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LIVESTOCK PRODUCTION AND WILDLIFE-BASED TOURISM: ARTICULATING
LAND-USE AND POLICY CONFLICTS IN THE OKAVANGO DELTA RAMSAR SITE IN
BOTSWANA.

LIVESTOCK PRODUCTION AND WILDLIFE-BASED TOURISM: ARTICULATING
LAND-USE AND POLICY CONFLICTS IN THE OKAVANGO DELTA RAMSAR SITE IN
BOTSWANA.

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Public Policy

By

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ABSTRACT

The management of common pool resources and policy conflicts between livestock and wildlife, two land-use types that take place in the same geo-spatial area has been a subject of debate among scholars for decades. This conflict in policies has engendered in communities which are beneficiaries attitudes that are either negative towards wildlife or favorable depending on the benefits they derive from them. This research therefore set out to understand the conflicts in the management of the Okavango Delta Ramsar Site (ODRS) where the OD is situated. The study used the grounded theory to collect and analyze the data in the ODRS from the respondent communities. The study finds that most members of the community had a favorable attitude towards CBNRM and the livestock policies. There is a difference in attitudes between communities that depend solely on CBNRM for livelihood and those that had alternative sources of livelihood such as cattle. The communities which depend only on CBNRM were strongly in favor of the policy and could not conceive life without CBNRM. Those which are not part of CBNRM and won cattle were against CBNRM as they felt it protected wild animals at the expense of livestock. The mixed reaction came from communities that are involved with both livestock and wildlife. The negative attitudes were expressed with regard to the decision making process concerning both livestock and wildlife policies as communities felt they were excluded and only informed about these policies. The study concluded that the power holders used their mobilization of process and bias to circumvent the communities in decision-making to avoid conflict.

Key words: Policy; Livestock; Tourism; Power; Community; Conservation; Attitudes

This dissertation is approved for recommendation to the Graduate Council.

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DEDICATION

To my late mother who saw me leave to attain this degree but will never know whether I ever made it or not.

CONTENTS

Chapter 1: Introduction	1
1.1. Background Study.....	3
1.1.2. Project Location, Topography and Climate	3
1.1.3. Social, Political, and Economic Issues	4
1.1.4. The significance of the Okavango Delta to Botswana.....	12
1.1.5. Statement of the Problem.....	12
1.1.6. Significance of the Study	14
1.2. Theoretical and analytical frameworks	15
1.2.1. Common pool resources and property rights	16
1.2.2. Theories of the Commons	23
1.2.3. The Different Players in the ODRS	31
Chapter 2. Literature Review	38
2.1. Theoretical Literature Review	38
2.2. Empirical Literature Review	51
CHAPTER 3. Methods	62
3.1. Background to Qualitative Research	62
3.2. Qualitative Design and Grounded Theory	63
3.3. Data Collection	66
3.3.1 Observations	69
3.3.2 Interviews.....	71
3.3.3 Focus Group Discussion	73
3.4. Data Quality and Analysis	73
Chapter 4. Results	76
4.1. Livestock Production	76
4.1.1. Economic Benefits of Livestock.....	78
4.1.2. Policy Incentives to Livestock Production	81
4.2. Wildlife Based Tourism.....	83
4.2.2. Social Benefits of Wildlife-Based Tourism.....	104
4.3. Attitudes of local people towards CBNRM and Livestock Policies.....	110
a. Feeling excluded from decision making	113
4.3.1 Communities dependent on CBNRM only	116
4.3.2 Communities participating in CBNRM and also keep livestock.....	123

b. Disregarding indigenous knowledge.....	124
4.2.3. Communities that do not participate in CBNRM	128
4.2.4 Official and practitioner discourse.....	140
5.1 Discussion	144
5.2. Limitations of the Study.....	161
5.3. Recommendations.....	163
Appendix 1: Open ended questionnaire.....	172
Appendix 2: Code book	173

List of Tables

Table 1	Budgetary Allocation in BWP for MoA during NDP 9	9
Table 2	Bundles of Rights Associated with Positions	20
Table 3	Total Sales and Holdings Selling, Total Revenue and Average Price in BWP by District	80
Table 5	Economic Analysis of Land use	87
Table 6	Rank of Animal Problem by type and District	138

List of Figures

Figure 1	Map of Botswana	4
Figure 2	Map of ODRS and Settlements	11
Figure 3	The Institutional Analysis and Development	28
Figure 4	Human Ecosystem Model	30
Figure 5	ODRS Cattle Population by Year	77
Figure 6	ODRS Cattle Holding by Year	78
Figure 7	Holding selling, total sales, average price per holding and average price by year	80
Figure 8	Number of Holdings by main source of income	83
Figure 9	Number of Holdings by main source of income	83
Figure 10	Total Arrivals 1998-2008	85
Figure 11	Employment in the Tourism Industry	88
Figure 12	Number of Businesses in ODRS by Type of Ownership	89
Figure 13	Total Revenue in BWP by Year for CTT	91
Figure 14	Employment by year for CTT	92
Figure 15	Total Revenue in BWP by year for KDT	94
Figure 16	KDT employment by Year	94
Figure 17	Total Revenue in BWP by Year for OCT	96
Figure 18	Total Employment by year for OCT	97
Figure 19	Total Revenue by Year for OKMCT	98
Figure 20	Employment by year for OKMCT	99
Figure 21	Total Revenue by Year for STMT	100
Figure 22	Employment by Year for STMT	101
Figure 23	Total Revenue in BWP by Year	102
Figure 24	Cattle and Elephant Distribution within ODRS	136

Acronyms

BIDPA	Botswana Institute of Development and Policy Analysis
BMC	Botswana Meat Commission
CBNRM	Community Based Natural Resource Management
CBC	Community Based Conservation
CBO	Community Based Organization
CHA	Community/Commercial Hunting Area
CBPP	Contagious Bovine Pleuropneumonia
CNP	Chobe National Park
CPR	Common Pool Resources
CSO	Central Statistics Office
CTT	Cgaecgae Tlhabololo Trust
DAH&P	Department of Animal Health and Production
DAPS	Division of Agricultural Planning and Statistics
DVS	Department of Veterinary Services
DWA	Department of water Affairs
DWNP	Department of Wildlife and National Parks
EIA	Environmental Impact Assessment
FMD	Foot and Mouth Disease
GDP	Gross Domestic Products
HEM	Human Ecosystem Model
HIC	High Income Countries
IAD	Institutional Analysis and Development
JVP	Joint Venture Partner
KDT	Khwai Development Trust
LIC	Low Income Countries
MEWT	Ministry of Environment, Wildlife and Tourism
MFDP	Ministry of Finance and Development Planning
MGR	Moremi Game Reserve
MoA	Ministry of Agriculture
MZCDT	Mababe Zokotsama Community Development Trust
NDP	National Development Plan
NGO	Non-Governmental Organization
NPAD	National Policy for Agricultural Development
OCT	Okavango Community Trust
ODMP	Okavango Delta Management Plan
ODRS	Okavango Delta Ramsar Site
OKMCT	Okavango Kopano Mokoro Community Trust
OPT	Okavango Polers Trust
SADC	Southern African Development Community
STMT	Sankuyo Tshwaragano Management Trust
TAC	Technical Advisory Committee
TGLP	Tribal Grazing Land Policy
TLB	Tawana Land Board
UNESCO	United Nations Educational, Scientific, and Cultural Organization
WMA	Wildlife Management Area

WRI

World Resource Institute

Chapter 1: Introduction

The Okavango Delta ecosystem is threatened with degradation due to competing land uses between agriculture, wildlife and settlements which exist in the same spatial location. The Okavango Delta (OD) is the largest inland Delta in the world and was declared a Ramsar site in 1997 after Botswana ratified the Ramsar convention the same year (Tawana Land Board, 2005). The convention necessitated that the Botswana government cooperate with other countries in the region (namely Namibia and Angola through which the Delta water flow before it enters Botswana) as well as International Organizations, notably the United Nations through its organ, United Nations Educational, Scientific, and Cultural Organization (UNESCO) (Ramsar Convention Secretariat, 2011) for the Delta's conservation. The contracting parties to the convention are under obligation to conserve and 'wise use' of their respective wetlands (Ramsar Convention Secretariat, 2011). Ratifying the convention has implications for national and local policy making with consequences for the local communities living in proximity to the wetland. The implications include the need for the contracting nation to align specific policies with the convention or have specific policies intended for the conservation of the wetland.

The purpose of this research therefore is to understand the conflicts in the management of the Okavango Delta Ramsar Site (ODRS) where the OD is situated. To develop this understanding I evaluate attitudes of individuals who live in communities of the ODRS towards natural resource conservation policies as well as agricultural policies. To achieve this task, the research addressed three issues that influence attitudes with respect to land use in the ODRS. These issues are: 1) national livestock policies, specifically the animal disease control policy, 2) the Community Based Natural Resource Management (CBNRM) program/policy on the development of the communities of the ODRS, and 3) the decision-making process and

interactions among the different stakeholders and government agencies Ministry of Agriculture (MoA) and Ministry of Environment, Wildlife and Tourism (MEWT) within the ODRS. The analysis consists of a comparison of attitudes towards conservation among individuals in communities whose primary sources of livelihood are wildlife-based tourism only and those that derive their livelihood from both wildlife-based tourism and agriculture. In order to conduct this analysis, several research tasks were undertaken. First, I provide a descriptive analysis of the livelihood strategies of the people living within the ODRS and on the nearby protected lands. Second, I describe impacts of differing livelihood strategies on the physical environment of the Delta and effects of the environmental and natural resources mitigation strategies that are practiced. These basic descriptions provide a baseline of attitudes and perceptions of communities towards the array of conservation and livestock policies implemented in the ODRS. Inherent in such an assessment of the communities' role in the implementation of CBNRM is the role of non-tourist livelihood strategies such as agriculture and subsistence hunting in the ODRS. This line of research fits into a larger body of research that is concerned with bio-diversity loss and environmental degradation which threatens human livelihoods (WRI, 2005; Harper 2004)

The purpose of this initial chapter is two-fold. First, I provide a broad-based background on the region under consideration. The background focuses on Botswana generally and the Okavango Delta Ramsar Site in particular. This section considers the size, topography and climate, as well as social, political and economic issues of Botswana. Second, the theoretical framework is discussed and focuses on the theories of the commons with specific reference to tragedy of the commons, the logic of collective action, game theory and the institutional analysis and development. The chapter concludes with the summary of dissertation organization.

1.1. Background Study

The section presents the following: the project location and a discussion of the ecosystem of the area. Secondly, the social, political, and economic issues are presented, followed by the importance of the ODRS to the Botswana economy, the Southern African Development Community (SADC) region, and the world. The statement of the problem is presented next and the last topic presented under this section is the significance of the study.

1.1.2. Project Location, Topography and Climate

Botswana is located in the southern part of Africa sandwiched between South Africa, Zimbabwe, Zambia and Namibia. It is completely land locked relying on South Africa for access to the seaports. The country has a total area of 582,000 km² divided into three main land tenure systems. These are the communal or customary land, state land, and the freehold land, which occupy 70 %, 25 % and 5 % of the country's surface area respectively MFDP, 2010).

Botswana is approximately 1,000m above sea level. It is generally flat with a few occasional outcrops especially in the eastern part of the country. The country is largely arid and semi-arid due to its position in the dry Kgalagadi ecosystem and its proximity to the sub-tropical high-pressure belt.

Figure 1: Map of Botswana



Source: <http://www.mapsofworld.com/botswana/botswana-political-map.html>

Annual rainfall averages from 250mm in the extreme southwest which is the Kgalagadi region to 650 mm in the extreme northwest where the Ngamiland region (MFDP, 2010).

1.1.3. Social, Political, and Economic Issues

Botswana society is composed of several tribes most of which have agriculture as the dominant livelihood activities in the rural areas. There are eight principal tribes recognized by

the Botswana constitution: Bangwato, Bakgatla, Bangwaketse, Bakwena, Balete, Batawana, Barolong and Batlokwa. Other tribes such as the Bakalanga, Basarwa, Bakgalagadi, Baherero, Basubiya, Bambukushu, Bayeyi and Bakoba are recognized as minor tribes. With the exception of Basarwa, these various tribes arrived in the territory at different times in the eighteenth and nineteenth centuries (Colclough and McCarthy, 1980). Almost all these tribes except the Balete moved into Botswana from Transvaal in South Africa.

The Bambukushu, Bakoba, Bayeyi and Basarwa are concentrated around the Okavango Delta in the Ngamiland region. The Basarwa are additionally located in other parts of the country due to displacement after conquest during the early tribal wars of the 18th century (Colclough and McCarthy, 1980). The Basubiya are located in the Chobe area of the Ngamiland region. The Bakgalagadi are found in the Kgalagadi and Ghanzi districts in the western part of the country. The remaining groups are all located in the eastern and south eastern part of the country (as shown in figure 1) as follows: Balete in Southeast district, Bangwaketse in Southern district, Bakwena in Kweneng district, Bakgatla in Kgatleng district, Bangwato in Central district, and Batawana in the Ngamiland district while the Bakalanga are located in the Northeast district.

The traditional Botswana economy before independence in 1966 was self-sufficient with families dependent on the land to satisfy their daily needs. Their diet consisted of "...sorghum porridge, milk, the meat of wild and domestic animals, vegetable dishes made from crops and wild plants and beer" (Colclough and McCarthy, 1980). The land holding was communal and under the administration of the tribal chiefs. Chiefs worked with Headmen who were responsible for administration in their small villages and wards, including settling of disputes. The land was allocated for building homes, cultivation, and cattle grazing. This resulted in three types of land use areas: 1) the main village, 2) crop cultivation lands-normally within a 10 km radius of the

village and 3) the cattle post area; where cattle were grazed. This system of land tenure was adapted to better control land use. For instance, crop cultivation was not allowed at the cattle posts in order to avoid crop damage by livestock. However, a few farmers would keep cattle at the crop lands to provide women and children with milk as well as draft power during the plowing season.

Botswana gained independence from Great Britain in 1966 after being a protectorate since 1885. Four political parties contested the first election at independence. This multi-party democracy has since been maintained with free elections held every five years. At the time of independence the economic prospects of the country were bleak with an annual per capita income of \$80 (Colclough et al 1980), which made Botswana one of the poorest countries in the world. At independence, agriculture was the dominant economic activity contributing 96 % of the total exports (Colclough and McCarthy, 1980) with contribution to GDP at 43% (MFDP, 2010). Wildlife was only used for consumptive purposes on a subsistence basis. It was a source of meat and skins were used for domestic purposes.

The post-independence era has been characterized by unprecedented growth especially after the discovery of diamonds in the early 1980s. This led Botswana to maintain the highest economic growth rates in the world (CIA-World Fact Book 2012; MFDP, 2010). Consequent to political stability and good fiscal and financial discipline, Botswana is now a middle-income country with a GDP per capita of \$16300 in 2011 (CIA-World Fact Book, 2012). The driving force of the country's economic growth is the mining sector, especially diamonds. Despite recent economic diversification, agriculture still plays a crucial role in the lives of the rural population while tourism has become the second largest exporter after diamonds (MFDP, 2010).

Other post-independence changes include land administration, which moved away from absolute jurisdiction of the chiefs to a new form of national government institutional management. Customary land is now administered by the Land Boards under the Minister of Environment, Wildlife and Tourism in conjunction with the tribal administration, which remains under the leadership of tribal chiefs. About 17 % of the customary land has been designated as various Wildlife Management Areas (WMAs) (DWNP, 2010).

The Department of Lands administers state land. The state land consists of national parks, game reserves and WMAs (19.4 % of all land area in Botswana), forest reserves (1 %) and all urban land (4.5 %). Free hold land is comprised of a block of farms administered under the Land Control Act, which came into effect in 1975 (MFDP, 2003). The Land Control Act was intended to provide public control of certain transactions involving agricultural land such as zoning and leasing. The block of farms, administered under the Act, are found in Ghanzi district, Southern district, South East and North East districts. Their vicinity to major urban villages and towns has led to the current trend where the farms are being transformed into urban land to augment the shortage of land in urban areas for residential, commercial and industrial uses.

According to (MFDP, 2003), about 45.8 % of the Botswana population lives in the rural areas engaged in both arable agriculture and livestock production. The latter represents 80 % of the agricultural contribution to GDP and most of the rural population depends on it as a source of livelihood (MFDP 2010). Livestock, mainly cattle, are also a source of social wealth and economic security (Fidzani, 1998). Although the livestock subsector remains important to the sector, its contribution has been declining. According to (BIDPA¹, 2010), it declined from 74 % in 1993/94 financial year to 55 % in 2007/08. BIDPA (2010) also found that the livestock value-

¹ Botswana Institute for Development Policy Analysis

added fell by 35 % during the same period. Despite this decline, the Botswana government has since independence formulated policies intended to increase productivity of the sector because it is the mainstay of the rural economy (MFDP, 2010).

The Tribal Grazing Land Policy (TGLP) was the first major livestock policy introduced in 1975 aimed at increasing the livestock productivity (MFDP, 2003; Fidzani, 1998). The aim of TGLP was to introduce the enclosure system or fencing which was predicated on the belief that rangelands in Botswana were degraded due to communal system of grazing (Taylor, 2006). The policy encouraged all cattle owners with cattle exceeding 200 to move into the western sand-veld (the Kgalagadi region) which was presumably an open space where these farmers would set up private ranches. According to the policy, the government would assist qualifying farmers with start-up capital to drill boreholes and fence their 8 kilometer by 8 kilometer ranches. The erection of fences meant exclusion of some local communities from accessing the natural resources that hitherto were accessible (Taylor, 2006). The fences also meant that wildlife routes were blocked therefore preventing free movement of animals from the Kgalagadi region during the dry season to the northern waters of the Okavango Delta (Albertson, 1998).

Animal disease control policy is one of the policies that were formulated to control the spread of diseases and reduce livestock mortality (MFDP, 2010). One of this policy's objectives is to supply free vaccination to farmers in communal grazing areas for major animal diseases such as foot and mouth, anthrax and botulism (MFDP, 2010). The bulk of the budget allocated for this policy is allocated to the ODRS where foot and mouth disease is prevalent as well as tsetse fly. For example, the MoA capital expenditure for the seventeen National Development

Plan (NDP) 9 projects stands at P²1, 009,265. The following table shows the budgetary allocations for the three projects related to livestock production in the NDP 9.

Table 1: Budgetary allocation for MoA during NDP 9

Project Name	Total Allocations in Pula
Livestock Development	101,676
Animal Disease Emergency Control,	97, 340,
Improvement to Disease Control	167, 126
Total	366,142

Source: Ministry of Finance and Development Planning (2003)

All the three projects were implemented by the Department of Animal Health and Production currently the Department of Veterinary Services. The budget for the three projects constituted 36.28% of the total capital budget for the whole MoA. Improvement to disease control was targeted at the ODRS where foot and mouth disease (FMD) and tsetse fly (which cause nakana disease) are a major problem. The paradox of this is that the region has the least number of cattle holdings as compared to all the districts. The animal disease control policies have a positive impact on the small cattle owners because it provides them with vaccines that they would otherwise not have access to. On the negative side, the policy encouraged the erection of veterinary cordon fences intended to prevent the spread of diseases from wild animals to domestic animals especially cattle. These fences were erected in the ODRS where wildlife numbers are high and the outbreak of foot and mouth disease has been a serious threat. Apart from blocking wildlife migratory routes, these fences also limit the movement of cattle to access grazing areas.

Other communities derive their livelihoods from natural resources such as wildlife. These communities, located mostly in the northwest and northern parts of the country, utilize wildlife for consumptive purposes. This use of wildlife was dominant prior to the emergence of

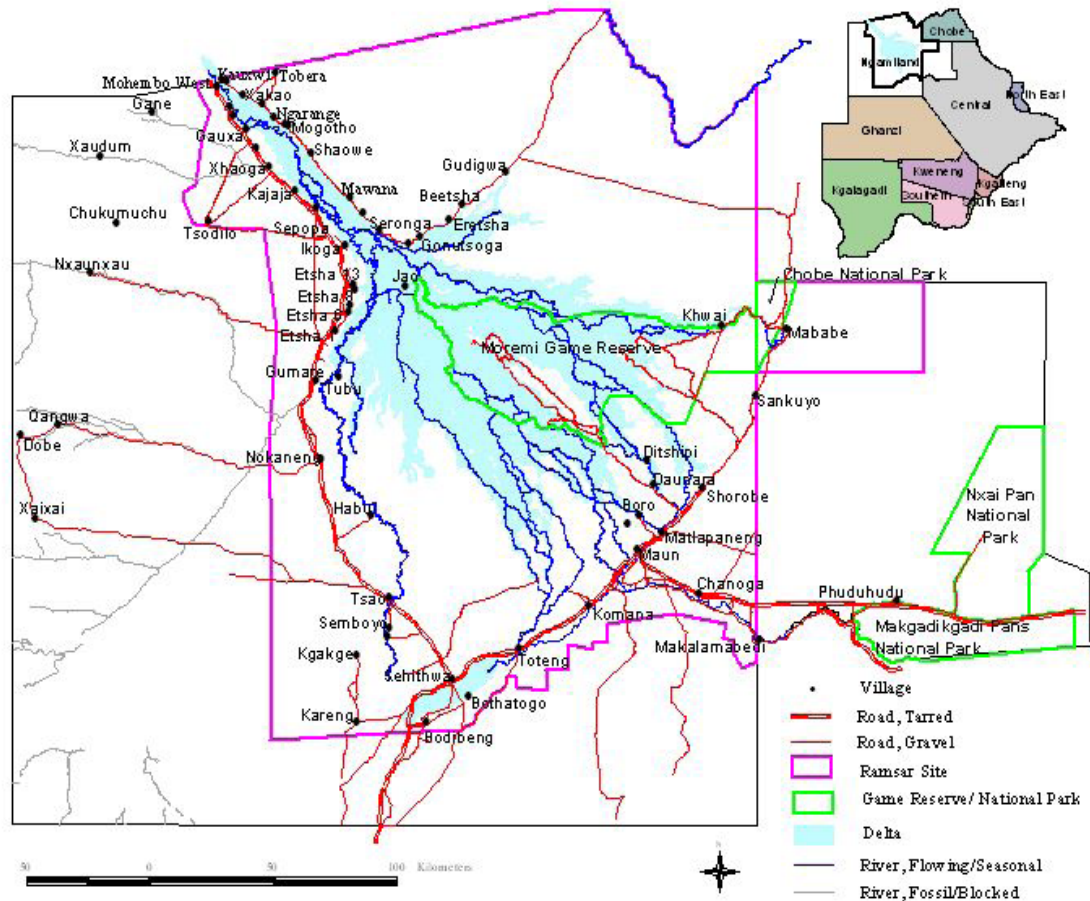
² 1USD= 7.333 Botswana Pula (3/18/2012 exchange rate)

commercial wildlife-based tourism, which has proven to be more profitable (Arntzen, 2003; MFDP, 2010). Commercial use of wildlife brought other benefits such as employment in the tourism industry and has given the communities an opportunity to have user rights and thereby profit from the resource through the CBNRM. Most of these community based activities take place in the ODRS which has become the heart of the tourism industry in Botswana. The communities participate in the tourism industry through the CBNRM policy which encourages communities living around the Delta to form community based organizations through which they can manage and conserve wildlife and other natural resources and at the same time derive economic benefits. Through CBNRM, there are twenty CBOs registered in the ODRS eight of which are wildlife-based tourism CBOs.

The water that flows into the Delta originates from the Bie plateau in Angola, a water catchment area covering about 112,000 square kilometers (Mendelsohn and Obeid, 2004). Specifically it flows as the Cubango and Cuito rivers from Angola, passing through Namibia before entering the Ngamiland region in the northwest part of Botswana through a Panhandle that expands into an alluvial fan known as the Okavango Delta (Mendelsohn and Obeid, 2004; Jacobson et al, 2005).

The Delta covers almost 60,000 square kilometers (Tawana Land Board, 2005) which is almost 51 % of the Ngamiland district of western Botswana. According to the 2001 population census, the Delta is home to 110,852 people which are 89 % of the Ngamiland district (Central Statistics Office, 2001, Department of Environmental Affairs, 2005).

Figure 2: Map of ODRS and Settlements



Source: ODMP, 2006

The natural resource base of the Delta provides a variety of livelihood sources to the people who live in the Delta communities. Among the critical resources supplied by the Delta and its ecosystem are the variety of wildlife, plant resources and water and land for wildlife, people and their livestock (Tawana Land board, 2005; Darkoh and Mbaiwa, 2005; and Van Der Post, 2004). The Delta is settled by different communities on both sides of the alluvial fan due to its resource wealth which provides important livelihood sources to them as shown by figure 2. The area is also divided into several hunting areas established through the CBNRM program.

The Moremi Game Reserve (MGR) is situated within the ODRS. The MGR is the second largest tourist destination in the Ngamiland region after the Chobe National Park (CNP) situated

in the northern part of the Okavango Delta (Mbaiwa, 2005; DEA, 2005). There are several communities located inside and on the boundaries of MGR whose proximity to the reserve has led to specific policies being applied, some of which are very unpopular among people of these communities.

1.1.4. The significance of the Okavango Delta to Botswana

The scenic beauty of the Delta and its wealth of wildlife and plant resources have led to an upsurge of international tourists visiting the region in increasing numbers annually. This has triggered several developments such as roads and aviation infrastructure into the region.

According to Mbaiwa and Darkoh (2005), there are twenty three privately owned airfields in and around the Okavango Delta and eight privately owned air companies with about forty-four small engine aircraft. This is indicative of the human sprawl and demand for wildlife tourism which according to Van Der Post (2004) is "...a realistic threat to the delta" (p. 65) because of the pressure it creates on finite and unique resources. This pressure on protected lands and wildlife is exacerbated by the need to develop agriculture to feed the ever increasing population in the region (Ukpolo, 2002). On the other hand, tourism has proven to be an important economic driver in Botswana ranking second (9.5 % of Gross Domestic Product (GDP) in 2009) after minerals in its contribution to GDP (Mbaiwa, 2006; DWNP, 2010).

1.1.5. Statement of the Problem

Although agriculture is the main land use comprising 48.8 % of the ODRS (Tawana Land Board, 2005), tourism has emerged as an important livelihood source providing 40 % of employment in the ODRS (Turpie, Barnes, Arntzen, Nherera, Lange and Buzwani, 2006). The contrast is that a sector that utilizes most land (agriculture) provides less employment and ranks lower than wildlife based tourism in its contribution to GDP. Despite this, agriculture is still very

important to the livelihoods of the local people in the ODRS hence the MoA and the MEWT promote policies meant to achieve each ministry's goals. The existence of agricultural production and wildlife, especially big game (e.g. giraffes, elephants, antelopes, lions, etc.) in the same geospatial environment has led to incessant conflict between man and wildlife (Darkoh and Mbaiwa, 2005).

The different land uses in the area have led to conflicts involving the Botswana government, local people who live in the Delta communities and the private sector e.g. safari/tourism companies. People from the communities complain about damage caused by wildlife on their property including agriculture and their domesticated livestock and loss of human life, while safari companies on the other hand complain about the communities' use of the land that has been leased to the safari companies by the communities through the CBNRM program (Mbaiwa, 2005).

Before the emergence of commercial wildlife-based tourism, wildlife was used for food consumption purposes (Arntzen, 2003). Commercial use of wildlife brought benefits such as employment in the tourism industry and increased incomes for the communities as well as individual community members. It also promoted communities' involvement in CBNRM which provides local people an opportunity to participate in the decision making process that affected the resources on which they depend for their livelihoods. This situation presents a management problem concerning the competing land use between the MoA and MEWT. It also presents a problem concerning conflict between the different actors: communities, government departments, and the safari companies which have divergent interests (Arntzen, 2003; Mbaiwa, 2006).

1.1.6. Significance of the Study

The significance of this research lies in the fact that communities play a major role in conservation (WRI, 2005) and understanding their attitudes towards conservation will provide an assessment of the extent to which community involvement in conservation efforts can and will lead to successful implementation of conservation policies and harmonize the conflict between livestock and wildlife. The ODRS is not only a wetland of national importance, as a Ramsar site, it is also a wetland of international significance and hence attracts people from across the globe.

The ODRS provides a variety of resources to both its human population and the wildlife that are found in large numbers in the area. The degradation and depletion of natural resources worldwide has engendered a global attention to the strategic management of these resources through sustainable means (WRI, 2005). Involving local communities to successfully achieve this goal has been seen as *sine qua non* for any conservation effort. The involvement of communities is however not without its controversies. While one school of thought holds a view that community conservation is the key to both conservation and poverty alleviation for communities living in proximity to these natural resources (WRI, 2008; Tawana Land Board, 2005), another school of thought holds a view that there is need to critically address the concept of inadequate community participation in conservation (Twyman, 1998; Goldman, 2003).

In Botswana CBNRM policy is seen as a solution to the conflict that exists between man and wildlife and a vehicle of rural development with potential to alleviate poverty. The participation in decision-making by the different stakeholders especially those in the ODRS, however, might be a factor to the success of CBNRM and economic development through CBNRM. It is also inadequate to focus on CBNRM as poverty alleviation strategy without addressing the major role of livestock policies in affecting/influencing the livelihoods of the

communities in the ODRS. As stated before, some of the livestock policies that have impact on the communities in the ODRS include the animal disease control policy, the fencing of communal grazing lands through TGLP and the fencing component of the New Policy for Agricultural Development. The cordon fences erected under the animal disease control policy have particularly had a negative impact on the communities in the ODRS. The impacts range from cutting off wildlife migratory routes, limiting grazing lands as well as limiting access to veldt products that the communities depend on (Mbaiwa, 2005; Albertson, 1998; Arntzen, 2003). These problems have prompted certain reactions from the communities that are investigated in this study.

This study therefore addresses a gap in knowledge about (1) the attitudes of the community towards CBNRM; (2) critical analysis of the decision-making process and the role of the different players in the ODRS. The study is significant also in that it addresses the ODRS within the context of a property rights regime the classification of which informs the type of policy adopted and its efficacy. This latter issue of contextualizing the ODRS within the property rights regime is discussed at length in the theoretical and analytical frameworks in the following section.

1.2. Theoretical and analytical frameworks

This section presents the analytical framework used in this research. The management of the world's commons and their sustainability is still a controversial issue to date with some popular theories/models developed in the 1960s which Ostrom (1990) calls the earlier models, predicting tragedy for the commons due to degradation and non-cooperation of appropriators. Despite these concerns about the doom of the commons, communities in different parts of the world the lives of which depend on Common Pool Resources (CPR) have been able to manage

and conserve their CPR for thousands of years. The purpose of this section is twofold: to discuss the theories of the commons and secondly, to discuss how groups can effectively manage and conserve CPR. To achieve this purpose, the first sub-section discusses the nature of CPRs and property rights. This section also discusses the different types of goods; private, common property, and public goods. The second sub-section discusses the theories/models of the commons that have been used to analyze the commons. These models are the tragedy of the commons, game theory, and logic of collective action. This sub-section also discusses the weaknesses of these models and the evolution of alternative framework; the Institutional Analysis and Development (IAD). The third sub-section focuses on the management of CPR by groups and the characteristics of the members or appropriators for the CPR, which enables the governance of the CPR. In doing so, particular attention is made on the possibility of managing the commons by groups within the Okavango Delta Ramsar Site (ODRS) in Botswana. The section will conclude with a discussion of how the common pool resources theory is relevant to the discussion of local peoples' attitudes and the impact of the current institutions on the development of the ODRS.

1.2.1. Common pool resources and property rights

This section discusses the CPR and the property rights regime. The property rights regime will shed light on the problems that arise in the use of environmental resources. The section will also discuss the CPR within the context of property rights as well as private and public goods and how these goods differ from CPR.

a. Common pool resources

Common pool resources are defined as "...natural or man-made resource system that is sufficiently large to make it costly (but not impossible) to exclude potential beneficiaries from

obtaining benefits from its use” (Ostrom, 1990, p. 30). Tietenberg (2004) describes CPR as “...those that are owned in common rather than privately” (p. 63). Tietenberg further explains that entitlement to CPR is either formal or informal. Specified legal rules protect formal entitlements whereas in informal entitlements tradition or culture protects the users of the CPR. In both cases, the local actors in CPR play a role in the design of the rules that govern the CPR.

Key characteristics of CPRs are difficulty of exclusion and subtractability. Exclusion means a situation where it is difficult to restrict other users from benefiting from the provision of a commonly provided good or service. High costs of exclusion through laws or other mechanisms at the users’ disposal are some of the issues making it difficult to exclude others (Ostrom, 1990; Ostrom, 2003; Ostrom, 2005). The excludability problem leads to a problem of free riding. Free riding increases when a group with entitlements to a resource cannot easily exclude potential beneficiaries for failing to contribute to the provision of a good or service (Ostrom, 2005).

CPR also face a problem of subtractability, which means that, as resource units are withdrawn less is available for the next appropriator. This is a problem for CPR when users cannot price a service; it results in other users attempting to maximize their use of the resource in anticipation of possible depletion. Although the problem of subtractability exists in private markets, the difference is that in CPR resource systems are jointly owned (Ostrom, 1990) and the rules to avoid free riding are negotiated to be in place whereas in private markets, free riding is not a problem as resource systems are privately owned through private property rights or entitlements (Tietenberg, 2004). The costs of appropriation in CRP are shared among appropriators and rules to ensure that those who do not pay are excluded are invoked when free riding is attempted.

The problem of subtractability also occurs when there is a change in the user's discount rates. Discount rates will increase when the resource is possibly under threat of depletion or when users' anticipate that rules are going to be broken. Under these circumstances, users try to take advantage by grabbing more of the service or good before its depletion. To resolve this problem effective groups institute regulations and rules to regulate the use of the resource. The earlier models (tragedy of the commons, game theory, and logic of collective action) assumed that groups could not cooperate because their discount rates will always be high given the propensity for individual actors to try and maximize their benefits before the resource is depleted. High discount rates meant the users did not expect the resource to be around for long hence they would try to maximize the withdrawal of resource units leading to the tragedy and the decline in resource productivity.

Ostrom and others have found that it is easy to design rules and enforce them when users are a small group that can meet and agree on rules governing the use of the resource. The effectiveness of rules depend on the size of the resource, mobility of resource units (e.g. water, wildlife or veldt products), the presence of storage in the systems, the amounts and distribution of rainfall, soils, slope, and elevation, etc. (Ostrom, 2005). In the ODRS wildlife is a mobile CPR and the community hunting areas (CHA) are also CPRs. The CHAs are CPRs because different actors can access them but their actions within the CHA will be based on their positions rules agreed by the community. Some of the actors that are allowed in the CHAs are the community members, tourists, DWNP officers, general public etc. Their activities within the CHA will be governed by the bundle of rights they have such as access, withdrawal, management, and exclusion. Each of these rights is discussed below. The same rights apply to wildlife. Once the

wildlife is in a particular community hunting area, they are jointly owned by the community that has user rights to the CHA (Moore and Rodger, 2010).

Apart from private and common property rights, Ostrom identifies other rights associated with CPR which she states as follows:

Access: the right to enter a defined physical area and enjoy nonsubtractive benefits (for example, hike, canoe, sit in the sun).

Withdrawal: the right to obtain resource units or products of a resource system (for example, catches fish, divert water).

Management: The right to regulate internal use patterns and transform the resource by making improvements.

Exclusion: The right to determine who will have access rights and withdrawal rights, and how those rights may be transferred.

Alienation: The right to sell or lease management and exclusion rights
(Ostrom, 2000, p. 339)

These rights help associate an actor with the position they hold in a CPR: whether owner; proprietor; claimant; authorized user; authorized entrant. It can also explain the rights of an individual at a particular point as one may be an authorized entrant such as a tourist in a national park, or one can have a bundle of rights such as an owner who would have all the five bundle of rights whereas an authorized entrant will have on the right of access. Ostrom demonstrates these rights in a table such as the one that follows:

Table 2: Bundles of Rights Associated with Positions

	Owner	Proprietor	Claimant	Authorized User.	Authorized
Entrant					
Access		X	X	X	X
Withdrawal	X	X	X	X	
Management	X	X	X	X	
Exclusion	X	X			
Alienation	X				

Source: Ostrom, 2000

The vertical side of the table shows the bundle of rights while the horizontal shows the different positions and individual may hold. The table shows each position has a different bundle of rights.

a. Public Goods

Public goods are very common in environmental resources. These goods are open access meaning that everyone can access them without exclusion. There is no excludability of other users from public goods. They are non-divisible which means that their availability does not diminish because some other user had withdrawn some units earlier hence less is available to the next user. The non-excludable nature of public goods and non-subtractability makes them different from CPR. It also means that there is no incentive to conserve them or use them efficiently since scarcity, which necessitate efficient allocation and use does not apply. Examples of public goods include air, national security, amenity goods such as scenic beauty and biological diversity all enjoyed by other users but pay no price. It is not possible to assign property rights to public goods because of their non-rivalries, non-excludability, indivisibility and non-

subtractability. The ODRS is characterized by scenic beauty: flora and fauna which are abundant in the area. It is not possible to exclude individuals from consuming the scenic beauty of the delta since in the context of scenic beauty and amenity goods, no resource units will be drawn that will be unavailable to others (Shaffer, Deller, Marcouiller, 2004). In the ODRS exclusion occurs when individuals are not allowed certain areas such as national parks if they had not paid. They lose their right to access because that can only be accorded those who pay for resource use (Ostrom, 2000).

b. Private Goods

Private property or goods are those characterized by exclusive rights by an individual. The individual has private property or right when they own a resource or have exclusive use of that resource and bear all the costs and benefits bestowed by the use of the resource. An individual in this case has private property rights to use and consume the specified resource. This form of property rights is the most preferred in the efficient allocation of goods where the assumption is that the consumer is rational and feels an obligation for efficient consumption of the good or resource (Carlson, Zilberman, & Miranowski, 1993). In the ODRS, private goods are dominated by the agricultural goods such as crops that are produced in small private lands, cattle that graze in the communal grazing lands and the individual housing units in the tribal land. Communal grazing lands in the ODRS can be classified as public because no distinct groups can lay claims to them under the current law (Tawana Land Board, 2005).

c. Property Rights and CPR

Property rights refers to a bundle of "...entitlements defining the owners' rights, privileges and limitations to the use of the resources" (Tietenberg, 2004, p. 56). Common property rights are allocated to a specific group who have entitlements to the common pool

resource and can exclude others who do not belong to the group from appropriating resource units from the resource system that is communally owned. For example, in the ODRS different communities are allocated a community hunting area which they manage through their community based organization. This arrangement is an example of common property rights because members of another community cannot appropriate resources such as wildlife in this hunting area. CPR and public goods have been confused in some cases due to some similarities between them. The property rights regime helps to distinguish the difference between CPR and the public goods. Public goods are not exclusive to any specific group of people; no property rights are assigned to a resource that is a public good in nature such as the consumption of natural amenities. The property rights regime helps understand the natural resource allocation which either leads to their preservation or destruction.

Confusion about CPR and public goods sometime arises from the fact that both CPR and public goods are prone to the problem of free riding. This is a situation where someone uses the resource without bearing any costs (Ostrom, 1990). The difference between them however, is that in the CPR excludability is possible based on specific rules that ensure that users share the costs of drawing resource units, failing which they are excluded from the use of the resource. Common pool resources are subtractable whereas public goods are not. Although it is difficult to assign property rights to public goods, common property rights govern CPRs, which are exclusive to a specified group.

The models, which became popular and dominated intellectual and scholarly discourse in the late 1950s and 1960s, were the tragedy of the commons, logic of collective action and game theory. The common feature of these models is that they all doubted the efficiency and effectiveness of groups to cooperate and manage the commons for the benefit of all members of

the community or groups. The policy implication of these models is that to avoid the tragedy of the commons there is a choice between two alternatives: the first option is to privatize the commons or secondly that a public entity in the form of government should take over the commons for management (Ostrom, 1990). An alternative framework that developed as a response to these earlier three models is the Institutional Analysis and Development (IAD), which shows that the commons are not all in jeopardy and evidence exists to show that. Examples include the irrigation systems in Huetta, Spain which have been managed by communities for hundreds of years but were never degraded (Ostrom, 1990; Tietenberg, 2004). A discussion of these theories/models is in the following section.

1.2.2. Theories of the Commons

The purpose of this section is to discuss the different theories of the commons starting with the tragedy of the commons, the logic of collective action and the game theory. The section will then present the alternative model developed as a response to the first three, i.e. IAD.

a. The Tragedy of the Commons

Harding (1968) pointed out that the tendency for individuals to maximize their benefits from public goods (open access resources) would lead to these individuals to pursue their individual goals leading to degradation or resource overuse. Harding further argues that there are problems for which there is no technical solution such as population growth where the finite resources will ultimately fail to support the ever-growing population.

The assumption in the tragedy of the commons thesis is that the commons are a large area with multiple actors all motivated by their own interests (Harding, 1968). Given this assumption, the tragedy of the common thesis is able to predict the outcome of such actions on the natural resources. Indifferent and continued use of the resource without concern for its preservation

leads to degradation. Multiple actors on a finite resource will lead to its depletion because each withdrawal of the resource leaves fewer units left for the next appropriator.

The tragedy of the commons thesis also assumes that actors do not communicate with one another such that no one knows what the strategy of the other is (Harding, 1968). This assumption also means no one knows what the consequences of others are on the use of the resource. The model also assumes that the costs of trying to change the rules are high. Based on these assumptions, the tragedy of the commons proceeded to paint the future with gloom given that no actor would want to incur high costs to change the rules of the game. With rules difficult or impossible to change, self-governance by communities is not possible because there are no shared norms and institutions that actors build on to preserve the commons.

b. Game Theory

Game theory extended the tragedy of the common to demonstrate the gravity of the situation by likening users of the commons as prisoners caught up in the compelling desire to maximize their benefits leading to their own destruction. In the prisoner's dilemma analogy, someone else controls the prisoner's actions over which the prisoner has little or no control. The assumption is that the prisoners do not communicate and neither one of them knows what the other plans. Given this assumption, the prisoners cannot cooperate. Another assumption of prisoner's dilemma is that the prisoners have complete knowledge and given that they cannot communicate, cooperation is not possible. According to this analogy, any agreements between players are non-binding and each player has a dominant strategy, which they can choose freely. The players do not have an incentive to change the rules freely independent of others. According to the prisoner's dilemma (PD), when both prisoners' choose their dominant strategy, they reach equilibrium level in their benefits, which however is not Pareto-optimal. Pareto optimality occurs

“when no person can be made better-off without making another person worse-off” (Freedman, 2002, p. 463). In the game theoretical model, with the equilibrium that is not Pareto-optimal, the “cooperate, cooperate” strategy does not yield optimal results but inferior outcomes (Ostrom, 1990). The actors in a PD game adopt the “cooperate” “cooperate” strategy in a situation where they only use the resource to maximize their benefits without degrading it. When this decision is adopted, the actors avoid the defect strategy where one actor would try to maximize their benefits without accommodating the destructive nature of their action, whereas another actor keeps their resource within the limit. Ostrom (1990) gives the example of a two man game where they graze two animals each on a meadow. The two animals will not go beyond the upper limit of the meadow. In this way they adopt a cooperate strategy whereas in a defect strategy one actor will graze as many cattle in the meadow as he wants to maximize their gains (Ostrom, 1990)

The conclusion based on the game theoretical model is that resource use left to groups with the hope that they will cooperate and yield optimal outcomes is not possible as shown by an equilibrium that is not Pareto optimal. A non Pareto optimal equilibrium results in inefficient use of resources that in the long run leads to degradation and stagnation in the production of outcomes. This metaphor from the game theory has reinforced the idea that different policy options, which advocate for outside intervention in the use of the commons, are a sine-qua-non for the common’s preservation and efficient use.

c. Logic of Collective Action

The logic of collective action preceded the Harding’s Tragedy of the Commons (Olson, 1965). In the logic of collective action, Olson challenged the then common belief that people having common interests would work together for the common good. Olson challenged the premise advocated by group theory that individuals would act to maximize group cooperation.

His thesis rested on the notion that “he who is not excluded” from a public good has no incentive to preserve it. Olson argues that the tendency for individuals who do not bear costs on utilizing public goods would have no incentive to preserve it but rather they opt to maximize their individual goals (Ostrom, 1990; Ostrom, 2011).

The three models presented above assume that the commons cannot thrive if left to groups alone. These models assume that individuals act on their own as rational beings with intention to maximize their benefits. These models assume that there were no transaction costs that the users had complete information and the users do not communicate. According to these models, the individualistic nature of human actors especially when there are no costs borne by users of resources is the overriding factor that makes cooperation difficult and impossible. When cooperation is difficult to implement, actors cannot self-govern without intervention from the state or some public entity to enforce the rules. Free riding, which occurs when there is no incentive to conserve a CPR due to undefined property rights, is a thorny issue, which has made the three models presented more appealing as analytical frameworks in the study of the commons. Given the popularity of the three models (tragedy of the commons, game theory, and logic of collective action), many countries followed them in designing their policies (Ostrom, 1990; Moore and Rodger, 2010).

Mutual trust is hard to attest according to these models given the tendency of individuals to maximize their benefits. Lack of trust and individualism makes it difficult to devise rules that can ensure the sustainability and efficient use of the commons. The analysis presented using these models insinuate the degradation of the commons and their ultimate collapse with dire consequences for those who subsist on them. The policy recommendations that resulted from these metaphorical models led many nations to advocate for establishment of private property

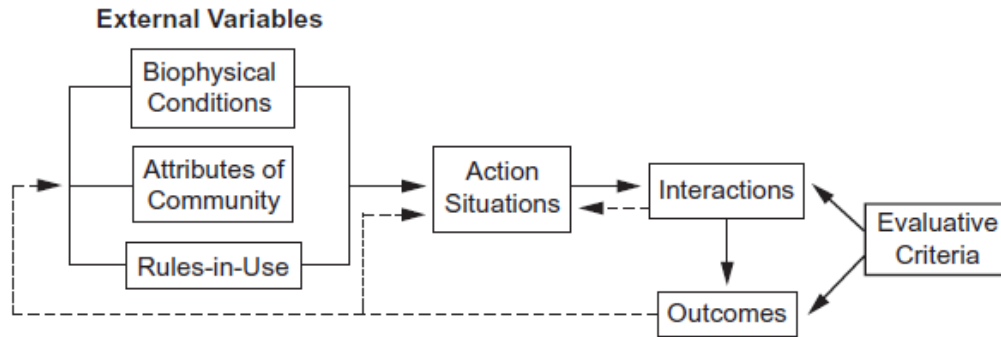
rights or central authority in the governance of the commons. Alternative models for the analysis of CPR emerged in the 1980s amongst which are the IAD.

d. Institutional Analysis and Development

After the first seminal work by Ostrom in 1982 using the IAD as an alternative to managing the commons, extant literature confirms that groups are capable of designing rules and regulations that they use to govern the CPRs. The multifaceted nature of the CPRs warrants the analyst to understand the nature of the project being studied thoroughly, the institutions in place, and the participants, which the earlier models overlooked (Ostrom, 2005).

The IAD is a multi-tier framework used to study institutions (Ostrom, 2011). Institutions are conceived as rules and regulations that society develops and individual members are expected to follow (Ostrom, 1990). Ostrom and others developed the IAD framework as a response to the earlier theories based on experiences from different parts of the world where groups have been successful in governing the commons contrary to the conclusions based on the earlier models. The purpose of the IAD is to show that not all CPR need private property rights or a public entity to intervene for the commons to survive. The IAD framework demonstrates that there is a need to study different institutions and rules and find out how groups can regulate the commons without the commons gravitating towards the tragedy as insinuated by the other models. This strategy (IAD) believes that in circumstances where communities or local people are able to self-govern by adhering to the rules and regulations that are developed by these communities, there is no need for government takeover or some private entity.

Figure 3: The Institutional Analysis and Development



Source: Ostrom (2011)

Action situations refer to “...social spaces where individuals interact, exchange goods and services, solve problems, dominate one another, or fight (among the many things that individuals do in action situations)” (Ostrom, 2011, p. 11). Within the action situation are actors whose presence leads to interaction. The interaction of actors with each other in turn affects the action situation and results in outcomes. An important aspect of the interaction of actors in an action situation is the different institutions that results as different actors try to have control and order in their action situation.

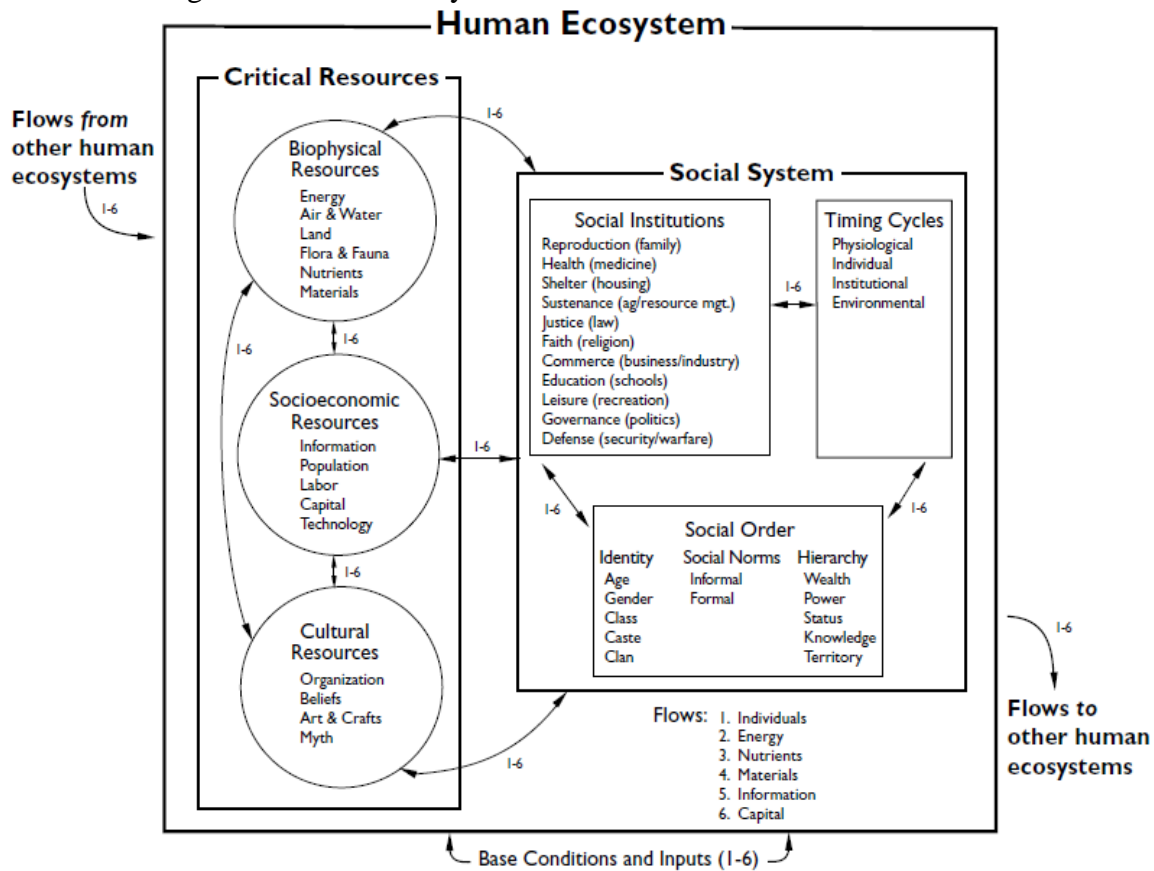
Institutions are rules and regulations made by the community members imbedded in the life of a community. They are part of the cultural systems that govern the behavior of individuals in a community. These behaviors constitute shared norms that regulate each individual in the community. The success of the CPR management governed by specific institutions depends on the unwritten code of conduct in a community that has often escaped the attention of outsiders interested in the study of CPR. Implied in the institutions is that the community will monitor the use of the commons and take action against those who break the rules. Research has shown that where rules are well defined and the community members are aware of them, the management of the commons are successful (Ostrom, 1990). This lack of understanding of institutions has earlier

(before the advent of IAD) led to policy solutions based on the “commons in jeopardy” thesis such as the tragedy of the commons and prisoner’s dilemma (Ostrom, 1990).

The literature on the CPR points to the action situations as spaces where interactions by users and resources occur. Action situations are also places where institutions, defined as rules, govern the interaction in action arenas. According to the IAD framework, rules and regulation are designed to ensure compliance by users of CPR as agreed by users, failing which sanctions are imposed for non-compliance. The rules are designed by the community or users of the CPR. This is what makes for the successful management of the commons as espoused in the IAD literature.

Ostrom also points out that multiple theories or models that are compatible with the IAD framework can be used if they help the analysts predict the likely outcomes. One such model that this research uses is the Human Ecosystem Model (HEM) presented below.

Figure 4: Human Ecosystem Model



Source: Machilis, Force, and Burch (1997).

The model presents a broad array of variables that can influence interaction within the action situation. As Ostrom (2011) explains, actors bring in the action situation different attributes including their demographic characteristics as well as different resources; the human ecosystem model shows the critical resources that can influence the action situation. These resources are exogenous variables which impact on the human social system and in turn are affected by the human social system. The study uses all variables in the cultural and the socio-economic resources categories. The study analyzes: land, flora, fauna and water from which resource units are drawn.

1.2.3. The Different Players in the ODRS

The ODRS has different players that influence the ecological as well as the socio-economic processes that affect the area. The major players are the communities living in and around the ODRS, the Botswana government through its agencies like the Department of Tourism, Department of Wildlife and National Parks and the Ministry of Agriculture. The private sector is another important player in the ODRS especially Safari companies who lease land and work with communities in the ODRS in the tourism industry.

a. Communities

The communities in the ODRS are important players in the use of the ODRS. They depend on the ODRS for veldt products (such as thatching grass, edible plants); the water for drinking and watering their livestock, fire wood, grazing areas, poles for building construction and medicinal plants (Mbaiwa, 2005). For centuries, some of the communities have lived around the ODRS dependent on it for their subsistence. They had their management systems that ensured that they used the resources in the area in a manner compatible with the rules in place.

To analyze the self-organization of the communities, it is important to know what rules are in place that the communities established. This acts as a baseline to compare with rules in place that are exogenous to the communities. Further analysis of the implementation of the rules and the community response to them will provide insights into the effectiveness of the rules. Disagreements involving the community rejection or skepticism about the exogenous rules in place will be indicative of distrust of the motive of the rules. It will also indicate the lack of effective participation by local people in the design of the rules.

The length of the community members in their respective communities is another variable that helps predict whether self-governance by local people with regard to their use of

CPR is possible. Ostrom (1990) argues that community members who have lived with each other for a long time develop mutual trust. They embrace the same norms and behaviors, which govern their community. In essence, Ostrom speaks of social capital, which makes interdependence possible.

The extent to which the communities depend on the CPR (ODRS) is important to establish. When people depend on the resource, they want to protect it and ensure that they can still draw resource units from it in the future. If the communities place high value on the ODRS and hope it will still yield future resource units, their discount rates will be low as they believe that future benefits are valuable. When discount rates are low, communities have a tendency to self-organize for the protection of the resource. They would cooperate in designing institutions that will ensure that all members comply with rules.

Communities with low discount rates tend to monitor their resources (Ostrom, 1990; Ostrom, 2010). The literature on successful CPR shows that when discount rates are low and appropriators plan to appropriate in the future, they will invest in the monitoring of rules to ensure that there is compliance. The irrigation systems in Huerta in Spain and Philippines have shown appropriators enforcing rules and applying sanctions on those who broke the rules. In Japan, the land commons also experienced appropriators enforcing the rules to ensure compliance (Ostrom, 1990).

Communities in the ODRS are involved in wildlife-based tourism and some of them have formed Community Based Organization (CBO), and have Community Hunting Areas (CHA) allocated to them. The distance between the community and the CPR can determine the extent of cooperation with those communities further away having less commitment on the CPR compared

to those close to the CPR. This information about distances between the CPR and communities is important to determine if it is a factor in the self-organization of the communities.

The Botswana government is responsible through its agencies to allocate the CHAs. One factor that is important to note is whether there are well defined boundaries of the CPR allocated to the community. The boundaries minimize disputes and tend to give the community a sense of ownership knowing their own boundaries. This information helps determine if the communities can self-govern. In situations where there are no clear boundaries, monitoring may prove difficult and some community members might be reluctant to participate when they do not understand where the boundaries are and whether they agree with them (Ostrom, 1990). The resource productivity is important in enhancing the cooperation between members of the community. If the resources are still capable of providing resource stocks in the future, it acts as motivation for appropriators to organize and self-govern.

b. Safari Companies/Joint Venture Partners

Safari companies or joint venture partners (JVP) play a crucial role in ODRS and the tourism industry. They usually operate as joint venture partners with the communities in the tourism industry. The partnership between the Safari companies and the communities will be strong if both parties have a common understanding of the rules. Safari companies may have different goals regarding the ODRS and their partnership with communities. Information that may lead to the success of the self-governance between the companies and the communities is if the companies appreciate the local rules and other cultural beliefs that are important to communities.

This study looks at the decision-making process and the discourse used to determine if the communities and the companies have common understanding. When users of the CPR

interpret rules and regulations differently, there is a danger of mutual distrust and this might threaten self-governance and organizing community members. Different power relations may disadvantage others in negotiations. To avoid this, the contracting parties must focus on mutual benefit. This study addresses the negotiations or consultation process and how the different actors are represented.

c. Botswana Government

The government is the general overseer of the whole economy and the ODRS. The different departments act on behalf of the government. The government and its operations are guided by the national vision 2016 which was implemented beginning 1997. Vision 2016 is a strategy that provides a planning framework for all different government sectors to advance socio-economic development (MFDP, 2010). The Vision comprises of seven pillars namely: an educated and informed nation; a prosperous, productive and innovative nation; a compassionate, just, and caring nation; a safe and secure nation; an open, democratic and accountable nation; a moral and tolerant nation; and lastly a united and proud nation. The National Development Plans (NDPs) are designed based on vision 2016 (MFDP, 2010). The NDP 9 (2003 to 2008) was the first plan that was designed based on the national vision followed by the current NDP 10 which runs from April 2009-March 31st 2016. All the ministries design their strategic plans based on the NDPs which outline the national policies, programs and objectives that the government plans to implement and achieve in a specified period. While there are different actors in the policies related to conservation of natural resources and livestock, the key ministries involved in implementing these policies are the MoA and the MEWT.

The MoA is divided into eight departments as follows: The Division of Research and Statistics; Department of Veterinary Services; Department of Crop Production; Department of

Agricultural Business Promotion; Department of Agricultural Research; Department of corporate Services; Department of Animal Production; and the Department of Extension Services Coordination. Through its departments, the mandate of MoA is to develop a sustainable and competitive agricultural sector by ensuring that farm incomes improve, creating employment opportunities, generating raw materials for agricultural businesses; conserving agricultural natural resources by promoting and adopting appropriate technologies and management practices. Through the design of different policies such as the animal disease control policies which is the subject of this study, the ministry is able to drive the sector to greater productivity.

The MEWT is divided into eight departments as follows: Department of Corporate Services, Department of Waste Management and Pollution Control; Department of Forestry and Range Resources; Department of Environmental Affairs; Department of Wildlife and National Parks; Department of Tourism; Department of Meteorological Services; and Department of National Museum and Monuments. The mandate of the MEWT through its departments is to ensure the sustainable use of environmental resources in the country. Topical departments in the MEWT are the DEA, DWNP, and DOT which are major players in the ODRS.

The government thus is a major player in the ODRS hence understanding the policies, programs and the objectives that she plans to implement provides an understanding of how these plans and policies influence self-governance or lack of governance in the ODRS. Specific policies that are relevant to the ODRS discussed in this study are the CBNRM policy and the animal disease control policy. However, the discussion of these policies is limited to how they influence livelihoods in the ODRS and the resultant influence on attitudes of the local people living in the ODRS. CBNRM is the main focus because the government designed with the view

to encourage local communities to participate more meaningfully in the conservation of natural resources.

This study investigates the consultative process between the government, communities and the private sector especially safari companies which operate in the ODRS. Still related to the role of government, this study analyzes the role of rules made by local communities in decision-making. The study also looked at information related to indigenous knowledge and how it is taken on board in decisions-making affecting the target communities in the ODRS. Knowledge systems tend to clash in a field setting, creating uncertainty where local communities feel undermined (Flora, 2008).

The discussion of the analytical framework covered the different models that have been used in the past to address the conservation and preservation of natural resources in different parts of the world. In order to do so, an understanding of how these resources are classified is important because that creates a basis for potential policy initiative designed to preserve such resources. It also creates a precursor for the stakeholder analysis and the type of property regime that should be in place to achieve maximum and efficient use of the resource. This research discusses the different models and places the ODRS in the context of a common pool resource in order to analyze the possibility of self-governance based on traditional institutions as well as addressing the current formal/modern institutions. This helps compare the different institutions and how they influence the stated attitudes towards the current policies designed to conserve the ODRS.

The rest of this dissertation is organized as follows: chapter two presents the literature review. The chapter is divided into two sections, the theoretical literature review and the empirical literature review. The theoretical literature review presents a thorough discussion of

the power theory in the first, second and third dimension. The empirical literature review presents the extant literature on the empirical research that has been conducted in the area of attitudes towards conservation, the effectiveness of community conservation and other related literature on the governing of common pool resources for community economic development and the literature on livestock policies and their impact on communities living adjacent to protected areas. The third chapter presents the methodology of the study. It is divided into four sections: background to qualitative research, qualitative design and grounded theory, data collection, and data quality and analysis. The results are presented in chapter four and this is followed by chapter 5 which presents the discussion, limitations and recommendation.

Chapter 2. Literature Review

This chapter presents the literature that informs this research. It is divided into two sections. The first section presents the theoretical review which focuses on the theory that is used in this research. The second part presents the empirical literature review which reviews extant research on community based conservation, livestock policies and attitudes of local people towards community based conservation.

2.1. Theoretical Literature Review

The use of theory in research plays an important role in conceptualizing issues related to the topic being researched as well as providing a lens through which phenomena is viewed ((Browne-Nunez and Jonker, 2008). Theory also acts as a foundation for policy making (Sabatier, 2007). There are multiple theoretical perspectives that are used to analyze different problems such as the conflict between environment and agriculture, livestock and wildlife and different concerns that affect human beings. The main theory used by this research is the theory of power. The theories of power have been used to analyze inequality in society where those with power create conditions that favor them to appropriate more resources than those with less power (Lukes, 2005).

Power has been a subject of debate for decades among both sociologists and political scientists alike. The different views on power have culminated into different dimensions, also known as different faces of power and these are: the first, second and third dimensions or the faces of power (Lukes, 2005; Gaventa, 1982).

The first face of power or the pluralist approach was developed by Robert Dahl and Nelson Polsby whose views were a reaction to the elite theory of power developed by C. Wright Mills and Floyd Hunter (Gaventa, 1982). Wright Mills and Hunter (cited in Luke, 2005) argued

that power was concentrated in the hands of a small group called elites. Dahl (1962), and the pluralists defined power as the situation where “A” makes “B” do something that “B” would otherwise not do where both are actors participating in decision-making in an open system. Pluralists assume that in an open system like the United States of America where no rigid class boundaries exist, domination of one group by another is impossible (Gaventa, 1982). Leaders are studied as representatives of the people and not as elites (Polsby cited in Gaventa, 1982). Polsby posits that non-participation is not a problem but just society’s inertia and that political inaction means consensus.

Bachrach and Baratz, (1962) are the main critics of pluralists’ theory of power. They argue that power has two faces. The first face is that presented by the pluralists where “A” has power over “B”, to the extent that “A” can make “B” do something that “B” would otherwise not do. Bachrach and Baratz (1970) point out that the second face of power is when “A” devotes his energies to manipulate dominant values and employs resources to keep some issues that are in the interests of “B” from the political agenda. They call this the mobilization of bias, defined as “...a set of predominant values, beliefs, rituals, and institutional procedures (“rules of the game”) that operate systematically and consistently to the benefit of certain persons and groups at the expense of others” (p. 43). The mobilization of bias is used to keep controversial issues out of the political agenda while allowing those preferred by the power holders. The mobilization of bias also results in non-decision.

Non-decision occurs in instances where an issue is deliberately ignored or marginalized. In turn non-decision is used to maintain the mobilization of bias. Non-decision is defined as “...a decision that results in suppression or thwarting of latent or manifest challenge to the values or interests of the decision maker” (Bachrach and Baratz, 1970, p. 44). Non-decision ensures that

voices demanding change are suffocated before they are raised, and dissent kept out of the agenda to maintain the status quo in allocating the privileges and resources in a given society.

Different forms of non-decision making are: use of force, sanctions, existing bias of political system, and the strengthening of the mobilization of bias to block challenges to the system. The use of force is considered the most extreme and may include imprisonment, beating and in some cases killing. The use of sanctions includes threats to deny some services, valued items or events that the challenger might not want to do without. Sanctions may include positive ones such as rewards to challengers who forgo their intended challenge. The bias of the political system is also used such as: rules, procedures or norms to block challenges. Labels like ‘communism,’ ‘unpatriotic,’ ‘undemocratic,’ maybe used to make challenge unpopular hence its marginalization (Gaventa, 1982).

The third dimension of power is critical of the behaviorist emphasis of the first two dimensions of power where the “...study of overt, ‘actual behavior’, of which ‘concrete decision’ in situation of conflict are seen as paradigmatic” (Luke, 2005, p.25). The third dimension embraces the mobilization of bias and non-decision espoused by the second dimension but adds that power is exercised when the actor’s perceptions and conception of issues are shaped by the power holders through the use of mobilization of bias, media and other institutions of socialization. The power holders influences, patterns, and shapes the wants and values of the powerless to conform to those of the power holder.

The mobilization of bias has been instrumental in different situations where important issues were prevented from inclusion into the formal agenda. Wilson (2000) shows that in Botswana some veterinary cordon fences in the ODRS were erected without conducting an environmental impact assessment (EIA). Wilson points specifically to the fences that were

erected after the cattle lung disease of 1995 where the policy was already in place requiring an EIA to be conducted before such an act could be effected. Wilson points out that the rationale for not conducting an EIA was that the need to curb the cattle lung disease was urgent. This was despite the expressed fears by communities in the ODRS and some experts that such a fence would have negative consequences on both wildlife and communal grazing lands. The challenge by the voices opposed to the erection of the fence without proper EIA was stifled because they did not have adequate resources and platform to adequately voice their views. The mobilization of bias was thus used by the power holders whose vested interests were the cattle industry in which most of them have invested (Wilson, 2000, Taylor, 2006). Gaventa (1982) points out that the mobilization of bias was used to keep issues challenging the status quo out of the political agenda in the Appalachian valley thus stifling dissent from the people of the valley.

One outcome of the mobilization of bias due to the powerlessness of the powerless is inertia which is itself an outcome of repeated defeat of the powerless hence the powerless become fatalistic and start to believe that their position of powerlessness is how things or the world is ordered. The resignation to fatalism of the powerless makes them vulnerable to manipulation and their conception of issues shaped by the power holders. In the case of the Appalachian Valley residents who Gaventa studied, several factors contributed to their quiescence in the face of oppression and unjust treatment by the power holders of the valley and these were: the use of force (beating, imprisonment, killing,), information gate keeping, and the creation of dependency of the people on the company that dominated the economic and political life of the valley and its functionaries. These created conducive conditions for the company to the control of what issues went into the political agenda and what issues were kept out (Gaventa, 1982). The indifference and hopelessness of the people of the valley resulted in the power-

holders control of the response of the powerless without any visible action from the power holders.

The methodology for the study of power differs for the first, second and third dimensions of power. In their analysis of power, the pluralists are guided by the behaviorist approach where they observe the behavior of participants in decision-making and conclude that the one who has power is the one whose ideas prevailed. The pluralist method study focus on decision-making procedures, instances of conflict over preferences among actors, as well as who prevail and loses in decision-making. Polsby (1974) points out that the pluralist method try to study outcomes in decision making in order to determine who won or who lost on the basis of which the pluralist would conclude the one who wields power. The leadership is assumed to be diverse and fluid hence making the existence of elites not possible

The proponent of this view was Robert Dahl who based his conclusions of how power can be studied on the results of a study he conducted in New Haven (Dahl, 1961). Based on the results of his study, Dahl concluded that contrary to elite theory, anyone can mobilize people and have their ideas accepted without being part of the elite. In his study he found that the mayor of the city was responsible for mobilizing the different actors in his city to decide on topical issues concerning the city without any veto from elites. The key to pluralist methodology is observable conflict in political action during decision making. According to pluralists, the one who wins in decision making has power and the one who loses does not have it.

Bachrach and Baratz (1962), the proponents of the second dimension of power were critical of the pluralists approach and proposed a different approach to the study of power. They argue that the mobilization of bias used to determine what goes into political agenda or not, is not considered in the pluralists' approach. They therefore propose that the study of power should

focus on the two faces of power: the first face is that proposed by the pluralists and the second face is the mobilization of bias. Bachrach and Baratz recommend that the researcher should first investigate the mobilization of bias in order to understand who benefits from it. Second, the researcher should analyze the dynamics of non-decision-making (p. 952). Bachrach and Baratz argue that this helps understand how the defenders of the status quo prevent change by limiting decision-making to safe issues. Thirdly, the researcher need to focus on "...participation in decision-making of concrete issues" (p. 952).

According to the third dimension of power, a researcher should be cognizant of the non-behaviorist aspect of power where A "...also exercises power over B by influencing, shaping or determining his very wants" (Luke, 1962, p. 23). Gaventa (1982) suggests a historical approach which has the advantage of revealing the different processes overtime used to shape the behavior of the powerless by the power holders. He proposes "...the study of social myths, language and symbols and how they are shaped or manipulated in power processes" (p. 15). Secondly, the study of power in the third dimension should look at communication of information, both the content and how the communication is carried out. The third dimension emphasizes studying the means by which the powerless are led to accept the issues by the power holders as legitimate: false consensus.

The methods of the second and the third dimensions of power are better at focusing on the agenda setting process because they address how issues arise and get into the agenda or how they are prevented from inclusion in the agenda. Through the mobilization of bias, Bachrach and Baratz (1970) have demonstrated how issues are mobilized in or out of the political agenda in the face of dissent by other groups.

The theory of power and its different faces permeate different agenda setting theories on how issues get into or get left out of the agenda. Baumgartner and Jones (1993) demonstrated some validity of the pluralists' claims when they pointed out that different interests groups in American politics use their resources to create policy monopolies which nevertheless collapse when other interest groups present issues and are forced into the macro-political agenda.

In non-federalist systems where there is less dispersion of interest groups participating in decision making, the dominance of one group over others is more pronounced (Sen, 1999). Rising gaps in inequalities and economic opportunities, poverty and deprivation found in low income countries in Africa, Asia and Latina America with unsuccessful challenge are indicative of possibilities of mobilization of bias and use of sanctions to maintain the status quo. The power holders use resources at their disposal, information gate keeping and mobilization of bias to ensure that issues are kept to safe havens while dissent is suppressed (Baumgartner and Jones, 1993; Sen, 1999).

The phenomenon of underdevelopment of one region by another also indicates the use of resources by the power holders to advance their interests with less focus on the interests of the less powerful. This view parallels the underdevelopment theories which posit that the powerful nations of the world use their resources to under develop the powerless nations especially in North and South national relations. The use of information gate keeping, mobilization of bias and both negative and positive sanctions are used by the developed countries to shape conceptions of people in developing nations about issues of political and economic importance. Within country relations also show such characteristics where the dominant social groups use resources at their disposal to shape consensus by different means in order to determine agenda issues. The third dimension brings the issue of 'power over' in contrast to 'power with' two concepts used to

differentiate gender relation in feminist discourse (Elshtain, 1982)). “Power over” signifies domination of one individual or group over another or others whereas power with signifies partnership and working together (Elshtain, 1982). In situations of power over, years of capability deprivation engenders powerlessness and give grounds for false consensus which helps keep political agenda to safe issues.

Botswana as a republic with democratically elected political representatives after every five years follows a democratic tradition in its policy formation where the public is involved in deliberations through different forums (Lekorwe, 1997). The most common forum for the citizenry to participate in policy deliberation is the Kgotla (traditional assembly) where issues of community and national importance are discussed (Lekorwe, 1997; MFDP, 2003). All urban areas, urban villages, villages, and localities have a Kgotla with tribal leadership running the day to day affairs of the assembly. Natural resources or environmental and agricultural policies therefore have a flavor of national ownership by virtue of all citizens having an opportunity to participate in the formation of such policies (Colclough and McCarthy, 1980).

The major policy problem in the ODRS like in many natural resource rich countries is the existing policy conflict between natural resources and agricultural policies. This is exacerbated by the existence of agricultural production and wildlife, especially big game, in the same geospatial environment which makes the conflict between man and wildlife inevitable (Boyd, Belnch, Bourn, Drake, and Stevenson, 1999). The growing impetus to develop agriculture and to promote tourism at the same time in the ODRS has led the MoA and the MEWT to promote parallel policies meant to achieve each ministry’s goals.

In the ODRS some MoA policies such as the animal disease control policy through veterinary cordon fences have proved detrimental to the wildlife sector resulting in death of wild

animals and restricting their movements in their seasonal migration to the Okavango Delta from the Kgalagadi area which is south of the delta. The animal disease control policy discussed earlier is responsible for the death and blocking of wildlife migratory routes through the cordon fences that were erected (Albertson, 1998). The National Policy on Agricultural Development (NPAD) of 1991 proposed the fencing of communal grazing areas for increased livestock productivity (MFDP, 2003). The erection of ranches in the ODRS poses a threat similar to the veterinary cordon fences which blocked wildlife migratory routes (Mbaiwa, 2005). The conflict in these policies therefore is focused on the erection of fences which negatively impact people's livelihoods.

Institutional change in the management of the Okavango Delta Ramsar Site (ODRS) including the different agencies both national and international bring an element of confusion and conflicting messages to the communities around the ODRS. At national level there are different agencies situated in different Ministries such as the Department of Tourism, Department of Wildlife and National Parks both situated in the MEWT and the Department of Veterinary Services, Department of Animal Production and Department of Crop Production all situated in the MoA implementing some aspects of their policies in the ODRS with lack of policy congruence (Meyer and Lucie, 2001). The institutions for the management of the ODRS are influenced by vertical and horizontal relationships between the agencies implementing policies in the ODRS based on their different mandates and powers (Tatenhove, Edelenbos, and Klok, 2010). In fact Tatenhove et al (2010) argue that individuals exercise power but it is important to note that these individuals are embedded in "...historically and socially constructed structures...such as institutions and discourses, p. 612).

There are different local agencies that also actively participate in the policy implementation in the ODRS such as the Tawana Land Board and the Ngamiland District Council. Tawana Land Board is responsible for tribal land where livestock and crop production take place (MFDP, 2003; MFDP; 2010). The Ngamiland District Council is responsible for all the development initiatives in the area. The communities in the ODRS also have their own agencies such as village development committees, community based organizations and their tribal authorities. In short, there are different institutions, defined as rules and regulations (Ostrom, 1990) which guide how the ODRS resource system is managed and utilized and how people relate with each other in appropriating resource units from the resource system. The process of establishing some of the rules in the commons have been described as bottom-up in conception but top-down in practice (Twyman, 1998; Blaike, 2007).

At the local level, community organizations participate in the development of the communities and implement some aspects of policies. CBNRM is part of the country's Revised National Policy for Rural Development of 2002 and its aim is twofold: ecological preservation and social and economic development of the communities (Department of Wildlife and National Parks, 2010; MFDP, 2010). The efforts undertaken to conserve natural resources and the environment often have negative consequences on poor communities living adjacent to conservation areas (Infield and Namara, 2001; Darkoh and Mbaiwa, 2005). This has often led to conflicts between government departments implementing conservation policies and communities.

The literature on CBNRM and the extent of community participation has been questioned on the aspect of the different power relations which disadvantage communities. Twyman (1998) has questioned the validity of the participative extent of the local communities given the unequal

power relations in the Okwa Wildlife Management in the Ghanzi District of Botswana. Twyman contends that the poor communities in the Okwa Wildlife Management are said to be in control of the resources in the area as per the CBNRM policy, but in fact, decision-making is top down from government to the communities. In the ODRS, the theory of power is used to understand what grievances are being expressed and which ones get saliency to be in the agenda. The theory is also used to identify whose ideas given the different stakeholders get into the agenda.

Gaventa (1982) has shown that the power holders use the mobilization of bias and non-decision to maintain the status quo. In the ODRS, different groups have different livelihood sources including agriculture and natural resources such as wildlife. The attractiveness of a livelihood source is also influenced by the allocation of limited resources and budgetary constraints from government. By the same token, the allocation of resources is influenced by those who have control over such resources. In Botswana, the livestock subsector has always received the lion's share of the budget compared to both the crop subsector and wildlife based tourism (MFDP, 2010).

The process of the decision-making has implications for the role of power and how the different actors given their resources would use their power to ensure that certain issues will be considered and others kept out. In the ODRS, Wildlife Management Areas (WMA) are used for both livestock and wildlife utilization. Some areas within the WMA called Community Hunting Areas are leased out to the Safari companies who use the areas for tourism purposes. The decision to lease land sometimes is reached between the Community Based Organization (CBO) and the safari companies. Mutual agreement and consensus is not abnormal in policy studies. Polsby (1980) for example, has shown that consensus can be reached where different parties anticipate mutual benefit.

Participation in decision making leads to a change in different institutions (rules and regulations) which govern many natural resources rich areas. In the ODRS this study focuses on one of the policy problems, the changing institutional landscape between the different actors which lead to goal conflicts of different government agencies, the private sector and the community. The study uses the theory of power to assess how the different actors use the different resources (money skills, etc.) that each actor has at their disposal to prevail in decision-making. Within the communities the different agencies such as the village development committee and the CBOs reflect specific power relations that influence local decision making. Conflicts are reflected in the leadership of the CBOs which in some communities are in the hands of non-locals prompting suspicions by community members concerning their real stake in the management of the ODRS resource system.

The communities in the ODRS are unique in the whole country. Most of the tribes, namely the Bambukushu, Bayeyi, Basarwa, and Baherero are all designated as minor tribes with no representation in the house of chiefs which is a legislative body responsible for articulating each tribe's interests to influence policy at the national Assembly. The Batawana, also residing in the ODRS are part of what is designated as major tribes recognized as such by the country's constitution.

The designation of some tribes as minor is a form of marginalization and denies them full representation in the House of Chiefs which advises the national assembly on matters pertaining to cultural issues of the different tribes. Taylor (2006) further argues that this marginalization disadvantage the minor tribes in CBNRM matters because having no representation with equal status as other tribes relegates their issues and positions to the margins. Blaike (2006) notes that

in Botswana there is a network of institutions that is transparent in managing the CBNRM projects. He however notes that

the nature of the safari, tourist, handicrafts and trophy hunting industry has not lent itself well to the development of skills by local people, or to the emergence of a substantial and widely distributed stream of income for local communities, it has also led to the marginalization of certain groups, especially the Koi-San³” (p.1954).

The development of the two sector society has evolved where the hinterland in this case the communities in ODRS especially those far away in the tourist areas have become the suppliers of cheap labor to the metropolis or private companies where most of the tourism infrastructure is built. This underdevelopment of hinterlands exacerbates the flight of capital from the production areas such as the tourist areas leaving producers/farmers less well-off (Iroegbu, 2001, Irogbe, 2005). In Botswana CBNRM has been seen as a major component of the rural development strategy (MFDP, 2010) but evidence shows that the development of some of the areas where most of the revenue is generated are still lagging behind in basic development infrastructure with high incidents of poverty illiteracy and poor health (MFDP, 2003, Central Statistics Office, 2009)). Gaventa (1982), suggests that absentee owners of the resources control and shape processes and conceptions in the hinterlands with resultant non challenge from those who are victims of exploitation being the repeated defeats of the past. Although there is no evidence so far that this could be the case in the ODRS, the migration of young people from the ODRS communities to urban villages and towns has led to decrease in populations of the

³ The Khoi-san are an ethnic group within the San people

communities in some parts of the ODRS such as Mababe, Sankuyo and Khwai (Tawana Land Board, 2005).

2.2. Empirical Literature Review

Extensive research on the interaction of agriculture, especially livestock, wildlife and protected areas reveal that there is incessant conflict that ultimately shapes the attitude of local people (WRI, 2008; Mbaiwa, 2011; Albertson, 1998; Wilson, 2000). In some instances, policies in place contribute to the conflict between the two sectors (Taylor, 2006). In other instances, the alienation of the local people from natural resource management who are also involved in agricultural production made them develop negativity towards wildlife (WRI, 2005, WRI, 2008). Of great concern relating to CBC is the attitude of local people to conservation of natural resources, which is seen as critical to the success of CBC (Infield and Namara, 2001; Durrant and Durrant 2008; Lam, 2004). They further state that to better evaluate the success or otherwise of CBC, it is important to assess the attitude of local people towards conservation. Receiving a fair outcome is seen as critical to the success of CBC (Infield and Namara, 2001; Durrant and Durrant 2008; Lam, 2004). Infield and Namara (2001) define CBC as being inclusive rather than exclusive of the communities. The key feature of CBC is the decentralization of natural resource management to local communities with emphasis on economic benefits to communities (Goldman, 2003). Goldman (2003) explains that the decentralization of some aspect of CBC is the reason why it is often referred to as CBNRM. Infield and Namara (2001) further assert that to better evaluate the success of CBC it is important to assess the attitudes of local people towards conservation.

Shretha and Alavapati (2005) however, argue that communities living in proximity to protected areas are often left to bear the social costs of conservation whereas the benefits of

conservation escape out of the region and are not equitably shared. Shretha and Alavapati further argue that the benefits of conservation are felt more at the global level followed by national and regional levels while the communities benefit less. Research in the ODRS has also suggested the same trend where the local communities are left out of the benefits of CBNRM because the bulk of the revenues leak out of the local economy (Darkoh and Mbaiwa, 2005).

Gaventa's study of the coal mines of the Appalachian Valley revealed that they were very rich in coal and contributed a high percentage of the US energy (62%) and yet the majority of the people of Appalachia remained poor (Gaventa, 1980). Gaventa explained and showed that despite this economic injustice, the people of the valley remained silent. In the ODRS and other areas rich in natural resources and yet with poverty being rampant could also be explained using the power theory to understand why inequalities remain unchallenged.

Studies on attitudes in Africa have largely been influenced by the methods and theories developed in the western world. The interest in attitude research is mostly influenced by the increasing conflict between man and wildlife (Browne-Nunez and Jonker, 2008). In their review of the different research projects that have been undertaken on attitude research, Browne-Nunez and Jonker point out that most research in Africa has been influenced by theories and methods developed in the western world such as Marshlow's hierarchy of needs.

The purpose for their review was to assess the applicability of the methods and theories in African survey research as well as the challenges faced by Africa survey research. They found that the common theme that influences research on attitudes is the human-wildlife conflict which has plagued both the western world and the developing world alike. They point out that the importance of research on attitude is predicated upon human-wildlife conflict which engenders certain responses from the afflicted communities. They point out that the attitudes of the

communities affected by wildlife conflict are important in policy response. Policy responses may include ‘...increasing the benefits to communities and using locally recruited game guards...’ (Browne-Nunez and Jonker, 2008, p.47).

Browne-Nunez and Jonker (2008) state the importance of methodological approaches in previous research which influenced research in Africa and raise “...questions regarding the basic cannons of empirical research such as measurement, testing of theories, reliability and validity’ (p. 48). The emphasis on methodology is that rigor of the methodology will lead to “successful application of survey data” (p. 48). Definition of concepts, what is being measured and theory are important aspects of attitudinal research. Browne-Nunez and Jonker (2008) add the importance of reliability and validity in the process of doing this type of research. They define conceptualization as the process that clarifies meaning of terms used in the research process so that the reader can have an understanding of their contextual meaning. They explain that the ‘...definition of the concept being measured and the indicators being used in measurement are often determined by theory” (p. 57).

Given the importance of conceptualization and theory, Browne-Nunez and Jonker (2008) propose a definition of attitude as perception or how one feels about an attitude object. This definition is by no means the only one but has been deduced from the different definitions that were found in the literature. The authors have found in the literature reviewed on attitudinal research in Africa that most of the researchers did not define the term attitude while many also did not apply any theory to their research. The lack of definition poses a problem of validity in terms of knowing whether the instrument chosen is measuring that which one set out to measure.

Browne-Nunez and Jonker (2008) also point out that applying no theory to the research adds to the disadvantage already stated by denying the research a guide to frame issues which

would help contextualize definitions upheld by the adopted theory in the event it becomes necessary to re-define the terms/concepts being measured. They further state that a few researchers have however used theories such as the Maslow's Hierarchy of Needs and Roger's Diffusion of Innovation. Survey research in Africa on attitude has been riddled with many challenges especially concerning data collection.

An evaluation of CBNRM on the basis of the benefits experienced at macro level using macro indicators often mask the negative consequences at the local level. Benefits of wildlife based tourism of which CBNRM is a driving force are often measured by macro-economic indicators such as the gross domestic product (GDP) with less attention made on the impacts at local level (Goldman, 2003). The distribution of benefits is a major concern with many CBC programs. Mbaiwa (2006) for example notes that joint venture partners benefit in disproportionate manner from tourism in the ODRS compared to the local people. He notes that the community sells the trophy animal for a very low price compared to the amount that the company gains when it sells the animal leaving the communities feeling cheated. Other discrepancy exists in the accrual of benefits related to environmental incomes. These include skills level and the resources needed to benefit from environmental income. The communities are usually disadvantaged in this regard (WRI, 2008).

Policy conflicts are usually exacerbated by the unclear property rights. Where these property rights are well defined, they are based on a model that was adopted without critical analysis of alternative theories (Blake, 2006, Ostrom, 1990). Harding's tragedy of the commons model (Harding, 1968) has been dominant in influencing conservation policies in many countries (Quinn, Hubby, Kiwasila, and Lovett, 2007). Due to its premise that individuals using the commons attempt to maximize their gains at the expense of the environment, the model proposed

privatization of the commons where some private entity or the government would take over the management of the resource Quinn et al (2007) however state that there is evidence that in Africa common property regimes have been used successfully to manage common pool resources (CPR)

CPRs are better managed when common property rights are recognized as applicable in an area under consideration (Clement, 2009; Quinn et al, 2007; Ostrom, 1990). Recognition of common property rights would signal an acknowledgement that local people are capable of collectively owning and managing the CPR from which they appropriate resources using their own institutions and rules. This leads to an alternative policy framework that embraces full participation of local people and hence minimizes potential conflict while also creating an environment where conflict also is resolved amicably using agreed institutions. On the other hand policies guided by the tragedy of the commons advocate privatization of the CPR with the understanding that local people cannot manage their own resources (Ostrom, 1990). This world view has the tendency to exclude local people from decision making triggering conflicts between the different agencies implementing the policy with local people (Blake, 2006).

Failure to conceptualize a resource based on the correct property rights theory has the potential to undermine conservation efforts. The history of conservation in Africa and elsewhere in the world, based on the tragedy of the commons had led to conflicts between implementing agencies and local communities (Quinn et al, 2007, DWNP, 2010). Communities often left out of the decision-making process concerning the natural resource on which they depend, develop hostile attitudes towards some natural resources especially wildlife (Mbaiwa, 2006; Goldman, 2003; Quinn et al, 2007)

The evolution of community conservation was a transition from solutions based on the tragedy of the common, culminating in emphasis on conservation and community economic development (WRI, 2005). The hypothesis of CBC was that with economic benefits from natural resource, communities would change their unfavorable attitude towards wildlife and participate more effectively toward wildlife and natural resource conservation. The spread of CBC in Southern Africa was rapid. The 1990s saw several countries adopt community based conservation with different names: CampFire in Zimbabwe, Living in a Finite Environment (LIFE) in Namibia, and Administration Management Design (AMADE) in Zambia. Most communities have embraced the idea of CBC after realizing the benefits of participation such as employment and revenue for their communities.

Despite the success of CBC in many countries that adopted it, CBC is not without its limitations. Although the philosophy behind the community based conservation is for communities to play an important role in a bottom-up decision-making in conservation, top-down approaches are still common (Mbaiwa and Darkoh, 2006; WRI, 2005). Some community members still view wildlife and natural resources as government property beyond their control. In some cases the language used is intended to coerce communities into agreement while greater power remains with government (Twyman 1998, Blaike 2006). This results in continued dissatisfaction by local communities with community based conservation.

There has been extensive research on the interaction of agriculture especially livestock and wildlife and protected areas. The interaction has mostly been characterized by conflict (Mbaiwa, 2005; Albertson, 1998). The conflict mainly involves wildlife destroying crops or predation on livestock (Arntzen, 2003; Mbaiwa and Darkoh, 2006; Albertson, 1998). Part of the problem of conflicts between wildlife and livestock lies in the policies intended to promote

livestock production and agriculture in general. In the ODRS for example, Albertson (1998) pointed out that the cordon fences that were erected in the 1980s that intended to prevent the spread of diseases from wildlife to domestic animals, ended up blocking wildlife migratory routes. The Kuke fence which separates the Ghanzi Tribal Grazing Land Policy farms, has actually resulted in thousands of wild animals trapped on the dryer southern side of the ODRS where there was little to no water during the dry season (Albertson, 1998). It is estimated that between 20 000 and 30 000 zebras and wildebeest died during the 1980s drought because they could not access the Okavango Delta waters due to the blockage of their routes by the Kuke veterinary cordon fence (Boggs, 1999). On the other hand these fences restricted livestock from accessing other parts of the grazing areas (Mbaiwa, 1995).

It has been argued that the modern land management policies in Botswana such as the Tribal Land Grazing Policy (TGLP) which advocated privatizing the commons disregarded the traditional systems which were efficient (Magole, 2009). TGLP was informed by the tragedy of the commons theory which in the 1970s was popular and influenced many policies concerning common pool resources. Magole (2009) argue that disregard of the common property regime which hitherto regulated land management in Botswana was a mistake as the performance of TGLP was dismal. In the Lake Ngami region, land was managed as common property by kinsmen under the authority of the chief. There were mechanisms in place that ensured that land was not overgrazed but TGLP provided exclusive rights to a few individuals who were expected to care for the land better (Magole, 2009). Evidence exists that TGLP has not been produced the expected results (Magole, 2009; MFDP, 2003). Instead most of the farms were overgrazed and mismanaged.

DeMotts, Haller, Hoom and Saum (2010), studied the dynamics of CPR in the Okavango Delta in Botswana. The purpose of the study was to make a comparative analysis of the historical changes in the use of common pool resources using two villages (Ikoga and Seronga) in Botswana.

They drew their data from a combination of field work conducted and studies published by authors on livelihoods in the Delta. Ethnographic field work was conducted by Roland Saum in Ikoga (2003 and 2004) mostly using participatory observation. Interviews with community members, oral history, biographies, archival search and secondary literature searches were used to access data. They found that institutions in the two villages had been undergoing changes from pre-colonial period through colonial period and after independence. The major changes were the institutions responsible for communal resources management. In the pre-colonial period, local institutions were responsible for land and its resources but these were dismantled during the colonial period where Chiefs became the custodians of the land and by extension the natural resources. These changes were maintained and further strengthened by the post-independence government.

Notable changes after independence were the formation of land boards to be custodians of the land and its resources. In the two villages, there are no territorial boundaries governing the use of resources especially fishing, access to common pool resources is open. The study concludes that despite the open resource nature of the resource there is no evidence that the common pool resource are under stress. This is attributed to other sources of livelihoods the communities have access to such as government assistance.

In Botswana some communities had predicated their existence on the common pool resources such as wildlife and veldt products. Magole (2009) conducted a study in which she

examined the shift in common pool resources management in Botswana and how it affects the different groups with differing socio-economic status with specific reference to the San or Basarwa ethnic group who are the earliest inhabitants and are now the most marginalized in the country.

The study relied on the use of secondary data and past reports which mainly focused on the San people. The study found that common pool resource management in Botswana shifted from being community led to a State led system where all conditions are set by the state through numerous laws governing the use of common pool resources. Specific results on the San people revealed that the advent of agricultural production and other modern production systems including mining exploration pushed the San further into marginal lands where they had to contend with fewer and fewer wildlife on which they depended. The passing of modern Acts like the Wildlife Act and Tourism Act meant further marginalization of the San from their livelihood source. Community Based Natural Resource Management Program was designed to bring back the participation of communities in the management of common pool resources. The policy was able to establish the boundaries which helped to some extent with the problem of excludability through the creation of community hunting areas.

Magole (2009) thus concludes that the marginalization of the San and the encroachment of the elites in the areas hitherto inhabited by the San have brought resource conflicts that has an ethnic dimension. The author further argues that access to common pool resources by the elites and other people from outside the areas presents institutional problems that are critical if the management of the Common Pool Resources is to be successful.

Moore and Rodger (2010) looked at wildlife as a common pool resource in Western Australia. The paper aimed at achieving three objectives: first, to explore the possibility of

wildlife tourism being a common pool resource; second, to derive a list of enabling conditions required for the sustainability of such resources and third, to determine the applicability of the conditions through a case study

The study used thirty enabling conditions grouped into four conditions that are required for sustainability of wildlife tourism to answer the second objective and applied the conditions using a case study to test applicability. The four categories are as follows: first, characteristics of the resource; second, nature of the groups depending on the resource; third, features of the institutional regimes, and fourth, which resources are managed. The case study was a desk-based study of whale shark tourism in Ningaloo Marine Park off northern Australia. Data sources included government, industry and unpublished reports, research thesis, journal papers, discussions with officers from Western Australia Department of Environment.

The results showed that wildlife can be considered a common pool resource because of its inability in some settings to exclude tourists and thus inability to capture the true investments and benefits of the tourism industry due to the free rider problem. Institutional arrangement such as licensing makes exclusion of free riders possible. These arrangements are supported by the state. Rulemaking and monitoring are agreed upon after local consultations. The problem encountered is the mobile nature of the sharks that make their use cross boundaries and jurisdictional borders. This is problematic in ensuring the preservation of resource stock. The study concludes that this is a problem irrespective of property right regime employed.

Given the successes of common property regimes in many parts of the world, it is important to consider characterizing the ODRS and its ecosystem, where the existence of agriculture and wildlife coexist, as a common pool resource. This consideration to characterize the ODRS as a CPR is based on the knowledge that communities that currently live in and

around the ODRS have lived there for thousands of years dependent on the delta for their survival (Magole, 2009). If the ODRS is considered as a CPR, it will offer alternative perspective from the dominant one where private property has been center stage in informing policy regarding land management in Botswana. Failure to characterize the ODRS as CPR limits the possibility of considering an alternative policy approach where common property would be an option. Inherent in this alternative view of common property rights is the increased participation of local people in the management of the commons.

The literature reviewed demonstrates that there are different views about the commons and what property rights would be suitable to manage them. This conclusion is based on the literature and experiences from other places where the use of the IAD has been applied. Some of the studies indicate strong government support for the local rules and institutions in the research areas which contributed to the successful management of the common pool resources.

There is a need for the assessment of the local peoples' attitudes towards conservation and the extent to which they participate in the decision making and benefit from CBC. Such information will provide insights into the contribution of local people in natural resource conservation especially in the fragile Okavango Delta ecosystem. This study therefore intends to assess the attitudes of local people towards conservation and land use in the Okavango Delta. It will specifically try to answer the following hypotheses:

1. The Community Based Natural Resources Management (CBNRM) and livestock policies have been successful in the development of the ODRS?
2. The local people of the Delta communities effectively participate in decision-making concerning the development of the ODRS.

CHAPTER 3. Methods

This chapter presents the methods used in this research. This research adopts a qualitative design and used grounded theory as a technique for data analysis. This chapter is divided into four sections: background to qualitative research, followed by the explanation of qualitative research and grounded theory; data collection; and lastly the section on data quality is presented.

3.1. Background to Qualitative Research

Research has been dominated by two distinct and often competing research designs: quantitative and qualitative designs (Babbie, 2004). The quantitative method often associated with the positivist approach has been the dominant of the two however in some cases the qualitative research is used to explain the social phenomena that are beyond the efficacy of quantitative research (Babbie, 2004). Although there are numerous qualitative designs, such as ethnography, ethnomethodology, phenomenology, etc. grounded theory has emerged as a powerful challenger to the otherwise dominant quantitative paradigm. As a process, grounded theory is a rigorous approach to data that includes a dialectical conversation between researcher and data. Grounded theory has the capacity to be especially strong in content validity (Charmaz, 2006) and holds the potential of being complementary and informative of quantitative research.

A study of the ODRS should therefore be cognizant of the diverse actors and their different characteristics in order to generate data that will truly reflect different discourses concerning the ODRS. Given the diversity of the actors and their different experiences, grounded theory provides a more relevant technique to understand the different perspectives of the actors. This can generate rich data that will provide in-depth understanding of the interactions between the actors and their meanings based on their stories and narratives.

3.2. Qualitative Design and Grounded Theory

I chose a qualitative design because the purpose of the study is to understand the conflicts in the management of ODRS by evaluating attitudes of local people towards conservation of the environment and natural resources. The respondents were selected from communities of the ODRS. Understanding the conflicts in the management of ODRS necessitates selecting a methodology that helps one understand meanings attached to the issues under study such as attitudes, conflict, etc. Qualitative design provides the tools that can achieve this task (Creswell, 2009).

Grounded theory came into existence in the late 1960s when researchers, concerned with the issues of dying and death and their impact on both the patients and the staff in hospitals, embarked on a journey to study the hitherto marginalized areas such as the one stated above: dying and death (Glaser and Strauss as cited in Charmaz, 2006). Grounded theory provided an avenue for qualitative research that cuts across disciplines and is able to “...develop and inductive theories that are grounded in systematically gathered and analyzed data” (Bitsch, 2005, p. 77). Simply put, using grounded theory as a technique results in a very close reading of the transcribed words of participants and/or observations. It involves a series of approaches to the data, from initial coding to focused codes and finally to a theoretical conceptual design (Charmaz, 2006).

In conducting data collection, I directed discussions in the interviews and the focus group discussions. This means that I have played a role in influencing the interaction between respondents. My role however was that of a facilitator to ensure that issues were explored more through probing. Having experience with the government bureaucracy made me interpret the results using my own intuition about how the bureaucracy works and the consultative process.

The methods chosen to collect data in the ODRS was that which focused on participation of the respondents especially the local communities who might be deemed to be voiceless by virtue of their location in the power relations system. In giving the respondents an opportunity to engage in dialogue about their concerns, I achieved what de Souza Briggs (2003) calls ‘People Power produces Proper Planning’ (p. 16). The tendency in bureaucratic discourse is to divide actors into givers and receivers where the government and its bureaucracy are givers and the local communities are receivers. This is the top down approach which has dominated planning for decades. Participatory methods have themselves been symbolic in most instances (Twyman, 1998). This results in conflict between the givers and the receiver since often times the receivers are given what does not add value to their lives.

An emancipator method is the one that creates dialogue to ensure richness of data (Charmaz, 2006). It helps the involved actors to deconstruct meanings of hitherto misunderstood conversations. By interviewing community leaders and conducting focus group discussions with local community members of diverse demographics, I was able to create dialogue amongst the community members and help them present their views on topical issues affecting their communities’ development effort. On the other hand, I interviewed the officials on similar issues and was able to discern in a reflexive manner the points of convergence and differences.

Mason (2002), advises that a researcher should ask themselves questions concerning how they want to read their data and present their arguments. She points out that these could be in a literal, interpretive, or reflexive sense. To read data in a literal sense is to look at the aspects of the reading for their literal substance. In the interpretive reading the researcher reads the data for what they think it means. The last one is the reflexive which requires the researcher to

interrogate themselves about their role in the reading. That is, how they see themselves in the data or the role they play in the interaction.

The ODRS as a major tourist attraction and housing a wetland of international importance (Okavango Delta) has invited different stakeholders with diverse interests. The diversity of interests implies contested views at the policy level with different discourses presenting their views. In the case of the ODRS with its diverse participants, the dominant views representing the interests of the power holders often prevail and find their way into the policy agenda while others do not. It is not uncommon in Botswana to find the dominant discourse to be the official one while the receiver discourse, usually the ordinary citizenry are being swayed to the margins (Twyman, 1998)

To study official discourse, different techniques were employed to decipher information from the government policy documents, ODRS management plans and the consultations as well as the presentations in the workshops leading to the plan by the bureaucracy. To achieve this I asked myself some questions as suggested by Charmaz (2006) including: who produced the text, for what purpose? What other purposes does the text serve? (p. 39). The second strategy I used is coding. I used initial coding to note emerging issues as a strategy which is helpful when working with documents (Charmaz, 2006)

As Twyman (1998) notes, practiced discourse might have hidden meanings that are intended to coax the receiver to accept what is being proposed only for the receiver to realize that communication did not mean what it said it meant. In studying the practice discourse I was aware of the fact that the bureaucracy in Botswana is the implementer of government policy which is the dominant discourse. I was also aware that the government or the policy makers use consultative process to convey their policy messages or images to the general public. Given this

understanding and cognizant of unequal power relations in the policy process and the typical use of language, text and talk to exercise power over (Alexander and Mohanty, 1997; Mohanty, 2006; Gaventa, 1982; and Dijk, 1993), I analyzed how the practitioner of this official discourse participated in its formation.

The receiver discourse is rooted in the indigenous knowledge which has been relegated to the margins in the modern policy discourse. The traditional way of life in most of the ODRS communities can be described by what de Souza Briggs call ‘raising barns’ (2003, p. 10) meaning the interdependence based on social capital (Shaffer et al, 2004). This way of living is characterized by the community dialogue on all issues that concern it in a manner that is reflective of patriotism. The interaction of the official discourse with receiver discourse is often conflict ridden where interests clash. de Souza Briggs (2003) argues that “...tackling problems well together usually begins with some honest inquiry into which conditions may qualify as problems to be solved, which as opportunities to be pursued, and which merely as concerns to be tracked and revisited” (p.11). A community in the ODRS pursuing such a strategy might find itself at loggerheads with the official and practitioner discourse which have priorities set at the national level. In cases where this occurs, the receiver discourse indicates acrimony which I identify by looking at the consultative records such as minutes from Community Based Organizations (CBO) minutes, reports and the government reports. Text analysis (Charmaz, 2006; Dijk, 1993) is a useful tool to link the three discourses and see the hegemonic tendencies if they exist.

3.3. Data Collection

As with any study, the nature of the research question should drive the method used. Here, I wish to better understand the meanings associated with stakeholders in Botswana, both

local and governmental, in order to assess how they understand the policies implemented in the ODRS region.

The data collection took place in three periods in the ODRS in Botswana: July/August 2008, July and August, 2009 and September 2011. Data collection methods include interviews with stakeholders in order to access the discourse of local stake holders related to issues of tourism and agriculture. I also conducted observations in Mababe, Khwai, Sankuyo and Nokaneng. I conducted observations in Mababe on three occasions in 2008, 2009, and 2011 and the same with Sankuyo but in Khwai I conducted observations in 2009 and 2011 only. I visited Nokaneng to conduct observations and interviews in 2011.

I also used secondary data in this research. Secondary data sources included Botswana government policy documents specifically national development plans (NDP), official statistics from central statistics office (CSO), relevant reports from different ministries especially the Ministry of Agriculture, Ministry of Finance and Development Planning, Ministry of Environment, Wildlife and Tourism. I obtained some of the data from the Okavango Research Institute (ORI), which is part of the University of Botswana focusing their research on the Okavango Delta Ramsar Site. The data was in the form of scholarly reports on the Okavango Delta and the different aspects of the Delta.

Three types of communities were visited: one community that does not have a CBO and does not participate in CBNRM activities but keep livestock and two communities that do not keep livestock but participate in CBNRM as the only source of livelihood. One community where interviews were conducted owns a few livestock and heavily depends on CBNRM as a livelihood source. These communities were purposefully selected for their uniqueness in the ODRS as described above. Mababe, Khwai and Sankuyo were selected because they derive their

livelihoods from wildlife based tourism through CBNRM and are not allowed to keep livestock. Nokaneng was selected because it does not participate in CBNRM. Their attempt to form a community based organization was refused by the Department of Wildlife and National Parks (DNWP) and as such the people in that community depend largely on agriculture as a source of livelihood.

Within these communities, I interviewed key informants such as traditional leaders, leaders of community based organization. The selection was also purposeful and I also used the snowball technique to identify respondents. These techniques are very common in qualitative research where respondent selection can be based on their resourcefulness given the issue to be studied (Creswell, 2009; Babbie. 2004). The key informants that I interviewed were the chiefs of Mababe, Sankuyo, and Nokaneng. The other respondent I interviewed in Mababe was identified through the snowball technique because of their wealth of experience in CBNRM issues and his credentials as the former chairperson of the Trust who had travelled overseas presenting on CBNRM issues in Botswana. I interviewed managers of CBOs/Trusts for Mababe, Sankuyo and Khwai as they all fall under the category of key informants. In total the key informants I interviewed were four chiefs for the four villages, a former chairperson of Mababe Trust and three managers of the Trusts for the three villages. In Nokaneng I interviewed the secretary of the Tribal Administration and the administrative Assistant at the Kgotla who is also a resident of the village, as part of the purposefully selected key informants. In total my key informants from the communities were eight. I held discussions with two faculty members from the Department of Environmental Science at the University of Botswana in 2008, director of Division of Agricultural Planning and Statistics in 2008 and 2011, Deputy Director, Veterinary Services in 2011, Chief Crop Production Officer all in the Ministry of Agriculture in 2011. I also

interviewed Senior Tourism officer at the Department of Tourism in Gaborone in 2009 and one tourism officer in for the Ngamiland District Council in 2011. I interviewed one Wildlife Officer in charge of CBNRM in 2011. I could not record the interviews as the respondents were not comfortable with that idea.

3.3.1 Observations

The use of observation as a data collection technique is common in qualitative research. It is usually used to capture data that include non-verbal communication and related environment in which research is taking place. Mason (2002) posits that it is

a method of generating data which entails a researcher immersing himself or herself in a research ‘setting’ so that they can experience and observe first hand a range of dimensions in and of that setting...including social actions, behavior, interactions, relationships, events, as well as spatial, locational and temporal dimensions (p.84).

In the qualitative tradition observations take place in the naturalistic environment instead of controlled one characteristic of quantitative design.

In the summer of 2009 and September 2011, I conducted observations in three local communities of Mababe, Khwai, Nokaneng and Sankuyo. The purpose was to familiarize myself with the setting, the environment, and different location of different infrastructure in the communities, business, and type of dwelling places, government resources and community based resources and structures. To ensure increased richness of data, I ‘immersed’ myself in the setting, the purpose being to experience and observe first hand all dimensions of the setting. This also helped me to observe the interaction of community members in a more relaxed setting and later in a more ‘formal’ one during focus group discussions (Mason, 2002).

In the summer of 2009, I spent three hours of observation in the Mababe village doing observations. I first introduced myself to the village chief and explained what my research was about and also to seek permission to move around the village making the observations. I noted the village infrastructure: schools, health facilities, government offices and other infrastructure that help people run their day to day activities. I also looked at the type of housing units in the village, water sources and retail stores, farms, and other forms of infrastructure that was observed. I also noted the people in their relaxed moments for example at a drinking spot where several young men were loitering. I listened and engaged in conversations about their everyday life in the village without making the conversation translate into an interview.

In Mababe I also had an opportunity to observe the community deliberations in a meeting in a traditional assembly on issues related to the community Trust. At the meeting I was sitting down taking notes on the content of the meeting as well as noting the characteristics of those in attendance. I made observation on how the issues were deliberated and how resolutions were taken. For example, one contentious issue that arose concerned the effectiveness of the Board of Trustees. Some members of the community were concerned about the type of training courses the Board and its management decided to send their children to be trained on which they argued were not what the community agreed upon. The members also questioned the biasness of allocating the training slots which they contended favored specific families. After some heated debates, a motion of no confidence was passed on the Board and they were subsequently unelected after majority favored the motion. The new board was elected in the same meeting.

I took note of the participation of the different attendees on the bases of gender and age. These attributes of the respondents help the researcher understand the factors that may influence the attitudes towards conservation of the environment and natural resources. I also took note of

the sitting arrangement and who set where, whether people of same gender sat together or whether they were just mixed as well as observing sitting arrangement by age. I felt the need to make this observation because I would learn something about the culture in a traditional assembly meeting and how that influences decision-making.

3.3.2 Interviews

I conducted interviews with key stakeholders from the Central Government, Local Government and community based organizations as well as the University of Botswana (UB), Department of Environmental Science at the Okavango Research Institute in 2009. The discussion with UB faculty centered more on research planning where my questions were directed at general issues about the ODRS, different stakeholders and different sources of information concerning the ODRS. In our discussions issues related to policies arose and how the different stakeholders interact in the ODRS which formed part of my data.

In September 2011, I interviewed the Mababe chief, the chairperson of the Mababe Trust, the chairperson of Sankuyo Trust and the chairperson of the Khwai Trust. The Chief of Nokaneng and the tribal administration secretary were also interviewed. From the local government, I interviewed the Deputy Secretary of the Ngamiland Land Board on different subjects including the land use plan for the ODRS, land allocations and community involvement in the development of the area. I interviewed the Head of Department of Environmental Affairs in Maun on issues relating to policy and the ODMP and the different stakeholders involved in the ODRS. The chairpersons of the Khwai, Sankuyo and Mababe CBO/Trusts were interviewed separately concerning their respective CBOs.

I used an interview guide with open-ended questions (Creswell, 2009; Hennink et al, 2011) to direct and generate discussions. By asking open ended questions, the respondents were

given an opportunity to provide as much information as possible with follow-up questions. I chose the interview method because it would help me get involved in the discussion and also make observations on non-verbal communication. I asked specific questions including what the people perceived as the benefits of CBNRM, what was the role of the community in the design and implementation of CBNRM, how the community leadership participated in CBNRM, the views of the respondents to wildlife presence in their area, and the role of community organizations in the management of wildlife resources. Other questions that I asked were: what were the views of the community with respect to the government in the management of CBNRM, the role of different government departments and how the community felt about their working relationship? I asked questions concerning other livelihood sources, mostly about the role of agriculture. Community members in focus groups were asked to rank the importance of wildlife, agriculture and other livelihood sources in their lives. A participatory rural appraisal technique of livelihood ranking was used to help understand the answer to this question. The technique involves the use of visual material such as grain for respondents to cut the portion from the pile that represents the percentage a livelihood plays in their lives.

In September 2011, I collected more data focused on the attitudes of members of communities in the ODRS towards CBNRM. I also asked questions about livestock keeping. I asked questions similar to the ones I asked about wildlife. In addition I asked about the views of respondents on the relationship between wildlife and livestock as well as the government policy towards compensation of wildlife damage on crops and on the predation of domestic animals by wildlife.

3.3.3 Focus Group Discussion

In the summer of 2009, I conducted focus group discussions in the three communities of Mababe, Sankuyo, and Khwai. The participants were purposefully chosen based on availability and their resourcefulness on the issues relating to conservation and community development. The Chiefs in the three communities were instrumental in facilitating my meetings with the respondents. In Mababe, the respondents included seven males who were all in their twenties and six females three of whom were in their late twenties and one old woman who was in her late sixties or early seventies. The males were mostly articulate on issues concerning developments in their community. To encourage the flow of ideas, I prompted everyone to feel free to make comments especially those who were more reserved and not partaking in the discussion sufficiently. I did so by asking them what their thoughts were on the topic under discussion. In Sankuyo, only a few men were present and two women who most of the times were more reticent. There were five men in their late thirties or early forties and four women: three were in their twenties while one was in her thirties. In Khwai, the participants were mostly young men (six men and two women) all in their twenties and were active in their CBO and were well informed about issues concerning the developments in the area.

3.4. Data Quality and Analysis

To ensure the quality of data, Lincoln and Guba (1984), addresses different criteria that the researcher or naturalistic inquirer needs to be cognizant of for their data to be accepted. They posit that the issue to be tackled first is that of trustworthiness. To do so, they suggest that the researcher addresses questions of truth value, applicability, consistency and neutrality (Lincoln and Guba, 1984). They contend that these four issues help address the issue of reliability which

is a precondition for validity. Triangulation which means replication is used to affirm the reliability.

In data collection, my role was that of a facilitator for the discussion to be focused on issues related to conservation and development in their respective communities and other issues stated before. The quality of this data is predicated upon the assessment of similar studies which could be compared for consistency. The instruments used should be able to yield similar findings if they are reliable. For this particular data collection, prolonged engagement in the setting ensured that the data collected reflects the situation on the ground not tainted with the misconceptions of the researcher, and secondly, the information was discussed with researchers at the Okavango Research Center specifically Dr. J. Mbaiwa who has been involved in several research projects in the area and thus familiar with the social environment of the communities. The discussions with the Department of Wildlife and National Parks (DWNP) also provided verification of the validity of the information. The purpose was to triangulate using multiple sources as suggested by Denzin (cited in Lincoln and Guba, 1985).

Several steps were taken to analyze data. The most recent data that I collected in 2011 was in the form of recorded interviews. The first step I took was to translate the interviews from Setswana to English and at the same time transcribed the interviews. I then developed codes starting with initial coding of the data. A code is defined as "...an issues, topic, idea opinion etc. that is evident in the data (Hennink, Hutter, and Bailey, 2011, p. 216). Initial coding involves reading the data and identifying an issue that is repeated in several other transcripts (Hennink et al, 2011). After the initial coding, I developed a code book containing most of the initial codes already developed. A codebook explains the meaning of the codes and gives examples from the interview in order to ensure the meaning is correct given the context. The next step was focused

coding. This step involved selecting codes that are similar and describe broad segments of data.

From the focused codes I developed memos which are explanations of the implications of the issue and the analysis of what they mean in the context of respondents. Most of the secondary data involved the numbers of wildlife, livestock, revenues and demographic data. The data is presented in the form of frequency tables to show the development trend in the ODRS and how its impact on the lives of the community members. This information from the quantitative data helps make sense of the impact of the livestock and wildlife based tourism policies on the communities of the ODRS. This baseline information is used to evaluate the responses from the community members given that the literature shows positive contribution of livestock and wildlife based tourism policies on development and yet there is continued conflict in the ODRS between the different actors.

Chapter 4. Results

This chapter presents the results of this study. It is divided into three broad sections. The first section of this chapter presents livestock production. It focuses specifically on and wildlife based tourism 1), economic benefits of livestock production 2), policy incentive to livestock production 3), wildlife based tourism data and 4), policy incentives to wildlife based tourism. Information on economic benefits includes total cattle sales, holdings selling, total revenue. The second section presents results on wildlife-based tourism. It focuses on the economic and social benefits of wildlife based tourism. The economic benefits are discussed based on the revenue and employment created by community based organizations through which local people of different communities in the ODRS participate in tourism. The third section presents results on the attitude of the local people of the ODRS communities towards livestock policies, with specific reference to livestock disease control policy and the CBNRM. This section addresses the attitudes of local people in communities whose main source of livelihood is CBNRM and do not keep livestock; communities who participate in CBNRM and keep livestock, and communities who do not participate in CBNRM and are engaged in livestock production.

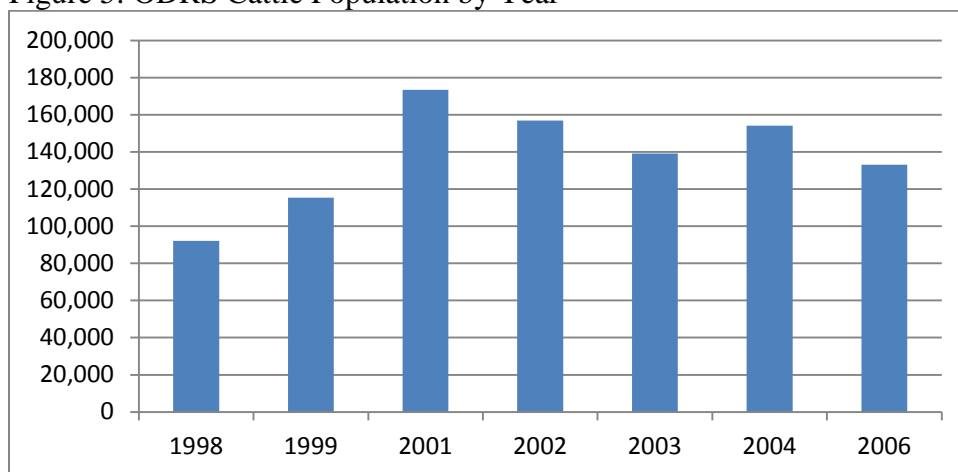
4.1. Livestock Production

After the cattle cull of 1996, following the Contagious Bovine Pleuropneumonia (CBPP) outbreak in the ODRS, the government restocked cattle to farmers who were affected by the cull. The government adopted the stamping-out policy (Marobela-Raborokgwe, 2011) where all cattle (320,000) in the affected zone were killed. The decision to kill all cattle in the ODRS during the CBPP outbreak was seen as the best strategy to eradicate the disease since the other options such as vaccination had failed and were also expensive. Cognizant of the potential hardship that the farmers in the ODRS would endure after the cattle cull, the government offered farmers three

options: the first option was for farmers to be given all their compensation money and get no cattle in compensation and the second option was for farmers to claim 75 % of the money and have 25 % compensation as cattle. The third option was for farmers to receive 75 % compensation as cattle and 25 % as money. The restocking exercise was aimed at helping farmers in the area to re-start their herds.

In 1997, a total of 70,000 cattle were re-stocked in the ODRS and other parts of Ngamiland district. Since then, the cattle population has been fluctuating but generally increasing from 1998 to 2006 as shown in figure 5. The cattle population was 92,154; 115,273; 173, 474; 156,845; 139,196; 154,196; and 133,148 for the years 1998, 1999, 2001, 2002, 2003, 2004 and 2006 respectively.

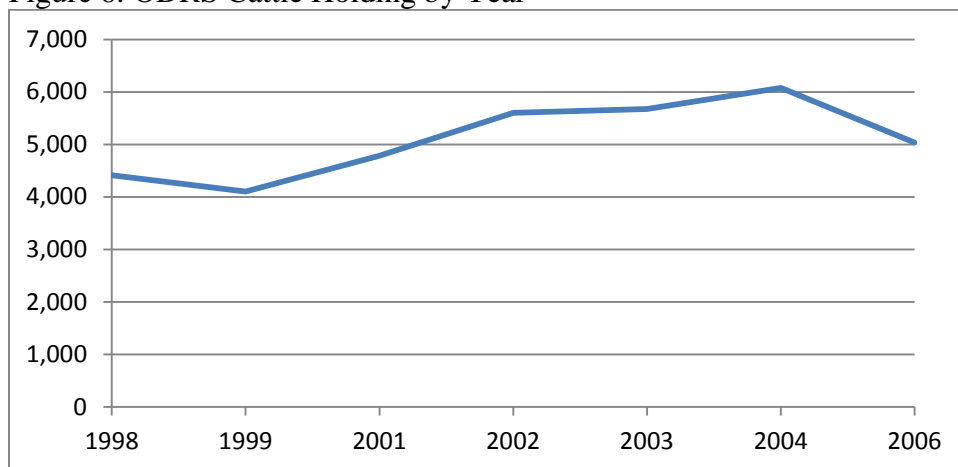
Figure 5: ODRS Cattle Population by Year



Source: Data compiled from CSO agricultural surveys for 1998, 1999, 2001, 2002, 2003, 2004 and 2006

An agricultural holding is defined as an economic unit which manages agricultural production on a specified land area (CSO, 2004). Agricultural production can be any type of livestock production or crop cultivation in a farm unit. In the ODRS, the number of cattle holdings was also increasing for the same years. These are shown in Figure 6 below.

Figure 6: ODRS Cattle Holding by Year



Source: Data compiled from CSO agricultural surveys for 1998, 1999, 2001, 2002, 2003, 2004, 2006

The benefits from cattle can be classified as social and economic. Emerton (1999) further classifies these into use values and non-use values (see also Barnes 1998; and Arntzen 2003). The use values include direct uses such as meat, milk, hides and draft power. The use of cattle for the provision of these uses has both economic and social components. These uses are addressed in the following sections starting with the economic benefits.

4.1.1. Economic Benefits of Livestock

The economic benefits of livestock discussed here include the revenues from cattle sales that individual holders earn, employment and the marketing infrastructure related to cattle such as roads and abattoirs.

With the advent of the modern cash economy in Botswana, the sale of cattle for cash became one of the major benefits of livestock. This propensity to exchange cattle for cash was encouraged by the availability of the marketing infrastructure, such as the Botswana Meat Commission (BMC), local abattoirs, and numerous other marketing outlets that emerged with the modern economy (especially after independence) (MFDP, 2003; MFDP, 2010). This marketing network, which constitutes build or physical capital, became more visible after the discovery of

diamonds, which helped government to generate enough revenue to embark in such developments to achieve such built capital. The improved road network infrastructure, which connects production areas with marketing places, was also a catalyst to increased livestock production and hence increased sales. The overriding factor that led to the fast growth of the built capital for livestock production was the livestock policies that the Botswana government adopted including Tribal Grazing Land Policy (TGLP), fencing component of the National Policy for Agricultural Development (NPAD) and animal disease control policy which were aimed at increasing livestock productivity.

As a result of the cattle cull of 1995 due to the CBPP outbreak, the cattle population in Ngamiland has not reached its pre-CBPP levels. For example, Wilson (2000) found that an average number of cattle herd per household was fewer than five in the Ngamiland West region after the cull. The cull led to alternative sources of livelihood and cattle as a livelihood source lost its prominence (Wilson, 2000). Fidzani (in Flyman 2003) found that the eradication of cattle in the Okavango led to economic hardships that hitherto were unheard of in the region. From their surveys, the number of households that ranked cattle as their number one source of livelihood dwindled from 52% of the people interviewed in 1996 to only 7.2% in 1999. Despite this, cattle are still important to the people of the ODRS as will be shown later in this section.

Revenues from cattle sales have been increasing largely due to the increase in sales since 1998. The results of the trends in total revenues, cattle holdings, average revenue per holding and price received are shown in Table 3.

Table 3: Total sales and holdings selling, total revenue and average price in BWP by district and year

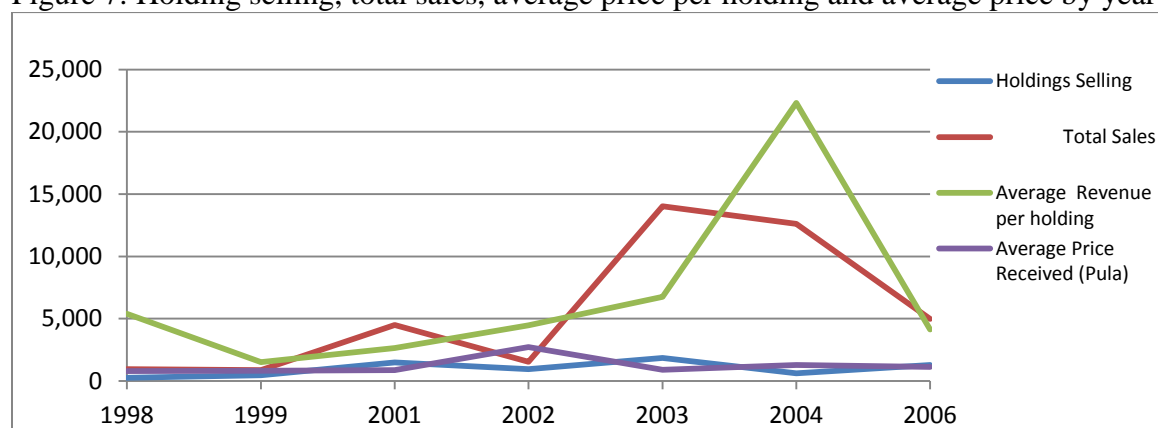
Year	1998	1999	2001	2002	2003	2004	2006
Holdings Selling	247	473	1,491	943	1,851	612	1273
Total Sales	954	870	4,505	1,547	14,016	12611	4981
Total Revenue Received (Pula)	762,000	719,332	3,926,046	4,212,474	12,492,540	16323403	5568781
Average Revenue per holding	22	1,521	2,633	4,467	6,749	22331	4142
Average Price Received (Pula)	799	827	871	2,723	891	1280	1124

Source: Data compiled from CSO annual agricultural surveys for 1998, 1999, 2001, 2002, 2003, 2004, and 2006

Table 3 shows that there has been a fluctuation in holdings selling, total sales, total revenue received, average revenue per holdings and average price received. Average revenue per holding from livestock sales rose steadily from 1998 to 2004 and declined in 2006. These would be very low annual revenues for households where cattle are the only source of household income, which is sometimes the case.

Figure 7 is a pictorial presentation of the holdings selling, total sales, average revenue per holding and average price trends over the seven year period. As figure 7 shows there is much fluctuation on total sales and average revenue per holding. The holdings selling and price and the average price have remained stable for the period.

Figure 7: Holding selling, total sales, average price per holding and average price by year



Source: Data compiled from CSO agricultural surveys for 1998, 1999, 2001, 2002, 2003, 2004, and 2006

A slight drop in average revenue is observed in 1999, which is consistent with the drop in cattle sales and revenues for that year.

4.1.2. Policy Incentives to Livestock Production

The agricultural policies in Botswana have mostly favored the livestock subsector compared to the crop subsector. The subsector has enjoyed favorable budgetary allocation and increased and improved built capital (roads, artificial insemination centers, marketing infrastructure etc.) There are also several institutional arrangements that the livestock sub sector enjoys. These include support from the government, parastatals⁴ and the private sector in terms of provision of subsidies, market and livestock feeds and vaccines.

In terms of budgetary allocations, the livestock sub sector enjoys a bigger share of the MoA financial resources. This is with the blessing of parliament where budgetary allocations are debated and approved. For example, the MoA capital expenditure for the seventeen National Development Plan (NDP) 9 projects, which was implemented over a five year period starting 2003/2004 financial year to 2008/2009 financial year stands at P1, 009, 265 as shown by table 1 on page 9.

The three projects were implemented by the then Department of Animal Health and Production now Department of Veterinary Services, constitute 36.28% of the total capital budget for the whole MoA. The animal disease emergency control and improvement to disease control are designed to control the major diseases such as foot and mouth disease, nakana, and cattle lung disease all of which are prevalent in the ODRS. The paradox of this is that no cattle or cattle products are allowed to leave the ODRS as part of the improvement to disease control. The imposition of trade restrictions on cattle from FMD zones has resulted in the banning of cattle

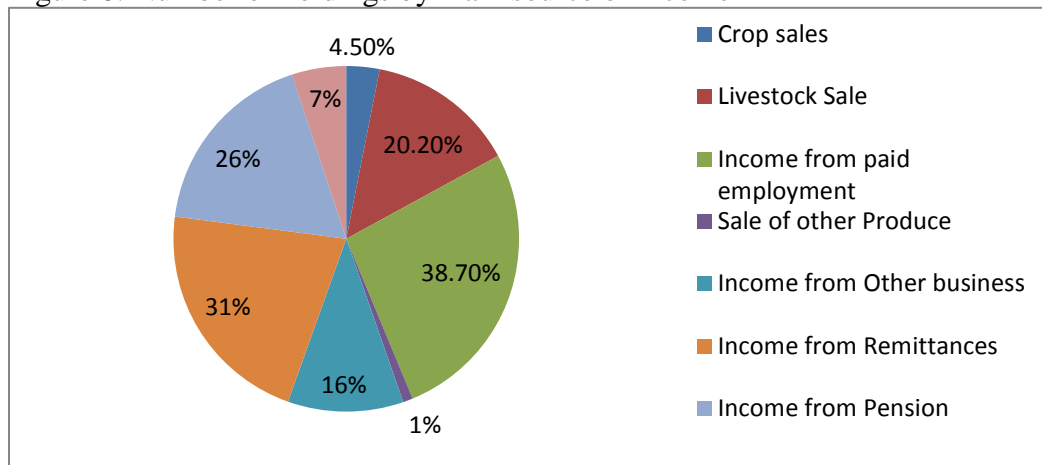
⁴ These are organizations that are jointly owned by the government and the private sector

from the ODRS to be exported to the lucrative European markets as part of the sanitary and phyto sanitary agreements between Botswana and the European Union. This means that these policies are more regional in nature and are invested in an area whose livestock has little benefit to the whole nation.

Apart from budgetary allocations, the livestock sub sector has several other institutions that support it. The marketing outlets include the Botswana Meat Commission, municipal abattoirs, local abattoirs, cooperatives, watering facilities, kraals, and crushes. The road networks, which link production sites with the marketing outlets, constitute the marketing infrastructure that is supported by government policy. As Ghatak and Ingersent (1984) state; “producers must be convinced that a remunerative market exists for their products ...before they can be induced to produce commercially” (p. 85). Although Ghatak and Ingersent were writing in the context of commercial production, the same logic holds for traditional production in Botswana. This is evidenced by the use of the marketing outlets by traditional producers in the ODRS where sales have been increasing (see table 3 above). To further illustrate the logic of the market outlets’ importance in production inducement, MFDP (2003) shows that the construction of several marketing facilities during NDP 8 “...in strategic production locations throughout the country and the distribution of these facilities has led to increased cattle off-take from the communal areas” (p.180). The availability, variety and proximity of market outlets therefore act as stimulus to more production.

Despite huge investment in the livestock subsector especially in the ODRS as shown by the budgetary allocations, most cattle holders in the ODRS depend on other sources of livelihood than cattle

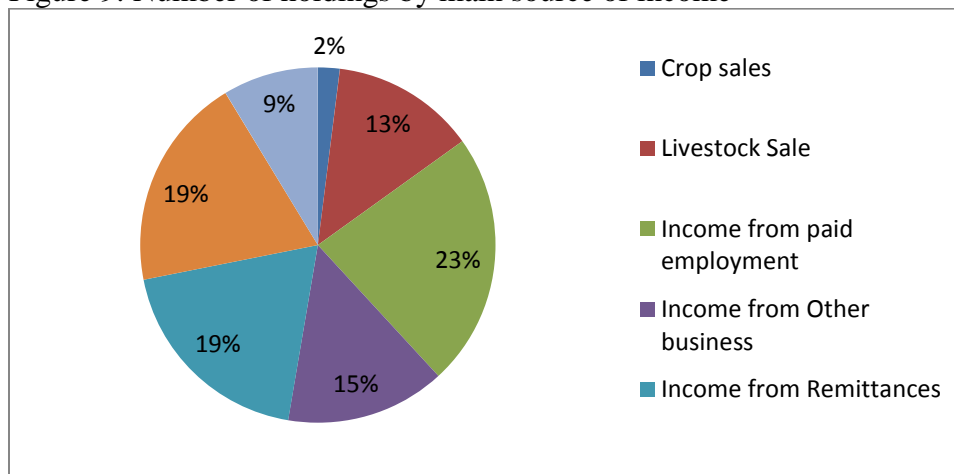
Figure 8: Number of holdings by main source of income



Source: Data compiled from CSO agricultural survey for 2004

Figure 8, shows that while livestock sale plays an important economic role in the lives of the farmers in the ODRS, they depend more on income from paid employment, income from remittances and income from pensions. In figure 9, which shows holding by main source of income for 2006, livestock ranks number four after, paid employment, pensions, remittances and income from other business.

Figure 9: Number of holdings by main source of income



Source: Data compiled from CSO agricultural survey for 2006

4.2. Wildlife Based Tourism

This section presents the advantages and disadvantages of wildlife-based tourism in the ODRS. The section is divided as follows: first the economic benefits of wildlife-based tourism

will be discussed. The discussion is centered on the revenue generated by the sector in the ODRS and on employment with specific reference to CBOs. Next the social benefits are discussed. Other benefits of wildlife are considered in a third subsection, followed by a summary of all benefits. This is followed by a discussion of the disadvantages and disincentives to wildlife based tourism. The section will conclude with a summary of the disadvantages.

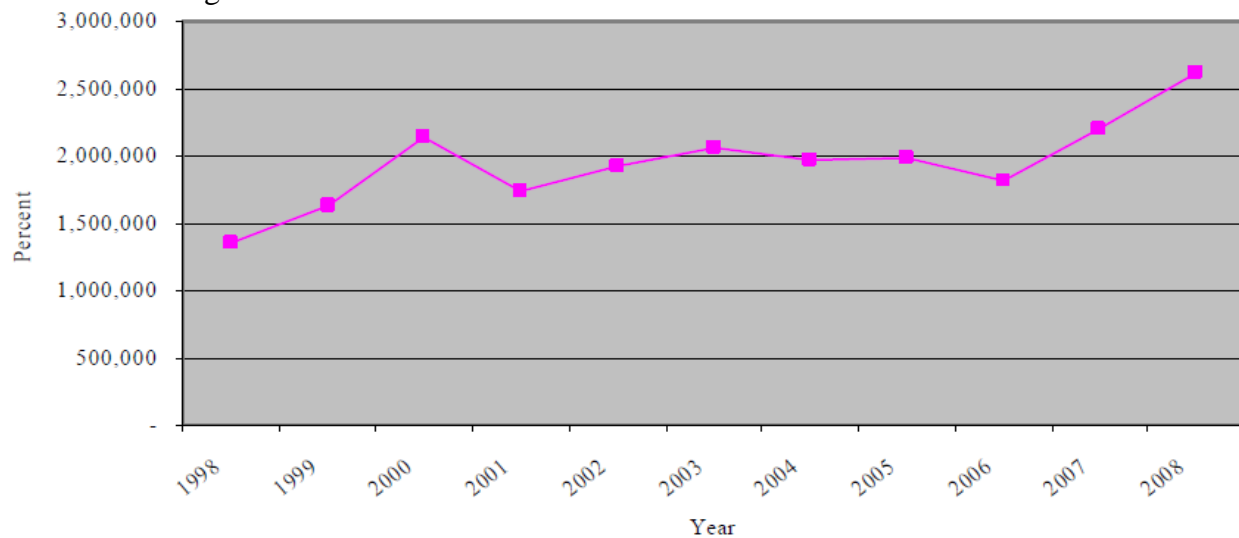
4.2.1. Economic Benefits of Tourism

This subsection presents the economic benefits of wildlife based tourism in the ODRS. It starts with the discussion of tourism in the ODRS in general and then it addresses individual CBOs that are engaged in wildlife-based tourism in the ODRS.

The tourism industry has been growing consistently over the past decades both in terms of international arrivals and revenue (Mbaiwa, 2005). For example in 2000, international arrivals were 689 million and in 2008 this number has increased to 928 million (Mbaiwa, 2005). This increase in international arrivals has been consistent all the years in between with a slight drop in 2001. Revenues from tourism have also increased over the years from US\$ 569 billion to US\$ 901 billion. A slight drop was also noted in 2001 with all the other years registering increases for the period. The increases in both arrivals and revenues were however skewed towards the HIC whereas the LIC countries had fewer arrivals and lower revenues. The challenges that the LIC face that limits them from earning higher revenues and more numbers of arrivals is low infrastructural development, skills and marketing infrastructure (World Bank, 2010).

In Botswana tourism has also been on the increase with total arrivals increasing over the years from around 1 400 000 in 1998 to around 2 600 000 in 2008 (CSO, 2010). This increase is coupled with increased employment and revenue for the country.

Figure 10: Total arrivals 1998-2008



Source: CSO, 2010

Tourism has also benefited the LIC by creating employment where formal jobs are non-existent in many remote areas of these nations (WRI, 2008). Many LIC have realized increases in employment due to the expansion of the tourism industry as well as net revenue accruals to their state coffers. Despite these benefits, Mbaiwa (2005) warns of unequal distribution of tourism revenues due to the more common enclave tourism in most LIC countries. According to this type of tourism, ownership of tourism resources is mostly in the hands of foreigners while locals have a few non-profitable enterprises. The result is that most of the revenue leaks out of the tourist areas and leaves the local economies no better off than they would be if they owned more of these tourism enterprises.

Employment in the tourism industry is also skewed with high paying jobs held by foreigners this being the result of the low skills level of local people in the tourism industry. Policies in place in some of the LIC are not effective in advancing tourism development. This usually is a result of pressing issues that force public policy to focus on other sectors such as education, health and food production (Sachs, 2005).

While the HIC countries have diversified their tourism industry from being just extractive

use of their natural capital year ago, this phenomenon is recent in most LIC. The reason behind this is the desperate need of the people in LIC to meet their daily needs to escape poverty and other major challenges such as diseases, poor sanitation and meeting immediate educational needs. In doing so they draw more from the ecosystem services through extractive means such as direct use values of wildlife, forests and veldt products to meet practical needs in most cases at the expense of the strategic needs (WRI 2005, 2008). Developed built capital in HIC which become amenities attracting people from metropolis around the world are absent in LIC (Green, Deller and Marcoullier, 2005). This offers limited options for tourists in LIC hence LIC lag behind in terms of arrivals and revenues.

The pull factors for most tourist destinations are their richness of natural resources such as flora and fauna and the scenic beauty of their landscapes. Research has shown however that while these attract a lot of revenue and in the process increased investments in further infrastructural projects, the local communities are often left with less benefits compared to the revenue generated (Twyman, 1998, Darkoh and Mbaiwa, 2005). Such needs as improved nutrition, access to medical facilities, good sanitation, and general wellbeing of local communities are often not part of the development agenda. This is usually the result of unequal power relations between the stakeholders involved in the policy process. Woolcock and Gibson (2008) for example, using a mixed methods approach studied the role of marginalized groups in local development found that these groups were usually excluded by the local elites in decision making. The only way the marginalized groups could participate was in the presence of facilitators who ensured that some form of dialogue was established and that the views of the minority were heard. It is however clear that despite these limitations, governments in LIC are investing their efforts in developing tourism and ensuring that local communities are involved

through community based conservation endeavors. In Botswana a large portion of land is set aside for tourism related activities as stated earlier even though the dominating economic activity in the ODRS is agriculture.

It is worth noting that the different land use types such as tourism and livestock grazing yield different use values and the allocation of land is influenced by how much each land use type will benefit the local and national economies. Arntzen (2003) made an analysis of the different land uses using the model developed by Barnes (1998). The following table shows the different land use types under different economic analysis.

Table 4: Economic analysis of land use types

	Small-scale traditional livestock production	Large-scale cattle post livestock production	CBNRM in low wildlife quality areas	CBNRM in high wildlife quality areas	Commercial tourism
I. Financial analysis					
IRR	11.5%	6.8%	8.0%	8.1%	9.6%
NPV (Pula)	381	-52 846	3 466	20 302	229 517
NPV/ha (P/ha)	52	-8	0.00	0.25	15.94
II Economic analysis					
IRR	10.1%	2.0%	24.8%	54.1%	64.0%
NPV (Pula)	4 679	-235 621	1.8 million	2.9 million	6.6 million
NPV (P/ha)	26	-37	3.00	36	457

Source: Arntzen (2003).

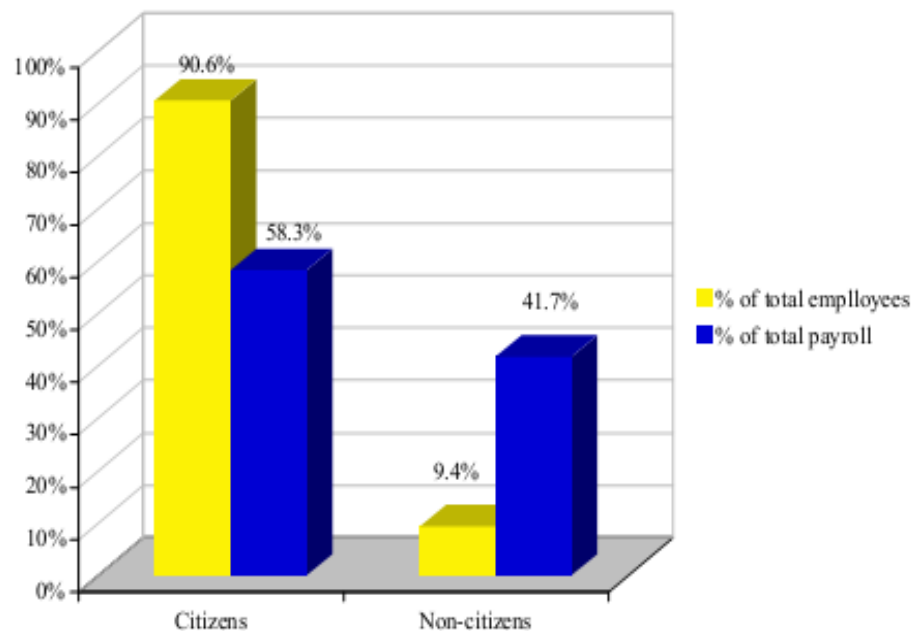
The table show analysis of different land use given specific internal rate of return. The results shows that small scale traditional livestock production is the most economic. This is followed by commercial tourism. It is worth noting however that these are economically viable under different scenarios. For example, wildlife based tourism will thrive in areas low human density and far from major human activity, areas whereas livestock production is the reverse. Commercial livestock production is shown not to be viable in the ODRS where commercial

tourism is most viable. Although this analysis has been done years back, experience in the Okavango Delta prove its veracity as the benefits shown in this section shows.

The Okavango Delta is the number one destination for most tourists in the country because of its richness in both flora and fauna (Mbaiwa and Darkoh, 2005). Mbaiwa (2003), notes that the tourist arrival has been on the increase in Botswana from 540 000 in 1995 to 740 000 in 1998. This number has been increasing over the years bringing more revenue to the country and specifically to the local communities in the Okavango Delta. This increase will be viewed as good news as the expectation is that the communities will benefit through the CBNRM.

Tourism brings benefits through increased employment where most of the local people participate. For example, the ODMP (2007) shows the proportion of locals employed compared to non-citizens.

Figure 11: Employment in the tourism industry

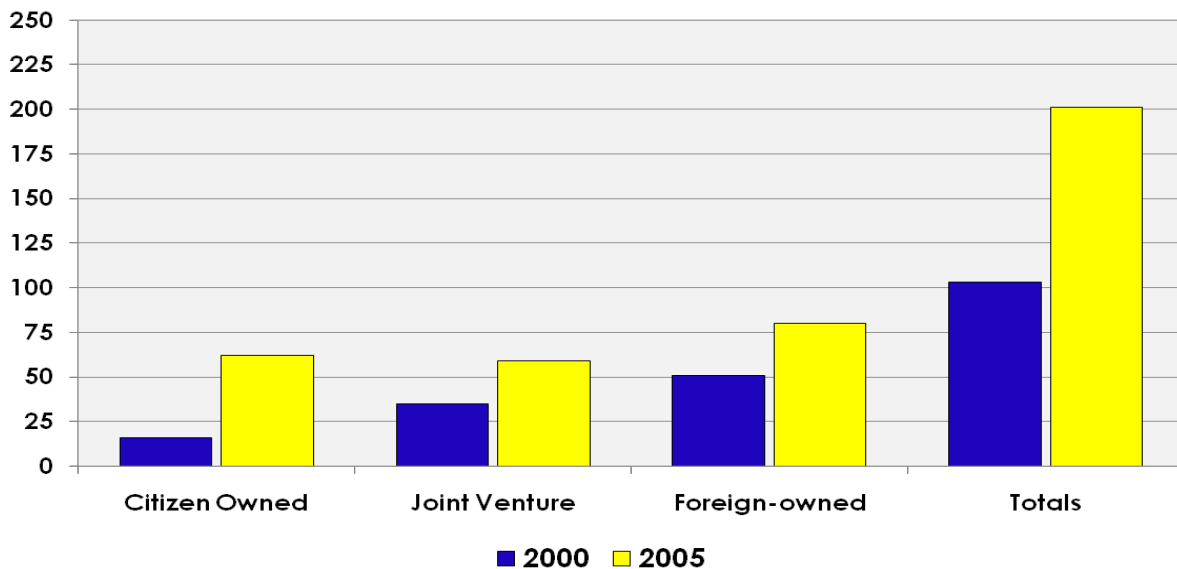


Source: ODMP, 2007

Figure 11 shows that 90.6% of the people employed are citizens and share only 58.3 % of the wage bill while the remaining percentage (9.4 %) is that of non-citizens and they share almost the same amount of the wage bill (41.7 %). The skewed nature of the wage bill could be attributed to the low income jobs taken up by locals while the non-citizens occupy the jobs requiring high education.

There are different types of business in the tourism industry. These include hotels, lodges, restaurants and safari lodges which are high quality compared to other accommodation types and business in the ODRS. Most people employed in the tourism industry are absorbed by these businesses. Figure 12 show the distribution of business ownership by types is presented.

Figure 12: Number of businesses in ODRS by type of ownership



Source: ODMP 2007

As shown in figure 12, the number of businesses in which citizens had ownership has increased between 2000 and 2005. Figure 12 however shows that ownership of business is mostly skewed towards non-citizens. As Mbaiwa (2005) argues this concentration of ownership in the hands of non-citizens works against citizen economic empowerment and will make it difficult for the Botswana government to alleviate poverty of which tourism is one of the main vehicles. Citizens

face difficulties in competing effectively with their counterparts from outside the country because of a lack of startup capital, as well as low skill levels in the tourism industry.

At community level, tourism has been instrumental in ensuring the participation of local communities in the industry. This has been achieved through the CBNRM program which was designed to ensure community participation in conservation and at the same time accruing economic returns.

Historically, Batswana utilized wildlife for consumptive purposes. Until recently, this form of wildlife has been dominant until the advent of commercial wildlife based tourism, which is deemed to be more profitable (Arntzen, 2003). Commercial use of wildlife brought other benefits, such as employment in the tourism industry and communities' opportunity to have user rights over the resource through CBRNM. For these communities to benefit, they establish CBOs with the help of non-governmental organizations (NGOs) and the DWNP. The CBO must register a constitution with the government of Botswana in order for its existence to be recognized (DWNP, 2010; Boggs 2000).

The analysis of the benefits of CBOs focuses on the revenue generated by the ODRS communities through the CBNRM projects, and the employment generated by the Community Based Organization (CBO). The economic benefits are investigated for each CBO sometimes called Trust. The trusts investigated in this study are all involved in wildlife conservation and utilization. The study focuses on the following six trusts that operate in the Okavango district: 1) Cgaecgae Tlhabologo Trust (CTT); 2) Khwai Development Trust (KDT); 3) Okavango Community Trust (OCT); 4) Okavango Kopano Mokoro Community Trust (OKMCT); and 5) Sankuyo Tshwaragano Management Trust (STMT) and 6) Mababe Zokotshana Community Development Trust (MZCDT).

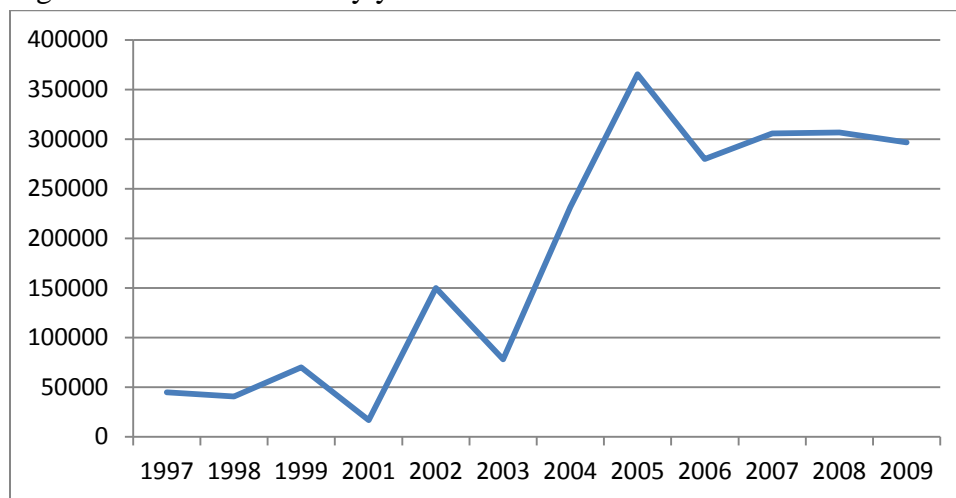
The CBOs discussed in this study are all engaged in various aspects of wildlife-based tourism. These aspects of wildlife utilization include the selling of concessions by CBOs to safari operators, trophy hunting, marketing hunts, and rentals of Community Hunting Areas (CHA).

4.2.1 a). Cgaecgae Tlhabologo Trust (CTT)

CTT was registered in 1997 and covers the village of Xaixai only. It has been allocated a CHA, NG 4 which the trust uses for multiple purposes. It developed its management plan in 1998 and has the following major activities in the CHA: photographic tourism, management of cultural tourism operation, and management of village shop and making and selling crafts.

CTT has on average experienced growth in revenue from 1997 to 2009. The growth is shown in figure 13 below.

Figure 13: Total revenue by year in BWP for CTT

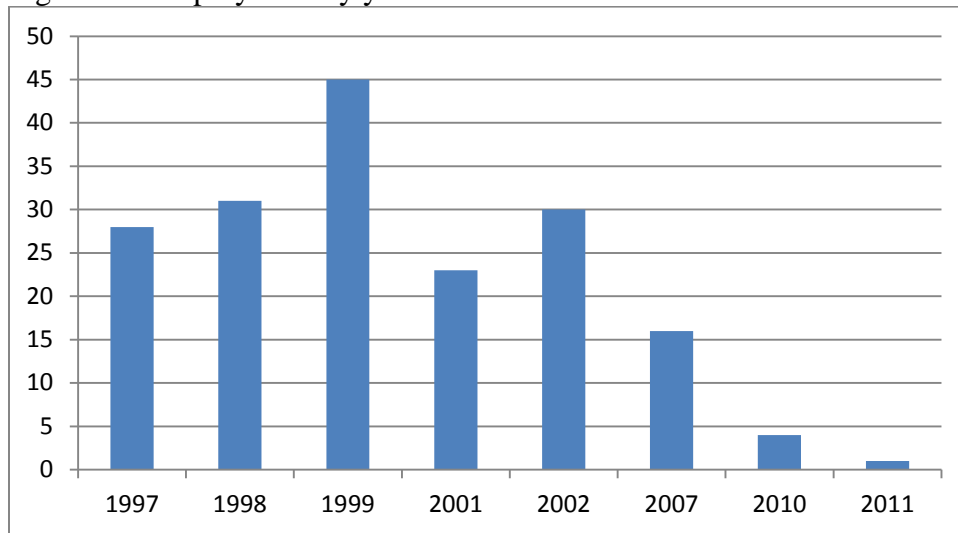


Source: Compiled from CBNRM reports Botswana

Revenues for this particular trust were derived from the sale of part of the quota in 2001 to a safari operator, Michelleti Bates, while most of the revenue came from the Land rental which since 1998 has been steadily generating income for the CTT. Employment creation in rural areas is one of the objectives that the government of Botswana intends to pursue in all national development plans. One of the objectives of CBNRM policy is to create employment for the

communities which qualify to register a community based organization. Data on employment for CBOs is very sparse, making it difficult to analyze the true dimensions of the employment in the area. For the CTT, employment generated through the trust is for the years shown in figure 14

Figure 14: Employment by year for CTT



Source: Compiled from CBNRM reports Botswana

As figure 14 shows, employment has been fluctuating over the years but rising over the first three years. It then declined in 2001 possibly due to the effects of the September 11, 2001.

Although there was a pick in employment in 2002, there was a decline in the years 2007, 2010, and 2011 but due to limited data, this research could not establish the reason for the decline. The payment of employees differed depending on whether the employer is the Joint Venture Partner or the community Trust. The employment wage for the Trust ranges from P450 to P850 and the employees by the JVP are paid between P650 to P1500. It is however unclear how many employed people are members of the trust and how many are not members. It can be assumed though that most people employed in the trust are community members since the objective of the trusts is to employ people from the communities represented by the trusts (MFDP, 2010). It is

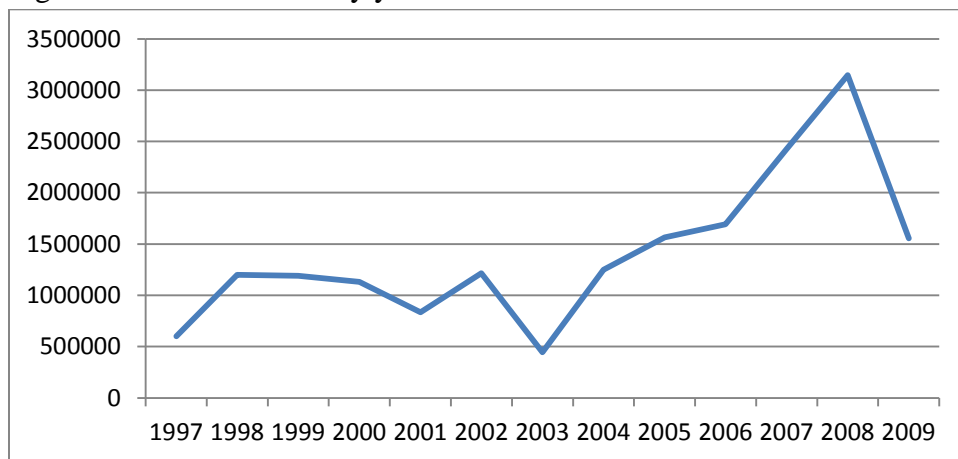
known that most of the employment created in this trust includes guides and other seasonal jobs (CBNRM, 2007).

Projects undertaken for the development of the community includes the operation of a tuck-shop which is intended to help local people have access to commodities that they would otherwise travel a long distance to buy. The Trust has also built Trust offices in the village. The challenges faced by this Trust include misappropriation and mismanagement of funds from the CBNRM projects. Lack of proper record keeping is another problem that exacerbates the continued mismanagement of the funds. Inadequate involvement of community members in decision making obscures transparency and has resulted in mistrust of the Board by the general members. Lack of business and financial management skills is a noted handicap for the success of the Trust as well as accountability. This Trust has taken some steps such as opening accounts for each business that the Trust ventures into in order to monitor the performance of the projects.

4.2.1 (b) Khwai Development Trust (KDT)

KDT covers Khwai village, which is located in the ODRS on the fringes of the Moremi Game Reserve. The trust was registered with the DWNP in 2000. It had a membership of 395 people in 2001(CSO, 2001). It controls the controlled hunting area NG 18 and also operates a lodge (Dinaka Lodge) situated in NG 19. The activities of this trust involve marketing hunts, grass and crafts marketing, subsistence hunting of part of the quota, and managing camps (DWNP, 2007).

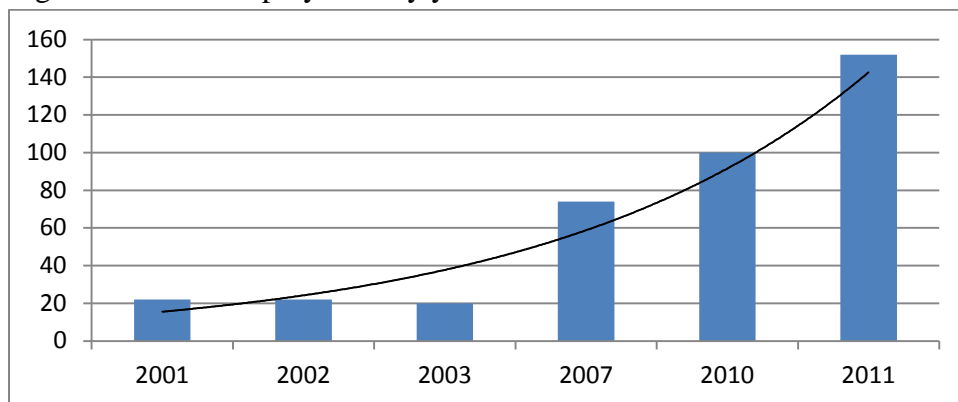
Figure 15: Total revenue by year in BWP for KDT



Source: Compiled from CBNRM reports Botswana

The revenues generated show an increase from 2000 to 2008 an unexplained drop in 2009 which could be associated with the international economic decline for that year. All income was received from selling hunting packages except in 2003 when additional revenue was received from campsites and the selling of the quota by public auction. Land rental and quota revenue increased over the years from 2003 to 2008. Employment in KDT varied for each year as figure 16 below shows.

Figure 16: KDT employment by year



Source: Compiled from CBNRM reports Botswana

The employment figures are a total employed by the Trust and the Joint Venture Company (JVC). In 2000, their safari company employed three people per hunting package. This

means that total employment for that year was dependent on the total hunting packages obtained. The safari company employed the same number of people per hunting package in 2001. In the same year, the trust employed 22 people to work in camps. In 2003, employment fell to 20 and went up in 2010 and 2011. Due to lack of data it is not clear what has been happening in the years in between. As was the case with the CTT, the employment figures are not well explained in terms of the origin of those employed in the trusts. The objective of the trust, however, is the same as that of the CTT, to employ the community members where the trust is established. Hence it is likely that the trust employed only community members.

The projects undertaken for the development of the community since the registration of the Trust include the building of an-eight bed hunting camp which is leased out to the JVC at P134000 per year with annual rental increment of 10%. The Trust also bought three vehicles (a Land cruiser, a truck a small truck) which are used by the Trust and the general membership. They have a speed boat used to patrol the river channel. They have invested in a burial fund for members with individual benefit of P3000. The community has also built a lodge (Dinaka lodge) which is to also be leased out to the JVC. Water reticulation is one of the projects that have been undertaken to provide water to individual households.

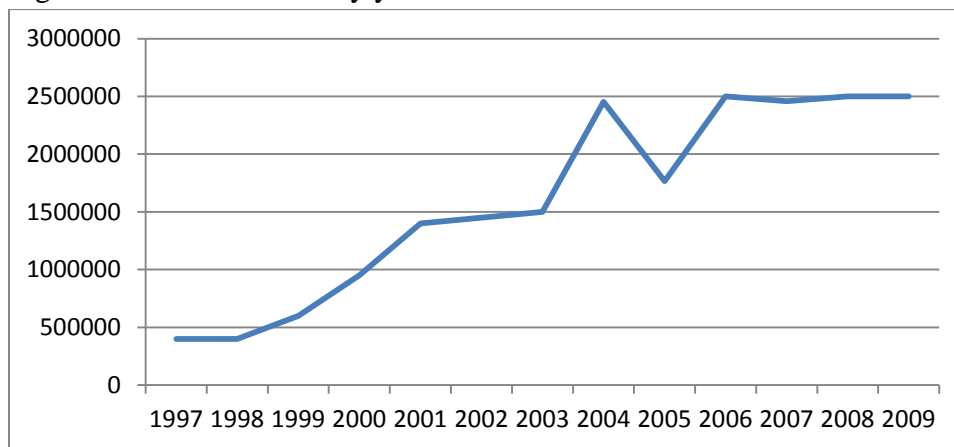
Despite the above achievements the Trust faces some challenges. One of the major problems is the misappropriation of funds which are however difficult to prove because of poor or absent records such as audit reports and financial receipts. The lack of proper record keeping is due to the low skill levels of the local people who are in most cases forced to employ people from outside the community to run the management of their Trust. Intra-community conflicts have been witnessed in this Trust where the outgoing board refused to hand over the assets of the Trust making accountability and progress by the incoming board difficult.

4.2.1 (c) Okavango Community Trust (OCT)

The OCT was registered in 1995. It covers five villages: Beetsha, Eretsha, Gudigwa, Seronga and Gunitsoga. The trust generates revenue from photographic tourism and the selling of concessions to safari operators. Apart from the management plan that was prepared for the trust by the Okavango Community Consultants for the allocation of the CHA in 1991, the trust has prepared its own management plan for the CHAs NG22/23 through the Ecotourism Services.

Since the trust started its operations, it has experienced steady growth in revenues over the years as shown in figure 17 below.

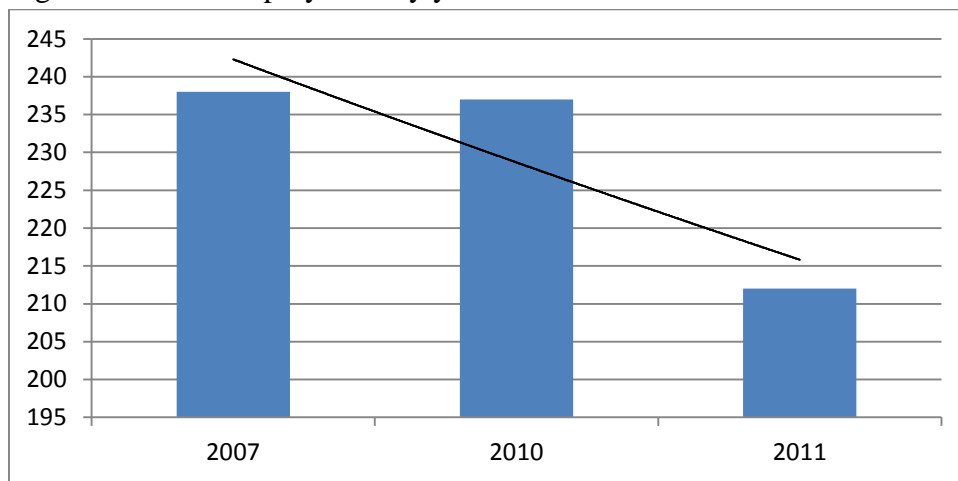
Figure 17: Total revenue by year in BWP for OCT



Source: Compiled from CBNRM reports Botswana

During the same period, employment fluctuated from a high of 155 people in 1997; dropping to 150 in 1998 and 29 in 1999. Employment then rose in 2007 and 2010 and slightly fell in 2011. The fluctuation in employment is explained by the seasonal nature of CBNRM activities like hunting and photographic tourism, which are dependent on the arrivals of tourists. The employment created by the OCT is shown in figure 18 below.

Figure 18: Total employment by year for OCT



Source: Compiled from CBNRM reports Botswana

Employment wages ranged from P650 to P10800 for both Trust and the JVC.

Apart from the revenue generated and employment, the Trust has invested in the different income generating assets mostly shops and kiosks. The Trust also bought a motor boat that is used to transport between villages at a specific charge. The vehicles include three land cruisers, a truck and a tractor.

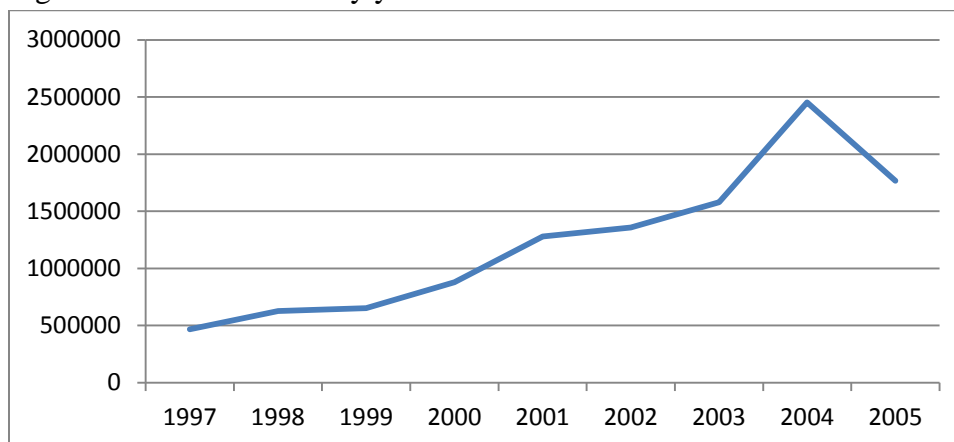
The Trust has encountered problems similar to problems experienced by the other Trusts discussed above. The most pressing problem concerned the constitution that gives the Board of Trustees all decision-making powers. This has resulted in most decisions made without the participation of the general membership. For example, setting high allowances for the Board of Trustees which was not beneficial to the community. The constitution also requires only 10 members in attendance to hold annual general meetings, which is not representative of the general members from the five member villages. Another complaint is lack of transparency of the Trust in its operations by not involving the majority of its members. This results in lack of information which might assist in the proper running of the Trust.

4.2.1 (d) Okavango Kopano Mokoro Community Trust (OKMCT)

The OKMCT was registered with government of Botswana in 1997. The communities covered by this CBO are Ditshiping, Quxau, Daonara, Boro and associated settlements. The CBO is involved in the selling of concessions to the safari company, management of campsites, mokoro (canoe) packages, grass reeds, and fish marketing. This CBO does not have a management plan for optimal use of the allocated CHA NG 17. The only plan that is in existence is the one prepared by the Okavango Community Consultants, which was used to seek approval for the allocation of a CHA NG 17.

Like other CBOs discussed in this study, OKMCT realized increased revenues over the years 1997 to 2009. The data are shown in figure 19.

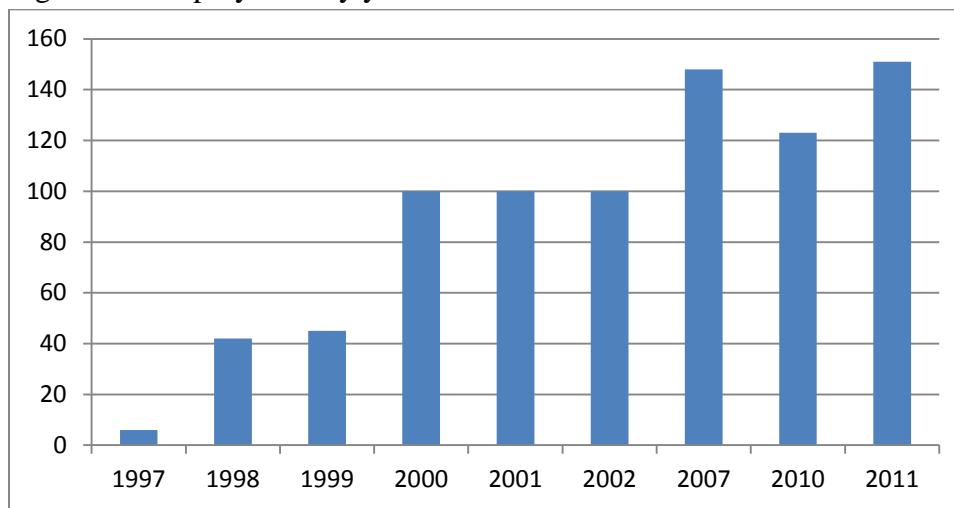
Figure 19: Total revenue by year in BWP for OKMCT



Source: Compiled from CBNRM reports Botswana.

Like revenue, employment has been increasing over the years for the community where the local population was the beneficiary. The employment trend is shown in figure 20.

Figure 20: Employment by year for OKMCT



Source: compiled from CBNRM reports Botswana.

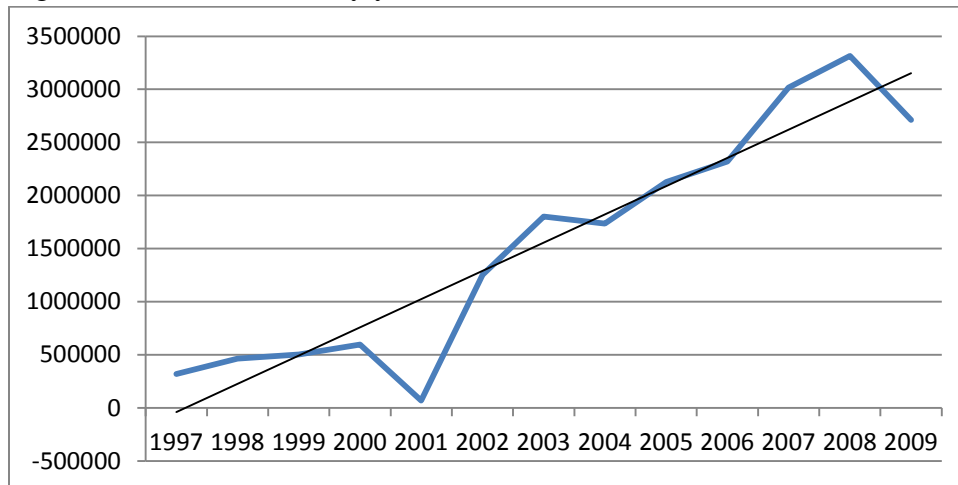
The Trust has also engaged in development activities including the drilling of water boreholes in four villages which participate in the Trust. The Trust bought twelve vehicles, used for the different activities in the participating communities.

The problems encountered include the misappropriation and mismanagement of funds by the Board of Trustees. The board has apparently failed to account for money from other revenue sources such as buffalo fence gate fees and mokoro poling, raising suspicions that the Board is enriching itself through the Trust's funds. This has stalled developments in the communities that are members of the Trust. The Board has also not been abiding by the constitution, which has led to poor management of the Trust. Inadequate involvement of the general membership in the Trust affairs has led to poor decision making process. Lack of business, accounting and management skills make the accountability of Trust funds very difficult as well as the general management of the Trust to make it more profitable.

4.2.1 (e) Sankuyo Tshwaragano Management Trust (STMT)

STMT was registered in 1995 and is engaged in the selling of concessions to the safari operator, thatching grass, and subsistence hunting of part of the quota. The revenues generated through the trust are shown in the figure 21.

Figure 21: Total revenue by year in BWP for STMT

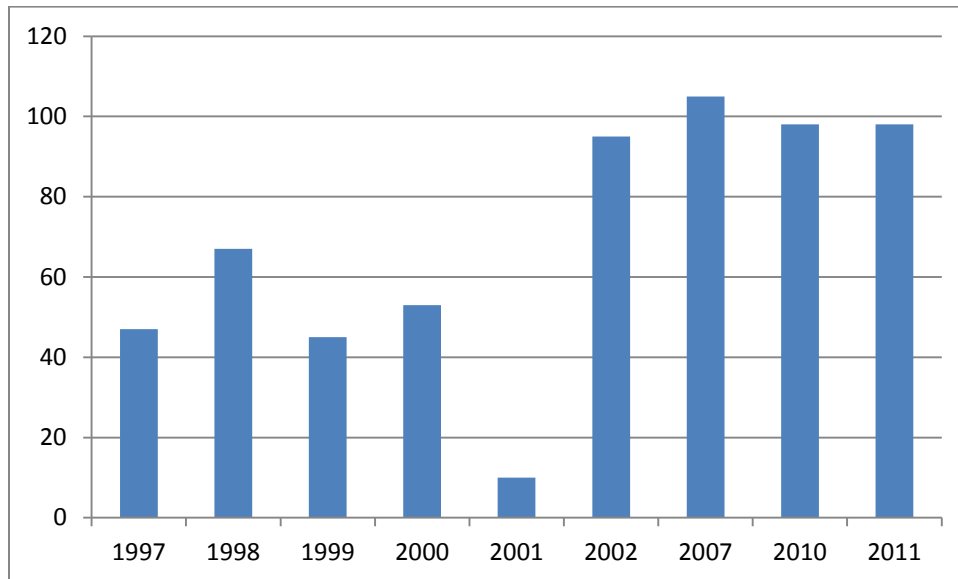


Source: compiled from CBNRM reports Botswana

Although there was a decline in revenues in 2001, there has been an overall increase in the following years up to 2009. More revenue for the STMT came from the hunting during the years when the Trust was allocated a quota. Other funds came from non-consumptive tourism such as photographic tourism and other projects owned by the Trusts including lodges and campsites. Since its inception, the STMT has initiated development projects including a campsite, cultural village, and water reticulation for members, water system toilets as well as helping the elderly with old age pensions on monthly basis. The Trust also administers scholarships for young people in the community to further their studies at tertiary level mainly doing tourism related courses.

Employment in the trust fluctuated from 1997 to 2011 but generally increasing as shown in figure 22.

Figure 22: Employment by year for STMT



Source: compiled from CBNRM reports Botswana

As with other Trusts, employment is dependent on the availability of the tourists who need guides, trackers, and temporary labor in the camps. The JVP employs most people compared to the Trust itself.

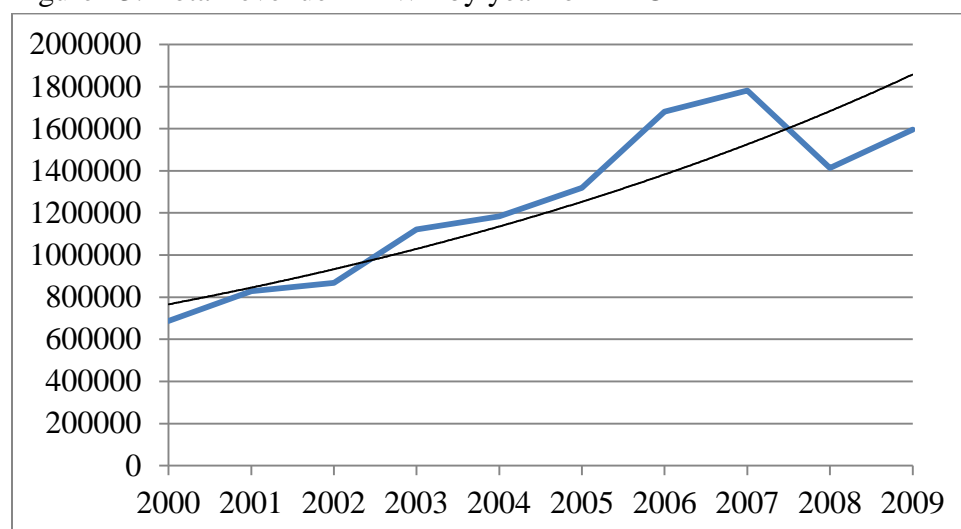
The Trust has undertaken several developments in the village such as the construction of water system toilets. The Trust has also constructed a Community Social Center with a television and DSTV decoder for the general membership. The construction of Trust offices in Sankuyo is another project that was undertaken and completed. The Trust has also refurbished the Santawani Lodge which it operates and constructed six chalets with the assistance of African Wildlife foundation. The Trust also operates the Kaziikini Camp site with traditional houses, a central kitchen and ablutions. The Trust made a donation of P25 000 to National Aids Coordinating Agency and P25 000 to Masiela Trust Fund during the 2004 financial year. The Trust is in the process of reticulating water to households. By 2007, sixty-five stand pipes had been installed but the target was to have every household in the village to have a stand pipe. The Trust also built seven one-roomed houses for destitute children and the elderly in the community. Since

1997, the Trust has been giving out P500.00 as household dividends to date. It also has a burial fund for members at a tune of P3000 per adult and P1000 per child (up to 16 years). A tune of P110 000 from Community Benefits Fund had been divided among elderly and disabled people of Sankuyo during 2005 and 2006 operation years.

4.2.1 (f) Mababe Zokotsama Community Development Trust (MZCDT)

MZCDT was registered in 1997 and operates Controlled Hunting Area NG 41. The focus of the Trust is hunting and photographic tourism with only Mababe village involved. The lease for the CHA runs from 2002 to 2017 after which the community needs to negotiate a new lease or an extension. The JVP is the African Filed Sports who started with the Trust in 2002 to date. The MZCDT has been having increasing revenue over the years from 2000 to 2009. Most of the income came from the quota and land rentals. Figure 23 shows the revenue generated by the MZCDT over the years.

Figure 23: Total revenue in BWP by year for MZCDT



Source: compiled from CBNRM reports Botswana

The MZCDT has engaged in several development projects intended to benefit the community. Some of the projects include the campsite, building of the Trust offices in Mababe and renovating some old offices. The direct benefits to the community include some destitute

allowance, scholarships which sponsor children from the community to attend schools in Maun. The courses are related to duties that need to be undertaken by the Trust such as accounting, secretarial courses and management courses. The idea is to invest in the community's human capital so that they can run their own Trust and not have "outsiders" take up the managerial positions of the Trust. The Trust also has a burial fund that helps with funeral expenses for community members.

Like many other CBOs in the ODRS, the MZCDT has challenges that include lack of managerial skills and financial mismanagement. And generally lack of trust of the Trust management which in most cases is manned by people from outside the communities is another problem that brings tension in the dealings of the community and its management. Low educational levels limit the capacity of communities to negotiate successfully for issues that are pertinent to their lives such as recognition of their knowledge system which has hitherto sustained wildlife and natural resource management.

In conclusion this section has shown that the revenues from wildlife utilization increased for all different CBOs investigated in this study, although fluctuating in certain years. This was mostly due to revenues in CBNRM being dependent on the arrival of tourists. The same trend was observed with employment, which also fluctuated because of its dependence on the demand for tourist activities. Most of the revenues came from joint venture agreements as opposed to other sources of revenues in CBNRM. While economic benefits play an important role in CBNRM, there are other benefits from CBNRM that are mostly social. These benefits are discussed in the following section.

4.2.2. Social Benefits of Wildlife-Based Tourism

This section presents the social benefits of wildlife in the ODRS. In this sub section the social benefits are divided into two components: 1) direct benefits and 2) indirect benefits. The direct benefits that are analyzed include access to subsistence products such as wildlife as sources of meat. To better understand the social benefit of wildlife, two entry points used by the World Bank in its ex ante analysis of development projects are used and they are: 1) Institutions, Rules and Behavior and 2) Participation. They are used to analyze the indirect benefits, such as ownership and decision-making, new alliances and social capital, social mobility and status attainment, technical and managerial capacity, and social empowerment.

The tangible house-hold level benefits of wildlife, such as meat, are very important to realizing food security and nutritional objectives. Since the suspension of subsistence hunting in Wildlife Management Areas, communities' access to wildlife meat through the kills made by the Joint Venture Partners (JVP). The communities, through their Trust, negotiate a quota with the DWNP. The hunting takes place outside the parks and protected places (Arntzen 2003) in the wildlife management areas designated as community hunting areas or controlled hunting areas. All the CBOs discussed in this study can enter into an agreement with their JVP to auction their quota to the JVP. The JVP do the hunting and share the meat with the community.

In Mababe, the community has an agreement with the JVP to make joint negotiations for the quota with the DWNP. Once the quota is awarded the JVP hunts the animals awarded and in the case of elephant kill, the parties agree that the whole meat is given to the community.

According to the interviews, the JVP brings the carcass from wherever the elephant is killed close to the village where the whole community can harvest the meat. The JVP gets the tusks and the bones and any other parts they deem valuable to them. These portions on the elephant that the

JVP harvests are sold abroad at a huge profit. This fact has also been confirmed by Mbaiwa (2006) who found that the JVPs earn large sums of money and what they spend on paying the community for the quota is very low. In the event other animals are killed like buffalo or antelope, the JVP takes half of the carcass and the community gets the other half. This practice is common with most of the CBO in the ODRS

The involvement of community members in CBNRM has other tangible results such as social mobility. Beeghley (2000) refers to mobility as "...changes in peoples occupation, either intra or intergenerationally" (p 43). In the context of CBNRM, the social mobility is looked at in terms of the movement of trust members from one social class to another. Although it is a difficult task to classify people into social classes, especially in rather homogeneous communities such as the ones found in the ODRS, Sorensen (2003) came up with the classifications as mentioned before. The indicators of these categories were as follows; housing, cattle, agriculture, fishing, employment, education, children's education, temporary job etc. Each indicator was matched with the wealth category to describe their situation. Housing for the very poor was found to be a house in a poor condition, if any existed, but mostly none existed. For the poor, the house was a traditional hut with thatched roof and no compound. For the middle-income group, the house was a brick house or possibly a traditional one with compound. For the rich and the very rich, the houses were brick with a fence surrounding them and had up to four rooms respectively.

Using this classification scheme, Sorensen was able to evaluate the social class of the OPT members after a short period of time in the trust. She found that all the Polers who were regarded as very poor were now perceived as poor while some of the poor Polers had moved into the middle income group (Sorensen 2003). When the same scale is applied to the other CBOs, a

similar pattern emerges whereby the members are socially mobile within their own communities due to the earnings they receive from CBNRM. This trend is demonstrated by the increasing per capita revenues from CBNRM activities. The increasing income enables the members to afford social amenities that they could not afford before CBNRM, such as improved housing and education for their children. This makes it possible for community members to move up socially. All the CBOs studied here have been experiencing increased revenues. They have been able to invest their money in other developments, such as the building of lodges by the KDT, which in turn generates more employment (Potts, 2003). In this way community members are able to climb the social ladder as they earn more income through their CBOs and they have more opportunities for gainful employment.

Status attainment is associated with social mobility. The data used in this study indicate that community members are able to move up the social ladder due to incomes they receive from CBNRM projects. Movement from lower status to a higher status through the productive application of one's labor is associated with rationalization. Weber explained this as the process where social life becomes more methodical based on scientific knowledge (Beeghley, 2000). This rationalization process is also associated with efficiency and control. In the case of the community members involved in CBNRM, the status attainment process is contingent upon the community member's achievement and not ascription (Beeghley, 2000).

The technical and managerial training provided by CBNRM and the government, as well as the private sector, has introduced community members to the world of business where they have attained some skills in general as well as in project management. The empowering effect of this is demonstrated by participation in the political and social life of communities where members are more influential compared to before CBNRM (Sorenson, 2003). It is a requirement

that the private sector embark on training community members once joint venture agreements have been entered into (Boggs, 2000). This capacity building initiative for the CBOs has focused on four areas: 1) project planning, 2) land use and management planning, 3) negotiating joint venture agreements, and 4) basic project and financial administration (CBNRM, 2003). The training is supposed to enable improved management of the projects by the communities. The devolution of rights to the wildlife resources can only be effective if the communities themselves are more involved and participate meaningfully in the decision making process. Shackleton, Campbell, Wollernberg and Edmunds (2002) note that, “where local people are well organized and had alliances with NGOs or other influential groups, they managed to secure greater benefits” (p 5). It is the provision of such skills as mentioned above that provides empowerment to CBO members

Another advantage of CBNRM and wildlife is that new alliances are formed between villages. For example, the OCT covers five villages that must work together in the management and conservation of wildlife for their own benefit. These new alliances create conditions conducive to rural development projects implemented in the district. Additionally, the social capital that results from these alliances would be broadly based compared to if only a few people are involved from a single village or community. Another form of social capital that can influence area development is political empowerment resulting in different villages speaking with one voice to influence political decision making in the district via district or village development committees.

This form of social capital is indicative of the new rules and behavior that develop among people involved in the production of goods and services, such as those of CBNRM. Such rules require members to contribute to the CBOs by attending meetings and taking up tasks that are

assigned to them. Failure to observe the new rules may result in a loss of membership from the CBO and hence loss of income. The involvement in the production process engenders new social relations that bring people together to meet common goals. As a result of the participation in CBNRM projects in their respective communities, members of these communities show active participation in CBNRM conferences by voicing their concerns about conservation and the benefits of CBNRM. This active participation is a result of interaction among people of different communities and different educational levels where cross-fertilization of ideas exposes community members to different ideas. This occurs during the consultative process of CBNRM and in particular when communities initially form CBOs. During this consultative process government officials and members of the private sector and the NGOs are present. They present different ideas from which members of the community may benefit. This buildup of community empowerment is visible in conferences where community members are active and able to articulate their position in relation to pertinent development issues. For example, in the CBNRM conference of 2003, communities challenged the lack of youth participation in CBNRM. Their concern was that many youths instead roam the streets in urban areas unemployed. The communities blamed this on insufficient marketing of CBNRM and hence it was resolved that the newly established tourism board would take up the task of vigorously marketing CBNRM (CBNRM, 2003).

CBNRM has not only brought monetary benefits to the Okavango district but also cultural benefits. For example, Mbaiwa (2004) has found that the use of mekoro (dug in canoes) have been used for many years in the Okavango district as a mode of transport and for hunting in the delta. The advent of tourism and CBNRM has brought new opportunities for this otherwise outdated mode of transportation to be rejuvenated for tourism purposes. There is now a trust, the

OPT, which operates mekoro and has now been able to re-invest their financial benefits in less than ten years establishing a lodge and a camp site along the Okavango river (Mbaiwa, 2004).

Another aspect of cultural rejuvenation is observed in the formation of traditional villages with traditionally constructed huts. These provide accommodations for tourists and generate revenue for the trusts. In the Okavango district the traditional villages have been constructed in Sankuyo, Seronga, and Gudigwa. Apart from the provision of accommodation, traditional dishes are also provided in the villages promoting the traditional culture. Traditional music and dances are an additional component of this endeavor to promote tourism through culture. In the process it is not only the tourists who enjoy the richness of culture but also the young who had lost touch with their own culture due to modernity.

In summary, this section discussed the various social benefits and incentives associated with wildlife based tourism in the Okavango district. These include bush meat consumption, ownership and decision-making, new alliances and social capital, social mobility and status attainment, new skills acquisition, political and social empowerment. Through subsistence hunting communities are able to access bush meat. New alliances are formed as different communities work together to achieve their objectives in CBNRM. Coupled with the new social capital that emerges from CBNRM activity, communities improve as they work together towards community development in general. Community members involved in CBNRM have been able to move up the ladder of social classes and attain new statuses, which lead to political empowerment. Despite the social benefits associated with CBNRM and wildlife utilization, there are some disadvantages as well. These are discussed under section 4.3.

The actors in the ODRS are agreed in the promotion of conservation in the ODRS and the economic benefits that could be derived by utilizing natural capital and other resources in the

area. However, the different actors have different views on the effectiveness of consultation and implementation of the ODRS policies and strategies. It is useful to point out that in a situation of unequal power relations, the powerless, or those who wield less power such as local communities are often disadvantaged with the elites playing possum on issues raised (Dijk, 1993). The power of the elites is often organized and institutionalized and codified in different laws enacted with symbolic participation of the local communities (Mbaiwa, 2005). To help the local communities to have a voice is to assist in reining in the divergent views that are detrimental to the goals and objectives of the ODRS. It is also to help strengthen the organizational capacity of the local communities (de Souza Briggs, 2003).

4.3. Attitudes of local people towards CBNRM and Livestock Policies

This section presents the attitudes of the communities towards CBNRM and livestock policies in the ODRS. The section looks at different issues that affect the community emanating from CBNRM and livestock policies. It also looks at the decision-making process and the participation of different stakeholders. It specifically addresses the different discourses: official discourse, receiver discourse and practitioner discourse which provide insights into how the community members feel about the policies in the ODRS. In looking at the different discourses, the section particularly addresses attitudes by looking at the three different types of communities: communities that participate in CBNRM only; communities that participate in CBNRM and also keep livestock; and lastly communities that do not participate in CBNRM but keep livestock. The positive and negative attitudes are addressed for each type of communities as stated above.

To better evaluate attitudes, questions such as: ‘what are your feelings about CBNRM’ “What are your feelings about animal disease control policy’ were asked and the answer was used to assess whether the attitude is negative or positive. Where the respondents expressed

dissatisfaction about the policy using such statements as: ‘that policy is for the DWNP and not for us’, ‘I do not benefit anything from the policy’, ‘I do not like the policy’ etc., were used as proxies for negative attitude towards the policy. Positive attitudes were evaluated by such statements as: ‘this is a good policy’, ‘I don’t know what we would do without this policy’, ‘we depend on cattle and the policies that support us’ etc. Such statements were evaluated as indicating favorable attitude or perception of the policy. Such measures are consistent with what is suggested in the literature and what other researchers have used to measure attitudes (Browne-Nunez and Jonker, 2008). In this study one technique that was not used but is commonly used in attitude research is the Likert scale where ordinal measures are used such as “Strongly agree”, “agree”, “no answer” “disagree”, and “strongly disagree” to measure the intensity of the attitude or perception (Babbie, 2004; Browne-Nunez and Jonker, 2008; Miller and Salkind, 2002). The Likert scale is more suited in interviews using structured questionnaires ‘...administered to a group of subjects representative of those with whom the questionnaire is used...’ (Miller and Salkind, 2002, p. 330).

The interviews conducted in the different communities of the ODRS and the conversations between the government and the communities on the consultative process leading to the ODMP revealed that communities appreciate CBNRM policy based on the tangible results that the communities enjoy as discussed in the previous section. The communities also expressed their desire to conserve wildlife and natural resources in the ODRS because of the benefits they derive from CBNRM. For example, KK, Mababe chief, put it this way “Life without the Trust would be very difficult (shakes his head, head bowed down). It brought employment, it has reticulated water into households and takes care of destitute and orphans. It has built houses for the elderly.” Code book, page 7. JR in Gudigwa, a community that keeps livestock and is also

involved in arable agriculture and participates in CBNRM said the following during the second round of ODMP consultative meeting held on 01/31/2005

I learned that the DWNP will do some detailed studies about specific animal species. Before you implement any solutions, please come back with your recommendations to the communities. We would not like to see wild animals displaced from here as we make a living from them. In Gudigwa we have a community trust and get an income from wildlife through tourism activities. We have two trust vehicles in Gudigwa that assist people with transport. (P. 4.)

These comments indicate the appreciation the local people have for tourism and CBNRM. These comments came from two communities: Gudigwa, involved in agricultural production and CBNRM and Mababe which is involved in CBNRM only. An interview with the court clerk in Nokaneng in October, 2011 revealed that the local people in that local people in that community do not appreciate CBNRM because they do not benefit from it. They do however acknowledge the benefits that they can get from the program but since their bid to register a Trust was unsuccessful, they depend only on agriculture for their livelihoods and other livelihood sources. They understand the benefits of the CBNRM program because they see developments in other communities that are part of the program and hence they argue that they should be allowed to register their Trusts so that at least they can benefit from the wild animals that kill their livestock and destroy their crops.

There is a difference of attitude between communities that do not participate in CBNRM and those who participate. The other difference is the responses of communities who own livestock and also participate in CBNRM. Communities who depend on CBNRM for their livelihoods such as Mababe, Khwai and Sankuyo have strong attitudes towards the conservation

of wildlife and natural resources as well as the policy issues concerning the wildlife and other natural resources. Communities that depend on both livestock and CBNRM were more concerned with the conflict between wildlife and livestock while feeling that the government was not doing enough to help them keep their livestock safe from wildlife. These communities were also more affected by the policy conflicts between wildlife and livestock as well as the negative impact some livestock policies had on their livestock when compared to communities who depend on CBNRM as the main source of livelihood. The third category of the communities in the ODRS is those which are affected by wildlife but are not part of CBNRM and hence derive no benefits from the policy. This latter group of communities had a negative attitude towards wildlife and a strong negative attitude towards the DWNP.

These local people in the ODRS communities however share many similarities on how policy decisions are made and other negative impacts that these policies have on them. The majority of the local people in these communities feel excluded and left out in the policy decisions that affect them. Four major categories are addressed that show different types of attitudes concerning livestock policies and CBNRM policy. These are:

a. Feeling excluded from decision making

Feeling left out of decision making is a category from the data that embraces several focused codes such as feeling marginalized, community being excluded and lack of transparency. This category denotes negative attitudes from the receiver discourse which were expressed during my interviews and the ODMP consultative meetings of 2003 and 2005. Feeling excluded from decision making means the feeling that the community is being left out when the government makes decisions concerning the ODRS. It means that communities' participation in decision making is limited and in most cases symbolic. Symbolic participation means the

involvement of communities without commitment to embracing their concerns or ideas (Sen, 1999; Twyman, 1998). Green and Haines (2008) address participation in terms of citizen participation or public participation which they differentiate from public involvement or citizen involvement. Public or citizen participation is conceived as a situation where citizens or the public are purposefully involved in activities in partnership with government or other agencies. This is also referred to as community action where the activities are initiated by the community through their community based organizations and are directed at changing a specific program or policy. The other form of participation, public involvement, is where the action is initiated and controlled by the government or outside agencies.

b. Disregarding indigenous knowledge

Indigenous knowledge here refers to the norms and values in a community that informs rules and institutions in the community that reflects the communities' knowledge systems. The rules and institutions in turn reflect shared values of that community. These norms and values are transmitted from one generation to another and constitute social capital (World Bank, 2003; Gorjestani, 2000). Indigenous knowledge is part of social capital which Shaffer et al (2004) states as a "...important element in community decision making" (p. 203). Social capital is defined as the community networks, mutual trusts within the community, norms and values that are shared by community members for their common good (Shaffer et al, 2004; Green and Haines, 2008). Indigenous knowledge is an important element of social capital and is a very important issue in the ODRS because local people in the ODRS have their own norms and values as well as a set of skills that for thousands of years formed part of the human capital that sustained them in the ODRS. The local people's set of skills that hitherto have been used for the preservation of the ODRS' environment and its natural capital are an asset that needs

consideration in any program or policy that pertains to the conservation and or development of the ODRS. More discussion of this category is made under the different communities that are located in the ODRS.

c. Expressing skepticism about government policy

Expression of skepticism about government policy cropped up in all the interviews I conducted in the communities of the ODRS and they were also expressed in all the consultative meetings of the ODMP that took place in 2003 and 2005. Skepticism about government policy refers to the mistrust and lack of confidence in the policy promises by government and its agencies. The skepticism also refers to the perceived preference with which the government and its agencies treat the foreigners or non-locals compared to the local communities. The third aspect of skepticism comes from inconsistencies and mixed messages that come from different come departments which implement different policies in the ODRS.

d. Conflicting Policies

Conflicting policies are a common feature in many organizations where different agencies compete for the same resources, the same client but have incongruent goals (Meyers and Lurie, 2001). The agricultural and wildlife policies implemented in the ODRS are a thorny issue to the communities residing within the ODRS or in proximity to it. Of particular concern to the communities regarding the policies implemented in the ODRS are the animal disease control policy, land use policy and CBNRM policy. Apart from vaccination, the major policy instrument of the animal disease control policy is the veterinary cordon fences which crisscross the ODRS hampering both the wildlife migration routes as well limiting local people's access to resources (Wilson, 2000).

The objective of the cordon fences is to separate livestock from wild animals in order to control the spread of diseases such as FMD and CBPP. Two fences, the northern buffalo fence and the southern buffalo fence are of particular interest in the conflict. Apart from blocking wildlife track routes these fences also limit access to grazing by livestock. The northern buffalo fence situated in the northern part of Maun (the capital of the Ngamiland district) cut through what had been the grazing areas for Shorobe farmers thus reducing grazing availability to the farmers. The northern side of the fence is the Moremi Game Reserve (MGR) which is declared a livestock free zone. Communities along the southern buffalo fence have also experienced the same disadvantage of the fence as those living adjacent to the northern buffalo fence (Mbaiwa, 2006). The above categories are discussed in details below based on the different types of communities.

4.3.1 Communities dependent on CBNRM only

In this study, three communities who depend only on CBNRM as a source of livelihood were studied and are all situated in the livestock free zone where the MGR is also located. They are Sankuyo, Mababe, and Khwai all on the fringes of the MGR.

a. Feeling excluded from decision making

The interviews I conducted reflect feeling exclusion from decision-making. For example, one of the respondents from Mababe G.M who I interviewed in 2011 said:

ODMP, I was there, there was a lady called PS today she's assistant secretary somewhere in the ministries. When it started, we were just told, it was like here say, somebody just coming into the kgotla, then they say 'there's some club that is coming that is going to look at the river and how you can live properly along it

without polluting it and so that the river can also not trouble your lives'. As easy as that (p.3)

G.M also expressed during the same interview the idea that the government develops ideas and bring them to the communities as finished products to be buttressed by the local people. He referred to the ODMP as an imposed plan on the local people, a “pre-cooked idea” idea as he put it.

This comment concerned the ODMP and the consultative process that supposedly took place between the ODMP committee and the communities in the ODRS. According to the interview the issue was framed and decided by the government and its bureaucracy and presented to the communities as a semi-finished product

In Sankuyo village, G. N commented in the second round of ODMP consultation held on 3/7/2005 as follows

In the past God blessed everybody. From the presentation it appears that our suggestions and requests have not been included by any department. Government comes up with policies and plans and they are implemented without listening to the communities. I have not been to school but I know the problems in our area.
(p. 143).

This comment is an indication of how issues are raised but are not included into agenda that leads to implementation. This non-decision by government is consistent with the second and third dimension of power where the power holders keep issues to safe havens for reasons which ensure that their agenda is pursued. Another respondent S.M of Mababe at the ODMP consultative meeting held on 3/7/2005 pointed out that they have had some recommendations as to how to solve their problems. S.M pointed out that “During the meeting in 2002, we made

recommendations on how to solve our conflicts with wildlife, but none of our suggestions have been implemented so far” (p.150).

In Khwai, during the ODMP consultative meeting held on 3/8/2005, T.S commented as follows:

In 2002 we were called to a workshop and made some suggestions how to solve conflicts that we have with wildlife. We suggested that the number of wild animals that are killed along the veterinary fences should be monitored, but we never got feedback as to whether that proposal has been implemented (p.153).

These comments indicate that communities are requested to bring forth suggestions on topical issues concerning their lives but the problem lies in implementing these suggestions or the authorities providing feedback on progress made on these suggestions. This trend of non-implementation or addressing of concerns by the government was common in all the communities in the livestock free zone where CBNRM is the main source of livelihood. These comments represent the receiver discourse where communities express their views on policies or government intervention aimed at improving the livelihoods of local people. The ODMP committee comprised mainly of government agency representatives (ODMP, 2005). Their responses reflected efforts the government has undertaken to help the communities and in some instances such comments seemed to blame the local people for the problems they experience. For example, a response to the issue of land allocations in Khwai raised in the meeting held on 3/8/2005 was as follows:

Up to now government did everything for communities. The idea of CBNRM is that communities should benefit from managing their own resources. Government is still providing guidance to communities through the TA C. The Khwai

community did not take the advice of the TAC. The Khwai trust has a campsite, which is not utilized. Why do you want more campsites before you have developed the one you have already got? (p.153)

The above comment was a response to a comment by K.S, a local resident of Khwai during the ODMP consultative meeting of 3/8/12:

The tourism activities in our area are not benefiting us enough. The joint venture partner makes much more money than the community. We have applied a long time ago for more communal camping sites in order to make more money from tourism, but we have still not been allocated these sites (p.153).

The two comments shows the conflict in receiver discourse and practitioner discourse where the latter is defensive of government policy and seem to suggest that the government is doing all the best in its power but the local people contribution is below expectation. It is clear from the comments that the government official did not address the thorny issue of unequal benefit from tourism between the non-resident actors which benefit more than the local people whose benefit less. It also shows how being excluded from decision-making leads to misunderstanding and potential conflict between actors representing different discourses.

e. Disregarding indigenous knowledge

The interviews and other data collected show that indigenous knowledge has been relegated to the margins of policy debates in the country. There is an acute dominance of official discourse with the expectation that the communities would and should follow the prescribed solution to their problems (Twyman, 1998). According to one key informant, K.K, the Technical Advisory Committee (TAC), which is composed of government departments and the private

sector, has a big brother mentality. The following is the comment from the interview with Mababe chief conducted in 2011:

Now what happens usually is that the TAC has the mentality of big brother...but you know I don't know but you know these people are not like the most educated like some people in specific areas but at times them being misled, they sometimes prevent the trust to make certain decisions at other times they disturb the trust in different ways. (p.7)

The chief stated that the TAC comes up with prescriptive formulations which the community has to follow. He asserts that in most instances the TAC overrules and overturns the decisions that the community through their Trust makes. In some instances, he explains, the TAC insists on their position even if it contravenes the constitution of the Trust. These assertions are echoed by other respondents who also feel they are being instructed around 'like kids' as one respondent put it. Twyman (1998) found similar notions of the dominance of official discourse in her study of Okwa Development Trust. The words used are couched in palatable statements such as "ownership of resources", 'communities are in charge' and yet the communities end up being given an end product that does not reflect their views and in other ways not what they expected.

The communities in the ODRS blame the decline of wildlife on the people who come from outside the ODRS and bribe the locals to use their licenses to hunt. One key informant, G.M from Mababe stated that the outsiders bring cars and guns and promise to share the meat with the local who fronts them in the hunting expedition. G.M claimed that some locals are paid money to do so. This therefore undermines the traditional methods that the community used in the past which allowed the hunters to appropriate only what they needed. The hunting tools were themselves limiting factors in the hunting process ensuring that there was no mass killing. The

presence of guns and cars as alluded to by G.M makes it possible for hunters to kill more, especially if they come from outside and do not follow the local rules of appropriation.

c. Expressing skepticism about government policy

The different respondents in the livestock free zone expressed frustration with government policy. Interviews with Khwai chief in 2011 revealed that the government makes promises they don't keep. He argued that there have been so many consultations on how to run their tourism business but more often than not the TAC instructs them what to do and what not to do. In other instances they bring forth ideas such as waste management and they are told the issue will be addressed and it is never addressed. This has made local people to lose trust in government promises.

An elderly lady, participating in the focus group discussion of 2009 conducted in Mababe, questioned if government knew if they as a community still existed. She wondered why they were poor and suffering whereas they were told they own the wild animals which would be bring revenue from tourism. Local people are aware of the income that is generated through tourism and they wonder why the benefits do not trickle down to them as promised by the government.

f. Conflicting Policies

Conflicting policies in communities that depend on CBNRM and do not keep livestock were mostly centered on how the DWNP treats local people vis-à-vis wildlife. There is a feeling among these communities that the DWNP favors wild animals over people. For example, G.M, a resident of Mababe during an interview I conducted in October 2011 made the following remark on the occasion of a lion that was killed because it was at a health facility “the DWNP was so

worried because a lion was killed despite the fact that it was preventing people from entering the clinic. These people don't care about us they care only about animals". (p. 11).

Concerning agency goal conflicts, G.M (2011) from Mababe and the deputy chief of Mababe interviewed in 2009 revealed that an arable field was supposedly allocated by staff from the ministry of agriculture. The field was fenced and the community members were concerned that elephants would destroy the fence. The DWNP in an interview conducted in 2009 expressed ignorance about the field and were concerned that the allocation of the field was an act of promoting agriculture where the DWNP discouraged it. Another instance of conflict in policies and possibly also a reflection of inadequate communication between government agencies was demonstrated by a confusion that arose when goats were to be transported to Mababe for distribution among local people as a way of alleviating poverty. In an interview with G.M of Mababe, he informed me that some few years back, the government agreed to buy goats for Mababe community as a poverty alleviation strategy. The Ministry of Agriculture personnel bought the goats from Maun and other neighboring villages. On their way to Mababe, the DWNP officers stopped the goats from going through the buffalo fence gate because they would be entering a livestock free zone. Another respondent, K.K the chief of Mababe, stated that no one is prohibited from rearing animals (livestock) people are just discouraged because of predation. It is evident from these accounts that government policy is not clear about the different types of livestock. The feelings of despondency and frustration about different aspects of government policy were also expressed by local people in communities that participate in CBNRM and also keep livestock.

4.3.2 Communities participating in CBNRM and also keep livestock

The communities that keep livestock and participate in the CBNRM are all located outside the livestock free zone mostly in the western and northwestern part of the ODRS. Unlike the Mababe, Sankuyo, and Khwai, each of which have its own CBO, most communities which participate in CBNRM and keep livestock share a single CBO mainly due to their being close to each.

a. Feeling excluded from decision making

The communities who participate in CBNRM and also keep livestock also expressed concerns of exclusion from decision making like those who depend on CBNRM for their livelihoods. Feeling excluded results in lack of trust on the government and its institutions. In Eretsha during the first consultative meeting of 11/5/2003, resident comment number two said

you say we should look after the Delta and its natural resources but we live by the Delta resources, so what should we do? We are suspicious that when you leave here you will sign away our resources and claim that the people of Eretsha have agreed to this. (ODMP, 2005).

In another village, Etsha 6 the following comment was made by M.T during the first round of the ODMP consultative meeting which was held on 11/13/2003

I do not believe these people came to seriously consider our opinion and help us. They are just doing their job because they get paid for it. We have often complained about wildlife but nothing ever happened. The government is mainly interested in the protection of the Delta, but not in our livelihoods (ODMP, 2005).

Boro community is one of the settlements that were visited by the ODMP team. The community is situated in the southern fringes of the delta and is engaged in both livestock and

CBNRM. Several comments indicated that they feel excluded from decision making and many complaints were also raised concerning conflicts between livestock and wildlife.

b. Disregarding indigenous knowledge

In the words of respondent comment 7 in Gunotsoga during the ODMP consultative meeting held on 11/06/2003:

we are conservationists, we have selected trees from which to create our mekoro'

yet another one said 'the reason we see wildlife today is because our forefathers

have conserved them over the years and now tourists are enjoying them

Communities also think the laws are changed so that they favor foreigners. In Gudigwa during the ODMP consultative meeting held on 11/5/2003 respondent's comment 2 expressed frustration at the discriminatory system concerning game licenses where foreigners are favored because they are given licenses faster after application as compared to locals whose licenses are given out after a long time. The same respondent went on to point out that they used to eat meat from lion left overs to avoid having to go hunting. When government encouraged them to settle down and leave their nomadic lives, the government put them on a food ration policy. The local people feel that they were better off with their old system where they lived off the land and still were able to rationally use the natural resources. The instruments used in harvesting natural resources have an impact on the depletion rates. The local people argue that the instruments they used to appropriate resource units were simple and did not allow for appropriation of more than they needed (Mbaiwa, 2006). For example, spear fishing is a traditional method that local people use to appropriate fish and they (local people) argue that this method cannot deplete fish. Instead they point to modern methods such as fish nets and used by JVP as depleting the fish resource.

g. Expressing skepticism about government policy

Residents in communities that participate in CBNRM and keep livestock also expressed skepticism about government policy. Resident comment number eight in Beetsha for example, commented during the ODMP consultations held on 11/6/2003, ‘I think that government has a plan to kill all our livestock. I think that government doesn’t want us to live here and that this management plan is just a pretext to these things. Just come out straight and tell us the truth.’ (ODMP, 2005). This concern expresses fear that government might want to kill their livestock possibly reminiscent of the 1996 cattle cull where all cattle were killed in the area due to the cattle lung disease.

The delay in land allocations especially for agricultural and tourism purposes was a thorny issues in these communities. The Tawana land board was accused by most members of the communities as delaying developments and also of favoritism. For example, SX of Jao, commented during the ODMP consultative meetings held on 2/2/2005 that it was difficult for them to get land allocated in the delta because the TLB would not allocate them land whereas foreigners were given land by TLB. Many other local people from different communities that keep livestock and participate in CBNRM echoed similar concerns about the TLB and other government agencies.

d. Conflicting Policies

This problem is more pronounced in communities where livestock and wildlife are in close proximity to each other. In Etsha 6, a community located on the western side of the Okavango Delta but south of the pan-handle, K.C made the following comment indicating the different demands from government in an environment where there are several conflicting situations:

You are telling us to take care of our water resources, but the water has diminished. What is causing the low flood levels?

You suggest we should not raise cattle. Elephants are breaking the buffalo fence, the fence is not repaired, and our cattle are crossing into the Delta. When cattle are found inside the cattle free zone, they are shot by the government. The owners are compensated with BWP 400 only. That is why livestock farming has gone back.

Beetsha is a settlement that lies in the north eastern side of the pan-handle. Residents here depend on both CBNRM and livestock rearing for their livelihoods. Their responses to the interaction between livestock and wildlife indicate the intensity of this problem and their frustration that it is not being solved. As S.B commented during the ODMP consultative meeting held on 01/31/2005:

In historical times cattle and wildlife mixed without getting Foot and Mouth Disease. It is difficult for us to see our cattle being killed when they cross the gaps in the buffalo fence. Fire has an important effect on eliminating livestock diseases in the floodplain grazing areas. Furthermore livestock benefit from the fresh sprouting grass after a fire. Normally we can coexist with elephants. They eat the vegetation but do not necessarily destroy it. However, when open water sources are diminishing, people and elephants are congested in the same areas. We used to kill and eat elephants to keep their numbers at an acceptable level (p. 8).

This comment suggests the desire for local people in livestock keeping communities for a resolution to the policy conflicts. It also shows that local people reminisce of the past where livestock and wildlife co-existed. It may be assumed that communities had institutions that

enabled that environment to exist where livestock and wildlife conflicts were kept to the minimum.

The conflicting messages and actions by the government agencies is another issue that was expressed by many respondents in the four villages (Mababe, Sankuyo, Khwai and Nokaneng) where I conducted interviews. The same sentiments were expressed by different speakers during the ODMP consultative meetings in all the categories of villages (see sec. In some instances such as in Ikoga village, the DWNP encouraged the community to form a TRUST, but according to A.K during the ODMP consultative meeting held on 11/09/2003, the Tawana Land Board refused to allocate them even though the WMA (NG24) was available for use. A.K claims that the Technical committee refused to sign the lease. Kauxwi community also experienced the same problem with the TLB after they formed their trust. During the ODMP consultative meeting, one community members stated that “we started our TRUST in 1999 and nothing has happened so far. The problem is the TLB; they send us back and forth between Seronga and Maun. The TLB even ignores local institutions when they come to deal with agricultural issues like farmers committees.” This non-decision on the part of governments brings confusion and uncertainty among community members

One of the issues that worries local people concern compensation of livestock or crops that are killed or damaged by wild animals. The MoA encourages increased production of agricultural goods and the MEWT promotes the conservation of wild animals which destroys agricultural produce. When livestock is killed or crops damaged by wild animals, it becomes the responsibility of the DWNP which in most cases does not offices in the villages, to assess the damage whereas in most cases the agricultural extension officers are resident in these communities. One resident in Ikoga J.M remarked that “our fields are damaged by elephants

even when they are fenced. Wildlife department is not even coming to assess the damage and compensate us”. The compensation issue is more intense in the communities that own livestock because they experience a net loss every time their livestock is killed by wild animals or their crops damaged due to inadequate compensation. Compensation is dependent on the DWNP coming to assess the damage. There are instances that the DWNP does not show up for the assessment mainly due to logistical reasons that apply to the department such as lack of transport to go to the site, or inadequate staffing which results in the farmer not being compensated. In Ikoga for example one resident (J.K) remarked that the elephants are a serious problem and they damage their crops but wildlife does not even come to assess the damage and compensate them.

The issues that are raised by these communities seem to have been raised before and there has been no solution to their problems. It would seem that the communities that keep livestock and participate in CBNRM were more concerned with livestock related issues especially as it pertains to the conflict between livestock and wildlife. Such comments as DWNP prefers wildlife over people suggest that they need assistance with livestock related issues more than conservation of natural resources as advocated by the DWNP.

4.2.3. Communities that do not participate in CBNRM

There are very few communities that do not participate in CBNRM except those that are located far from the ODRS even if they are still in Ngamiland district. Nokaneng is one of the few communities located in the ODRS south of the pan-handle on the western fringes of the Delta. Local people in this community depend on livestock as compared to CBNRM.

a. Feeling excluded from decision-making:

Local people in these communities expressed concerns that they were excluded from decision making. One respondent, respondent A interviewed in Nokaneng contrasted the current

situation of elected officials with the advent of chieftainship and said the following: “in the past our chiefs cared about us and knew how to work with us to control animals but the government and the wildlife people want the wild animals to kill us all so that they take our land”. This skepticism of government policy emanates from lack of consultations which in the past was strong within the community as indicated by the comment. The major issue raised in these communities however relate to wildlife and livestock conflict.

b. Disregarding indigenous knowledge

Residents of Nokaneng raised concerns about the invasion of modern institutions in their area which eroded the traditional rules and norms and hence affected the natural order of things such as availability of rain. In the words of S.K commenting during the ODMP consultative meeting held on 11/14/2003 “In the past when we had rain makers there used to be good rains that fed the rivers. There were always elephants in our area, but they came to drink water and walked away without harassing us.” (ODMP, 2005)

In another settlement of Habu, situated south of Nokaneng in the western fringes of the OD, people expressed S. M

I want to know which groups qualify for the community development fund.

Perhaps the fund could assist us to drill boreholes away from the river. I am prepared to kill predators that destroy my livestock. I blame the DAHP officers working in our areas for suggesting such low compensation rates.

This comment is similar to others that were expressed in the discussions of the ODMP. The comments were more concerned with the protection of their livestock and such expressions as ‘I am prepared to kill predators that destroy my livestock’ indicate preference for a source of livelihood on which the respondents depend. This community like others that do not participate

in CBNRM, are more concerned with protecting their livestock and agricultural production and do not dwell much on wildlife conservation which they see as a problem to them.

The preceding discussion focussed on four categories that were constructed from the focussed codes. The categories discussed are: a. feeling excluded from decision-making; disregarding indigenous knowledge; expressing skepticism about government policy; and policy conflicts. The discussion about these categories centered on how different communities responded to each of the categories. In the following discussion I focus on each category and draw comparisons between communities, based on their responses. I also discuss practitioner discourse which in the case of the ODMP consultative meetings was a response to the receiver discourse.

Feeling excluded engenders in the beneficiaries of a specific policy negative emotions and attitudes towards the agencies that are responsible for its implementation. In the ODRS, the DWNP is responsible for implementing CBNRM and have thus received the brunt of the negative attitudes emanating from communities. The DWNP is the representative of government in the implementation of CBNRM and thus aims to ensure that the communities take part in the policy. Many community members believe that the DWNP favors animals over people and such comments were expressed multiple times during the interviews and the ODMP consultative meetings. These sentiments are stronger in communities which do not participate in CBNRM. In those communities that participate in CBNRM, the sentiments show more negativity when there is conflict in terms of livestock killed or crops damaged by wild animals and also where human life is threatened. In every village during the ODMP consultations, wildlife as a problem was mentioned more than 60% of the time and the DWNP was accused of doing nothing about this other than to prevent people from killing these problem animals.

Instances of exclusion in policy making by the Ministry of Agriculture concerning such policies as the veterinary disease control were also mentioned as shown in the sections 4.3.1, 4.3.2 and 4.3.3. Communities who depend on livestock production for their livelihood complained about the veterinary control fence as cutting out some part of their grazing land hence leaving limited grazing for their livestock as discussed under sections 4.2.2 and 4.2.3. They local people argue that this increases competition between livestock and wildlife for the now limited grazing resource. Mbaiwa & Mbaiwa (2006) also found that in Shorobe, local people complained about the buffalo fence cutting on their grazing land hence limiting access to other parts of the grazing area they use to have which is on the other side of the buffalo fence. Villages of Eretsha, Beetsha, Gudigwa, Maun and Shorobe all complained about the buffalo fence and its negative impact on their livestock during the ODMP consultative meetings as shown under section 4.22. The fence cuts them off from accessing other parts of the ODRS which before the buffalo fence they could access with ease and appropriate resources important to their livelihoods.

In contrast, the communities that depend on CBNRM as their main source of livelihood did not express many complaints about the veterinary cordon fences or express any complaints about the MoA. The only comment that could be a measure of attitude towards the MoA in these communities was whether they get any help from the MoA or not. Their response was that there is very little help they get but did not express major concern about this scarcity of service. From the official discourse, it is possible that this lack of support from the MoA to the communities is in line with the declaration of the northern side of the buffalo fence, where Sankuyo, Mababe and Khwai villages are located, as a livestock free zone. As it pertains to arable production, destruction of crops by wild animals is certain to occur, sparking compensation claims from the

DWNP by farmers. Since compensation for killed livestock and/or crop damage by wildlife is a thorny issue in the ODRS, the DWNP would not be inclined to encourage any policy that promotes agricultural production in the area especially in the fringes of the wildlife rich Moremi game reserve where the Sankuyo, Mababe, and Khwai villages are located.

The intensity of the negative attitudes expressed also differs between the communities that own livestock and participate in CBNRM and those who keep livestock only but do not participate in CBNRM. The latter communities express skepticism about anything related to wildlife and CBNRM as well as frustration at the DWNP as regard the way the department treats wildlife favorably compared to local people. In these communities as shown by responses in Nokaneng and Habu, some local people express strong feelings about possible action towards wildlife if the wild animals kill their livestock as discussed under section 4.2.3.

It becomes clear that these complaints emanate from the exclusion of communities in the initial policy ideas that resulted in the formulation of the policy. The communities get involved at the end of the process when the policy is nearing completion. Their involvement takes place during the consultative meetings through the kgotla where the draft policy is presented to the community so that they can present their views. Usually this happens when the issue has already been discussed by the legislature who now ensures it gets community 'support'. Molomo (as cited in Edge and Lekorwe, 1998) points out that the bureaucracy in Botswana dominates the legislature in policy making more often by-passing the consultative process that needs to take place with the citizenry before the issue is placed on the official policy agenda. In the process the issue lacks the input of communities whose knowledge system has sustained them for generations. The disregard for indigenous knowledge emerged as one of the thorny issues during

the interviews and it is also mentioned in most of the villages during the ODMP consultative process.

Specific to indigenous knowledge, the communities believe they are better conservationists than the government. They question the government's proclamation that the government wants to help them conserve the natural resources which they (communities) have lived among and off them for generations. They argue that the reason why government is able to talk about the resources especially wildlife is because the communities have conserved them. The communities' conservation strategies has for years been to kill only those animals that are old, or seem sick and mostly to kill male animals selectively. The idea was to ensure that there was breeding stock. Where a certain species was seen to be in decline, they would stop hunting that breed and its killing was made a taboo until the species recovered. These stories from the local people have been confirmed in the literature by other researchers. Mbaiwa (2006) for example also found that the people of Khwai hunted only certain species and usually they selected old males.

The communities also blame current policies which they argue do not allow for animal population control. They give an example of elephant population which has increased to uncontrollable proportions. The communities believe conservation of natural resources should also consider the carrying capacity of the land. In this consideration, the communities argue, focus should not only be on cattle but also on wild animals such as elephants whose population growth has led to more destruction of vegetation hitherto not seen. The communities have in the past employed culling of elephants as a way of controlling their numbers. They would eat the meat and use other parts of the animal for different uses. The current arrangement now is that DWNP has control of who hunts and what to hunt and when. This then replaces the indigenous

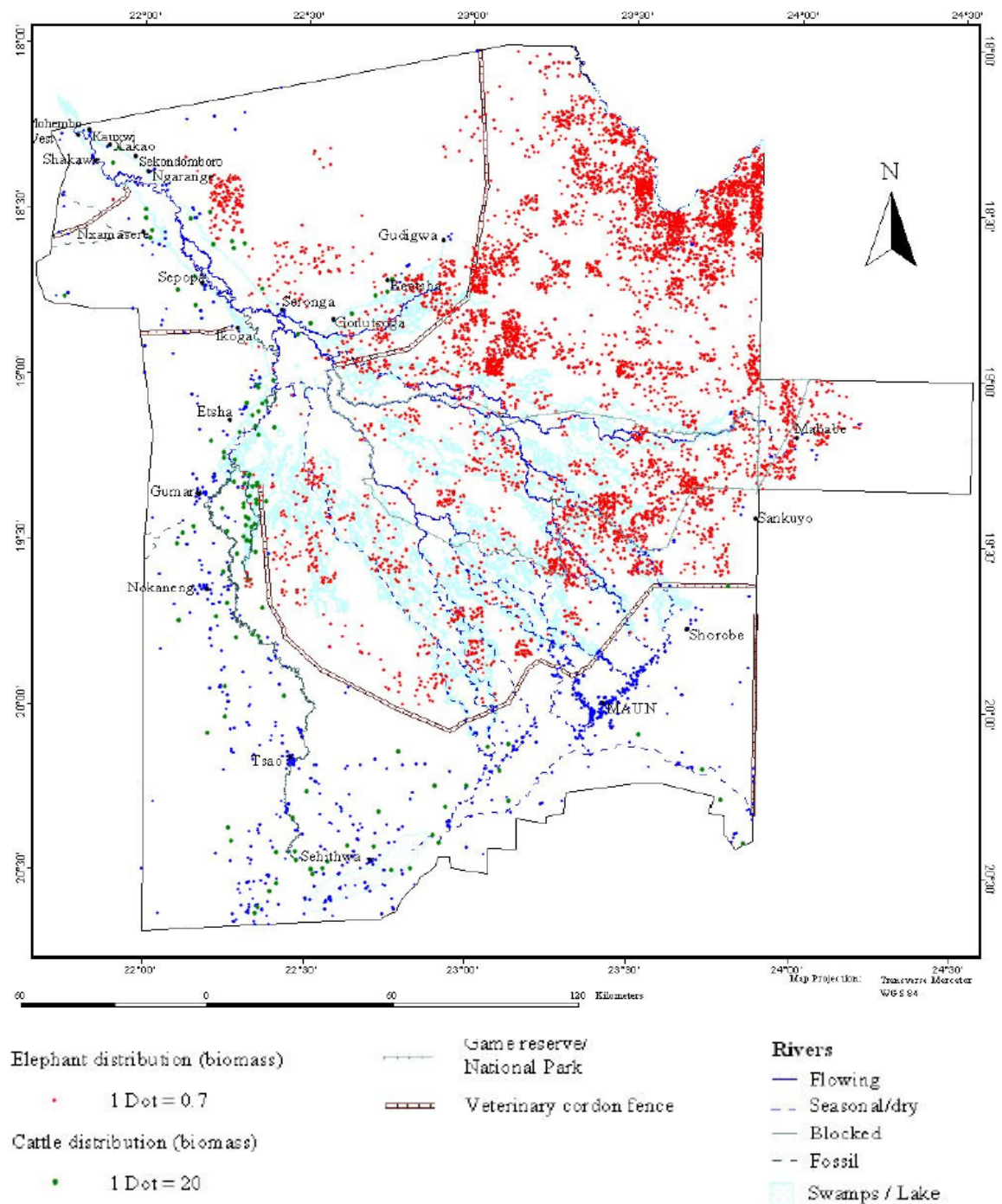
knowledge conservation practices of the past. It also limits the right to access because the final decision as to who can access the resources in the ODRS rests with the DWNP. For example, accessing the national parks is in the control of the DWNP and communities do not participate in apportioning that right. According to the five bundles of rights discussed earlier, the communities are given the right to access, manage and appropriate but the appropriation rules are designed by the DWNP. Thus the rules and institutions that hitherto sustained the commons according to the communities are replaced with new rules and institutions that are alien to them. This disregard for indigenous knowledge results in feelings of despondency and skepticism about government policy.

Expression of skepticism about government policy cropped up in all the interviews I conducted in the communities of the ODRS and they were also expressed in all the consultative meetings of the ODMP that took place in 2003 and 2005. Skepticism about government policy refers to the mistrust and lack of confidence in the policy promises by government and its agencies. The skepticism also refers to the perceived preference with which the government and its agencies treat the foreigners or non-locals compared to the local communities. The third aspect of skepticism comes from inconsistencies and mixed messages that come from different come departments which implement different policies in the ODRS.

The interviews that I conducted revealed lack of trust in the promises that the government and its departments make. A thorny issue that emerged in all the discussions both in focused groups discussion, key informant interviews and the ODMP consultative meetings is the conflict between wildlife and agriculture. This conflict involves crop damage by wild animals and predation of livestock by wild animals.

The proximity of livestock to wildlife areas due to settlement expansion has increased the interaction of wildlife and livestock escalating the conflict between the two (Van De Post, 2004). The increasing elephant population has also been a major contributing factor to this conflict as well as no clear policy to control such growth of settlements, elephant population and inadequate consultation of the local people concerning the management of the ODRS and its natural resources (Mbaiwa, 2006; Wilson, 2000). Figure 24 shows the distribution of elephants and livestock and elephants in the ODRS. As the figure 24 shows, there is more concentration of elephants in the northern part of the ODRS while most cattle population is concentrated in the southern part. The figure also shows that the cattle and elephants intersect in areas where the buffalo fence is not connected. The figure also shows that elephants are wide spread from the north into the central part of the ODRS and since they are difficult to control, elephants are able to go through some weak part of the buffalo fence and go into cattle grazing areas which increase the conflict between the two species.

Figure 24: Cattle and elephant distribution within ODRS



Source: MoA and ODMP, 2005

Another major concern about the animal disease control policy is that cattle that accidentally enter the cattle free zone where elephants cut the fence are killed and the carcasses

burnt (ODMP, 2005; Mbaiwa, 2006). The community members question why can't they be given the meat for consumption? On the reverse side, when wildlife crosses in the livestock zone, they are chased back into the livestock free zone often using helicopters. These issues were also found by Mbaiwa (2006). The community members wonder why the wild animals that cross into the livestock zone are not killed just like their livestock. The use of government helicopters creates an image about the government attitudes towards wildlife that is very disturbing to the communities. It gives an impression that the animals are much respected because helicopters are associated with dignitaries. This clear contradiction about government action on straying livestock and wild life animals fuels skepticism of the communities about government policies. Several community members have remarked "government loves wild animals over people". Similar remarks were observed in most of the villages during ODMP consultative meetings as different members from the concerned villages expressed their despondency about the government preference for animals over people as will be shown under the discussion of local people of the different communities.

A mitigation strategy taken by the government is to compensate the affected farmers after the DWNP assesses the damage. This appears a fair approach, but two issues arise that are a persistent displeasure to the local communities. First, the DWNP offices are located far from the site where crop damage or killed livestock occurred. This makes it difficult for communities to reach the offices within a reasonable time that allows the DWNP to find evidence of the damage or killed livestock. Added to this is the non-response by the DWNP due to their logistical problems (transport problems or inadequate staffing). If the DWNP fails to undertake the assessment of the damage caused or if they get to the site after the evidence has disappeared that links the damage to the wild animals, the farmer would not be compensated.

Table 6: Rank of animal problem by type and district

Source of Conflict	Okavango				Maun			Mean rank
	Gunotsoga	Seronga	Shakawe	Gumare	Shorobe	Sankuyo	Khwai	
Elephant	1	1	1	1	1	2	4	1.6
Lion	2	3	3	2	2	1	3	4
Hyena	3	2	16	4	3	4	1	6.3
Leopard	4	16	5	16	16	3	16	9
Wild dog	5	16	16	3	4	16	16	12
Jackal	16	16	16	5	5	5	16	12.1
Buffalo	16	16	16	16	16	16	3	13
Eland	16	16	16	16	16	16	16	14.3
Zebra	16	16	16	16	16	16	16	14.3
Monkey	16	16	16	16	16	16	16	14.5
Crocodile	16	5	2	16	16	16	16	14.6
Waterbuck	16	16	16	16	16	16	5	14.6
Porcupine	16	16	16	16	16	16	16	14.8
Kudu	16	16	16	16	16	16	16	15.3
Baboon	16	4	16	16	16	16	16	15.3
Hippo	16	16	4	16	16	16	16	15.3

Note: A rank of 1 indicates the most important.

Source: MoA and ODMP, 2005

The above table shows the animals that are a problem in the ODRS ranked by the problem status.

As the table shows elephants are the main problem animals in the area followed by lion and thirdly the hyena.

The second aspect of the mistrust results from the length of time that it takes for the compensation to be awarded. In most of the interviews the respondents expressed frustration that the compensation for their livestock killed by wildlife and their crops destroyed by wildlife takes too long if it ever comes. One of the reasons compensation never comes is due to the length of time it takes between the time the farmer submits a report to the DWNP and the actual assessment by the DWNP. In many cases the DWNP takes too long to go for assessment due to logistical factors stated earlier (transport shortage and low staffing) and when they arrive, the

evidence such as animal tracks, connecting the crop damage to wildlife would have disappeared. The same applies to livestock predation; the evidence such as tracks and the carcass would no longer be available for evidence (Mbaiwa, 2006).

One of the uncertainties about government policy concerns the allocation of benefits in the ODRS. Most of the respondents pointed out that government agencies treat them differently from those outside the ODRS especially non-locals. They claim that non-locals especially white people are preferentially treated and are accorded easy access to resources such as land and licenses to start businesses whereas locals are not. They specifically complain about the Tawana Land Board (TLB) which they claim is “useless” in the words of one respondent. The TLB is responsible for allocating land to individual community members for residential, business and agricultural purposes. It also allocates CHAs once the trust is formed by a specified community. The TLB seems to have failed to efficiently and effectively execute these tasks for many community members in the ODRS. The complaints against the TLB were on average 40% of all the complaints during the ODMP consultative meetings of 2003 and 2005.

Unmet promises from the government have contributed to the communities’ skepticism about the government. The interviews that I conducted revealed that there have been many consultations concerning the needs of the communities and the feedback the communities provided was never put into action. The local people, as tax payers, begin to wonder why government officials keep visiting the communities to solicit ideas about the best ways to improve the livelihoods of the local people and yet the officials never give feedback or implement the suggestions. As demonstrated in the discussion on the category ‘skeptical about government policy’, the local people become suspicious that government officers visit the Delta so that they can claim subsistence allowance.

4.3.4 Official and practitioner discourse

The last sections (4.3.1, 4.3.2, and 4.3.3) focused on the receiver discourse. In this section, the discussion focuses on the official and practitioner discourse. Discussing the official and practitioner discourses entails looking at the responses that the policy makers and the bureaucracy make to issues raised by the receiver discourse as well as looking at the policy positions of government. In this study, official or practitioner discourse was limited by the reluctance of respondents to be interviewed as well as refusal to be electronically recorded which limited optimal use of the data and increasing the quality and richness of data.

In general, the response of official discourse to receiver discourse was that of defending the status quo and the efforts put in place to assist local people through implemented policies. For example, the TLB in an answer to land allocation for agricultural purposes in Seronga in an ODMP meeting held on 02/03/2005

The Land Board does not stop people from ploughing along the river or in the flood plains. However, TLB will not make allocations or issue certificates for *molapo* fields. Doing so would have adverse legal implications. TLB does not compensate farmers who plough in this high risk area if fields are flooded... P 24

The answer is from practitioner discourse perspective where the speaker is an implementer of policy and follows the rules in place hence the answer might be seen to be inadequate as it merely states the position of government. It should also be noted that the issue here represent the feeling skeptical category discussed above. In Ikoga, CM, in an answer concerning the elephants/livestock conflicts stated that in many communities people have complained about the destruction caused by elephants. He mentioned that this issue would be addressed by the management plan (ODMP 2003). The same issue when raised in the second round of the ODMP meetings was answered in the same fashion making local people to feel that the government is not

taking their concerns seriously. Another complaint about the TLB with regards to unfair land allocations was that the TLB allocates land after consulting with communities (ODMP consultative meeting, 2005, p 87). Many communities as shown in the preceding section on skepticism of government policy have pointed out that the TLB was a problem with its land allocation policy which the communities were not clear as to how it works.

Responses concerning low compensation have also been made as well. As one member of the ODMP team put it, the word compensation is not understood by local people and needs to be changed because according to the official explanation, compensation does not meet paying the value of the damage as the local people would like it to be. It means defraying cost for the farmers but not paying the total cost of the damage. This issue was raised in the different types of the communities studied: those depending on livestock only; those involved in agriculture and CBNRM and those that do not keep livestock and are involved in CBNRM.

There were no official or practitioner discourses relating to indigenous knowledge other than to acknowledge the concerns of the communities. The same types of responses were made concerning policy conflicts where the issues of livestock predation and crop damage were appreciated by the official discourse and local people promised that action would be taken. This is indicative of the power of official discourse to manipulate issues in order to keep the conflict to low levels by using symbolic placation or non-decision.

In conclusion, this chapter has discussed the attitudes of local people towards the animal disease control policy with specific reference to the veterinary cordon fences and the CBNRM. Three types of communities were discussed in this chapter. The communities that participate in CBNRM and are not involved in agriculture, secondly, communities that are involved in both agriculture and CBNRM. The third category of communities was those which are involved in agricultural production but are not part of CBNRM program. Four categories describing the local

people's perception of the policies were looked at. These are: feeling excluded from decision making, skeptical of government policy, disregard for indigenous knowledge and policy conflicts. These categories are comprised of several focused codes that were derived from initial codes.

The chapter showed that there were differences in intensity of attitude towards the policies depending on which community type was expressing the attitude. The results on attitude showed that the communities who participate in CBNRM only and not in agriculture are more concerned about being excluded from decision-making concerning CBNRM and hardly mentioned livestock policies. The communities that are involved in both agriculture and CBNRM showed concern about lack of consultations on both CBNRM and agriculture with more intense attitudes expressed decisions that affect livestock and wildlife conflict. Local people in these communities were more concerned about protecting their livestock and being involved in the decision making that concerned compensation for crop damage and livestock predation. Local people in communities that do not participate in CBNRM but participate in agricultural production were also concerned with feeling excluded although they were more concerned with decisions pertaining to agriculture and protection of their crops and livestock.

Local people in all communities expressed skepticism about government policy. This was mainly due to unmet promises made by government agencies to the local people. Such promises as the solution to the livestock and wildlife conflict was a thorny issue in communities that are involved in livestock and crop production. For communities that are not involved in agriculture, the conflict involved the threat to human life by wildlife and the government inaction on the issue. Other examples that made local people lose confidence in the promises by government were the persistent soliciting of concerns or issues that the local people felt should be addressed

by the government but with no results. The discussion above shows that in a situation of unequal power relation, those who wield less power can bring forth ideas and concerns but the power holder may still not address them.

Chapter 5: Discussion and Conclusions

This chapter presents the discussion of the results and the conclusions drawn from those results. The chapter is divided into three sections as follows: first the discussion of the results is presented, followed by the limitations of the study and thirdly the recommendations are presented.

The purpose of this study was to understand the conflicts in the management of the ODRS by evaluating attitudes of individuals who live in communities of the ODRS towards natural and environmental conservation. The study focused on the CBNRM policy and the veterinary disease control policy. The veterinary disease control policy is aimed at controlling animal disease through the erection of veterinary cordon fences which separates livestock from wild animals in the ODRS. The major livestock diseases that pose serious threats to livestock in the ODRS are foot and mouth disease and the cattle lung disease.

5.1 Discussion

This study found that most members of communities in the ODRS have a favorable attitude towards CBNRM due to the tangible benefits that accrue to them as a result of the policy. Communities most favorable to CBNRM are those who are involved with the program and thus are able to balance the loss of agricultural produce such as crops and livestock due to wild animals with the gains through CBNRM. Cash income is the major incentive that minimizes negativity to CBNRM even when there is predation and crop damage by wild animals. The communities, who do not participate in CBNRM, showed negative attitudes towards CBNRM which they equated to a policy that protects wild animals at the expense of their agricultural products: crops and livestock. Although CBNRM is viewed positively in most of the

communities, there is disgruntlement and frustration with regard to the way decisions pertaining to CBNRM and conservation are made.

The main discontent with CBNRM is that the community participation in CBNRM decision making is symbolic rather than authentic. Participation is influenced by recognition of different actors by the power holders based on their power status. The power status might be based on the expertise of an actor or resources they have. For communities to effectively participate in decision making pertaining to CBNRM and Ministry of Agriculture policies there must be genuine recognition of the need for their participation by the power holders which are the government and the bureaucracy. In Botswana the legislature and the bureaucracy have a dialectical relationship at policy formation level where the bureaucracy is both an initiator of policy as well as the implementer also playing the role of advisor to the legislature.

In political systems that heavily rely on top-down decision-making or what Howlett and Ramesh (2003) call unitary systems like China and France, different approaches must be used. In these systems, the government or the executive retains the power of decision-making and/or policy formulation. Its decisions are often unchallengeable (Howlett and Ramesh, 2003: p 62). Over and above the power of the executive to make policies, it also has the responsibility to implement them. One of the legislature's functions is to safeguard the interests of the society by holding the executive accountable. Botswana's political system resembles this system with its three branches of government being the executive, the judiciary and the legislature. The power of the executive lies in their access to and control of resources like finance and the bureaucracy that serves as experts in policy issues. The role of the legislature is to make policies which are supervised by the executive for implementation.

In Federalist systems like the USA, at least two autonomous levels of government exist, e.g. states, provinces, regions that participate in public policy process as independent entities. The federalist system means that a decision must be reached involving all parties. This process often leads to protracted bargaining and lobbying between the groups and the policy process become a long process. In these systems participation is widespread among different actors unlike in unitary systems. This ensures the checks and balances that prevent dictatorial tendencies in policy making. Botswana follows a non-federalist system of democracy where the government is comprised of the legislature, the judiciary and the executive. The elected representatives in the legislature make policies with the bureaucracy playing an advisory role and at times as initiators of policy. The general population is informed about policy ideas which emanate from the legislature and/or from the bureaucracy. The weak civil society and fragmented NGO in the country creates a weak base for policy coalitions to be assembled which could increase the debate on policy issues. This results in the dominance of the legislature and the bureaucracy in policy formation with most of the citizenry participating at the end of the process when the policy idea has been solidified. The different ministries represented by their senior bureaucrats act as policy experts who bring policy ideas to the attention of elected officials intended to achieve individual ministries goals or provide solutions to their ministry problems which at times conflict with ideas from other ministries.

The delayed solution to the problem of policy conflicts (especially animal disease control policy and CBNRM) in the ODRS between the MoA and the MEWT is due to several possibilities. One of the reasons for this delay pertaining to fences in the country is attributed to the political leadership in Botswana formulating policies that are in their best interests especially in the case of livestock (Fidzani, 1998; Cullis and Watson, 2004). Since cattle ownership is

concentrated in the hands of the few politicians and the senior bureaucrats (Fidzani, 1998), problems related to livestock are acted upon quickly and are well resourced. Policies related to livestock are also given priority when compared to environmental and natural resources policies (Wilson, 2000; Albertson, 1998).

An examination of the CBNRM implementation in the Okavango region reveals that different social classes from the communities participate in the running of their trusts. For example, Sorensen (2003) examined the social groups who participate in the Okavango Polers Trust (OPT), another CBO in the Okavango region involved with wildlife based tourism. She discovered that before joining the trust, fifteen members were categorized as very poor, twenty-nine as poor, thirty as middle income and only one member as rich. The ranking was based on five categories of very poor, poor, middle income, rich and very rich (Sorenson 2003). This indicates that the participation in the trust was inclusive of the different social groups in the community with the majority coming from the lower social classes. This participatory development more likely ensures that the lower social classes are uplifted from poverty and are able to reduce their dependence on government support. It also ensures the success of the project by increasing the revenues generated as demonstrated in the section on economic benefits.

While it is established that different social groups in the communities are involved in CBNRM, it is also important to understand how influential they are in the decision making process of their trusts. CBNRM in Botswana has three main stakeholders: 1) communities, 2) the private sector (safari companies), and 3) the government. The devolution of power to the communities through CBNRM is intended to instill in the community members a sense of ownership of the resources to be conserved. As a result, they are given an opportunity to use their collective decision making to rationalize the use of the natural resources in their jurisdiction

to their own advantage and maximum benefit. This ability to make decisions independently has been observed in some CBOs in the ODRS. For example, the Khwai Development Trust never entered into a joint venture agreement with any safari company even though the general belief is that this form of arrangement is the most profitable. Instead, the Trust opted to auction a part of its quota to private hunters (CBNRM, 2003; Potts, 2003). Although the decision taken by the community was not popular with both the private sector and the government, the community went ahead with its decision.

The benefit of participatory development, of which CBNRM is a strategy, ensures that the stated development objectives set by the community are met. For example, the CBOs studied have shown economic growth both in terms of revenues accruing to them and employment creation. This increase in revenues is the result of collective efforts by the communities to manage the resources in their areas to maximize benefits. One of the ways that CBOs have been able to maximize their earnings has been through decisions by trusts to sell part of their quotas to safari companies or enter into joint ventures. In this case, CBNRM has created conducive conditions for the communities to bond together for the common good. This is not only beneficial to economic development, but also to the enhancement of social cohesion in the community. It can be argued that the new social relations that are formed during CBO operations will engender a new sense of community in other areas of community development. Despite the seemingly high level of participation in CBNRM by communities as presented by official discourse, there are dissenting voices that are indicative of the hidden meanings and information gatekeeping that ensures the harmony intended by official and practitioner discourses.

Symbolic participation of communities in CBNRM and livestock policy making results from lack of recognition by both the bureaucracy and government of the communities as having

voice in policy development. According to Tatentove, Endelmbos, and Klok (2010), "...citizen participation...refers specifically to participation of citizens in policy formulation, decision-making and implementation" (p. 609). When citizens are consulted on an already formulated policy for its finalization, their participation is not authentic but is used to justify the relevance of the policy as a solution to some well-articulated problem within the government circle or by the power holders.

The voice of communities in the ODRS fails to get the attention of policy makers because they do not wield enough power to influence decision. They do not have the resources to mobilize and have their issues brought into the policy agenda (Baumgartner and Jones, 1993, Gaventa, 1982). The state uses the mobilization of bias to keep the issues that community members care about to the margins. During the interviews the issue of livestock and wildlife conflict and the action the state has taken as inadequate was raised by all the communities and they (communities) indicated that it has been a thorny issue for years since the state took control of wildlife but no action has been taken to address it. The lack of participation of communities in the solution to wildlife and livestock conflict has left the communities as perpetual complainants about the issue. The solution the government put forward was inadequate compensation which was confirmed during the interviews with the focus groups discussion I conducted as well as by the ODMP consultative meetings. In fact, Jackson et al (2007), show that the compensation given to farmers for crop damage by elephants is only 11 % of what they would get if there was no damage. Not only is compensation insufficient, the process for compensation is often long and stressful (Tawana Land board, 2005). The low compensation has been discussed in different forums but no agreement has been reached to increase the compensation.

The CBNRM policy and other conservation policies in the ODRS indicate the domination of the government and the bureaucracy over the communities in policy making. The participation of the communities takes place within parameters and limits set by the government. The policies are intended to regulate the resources euphemistically owned by communities and yet controlled by the government and the bureaucracy. DWNP for example has custody and control over wildlife which is 'owned' by the government and yet in discussions with communities the impression given is that the communities control these resources (Twyman, 1998).

Communities' control of resources is used as a powerful policy image by the government to appeal to the communities and their leadership to support the policy. Once the policy is supported by the communities, the DWNP which has policy monopoly over wildlife and other ecosystem resources sets rules in place which will govern policy implementation. As Baumgartner and Jones (1993) note, policy monopolies have "...a definable institutional structure...responsible for policy making and that structure limits access to the policy process" (p.7). The DWNP in this case limits the communities' access to policy process by excluding them from the nuts and bolts of the policy formulation. They do this by allowing communities to participate only at the very end when the policy has been formulated.

The same strategy of limiting communities' access to the policy process is applied by the Ministry of Agriculture (MoA) which designs policies based on their perceived national and other political interests. The animal disease control policy was designed with only the prevention of livestock disease in mind. In the process the communities in the ODRS were barely consulted on the proposed policy. It is no wonder that the interviews I conducted and the ODMP consultative meetings revealed the displeasure by the communities about the veterinary cordon fences which they said restrict wildlife movements and limits their access to grazing and veldt

products. Wilson (2000) found these fences were erected without proper Environmental Impact Assessment (EIA) despite the need for such EIAs to be conducted when such projects with potential impact on the environment are implemented. The bureaucracy in the MoA being the policy monopoly is able to thwart any suggestion that seems to threaten the policy they propose. The mobilization of bias was used in this case by justifying that the EIA would delay the need to promptly deal with the impending crisis of cattle lung disease which threatened the lucrative European beef market (Wilson, 2000). The paradox of this policy is that the beef from ODRS is banned from entering the European market! The interviews also revealed that even within the ODRS the movement of cattle is restricted from one area to another within the ODRS.

The interviews revealed that local people in some of the ODRS communities have been forcibly moved from their locations in the past and such attempts or insinuations have been made in the recent past. The Mababe and Khwai communities have been moved when the MGR was established in the 1960s against their will (Mbaiwa, 2006). One of the respondents during the interviews revealed that suggestions to move them have been made in the recent past (5 years) when the Okavango Delta was flooding. The local people were informed that they should move because the floods would destroy their property but paradoxically some business people from outside the area were not asked to move. This has made local people in some of the ODRS communities uneasy and suspicious when they see government officials because they fear that they might be moved. In other words the appearance of outsiders; be they researchers or government officials is associated with threats of actions that would affect the communities negatively.

Although there might be legitimacy in the local people's suspicion of outsiders, it is not all the time that outsiders represent a potential threat to peace and tranquility that reign in these

communities in the absence of outsiders. Perpetual fear makes the local people to avoid effective participation in activities or deliberations that affect their lives. It can thus be argued that local people socially construct oppression based on past experiences and become targets for manipulations by the power holders. Gaventa (1982) found this type of outside control of the local people to be effectively used by the power holders in the Appalachian valley even when these absentee power holders were taking no action. The categories developed in this research point to the perspective of a powerless people, whose past and repeated exclusion from decision making couple with threats to be moved, feel oppressed due to latent actions on the part of the power holders. Charmaz (2006) define constructivism as “a social scientific perspective that addresses how realities are made” (p. 187). Social construction of oppression means a situation where people create an image of stifled freedom or imposed lack of freedom due to past experiences which then limits their ability to freely participate in the running of their lives. The ODRS communities who I argue socially construct oppression have limited freedom to articulate and mobilize process for the presentation and achievement of their desired goals. Lack of resources and the knowledge of the extent to which the power holders have and can utilize the resources at their disposal make local people to relegate themselves to the margins as well as have suppressed ambitions.

The relegation of indigenous knowledge to the margins and its substitution with exotic knowledge system leads to the depreciation of social capital that hitherto has ensured proper governance in the use of natural resources and management of common pool resources (WRI, 2005). As the Institutional Analysis and Development (IAD) framework explains, local rules and institutions in communities ensure an effective governance of common pool resources. This is made possible by the shared understanding and trust that has been developed over the years in a

community. The shared understanding and trust (social capital) make interaction of actors within the action arena more cordial and effective leading to meaningful decisions such as how much to appropriate, who should appropriate and when (Ostrom, 2011). In the case of the Botswana polity, the Kgotla is the major decision making forum making it the main action arena for community decision making within the IAD framework. It is in the action arena where rules and institutions are articulated and agreed upon for governance in the use and management of common pool resource. The current rules and institutions in place for governance in the use of CPR in the ODRS are characterized by a multi layered influence (Clement, 2009). As Clements again notes, it is important to understand the multi layered nature of IAD framework as comprising the national, the regional and the local (ibid). In the ODRS, this analysis is in order because the influence on the decision making at local level (community) is influenced by both the international policies (Ramsar) and a plethora of national policies such as tourism policy, CBNRM, animal disease control policy etc.

The impact of these layers at local level is the depreciation of local culture and the rules and institutions that held the community together and its relationship to natural resource and their management thereof. In the ODRS, Ramsar requirements dictate certain policy positions such as the need for a management plan that aims to conserve the Delta and impose some limits on its use. At national level, policies related to the ODRS are aligned to the conservation of the ODRS according to the expectations of RAMSAR. This top down approach explains why in the face of decentralized planning through CBNRM there is still a lot of centralization (Poteete, 2011), hence the continued grievances from the communities. At local level, self-governance is undermined because the local rules and institutions of the communities are replaced with new and exotic rules and institutions from outside the community. Through the mobilization of bias

and non-decision, the government and its agencies are able to implement new rules and regulations even when the communities express their dissatisfaction. One way the government and its agencies use the mobilization of bias is to invoke the administrative procedures that prevent the questioning of government actions. For example, during the ODMP consultations such statements as “it is government policy we cannot change this now” and “we need to address relevant issues” coming from the ODMP project facilitator were common. By so doing the facilitator was able to restrict the discussions to “safe havens” (Rogers and Cobbs). Another way that issues from the communities were restricted was to re-direct them to other agencies that were not present during the consultative process. It is notable from the composition of the ODMP team that conducted the consultative meetings in 2003 that DWA, TLB, and MoA were not represented.

The results section has shown that veterinary cordon fences are a thorny issue in the ODRS and have been for years before the signing of the Ramsar convention in 1997 (Albertson, 1998; Mbaiwa, 2005; and Wilson, 2000). It is possible that the absence of the MoA from the consultative meeting was a deliberate action by the organizers to limit the discussions to non-controversial issues. For example, when the issue of fences and the hardships these cause to communities the ODMP project facilitators answered “the community should report the low effectiveness of the buffalo fence and the unsatisfactory compensation for livestock that has been shot when found in the Delta to the DAHP”. There were so many grievances that were expressed about the TLB, but there were no precise answers or comments that the ODMP team made other than that the TLB was not present to answer. It is possible that leaving government agencies who seem to be at conflict with the community was a strategy to limit all the emergence of potentially controversial issues (Gaventa, 1982). Confronted with new and exotic rules and institutions in

their own action arena, communities face a choice of rejecting their new rules and institutions or going along with them amid torrid protests and grievances. In almost all cases communities follow and hope to one day understand (Poteete, 2011). The choice to reject the new rules is limited by the lack of resources on the part of the communities. They do not have the necessary skills, money and media on their side to effect the mobilization of process (Gaventa, 1982) on their issues. Similar to the experience of Appalachian valley, the media hardly reports on the inequalities and dissatisfaction of communities in rural areas. The ODRS communities are more disadvantaged because the issues that affect them do not take national character and are only relevant to them. That livestock is killed by predators is an issue relevant mostly to the ODRS; crop damage by elephants and other wild animals as well as the problem of veterinary cordons fences are spatially localized problems to the ODRS. Other parts of the country cannot relate to them, making expedited acceleration of these issues onto the formal policy agenda remote.

The multi layered influence on the local resources of the ODRS by powerful international (e.g. United Nations Environmental Program) and national actors paralyzes the function of the local rules and institutions (Clement, 2011). Where local people could work within their actions arenas to design rules and regulations for governing CPRs given normal the external variables, it is difficult for ODRS communities to realize this goal because of the powerful actors stated above with their new rules and institutions. Clement (2011) argues that the disintegration of traditional rules and institutions was in fact a deliberate effort by government to extend control over communities. Agrawal (2011) argues that the CBNRM in east and southern Africa has been high jacked by the state, which despite advocates of decentralization of natural resources management, has in fact retained much of the control due to lack of trust on local communities'

ability to effectively manage the natural resources. The state's control on the natural resources, albeit advocating decentralization, has undermined traditional institutions.

Community self-governance through CBNRM could be possible if the external actors loosened their grip on natural resources control (WRI, 2008). Experience with self-governance shows that communities can achieve good governance if they are able to use their institutions based on social capital (Agrawal, 2011; Poteete, 2011; Goldman, 2011; Ostrom, 2011). As Mbaiwa (2005) points out, before the advent of modern institutions and regulation by government, communities had their own rules that governed appropriation of resources. For example, Mbaiwa notes that hunting of animals was targeted at older males during specific seasons. They would avoid female animals and violators were punished by the leadership. DWNP (2010) also notes that animal species that were observed to be in decline would be spared from hunting. Taylor (2007) also observed that land use monitoring was enforced based on agreed rules and institutions by the communities. Selected land overseers would ensure for example that cattle only used an agreed side of the grazing area. The idea was to ensure that other sides of the grazing areas recover. Self-governance and management of CPR therefore depends on the communities' social capital and the relationship between the community and external actors. Where there is more centralized power in a central agency such as government also being a stakeholder in specific CPR, self-governance will be undermined. The power differential would subdue the community to the dictates of the center. In a more relaxed power authority, the community would have the opportunity to employ and implement their rules, and self-governance.

Government agencies involved in the development of the ODRS have direct impact on the livelihoods of communities in the area through the policies or programs they implement. The

major government agencies in the ODRS are the Department of Veterinary Services and Department of Crop Production in the MoA; Department of Tourism and Department of Wildlife and National Parks in the Ministry of Environment, Wildlife and Tourism, Department of Water Affairs in the Ministry of Minerals and Water Resources; Ngamiland District Council, Tawana Land Board under the Ministry of Lands. These agencies pursue their different plans all contributing to the national vision 2016. They play a major role and at times a leading role in policy agenda setting and policy formation. Where the policy issue emanates from the legislature a relevant department is identified where their expertise would be utilized to finalize the policy and implement it. In some instances sectorial policies emerge from the government agencies through identification of problems that the bureaucracy or experts deem important enough to be in the policy agenda.

The different government departments stated above pursue their departmental goals which are sometime incongruent (Meyers, Riccucci, and Lurie, 2001). Part of the policy conflicts in the ODRS is due to incongruent goals pursued by the departments and by extension the different ministries. The Ministry of Agriculture pursues food security as a policy and recently with some shifts to food self-sufficiency. These are people centered policies which need more land in order to increase food production as well as more grazing for livestock. On the other hand the DWNP pursues conservation of wildlife and natural resources as a policy (for example wildlife policy of 1986) which is fauna and flora centered. To achieve conservation policies transformation of tribal land into WMA was effected to ensure free movement of wild animals and at the same time allow some livestock production in these areas (Taylor, 2006; Poteete, 2011). The lack of congruence of the stated policies has resulted in the ODRS being both a livestock production zone with intensive investments by the Ministry of Agriculture, while from

the Ministry of Environment Wildlife and Tourism (MEWT), the ODRS is viewed as a conservation of natural resources zone with investments geared towards that goal. Food security as a policy outcome has not been jointly articulated as a congruent outcome that intersects both ministries. The result is pursuant of different policies by the two ministries that could complement each other but end up sending mixed messages to communities while aiming to improve the livelihoods for the same communities. For example the approval of the allocation of goats for Mababe by the MoA was intended to help alleviate poverty but the DWNP stopped the goats from reaching the beneficiaries in Mababe because the village is situated in a livestock free zone where livestock is officially not allowed. The presence of livestock (goats and donkeys) in Sankuyo, which is in a livestock free zone, contradicts the official policy which prohibits livestock production or arable agriculture in the area. In one instance a plowing field was allocated for Mababe residents and fenced and this also was against the spirit of conservation policies implementation by DWNP. These contradictions are exacerbated by the minimal participation of the target group (communities) as well as the bureaucracies' motivation to achieve their goals. The results of this study show that the minimal participation of local people influences their views on the implemented policies while the contradictory and conflicting messages from the different government agencies creates a negative view of local people on the agencies.

This study set out to investigate the attitudes of local communities towards the CBNRM and livestock policies especially the animal disease control policy. The study also set out to assess the impact of these policies on local development in the ODRS. From the results as well as the analysis of the results, this study concludes that the attitudes of local communities towards CBMR are a positive/favorable. This conclusion has also been reached by Mbaiwa et al (2011)

who compared the attitudes of people in Mababe, Sankuyo and Khwai between 2001 and 2011. He found that attitudes have increasingly been favorable between the two periods having been somehow negative in 2001 to being positive in 2011. The change in attitudes is attributed to the increase in tourism revenues that have trickled down the local people.

This study and the one conducted by Mbaiwa finds that economic development and benefits from wildlife have been the major variable influencing whether communities support CBNRM or not. Where CBNRM is not implemented, the attitudes of local people towards wildlife are negative especially if there's predation on livestock and crop damage by wild animals. The level of appreciation of CBNRM also differs depending on whether the community is dependent on the policy for their livelihood or not. For those communities who derive their livelihoods from CBNRM only, (Mababe, Sankuyo and Khwai) the policy has had a major transformative effect on their lives. The communities cannot imagine the hardships they would endure without the policy. This study concludes that the value of CBNRM to these communities is also related to other available opportunities which can create employment, generate revenue and hence community development. Such opportunities have never existed in the CBNRM dependent communities that were part of this study and there are still no alternative opportunities at present. Their evaluation of CBNRM is only in relative terms: a prior situation where there were no revenue sources and the advent of CBNRM which brought the benefits stated earlier: revenue and cash employment to individuals. Community members who own livestock and are engaged in CBNRM also expressed favorable attitude towards wildlife and CBNRM but were much concerned about predation on livestock and crop damage by wild animals. The inadequate compensation for livestock killed by predators and crop damage started resentment towards the DWNP which is seen as being more concerned about wildlife and care less about the human

plight. Communities which do not participate in CBNRM expressed negative attitudes towards CBNRM and wildlife because they have a net loss due to predation and crop damage by wild animals.

The attitudes of communities towards livestock policies were favorable except that they expressed concern about the buffalo fence which limits access to grazing areas and veldt products. The favorable attitude were evaluated by the statements that they respondents used during the interviews, focused group discussions and the data obtained from secondary sources such as the ODMP consultative meetings. The favorable attitude of ODRS communities towards livestock policies is influenced by the benefits (both social and economic) that accrue to them. Heavy subsidies towards the subsector help maximize the benefits by minimizing the production costs of livestock making it a lucrative enterprise to venture into. Even those communities that do not own livestock such as those in the livestock free zone (Mababe, Sankuyo, and Khwai) expressed interest in owning livestock if they could be allowed to.

The agencies that implement the policies in the ODRS also shape the attitude of local people. The DWNP is still viewed by some in a negative light. The major reasons for this are: DWNP is perceived by some as protecting animals at the expense of people; the DWNP limits the communities' access to resources and exercises too much power over communities and decision-making process. The TLB was also perceived in a negative light with most respondents complaining about the TLB refusal to allocate land to applicants from communities but while allocation of land for foreigners or non-locals was perceived to be expedited by the TLB. It is singled out as delaying development because of its inefficiency in land allocation and rigidity in land use change. The respondents had favorable attitudes towards the DVS from the MoA

because its major function is to ensure the good health of livestock for farmers and is always available to meet the demands from communities.

This study concludes that self-governance in the ODRS communities is hampered by the unequal power relations where external factors such as the government agencies are more powerful and bring prescriptive institutions that communities have to follow. The erosion of local institutions and rules weakens the communities' capacity to self-govern and manage their CPR. Vestiges of centralization based on the patronage philosophy of the Harding's model in resource conservation are still retained. It is possible that limiting the communities' ability to apply and utilize their institutions might limit the efficiency of CBNRM as a policy as well as hampering the minimization of policy conflicts in the ODRS. The rights of communities to the ODRS resource system are limited to those of authorized user where their rights include access, withdrawal and management. This position makes self-governance difficult because one of the conditions for self-governance is exclusion meaning the ability to determine who will have right to access and withdrawal of resource units.

5.2. Limitations of the Study

Most research presents challenges that a researcher has to content with in order to get all the necessary data to perform an analysis of the problem under investigation (Browne-Nunez and Jonker, 2008).

1. Time was the most limiting factor in this study as the research site is in a different country in an area not easily accessible by any type of transport except all-weather like four by four types of vehicles. The time to move from one area to the other was slow resulting in less being achieved than anticipated. This affected coverage because I could not reach a wide variety of respondents as I would have wanted to. For example, gender is an important

variable in natural resource management but due to time constraints I could not have focus groups with women only so that I could discern the gender dimension in the data.

2. Qualitative research especially grounded theory requires repeated visits with respondents so that one can capture the changing views if any and also to use the observation technique which provides better results when done several times.
3. Some respondents were reluctant to provide information and be recorded. Although most of the data they provided was captured by writing, some data could escape with possible effect on the quality of data collected. This was observed more with senior government officials who preferred to refer the researcher to written documents rather than answer questions and articulate policy position by government.
4. Availability of data on employment, revenues generated by the different CBOs as well as distribution was scarce making it difficult to measure the real economic impact of the CBNRM policy on community development. It was also not possible to obtain current information on livestock sales to make comparisons of the value generated by livestock versus wildlife. Although this information would be useful, it was not critical because it was beyond the scope of this study both in terms of the research questions and the resources to obtain such information.

Despite these limitations, this study was able to gather enough information to answer the research question by conducting extensive search for secondary data of which the ODMP consultative meetings minutes provided a valuable source bridging the gap in primary information gathering. The study also had an added strength of integrating the IAD framework with the power theory and providing insights into the interaction of the power theory and the framework which has not been adequately studied in the ODRS. The second strength of study is

the use grounded theory which emphasized narratives of the respondents as the basis for the data and understanding of the policy conflicts in the ODRS. This helped provide a clear view of the situation on the ground by providing stories from respondents first hand.

5.3. Recommendations

On the basis of the results of this study, the following recommendations are proposed:

1. The respondents from the ODRS have a favorable attitude towards CBNRM but are not happy with the decision-making process. Adequate consultation is lacking and communities have to follow what the government and its agencies propose. It is recommended that the government and its agencies work with the communities to identify issues that the communities are concerned about and work with the communities to identify possible solutions to the problem. Communities' views on the issue or problem should be center-stage so that they can have a sense of ownership of the proposed solution.
2. In most or all the communities in the ODRS, the traditional institutions have been weakened. For example chieftainship has been undermined as the decision-making institution with the tribe but has been reduced to an extension of one of the government departments. Their role is to buttress what is being proposed by the government and its agencies. Despite this, the local people still respect the institution of chieftainship and would prefer to use it as the first point of contact for any concern that they have. This study recommends that the role of the chief and traditional leadership be strengthened by giving them more freedom to represent the interest of their communities and articulate local issues without inhibition by government regulations. Chiefs are currently regulated by the Public Service Act designed to regulate the public service. This obligates the chiefs to act spokespersons for the government with their different communities hence restricting their

ability to articulate the interests of their subjects more effectively such as the conflicts in the ODRS as well as the growing dissatisfaction of the local people with regard to their symbolic participation in policy decision making. By exempting them from the Act, they will be free to represent the interests of their tribes as well as working with elected officials in their communities for effective representation of the local people's interests.

3. Government agencies should work together towards identifying topical issues that affect the communities and consult on the roles of the different agencies in addressing an identified issue. The improved collaboration among the government agencies would minimize the confusing messages that conflict and contradict each other. This will bring more congruence in policy formation and will address the issues that the communities care about.
4. NGOs and civil society should be strengthened and more involved with policy making as well as implementation so that there could be a voice that could counter symbolic placation. This should be done by empowering the local institutions such as the Village Development Communities, Health Committee, and other village institutions responsible for different aspects of village activities. The committees mandates should be clarified and the elected officers to these committees be trained in their mandate of their committees and how they should interact with elected officials and the government agencies.
5. The communities in the ODRS are characterized by low development and lack of human capacity. This has resulted in many non-locals benefiting from the tourism industry than the locals. It has also led to many CBOs employing non-locals to fill management positions to help run their Trusts. Many conflicts and suspicions have arisen with communities suspecting fowl play when benefits are not flowing as expected. It is recommended that government creates a special fund to assist in accelerating the human capital of local people

so that they can manage their Trusts and reduce dependency on non-locals. This will go a long way in creating the much needed skilled labor in the communities. The current arrangement where some of these communities are treated at par with the rest of the country without due regard for the special circumstances that they face does not help the communities. By virtue of their location, some of these communities are far away from built capital which enhances learning and human growth, thus disadvantaging them when it comes to educational attainment.

6. A monitoring and evaluation system with a management information system (MIS) should be established in order to track the progress of policy implementation. The information should be collected and kept at both local and national levels so that the information can be used to correct the immediate deviations at local levels while providing strategic information at the national level for alignment with Vision 2016. If the MIS is managed at the national level by the government agencies due to their resource access and human capital, it can be accessible to research which contributes valuable information to other stakeholders including government.

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Appendix 1: Open ended questionnaire

1. What are the benefits that you derive from CBNRM policy?
2. Who came up with the idea of CBNRM?
3. Before CBNRM, how did local people manage wildlife existence in their area?
4. How have you been involved in conservation in the past?
5. There has been a lot of concern about poaching, what are your views about causes of poaching?
6. How do local people try to address the problem of poaching?
7. What are the benefits that you derive from livestock policy?
8. What is your role in making decisions pertaining to CBNRM?
9. What is the role of the community in decisions concerning CBNRM/livestock policies
10. How does the community leadership participate in CBNRM/livestock policies
11. What are your feelings about the wildlife presence in your area?
12. Role of community organizations in the management of wildlife resources
13. What is your relationship with the DWNP?
14. What is your relationship with the MoA?
15. Are you aware of the ODMP?
16. How have you participated in the design of the plan?

Appendix 2: Code book

Code	Type	Description	Example from Transcript
Diverse ways of empowering community	Inductive/deductive	Actions designed to uplift the community economically and socially	If government was to help people to utilize these natural resources including food to show case them to white people it would help them get out of poverty (p 1)
Identifying viable projects:	deductive	A set of activities designed to advance the wellbeing of the community	yah basically what happens is that we look for diverse ways that the community can be empowered. (p 1)
Explaining how decisions are communicated	inductive	Explanation of how issues are communicated	With that in mind we present that to the board, and if they are happy about it then the community is informed about those decisions before they can be implemented (p 1)
Tool for managing CBNRM	inductive	The use of constitution to show how the affairs of an organization are run	the constitution explains that the board presents to the community (p 1)
Dealing with technical staff	inductive	Issues handled by management that are considered requiring specialized skills to perform	However there might be other technical staff that may come from the office that may require our presentation especially in the areas of accounting and stuff. (p 1)
Management as technical experts	inductive	Individuals endowed with the skills to perform technical issues	However there might be other technical staff that may come from the office that may require our presentation especially in the areas of accounting and stuff. (p 1)
Differing levels of conceptualization	inductive	Understanding issues at different levels	...ends up with the board not understanding exactly where we are coming

			from, where we are driving them to or the vision that we have, the vision that we would like them to have ownership of, so we are all in one boat, and all able to move and deliver to the community (p 2)
Improving information flow for community involvement	inductive	Disseminating information and empowering community and board members so that they and management understand each other	board needs to be empowered in areas of education, areas of projects implementation so we all at the same wave length (p 3)
Management superiority	inductive	A situation where management feels they are above the community	So what we do is put them at the same level of understanding with us (p 4)
Having freedom to make decisions	inductive	The community's choice to express their views without inhibition	They ask questions when they don't understand, they can sometimes refuse even if it's a fair decision (p 4)
Differing levels of understanding	inductive	A situation where it takes people different times to understand an issue with some grasping it quickly others taking a while to understand	because the speed of their understanding is different, others grasp issues quickly others it takes them two or three days to understand what others understood in a short time especially old men (p 4)
Agreeing without understanding	inductive	A situation where people agree to make another happy or to bring the conversation to an end	at times agree but may not explain later why they agreed to the ideas or reason that we agreed for 1,2,3 reasons (p 4)
Resisting to new ideas	inductive	Reluctance or refusal to embrace unfamiliar ideas or projects	it happens often when it is a new thing completely that needs to be implemented (p 5)
Preferring certain Issues	inductive	Community members prefer issue that seem to address their core concerns and issues that	If it's something new like designing the logo, it took them time but if it's something related to

		they are familiar with	projects like building, it takes them a short while because it's in them already. (p 5)
Explaining village power relations	inductive	Distribution of power that influence decisions in the community	I was saying because of the two prominent families in the community we also encounter a challenge as management to work with the board and the community (p 6)
Encountering challenges in decision making	inductive	Uncertainty about adopting a position that would be acceptable to all concerned	I was saying because of the two prominent families in the community we also encounter a challenge as management to work with the board and the community (p 6)
Not trusting management	inductive	People feeling that management favors another faction or groups	let's say on that decision Kebuelemang's family is a beneficiary in that particular decision, the Tebalo's family will feel we are doing that because we are on the Kebuelemangs side (6)
Focusing on the objective to be achieved	inductive	Decision making by management designed to benefit all	but we will be implementing the decision without looking at who is who in the community, only focusing on what is it that we want to accomplish (p 6)
Participation in community power structure	inductive	A situation where people align themselves with major factions in a community	yeah they are though, somewhere somehow they also have got their own side (p 6)
Fearing victimization	inductive	fear to freely express one's opinion to avoid being made a victim	some decided to be silent for the reason of being hated; they don't want to be singled out (p 7)
Management of CBNRM: Kgosi Montle Kebualemang Level of participation			
Tool for managing	inductive	The Trust used as a tool to	you know we have a

CBNRM		manage CBNRM	community trust for Mababe, it really is a tool we use to manage CBNRM (p 1)
Fluctuating level of involvement	inductive	Level of involvement varying depending on circumstances	Some other times you find that my involvement is not that much, some other times my involvement is heavy depending on how much the board invites me to their meetings.
Expressing wishes through constitution	Inductive	Using agreed upon constitution to guide the operations of the organization	So it is the community that expresses their wishes concerning how the trust should operate by instituting that particular clause (p 2)
Assigning importance to self	inductive	Speaking about self in a manner that shows how important one is	But I think they at times invite me when they want my advice possibly when there is something that is technical but really all is up to them (p 2)
Lacking skills	inductive	Where skills are scarce affecting decision making	they may need me for help since there is shortage of skills on certain issues (p 2)
predatory animals conflicting with domestic animals	inductive	Wild life predation on domestic animals resulting in conflict between communities and the custodians of wildlife	The reason is that there are a lot of predatory animals, hyenas, lions and leopard.(p 2)
Inattention to Agriculture	inductive	When there is no support or notable promotion of agriculture	the thing is it is not encouraged but it is not that they are prohibited to have animals.(p 2)
Compensating for killed animals	inductive	The payment by government to the farmers whose livestock or crops have been killed or destroyed by wild animals	Yes, there was even though I cannot remember how much the compensation was (p 3)
Agriculture programs			
Disclosing CBNRM as an alternative source of livelihood	inductive	CBNRM program being stated as an alternative source of livelihood to	the advent of CBNRM provided an alternative source of livelihood.

		agriculture	(p 3)
doubting government assistance	inductive	Unsure of what the government is doing to assist the people	Actually they used to distribute seeds, but I don't remember if they still do or not (p 3)
Forms of agriculture			
Wildlife and agriculture conflict	Inductive/deductive	The problem that occurs when wild animals predate on domestic animals and destroy crops	The problem is elephants have no barrier so they get in and stamp on the water melons, break the crops, baboons also destroy crops, the ntloles also eat the crops (p 3)
Distributing resources	inductive	Sharing of resources among the community members	Those in the village share from the rations of those in camps and others bring in some money.
Bridging harvest gap	inductive	The strategies that people use to add to their food bank the shortages from harvests	uuhh really what we get from our fields even though it is small we increase it by buying from places like Sankuyo, they sometimes have better harvests, when people want to eat food from the fields.(p 4)
Seasonality of hunger	inductive	Hunger described as being a problem in particular seasons and not a problem in other seasons	hunger during the months when there is hunting is not an issue as such, even in the village (p 5)
Disclosing income sources	inductive	Discussing where the community gets its revenues to sustain households	you know there are those who work in the village in the Trust, from there, there are those in the camps. (p 5)
Negotiating quota	inductive	The participation of stakeholders in discussing how many animals are allocated to each community	it is the company that the Trust has entered into an agreement with, you know the government gives us a quota for a certain number of animals for that season (p5)
Having brother mentality	Inductive deductive	A situation where one group exert their power over another to have their agenda succeed	they sometimes prevent the trust to make certain decisions at other times they disturb the trust in

			different ways (p 6)
G.M			
Disregarding indigenous knowledge	inductive	When authorities impose their way of doing things and do not factor in local skills and cultural practices	That is he does not consider indigenous knowledge (p 1)
Discussing poverty eradication	inductive	Explaining how poverty can be eradicated	
Abolishing dependency	inductive	Finding ways to ensure that communities do not depend on an outside entity for their livelihood	When I am here I can think of things which as I move around here in the dry land that can be done to eradicate poverty, instead of struggling the whole day as someone's laborer, or looking up to government. (p 1)
Emphasizing resource availability	Inductive	Explaining the variety of resources in the area	But while in the Ramsar Site, you are the boss because you can acquire so many things that one can acquire in the Ramsar Site (p 1)
Showing resources wealth	inductive	Showing that there are richness and various resources in the ODRS	I can use such plants as Maupo for soap, animals skins for clothes cause these days the animals are given (p 2)
Being viewed as backward	Inductive	A view from outside entity of one being uncivilized	So one can survive even though you will be like you've gone back to the Stone Age but still in the modern era. (p 2)
Critical of government policy	Inductive/ deductive	When the government policy is being pointed at as being responsible for the existing problem	If government was to help people to utilize these natural resources including food to show case them to white people it would help them get out of poverty (p 2)
Feeling discrimination by government	Inductive	Government seeming to favor certain people over the local people	Instead of government asking the people to leave the Delta and go to the dry land, while allowing white

			people to remain in the Delta. And yet coming to the land you don't know and understand, you see (p 2)
Uncertainty about government policy	inductive	When government adopts different positions that are contradictory	This leads to people to take chances and claim that government is doing this because of certain reason
Advocating transparency	inductive	Avoiding unscrupulous ways of using resources by ensuring that resource use is being accounted for	So what is needed is for us to utilize them in a proper manner without corruption because they are not for us alone (p 2)
Marginalizing communities	inductive	When communities are deliberately left out of decision making	An example I can give you is when they made the final plan for the OD Ramsar Site, we were holding a meeting at (p 2)
Symbolic placation	inductive	When authorities promise to take action on an issue to stifle opposition only but in essence do not keep the promise	Then they say "nah, we will always bring a car". They never did, it only happened that we found later that the ODMP was finalized.
Government insensitivity	inductive	Government unwilling to address issues or concerns of local people	When they ridicule them, they call them river Bushmen, those people have their way of life so when you make them abandon their way of life just because you want to conserve and yet you can't accommodate them in your house, you can't go with them to the toilet you cannot... you can't work with them, what reaction do you expect from them?