

**Community-Based Natural Resource Management:
Strengths and Weaknesses for Sustainable Development and Resource Governance in Sub-
Saharan Africa**

University of Ottawa | Faculty of Social Science
Graduate School of Public and International Affairs

Presented to: Professor Abrahamsen and the API Department

Supervised by: Professor Abrahamsen

July 21, 2016

By: Andrew Heffernan

4670831

Table of Contents.

Table of contents.....	2
Abstract.....	3
Chapter 1: Introduction.....	4
Chapter 2: The challenges of resource governance in Africa.....	11
Climate change and Africa.....	11
Africa’s paradox of resource riches and persistent poverty.....	13
The politics of resource governance in Africa.....	14
Chapter 3: Situating CBNRM in Development Discourse.....	21
CBNRM and development thinking.....	22
The economic of CBNRM.....	25
Forms of CBNRM.....	27
Conditions for success.....	29
To what extent can CBNRM respond to the challenges of resource governance and sustainable development.....	31
Chapter 4: Case Studies – what works and what fails.....	34
Namibia – Home to the largest area of protected communal land in the world.....	34
Zimbabwe: CAMPFIRE, the cradle of CBNRM.....	41
Tanzania’s Community-Based Forest Management (CBFM): A potential global carbon sink.....	45
Chapter 5: CBNRM – Strengths, limitations, and conclusions.....	50
CBNRM Strengths.....	50
CBNRM Weaknesses/Limitation.....	52
Conclusions.....	55
References.....	59

Abstract

Climate change is the greatest challenge our generation will face. This remains brutally true for the continent of Africa who stands to experience the greatest negative impacts as a result, and while paradoxically having contributed the least to causing its effects, remains in the least able position to adapt to and mitigate its effects. The continent enjoys considerable resource wealth, but due to a long history of poor resource governance, millions on the continent live in poverty and have suffered from long and protracted underdevelopment. Much of this has stemmed from problems such as neopatrimonialism and what can be called the resource curse but all add up to the continent's resources benefitting the few in an extremely inequitable fashion that has also led to massive environmental degradation. Community-Based Natural Resource Management (CBNRM) has developed out of development discourse, through ideals such as 'ownership' and 'participation,' developed in the 1990s and solidified in the 2005 Paris Agreement. It has come about as a set of practices that are presented as a possible way to overcome many of the challenges of resource governance in Africa, through devolution of the control of resources from central governments, into the hands of the people in local communities. This paper will examine the strengths and weaknesses of CBNRM with a focus of its effects on sustainable development in Africa. It will examine the tensions that are placed between the environment and economic growth on the continent through three case studies: Namibia, Zimbabwe, and Tanzania through their respective versions of CBNRM.

Chapter 1: Introduction

For years environmental activists, climate scientists, politicians, left-leaning think tanks and, of course, the rock star Bono have been telling us that the human race has put planet earth on a direct course for catastrophic change as a result of the burning of carbon and the release of carbon dioxide (Co₂) emissions into the atmosphere (Klein, 2014). The details of what precisely will occur, or when, are still highly debated, but every passing year presents incontrovertible evidence that the effects of climate change on our planet are well under way and are certain to get much worse. Be it oppressive levels of smog in China, devastating wild fires in Canada, deadly heat waves in Australia and India, rising ocean levels in coastal regions around the world or continuous desertification on the African continent, climate change is undoubtedly the greatest challenge facing our generation.

Almost as some perverse joke, Africa, the continent that has contributed least to climate change (largely as a result of its long and protracted underdevelopment) stands to be the most adversely affected. It is also the least able to adapt to and mitigate the effects (Low, 2006). For many reasons Africa is pivotal to the fight against climate change. Although most forecasts project that much of Africa's growth will decline from the peak of the early to mid-2000s, the pace and model of the continent's economic growth and development will greatly affect humanity's ability to deal effectively with climate change (World Bank, 2015). If Africa industrializes the way the West did, and the way China and the other BRIC countries currently are, humanity stands little hope of continuing life as we know it for long into the future. Newly industrialized countries have been building coal fired power plants at an alarming rate, using exorbitant amounts of resources and contributing massively to the production of greenhouse gases, all the while destroying natural habitat and the planet's ability to sequester carbon at a

sufficient rate (Madison, 2007). While this has resulted in historically unparalleled levels of economic growth, it has also resulted in unsustainable levels of pollution.

As more and more people around the world are pulled from poverty it thus becomes painfully necessary that they do not develop in the same dirty, destructive and unsustainable manner as today's leading economies did. This is the challenge and dilemma of sustainable development; the urgency of reducing poverty without jeopardizing the earth's carrying capacity for future generations. While it seems fair that developing countries around the world should have the same opportunities to develop as today's rich, industrialized nations had in the past, it is now clear that this would ultimately endanger us all.

There is thus a very strong, shared international interest in finding climate solutions in Africa, while enabling the world's poorest region to realize acceptable levels of human development. No one has a stronger impetus for doing so than Africans themselves as it is their land and livelihoods that climate change is destroying, and their economies that stand to benefit most from a truly *sustainable* development that will allow future generations to prosper. As a result, Africans themselves have a strong rationale for taking matters into their own hands and developing solutions to the interlinked enviro-socio-economic-political problems.

The challenges of doing so are multiple. Climate change does not take place in a political vacuum, and tackling the challenges of sustainable development require facing the problems of resource governance. Often resource management in Africa has been characterized by corruption and benefitted only a narrow elite, and paradoxically, the countries most blessed with resources are frequently the poorest. Community Based Natural Resource Management (CBNRM) is one response to these challenges and represents an attempt to ensure environmentally sustainable resource development that benefits local populations. As Fabricius and Collins explain,

“community-based natural resource management (CBNRM) focuses on the collective management of ecosystems to promote human well-being and aims to devolve authority for ecosystem management to the local (community) level” (Fabricius & Collins, 2007 p.1). For some CBNRM is a virtual panacea for the multiple problems associated with African resource development and governance, and therefore crucial for sustainable development. (Frost & Bond, 2008; Rantala, Bullock, Mbegu, & German, 2012; Richardson, 1998; Robinson, Albers, Meshack, & Lokina, 2013) Proponents argue that, in theory, through the devolution of resource rights from central governments to local communities, Africans can take control of the management of their local natural resources as well as the accrued benefits. This would lead to stronger community engagement and better organization of local institutions and governance structures. It would also create local jobs, while giving all members of the community an incentive to protect and responsibly manage their resources (Murphree, 1998; Rantala et al., 2012; Richardson, 1998). For the proponents of CBNRM, then, this is an African solution to African problems – the type of solutions that is increasingly perceived as necessary after years of failed outside interventions.

Of course, any quest for a panacea is doomed to fail, and so also with CBNRM. There is an increasing realization that CBNRM is far from a straightforward technical solution that can be easily applied to varied and complex communities, and that while CBNRM might work in some places or situations, it will not work everywhere or for everyone. At the same time, a growing body of research points to the potential merits of this form of resource management (Leach, Mearns, & Scoones, 1999), and it is clear that in some communities CBNRM has contributed significantly towards sustainable development (Junge, 2004; Rantala et al., 2012; Snively, 2012; Taylor, 2009). Given the challenges of climate change, sustainable development and resource

governance in Africa, there is accordingly a need for further examination of CBNRM, its strengths, and also importantly its limitations. This is the task of this major research paper (MRP), which seeks to evaluate the extent to which CBNRM can offer a solution to the challenges of sustainable development. Its main research question asks what are the strengths and limitations of CBNRM in sub-Saharan Africa?

Methodologically the MRP draws on secondary sources including a diverse range of academic literatures, especially within the disciplines of development studies, environmental studies, anthropology, and resource governance. There is also increasingly work being published by NGOs on the benefits of CBNRM, and policy documents being produced by a range of institutions around the world. The literature on CBNRM has grown significantly in recent years, and includes works from major international institutions such as the IMF and World Bank as well as national governments.

Three case studies will be examined to enable a thorough analysis of CBNRM and the research question. Methodologically, the case study selection is best described as typical or representative, as the cases demonstrate causal mechanisms at work in a general, cross-case relationship (Seawright & Gerring, 2008). They were chosen because of the availability of sufficient secondary literature, but also because they occupy particular importance within the research on CBNRM. Namibia began its version of CBNRM in the mid-1990s and as a result there is an extensive body of literature and evaluations. Namibia also provides a unique and interesting case, given the country's relatively recent independence from South Africa and its very progressive constitution that strongly influences the implementation of CBNRM. Moreover, it has more land under protected communal status than any other country in the world, adding to its usefulness as a case. The second case study, CAMPFIRE in Zimbabwe was selected as it is in

many ways the pioneer, or original, CBNRM project. As a result, it is also the largest such project to date and one of the most well studied. Finally, Community-Based Forest Management (CBFM) in Tanzania differs slightly from the two other cases, both in terms of its historical and legal circumstances and in terms of its scope. This project focuses on protecting forests to work as a carbon sink to benefit not only Tanzanians, but also the whole world. This proves an important lens through which to see how the problems of climate change and resource governance in Africa are inseparably tied to those of the rest of the world. It helps to develop an analysis around how community-based solutions can work in concert with the global fight against climate change as well as be helped by actors around the world. Taken together, the three case studies enable a comprehensive answer to the research question.

In order to appreciate the problems that CBNRM is intended to solve, Chapter 2 provides a review of the challenges of sustainable development and resource governance in Africa. The chapter begins with examining the paradox of Africa's resources riches, yet its persistent and widespread poverty. I then focus on the politics of resource governance including neopatrimonialism and the resource curse as two significant challenges for sustainable development and effective resource management on the continent. Finally, I examine some of the worst effects of climate change on the continent, and show how the urgency in dealing with these is hampered by the lack of capacity and resources - and by the poor resource governance resulting from neopatrimonial politics. While not all CBNRM projects are intended to overcome all of the challenges discussed in this chapter, together they illustrate the need for alternative forms of resource governance in order to ensure Africa's resources are used in a sustainable manner that simultaneously supports poverty reduction.

Chapter 3 provides an overview of the thinking behind CBNRM, traces its origins within development thinking, and provides a breakdown of the main forms of CBNRM. In this chapter I explain the way in which this form of management was developed in concert with the ideas of participation and ownership that emerged from development discourse and were solidified in the 2005 Paris Declaration. CBNRM is a broad set of policies and initiatives and comes in many different forms. Nevertheless, its key focus is on devolving control of resource governance from the central government to local communities, with the intention of giving people a stake in the protection and responsible management of local resources, preventing large scale corruption and ensuring that local people benefit from their resources. This chapter also lays the foundation for an assessment of the strengths and limitations of CBNRM, as examined in Chapter 5.

In order to examine the strengths and weaknesses of CBNRM, Chapter 4 reviews the evidence from three different projects in three different countries. Focusing on projects in Namibia, Zimbabwe and Tanzania, the chapter gives a brief profile analysis of each country highlighting some of the particularities of each with regards to population size, economic indicators, natural resources, as well as various local nuances to be taken into consideration. It then goes on to explore the way in which CBNRM developed in each respective case study. The chapter takes a particular look at the legal framework that allowed for these projects to be developed, as well as how they got off the ground and through the actions of whom. It will then go on to explore some of the particular achievements as well as some of the faults of the respective projects to present an understanding of some of what has been accomplished concretely.

Finally, Chapter 5 synthesises the research findings from the three case studies and concludes that while far from a panacea, CBNRM can, in the right conditions be a useful tool for

helping to realize sustainable development and improved resource governance. Its main strengths are its conservatory abilities with regards to wildlife, habitat and biodiversity. It can also play an important role in community development through governance and institutions building. Its key weaknesses or limitations are that in most cases the economic benefits from CBNRM are relatively modest. Moreover, as people's livelihoods are displaced to avoid environmental degradation and support conservation, the opportunity costs for activities people were previously engaged in are rarely factored into project assessments. This means that while shifting from subsistence agriculture for example, towards some form of wildlife conservation for ecotourism, it means that these communities are producing less food, threatening food security and/or certain members of the community's ability to provide for their families. It is not so simple as to decide some new form of land use or economic activity might be beneficial without taking into account the full costs of ceasing previous production. The final major limitation to emerge from the analysis is that while effective community building can, and has occurred, there are also risks that communities will develop new forms of patrimonial rule, which in turn could create new forms of inequality and irresponsible resource governance – but this time at the local as opposed to at the state level. Politics thus continues, and successful CMNRM requires continual political awareness and democratic accountability.

Chapter 2: The Challenges of Resource Governance in Africa

Climate change and Africa

No other region of the world will be struck as severely by the effects of climate change as Africa. Its geographic position, coupled with its considerably limited adaptive capacity, widespread poverty and low levels of development, makes the continent highly vulnerable. Both in Africa and other underdeveloped regions of the world, climate change poses a significant threat to economic growth, long-term prosperity, and the survival of already vulnerable populations. Consequences of this include the persistence of economic, social and environmental vulnerabilities particularly for economic and livelihood sectors. There is also an ever-increasing risk of disasters placing additional limitations on sustainable development and an increased impediment to achieving the many development goals of the continent (Low, 2006).

Some of the worst projected impacts of climate change in Africa include, an additional 75-250 million people being exposed to increased water stress due to climate change and yields from rain-fed agriculture reduced by up to 50% both by 2020. This would severely compromise agricultural production and affect food security, exacerbating malnutrition (Low, 2006). Towards the end of the century sea levels are projected to rise and affect low-lying coastal areas with large populations. Arid and semi-arid land in Africa is projected to rise 5-8% by 2080. The costs in terms of adaption could rise to at least 5 to 10% of GDP for the continent, putting a further strain on already struggling economies (I & Alley, 2007).

Although Africa has contributed relatively little to the causes of climate change, especially in terms of the amount of greenhouse gases released into the atmosphere, the continent faces an almost unending and increasing slew of environmental issues. Some environmental problems are self-induced, some stem from climate change, and others yet are a result of foreign

actors. Environmental degradation can be a result of people's struggle for survival, which forces them into unsustainable practices (e.g. cutting down trees for firewood and thus causing desertification, or failure to allow fallow periods for the land, due to population growth etc.) It can also be due to corporate practices and industrial development; oil pollution in Nigeria's Niger Delta, for example, is largely due to poor maintenance by oil companies that leads to large-scale, damaging leakages and spills (Fairhead, Leach, & Scoones, 2013).

The Delta's environmental destruction is a striking (and frightening) example, of the negative effects of corporate global capital and its collusion with national governments. As such, it draws attention to the fact that environmental degradation is often a result of a lack of effective, responsible leadership and of resource exploitation with scant regard for the protection of the land and the well-being of people and future generations, as the Brundtland report famously dictated in 1989 (UN report, 1989). In order to appreciate the context in which CBNRM emerged, this chapter begins by framing the paradox of Africa's pervasive poverty despite its immense resource wealth. It then explores the challenges of resource management in Africa focusing on the politics of resource governance with a particular focus on neopatrimonialism, and in extreme cases, the resource curse. Finally, it will assess the effects climate change is already having on the continent while situating these within the realities of the lack of capacity and neopatrimonial politics. While not every CBNRM project is intended to solve the issues discussed in this chapter, a review of the manner in which resources have historically been managed and exploited on the continent, as well as the devastating effects of climate change, serves to demonstrate the need for an alternative form of development and resource governance.

Africa's paradox of resource riches and persistent poverty

The continent of Africa has long been a place of vast natural resources and rich environments. The continent is generously endowed with productive and fertile land, although its quality has begun to deteriorate at an increasing rate in recent years. It also boasts an abundance of natural resources, including renewables like water, forestry, wildlife and fisheries, and non-renewables such as minerals, coal, gas and oil. These various natural resources form the backbone of many African economies, which have traditionally been export oriented, and also provide livelihoods for the vast majority of Africa's rural poor (Burgis, 2015). Under the right conditions, as has been witnessed in many countries around the world, effective leadership and resource governance can see natural resource endowments contribute to a strong, robust and inclusive economy. It is commonly agreed that in these situations, natural resource income can stimulate growth, facilitate a transition from small-scale cottage industries to factory production, and ultimately help diversify economies, making them more robust and sustainable (McMillan, Rodrik, & Verduzco-Gallo, 2014).

Many African countries, however, have failed to develop strong institutions to effectively implement the right growth-promotion policies. These institutions are necessary for effective resource governance that will ensure that resources are extracted in a way that will benefit sustainable and inclusive growth. Unfortunately, this has not been experienced in Africa and as a result some countries that should be among the wealthiest are now among the very poorest. The World Bank stated in a 2012 report that "Overall, the decline in poverty rates in resource-rich countries has generally lagged that of the region's non-resource rich countries. Income distribution remains highly unequal in most countries in the region ... To a large extent, the benefits of growth have not reached the poorest segments of society." Many of Africa's poor

struggle simply to survive as billions in resource wealth disappears while their local natural environments are plundered and degraded (Collier, 2010).

The politics of resource governance in Africa

One explanation offered for Africa's inability to prosper from its resources is the predominance of neopatrimonial forms of rule (Bratton and van de Walle, 1997; Lodge, 2014). Neopatrimonialism describes a broad set of practices, and refers to a form of governance that blurs the line between public and private, and where legal-rational rules interact with the existence of private obligations and norms. As Bratton and van de Walle (1997) explain,

in patrimonial political systems, an individual rules by dint of personal prestige and power, ordinary folk are treated as extensions of the "big man's" household, with no rights or privileges other than those bestowed by the ruler. Authority is entirely personalized, shaped by the ruler's preferences rather than codified by laws. The ruler ensures the political stability of the regime and personal political survival by providing a zone of security in an uncertain environment and by selectively distributing favours and material benefits to loyal followers who are not citizens of the polity so much as the ruler's clients.

This description of patrimonialism gives the basic workings upon which neopatrimonial webs are founded. The term patrimonialism derives from Max Weber, who contrasted patrimonial forms of legitimacy with modern, or legal rational forms of legitimacy. In the former, legitimacy was based on personal allegiances and loyalties, whereas in the latter it was based on legal-rational rules set out in codified and predetermined laws (Pitcher, Moran, & Johnston, 2009). The pre-fix 'neo' thus refers to the existence of the modern state, and the fact that

neopatrimonialism is a distinctly modern phenomenon where the two forms of rule co-exist, with the personal and patrimonial suffusing the legal-rational structures of the postcolonial state (Bratton & van de Walle, 1997).

In practice this means that rather than power being distributed through a Weberian legal-rational political system, which as an ideal type is based on merit, qualification and codified laws, patronage is distributed and used by leaders to maintain power through extending rights to control virtually every part of the economy including natural resources and their extraction. Neopatrimonialism encompasses a set of practices that are heavily influenced by the colonial period, but which were and have been able to be continually fostered by African agency (Herdt & Sardan, 2015). Jean-Pierre Olivier de Sardan in discussing neopatrimonial practices argues that “above all, such traditions tend to be very closely intertwined with socio-cultural traits inherited from the colonial period or produced after independence” (Olivier de Sardan, 2008, 3). It is beyond the scope of this MRP to explore all the various aspects and debates of neopatrimonialism. Instead I focus on the system of patronage appointments and the functioning of the state apparatus, which is the key to understanding resource governance and, by implications, some of the reasons why CBNRM came about.

What can be described as neopatrimonialism has often resulted in the control of resources being placed in the hands of one person who uses this power to continuously attempt to solidify their own legitimacy and prop up their own regime. (Bratton and van de Walle, 1997). Thus the benefits accrued from resources will be given to whomever serves the leader or elite’s purposes. More often than not this means that resources will be extracted with thought given only to maximizing short-term income. By its very definition neopatrimonialism is short-term in thinking. It is a system based on the maximum short-term extraction of resources as this becomes

the only way for the patrimonial web to survive. Through being continuously fed through what the title of Tom Burgis's book refers to as 'The Looting Machine.' This directly and deliberately undermines any possibility for responsible resource management, and hence for sustainable development. Ultimately these practices have also led to a deterioration of the effectiveness of the African state or certainly any version of the Weberian state in Africa. All of this has contributed to maintaining widespread inequalities on the continent, encouraged persistent underdevelopment and contributed to pervasive environmental degradation and an inability to effectively deal with the issues of climate change as this chapter explores.

While neopatrimonialism alone cannot be blamed for the lack of responsible and sustainable resource management in Africa, pervasive neopatrimonial networks mean that wealth often by-passes local communities and as a result, many are left feeling little incentive to protect or preserve their local resources and environment. The supposed 'trickle down' from governments and their patronage webs has failed to materialized, whether this be through jobs or the distribution of important public services (Lodge, 2014). What this has meant in many cases is a loss of legitimacy for many leaders, even a breakdown of the social contract. As leaders and their government cease to function for their people, the people must fend for themselves. Thus many Africans have often been forced to extract and use whatever resources they can for themselves which has only led to continued and increasing environmental degradation (Low, 2006). Perhaps even beyond environmental degradation and continued socio-economic underdevelopment what these neopatrimonial relationships between resources, governments and communities have led to is a growing disconnect. It is a disconnect that leads to a continued breakdown of the aforementioned impacts of resource extraction as well as having dangerously put central governments at odds with vast sections of their people (Kumar, 2005). The leader at

the top controls everything in the neopatrimonial system and from here power and wealth cascades down. You must be a part of this patronage network to benefit. Those excluded from the networks receive few, if any benefits, but are not shielded from the downsides in terms of pollution and environmental destruction. The result is frequently a loss of government legitimacy.

The resource curse, also known as ‘the paradox of plenty,’ is a phenomenon that is closely related to neopatrimonialism and that has attracted widespread academic and policy attention in recent years (Bratton & van de Walle, 1997; Burgis, 2015; Obi, 2010). It refers to a situation that has often developed in an area or country that possesses an abundance of valuable, generally non-renewable natural resources. The term was first used in 1993 by Richard Auty to describe how countries, rich in mineral resources were unable to use the wealth generated from their resources to effectively develop their economies, yet other countries poorer in resources often experienced higher growth rates (Burgis, 2015). Moreover, the curse is said to have negative impacts on democracy and the development of strong governance institutions, and in the extreme to lead to violent, bloody and protracted conflict (Obi, 2010). The resource curse can be seen to undermine democracy because the presence of an abundance of natural resources enables the political elite to reproduce itself without relying on taxation of the population or its productivity. David Ricardo explained this as ‘the ingenuity of man’ (and woman as it would be) which means that with no taxation there can be no democracy (Ricardo, 2010). In short, this refers to a situation in which if a government possesses enough funds to maintain itself and allow those within it to prosper, it lacks the necessity to rely on its people for revenue in the form of taxes. When a government no longer needs its people, or more specifically their ingenuity, it

ceases to need, or care for, their well-being. This situation leads to the disintegration of the social contract as it were and precludes any effective form of democracy.

The resource curse is also associated with the so-called Dutch disease (Obi, 2010). As governments and the private sector extract resources and focus their energies on an individual sector due to high productivity and revenues, it limits the perceived need to diversify the economy. This leads to the kinds of booms and busts that African economies have been particularly subject to due to market fluctuations of commodity prices. These past few examples have been witnessed to the extreme in Nigeria in recent years as the government has focused its energies almost solely on the sale of oil, while virtually eliminating taxation, but also providing devastatingly little in the way of services for its people.

The utility and accuracy of the term 'resource curse' need not detain us here, suffice it to say that indeed many countries in Africa have been particularly vulnerable to the extraction of its natural resources benefiting only the very few while leaving the wider populations in deep poverty (Obi, 2010). Far too often elite control of resources sees the benefits of these resources fall into the hands of people who reside far from their sources creating a disconnect between those benefitting from resources and a desire to protect the local land in any meaningful way (Besada, Sewankambo, & Centre for International Governance Innovation, 2009). As a result, natural resources are often extracted unsustainably, while little protection for the surrounding natural habitat is observed (Costa, 2013). This can create a situation in which responsible resource governance becomes nearly impossible leading to the undermining of effective sustainable development.

Nigeria's Niger Delta has become one of the starkest examples of a failure of resource management and sustainable development in the world, as mentioned above. While Nigeria

boasts Africa's biggest economy and is its largest exporter of oil, the peoples of the oil producing Niger Delta live in desperate poverty, their fisheries and farming often damaged by the environmental effects of oil production. It is by now well documented that Nigeria's oil wealth has overwhelmingly benefitted a narrow elite, who have not only mismanaged the economy but also been guilty of large-scale corruption (Obi, 2010). Former World Bank Vice President, Dr. Oby Ezekwesili, has said that a staggering \$400 billion of Nigeria's oil revenue has been stolen or misused since the country's independence in 1960 (Burgis, 2015). Nigeria's new president Muhammadu Buhari has made great claims that he will clean up this corruption but there is plenty left to be done in what has become a monumental task. This example demonstrates the way in which neopatrimonialism can tie into the resource curse and result in a form of resource governance that emphasizes some of the tensions between economic growth and environmental conservation in Africa. It exemplifies the major environmental and socio-economic issues that can stem from a breakdown of any form of responsible resource governance.

Nigeria stands as but one stark example of the effects the resource curse has had in Africa. Certainly there are many states in Africa that have experienced terrible effects from what would be called the resource curse. It has also increasingly been recognized by scholars, however, that this need not be so (Kopiński, Polus, & Tycholiz, 2013). The resource curse comes about when a certain set of criteria are present above and beyond the abundance of valuable natural resources, but through improved institutions, and systems of management, resources can be a blessing rather than a curse. The next chapter will explain CBNRM more fully and explain ways in which resources may work to benefit communities and strengthen local governance and institutions, rather than exacerbate problems of poverty, insecurity and corruption.

Neopatrimonialism and the resource curse have conditioned the way governments and people respond to and deal with climate change and its effects. There is a disconnect that is created between the government and its people which could be compared to a break down of the social contract. As leaders fuel their regime through neopatrimonial practices that are often fed by way of their kleptocratic style of resource governance, their need to provide for or protect the well being of their people disappears as they cease to rely on the collection of taxes or general productivity from their people as mentioned above. This becomes important to understand as similarly, the people receive little in the way of services and, in extreme situations, even security from their governments and thus traditional relationships that would see efforts to combat the pressing issues of climate change cease to exist. While many societies around the world are enacting climate change initiatives through a combination of government led action mixed with pressure from the people below that work in concert to develop climate solutions, this relationship does not exist in neopatrimonial states. Because of the disconnect that has been explained above society ceases to function in concert for the well being of one another which fails to realize joint efforts on important issues such as combating climate change.

It is thus widely recognised that to date, most African countries have failed to turn their resources into broad-based, sustainable development. While there are important exceptions, like Botswana, and only a few countries suffer from the extreme effects of the resource curse, governments, international organizations, NGOs and civil society alike have recognised that for development to occur significant changes are needed in the way natural resources are managed. CBNRM is one of these alternative policies.

Chapter 3: Situating CBNRM in Development Discourse

CBNRM has to be understood in the context of Africa's history of poor resource governance and the challenges of sustainable development. CBNRM is a broad set of policies and initiatives, and in practice it can take many distinct forms. Such differences aside, CBNRM generally involves devolving control and management of natural resources from central governments to local communities. This chapter provides an overview of the philosophy behind CBNRM. It traces its origins within development thinking, dating back to the 1980s and provides a breakdown of some of the multiple forms of CBNRM. The chapter also lays the foundations for an assessment of the extent to which CBNRM can respond to the challenges of resource governance and sustainable development in Africa.

CBNRM, as mentioned, is intended to place power in the hands of the people, to give them a stake in the protection of their resources, to prevent large-scale corruption and ensure inclusive socio-economic development for local populations. For some CBNRM is a virtual panacea for the problems of resource management in Africa (Gardner, 2012; Klein, 2014; Rantala et al., 2012; Richardson, 1998). Increasingly connections are being drawn with the situations not only in African communities, but also other underdeveloped regions in the world, aboriginal communities, and even affluent communities that wish to have a better connection to the land upon which they live and protect their local environments.. While resource governance and sustainable development are issues that are widespread and perhaps more severe in Africa, they are issues that nonetheless are felt elsewhere and which effective solutions can work to help.

CBNRM and development thinking

While CBNRM has a fairly long history dating back to the 1980s, it emerged in a systematic fashion and grew in popularity in the 1990s when dominant development thinking came to focus on community empowerment. The big buzzwords of development discourse in the 1990s were ownership and participation (Ziai, 2015). After decades of failed outside development interventions, these ideas entered into the mainstream suggesting that effective development solutions needed widespread participation of local people and communities throughout the entire planning, implementation and ongoing management phase. Initially development projects were developed by westerners who conceived of them often only through western ideals of development. They would then bring their ideas and projects and try to implant them on top of African communities without proper thought given to local cultural variations or nuances. It was soon realized that these projects were largely failing because of a lack of participation by the local people (Sjöstedt, 2013). Often foreign development agencies would decide for example, that a community was in need of a school. It would then proceed to build the school wherever it thought made the most sense, or was most convenient, without seeking input from the local community itself. This was done strictly from their own assessment of the local needs and situation, without properly assessing if the community would be able to staff it, buy books for it, or if students could conveniently reach it. Not only was this new idea of participation thus seen as necessary but eventually also a real ownership so that communities and their people could truly feel empowered, as these development solutions were theirs, and they importantly felt a vested interest in their success. CBNRM emerged with these two principles of participation and ownership at its very core. These new ideas seek to ensure that solutions are

being provided to problems that are real and felt within the community, and that they are feasible and will have a real impact on the well being of members of the community (Owa, 2011).

While sounding like an effective way forward in development thinking, there are also possible drawbacks. Some scholars have simply denounced these ideals as the newest buzzwords in development discourse which seek to be so all-encompassing as to mean very little at all (Fairhead et al., 2013). It is similarly argued that these buzzwords are simply painting a new picture over old ways of doing things, but that little has changed (Cooke & Kothari, 2001). This is to say that while CBNRM seeks to incorporate these ideals from development discourse, it does not in and of itself mean that these projects will be successful. Participation can indeed prove to be a challenging obstacle to effectively integrate. Efforts at participation often lead to what could be viewed more as consultation as outsiders enter with ideas in their mind that are difficult not to instil in development efforts on the ground. With consultation people might be informed about pre-determined plans, and perhaps have a little bit of say in the development phase of a project, but fundamentally being removed from influencing the course of events or strategies chosen. This is indeed where politics itself resides, within deliberation, difference of opinions and struggles for power and resources. Put another way then, it is extremely difficult for politics to be removed from a situation and politics indeed has an effect on so many pieces of every development puzzle.

The shift towards CBNRM and similar types of projects within and without development thinking has been a gradual process that began in the 1980s. It is both within and outside of development thinking because, especially in recent years, community-based thinking has taken hold even in some of the most developed regions of the world. We see this with extremely successful municipal and community-led initiatives around the world being noted as some of the

most successful in the fight against climate change, and in green initiatives that are continuously empowering communities (Dendena & Corsi, 2015). Around the mid-1980s this shift from a preservationist conservation paradigm to a more integrated approach that began to recognize the importance and necessity for the promotion and empowerment of communities. It began to be understood that this must be done by linking economic and social development to natural resource management (Williams, Masoud, & Othman, 1998). It is interesting to note that although the ideas of participation and ownership within development thinking did not develop until the 1990s, community-based approaches had already begun in the 1980s. This demonstrates that these ideals were not simply concocted within academic debate, but rather developed in concert with what was actually occurring on the ground. Together scholars and practitioners then have come to develop the groundwork for participatory and community-based approaches that have been seen increasingly over the years. Many now argue that smaller scale development and initiatives are indeed the *only* kind that will work in many situations, and that at least when they fail, as some are always bound to, this will only be on a small scale, rather than country or region wide (as was seen for example with the sweeping Structural Adjustment reforms of the Washington Consensus) (Blaikie, 2006). This realisation also coincides with a general trend in rural development studies that communities should be included in decisions that affect them, especially as it is only these communities who are fully aware of local nuances and influencing factors.

In practice this community involvement began as a participatory approach centred around the planner of projects in which communities were consulted and asked for their views on how they thought they could be involved at the heart of the management of such projects and approaches. Thus while the idea of participation developed, it has over time largely involved

consultation more so that a real ownership or participation (Plant, 1978). However, this has also been realized increasingly within the development community and renewed efforts at real participation have developed and experienced some success. This proved to be the first challenge for communities to begin to organize differently and engage in institution and capacity building projects to ensure they had a voice through which to communicate their desires and suggestions for inclusion and participation (Thakadu, 2005).

The Economics of CBNRM

There have been efforts to curb the consumptive use of land from low-productive purposes such as subsistence agriculture to higher productivity and renewable purposes. From many economist's perspectives the major reasons why so many African nations remain underdeveloped is a direct result of low productivity (McMillan et al., 2014). While underdevelopment is perhaps not so simple as this, certainly many countries have a significant percentage of people employed directly or indirectly in some form of subsistence agriculture, which can be an extremely low productivity activity depending on local conditions (which are worsening throughout Africa as discussed in chapter 2) (Toulmin, 2009). This means that for each unit of input into it, very little GDP output is produced, often making it hard for people to earn a decent living and difficult for economies to grow, diversify and evolve. For agriculture specifically this is caused largely by poor soil and weather conditions as well as a lack of capital investment to increase agricultural productivity (McMillan et al., 2014). This situation is being compounded as climate change worsens weather conditions, increases desertification and threatens to continually decrease the productivity of subsistence farmers. It is also however, a self-compounding problem as in many cases this extremely low-productivity activity is

contributing even further to climate change, desertification and environmental degradation itself (Toulmin, 2009).

Namibia is a prime example of this as less than 1 percent of the country's land is arable and it possesses extremely limited freshwater sources which has helped lead to a huge push for environmental protection (World Bank, 2014). Despite efforts, 40 percent of households obtain a major part of their income through subsistence agriculture, an activity that is extremely unproductive in such a dry, arid country (UN data, 2014). Apart from being unproductive, constantly searching for new land to cultivate due to expanding populations or in search of better soil results in continued environmental degradation, a further worsening of soil quality and weather conditions and ultimately feeds into the vicious cycle of climate change. Economists largely agree that for countries such as this to move forward in their development they must move past such low-productivity activities towards higher-productivity ones (McMillan et al., 2014). Proponents of CBNRM present it as a way to achieve these goals, while contributing to the fight against climate change and helping communities to develop stronger systems of self-governance, improving human capital from within.

Much research has confirmed that wildlife has an ecological and economic comparative advantage in arid and semi-arid rangelands, compared with subsistence agriculture and many other consumptive uses of land (Child, 1996). Thus it seems that perhaps some of the economic and environmental issues many African communities are dealing with are a result of market failures and a breakdown of the understanding of true cost-benefit analyses that could show the advantages to moving away from certain traditional land use forms. This same cost-benefit and comparative advantage calculation can be done with Community-Based Forest Management (CBFM), another form of CBNRM which demonstrates the numerous ecological and economic

potential for responsibly managing forest, rather than using it in overly-consumptive ways that sees its value diminished quickly.

Forms of CBNRM

States, of course, traditionally had de facto rights over natural resources, but through the development of local governance capacity and institution building, communities have been able to become legal entities and at first were able to be granted short 10 or 15 year leases over the management and use rights of resources. As time passed and success grew, longer and more thorough devolution of land, and resource rights began to ensue in an ever-increasing number of countries and communities (Roe, Nelson, Sandbrook, & International Institute for Environment and Development, 2009; Williams et al., 1998). This facilitated the development of integrated community-based conservation and development programs in Botswana, Kenya, Malawi, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe between 1979 and 1995 (Steiner and Rihoy, 1995; Arntzen et al., 2003). This process would eventually lead to the many hundreds of CBNRM projects which exist today.

Wildlife protection and management has been one of the major CBNRM goals for many African communities. Wildlife has often been seen as pests and been killed either for meat or sold cheaply and unsustainably for sport hunting, or simply to protect people and crops from them (Brown and Bird, 2011). As CBNRM projects have started through joint efforts by governments, NGOs, and communities increasingly across the continent, communities have begun to put protection of this wildlife and their habitat at the forefront. In protecting the wildlife and their habitat, eco-tourism has grown in many countries helping the tourism industries across Africa to grow as a percentage of GDPs (Snively, 2012). Across Africa wildlife species are being

threatened or endangered as a result of human activity. CBNRM wildlife conservation projects seek to change this by protecting their habitat and these populations through responsible management. Through various methods that will be explored in the next chapter they ideally are not only protected but managed in a way that creates jobs as wildlife populations rebound and tourists arrive, injecting new capital into the communities as part of a sustainable industry.

The tourism dollars that come in can contribute to a variety of local jobs from resorts, to getaways, guided hikes, safari tours, camping, as well as the added increase to many other parts of the local economies as tourists will want to eat, shop, explore etc. These jobs are often described by economists and development agencies as ‘good for development’ jobs, that see more contribution to sustainability and productivity than other lower productivity sectors (Todarro and Smith, 2012). The offshoots for potential economic development are numerous, though it appears these are likely much more modest than suggested by proponents as will be explored in the final chapter of this paper (Kiss, 2004).

While proponents of CBNRM tout the many potential benefits from eco-tourism, it must also be understood that tourism in itself presents communities with whole new issues, including environmental ones. Of course there is the basic environmental strains with the travelling that these tourists do through fuel emissions and increased infrastructure demanded as tourism around the world has grown so much in recent years (Becker, 2013). There is however also added pressure put on local food stores, clean water, and a simple increase of human traffic over areas that may otherwise have been left in a more natural and untouched state.

For CBFM, another type of project, much like with wildlife management there are a plethora of ways to generate income, while partaking in important community building, and contributing to local sustainable development. CBFM can see communities receive direct

compensation for providing the world with a carbon sink, through international funds that have been set up. Deforestation contributes to as much as 30% of total global greenhouse gas emissions each year which is roughly equivalent to emissions from the entire global transportation sector (Klein, 2014). Forests provide an important carbon sink and when they are destroyed, the Co₂ which they sequester is released into the atmosphere (Low, 2006). Thus any efforts that protect forests are important initiatives for the global fight against climate change. People from the local to the global can also benefit from long-term responsible management of forest projects. The forests can also be used for eco-tourism, as well as local environments benefiting from slowed effects of climate change due to deforestation as trees provide an essential part to any form of ecological conservation. All of these above forms of CBNRM and possible benefits are indeed *possible* benefits. It is, however, important to distinguish between theory and practice, and it is important to understand under what conditions CBNRM may work, and where it might fail.

Conditions for Success

CBNRM can take on a variety of forms but these initiatives are also necessarily limited in scope. Most often the projects are centred on preserving wildlife, habitat and forests with goals of boosting eco-tourism, or receiving financial remuneration for providing carbon sinks to the world. It is limited in scope as it would be difficult for communities to take control of hugely capital intensive extractive industries such as mining and oil drilling as so much infrastructure is needed over large areas (Blaikie, 2006). Taking on projects of this nature and scope would in many ways also, by definition, cease to make them ‘community-based.’ Thus one of the limits of

CBNRM is that it has only demonstrated success in certain areas in relation to particular resources.

For these reasons many authors cite that these communities should be small enough that ‘they can come together to meet under a tree,’ a number that is often given to be around 200 people (Kumar, 2005; Rantala et al., 2012; Richardson, 1998; Robinson et al., 2013; Taylor, 2009). While there is no set size for CBNRM, this loose figure serves to underline that these projects are indeed meant to work on small scales.

Beyond organizing to create a voice, and set of goals, communities must then educate themselves through a variety of mechanisms. They must decide how much, if any outside help they want. They must develop the necessary capacities on communal lands that will be managed for wildlife, tourism industries, as well as sufficient other initiatives that projects will require (Richardson, 1998). Perhaps one of the greatest challenges communities face with CBNRM is indeed developing all of these capabilities on such a small scale, often with scant resources and minimal outside help. It is for this reason that this form of resource management is likely not possible in many large-scale resource extraction situations and even in some where it is feasible, would not be practical or desirable. Chapter 4 of this paper will give a more thorough and concrete breakdown of the steps of CBNRM as these steps are in large part important for understanding the coming together and organization of the community which are important steps to success for these projects.

To what extent can CBNRM respond to the challenges of resource governance and sustainable development

CBNRM is about reconnecting people to their natural habitats. For years as neopatrimonial practices, poor governance and mismanagement led to what amounted in many places to the plunder of local resources, many people felt increasingly detached from their land, their resources and ultimately their communities (Plant, 1978). ‘Ownership’ was developed under the 2005 Paris Declaration and has become one of the important buzzwords in development circles today (OECD, 2005). As communities obtain the rights to manage their own resources they can feel a real connection to the land and an impetus for the responsible management for their own futures (Kumar, 2005).

Having reviewed the challenges of resource management in Africa as well as the core tenets of CBNRM, it is now possible to identify a few key issues that must be resolved for CBNRM to work. Broadly speaking, the challenges of sustainable resource management in African have two dimensions; that of development and of governance. These in turn contain tensions. In the case of sustainable development, the tension between economic growth and environmental conservation. In the case of resource governance, the tension between devolved power to the community and the dangers of new local forms of patrimonial abuse of power.

First, the tension between growth and conservation: This has been alluded to previously as it was discussed that some of the greatest threats to sustainability in Africa are a result of economic development goals. Far too often these are pitted one against the other and the widespread extraction and sale of natural resources can often lead to great wealth. This however, generally coincides with the employment of unsustainable practices that are damaging to any form of conservation and environmental protection. To put it simply, the environment today has

got to where it is as a direct result of a specific side of global economic development. For Africa this often means cutting and using local forest products excessively by ever-growing populations, or shooting and killing wildlife for short-term economic gain. Things do not have to be this way however as we are learning more and more everyday. These tensions can indeed be balanced and there are ways to promote both economic development as well as conservation by bridging the gaps that cause these tensions.

Second, the tension between patrimonialism and devolved community power: Communities can certainly benefit, prosper and build capacity as a result of devolution and CBNRM. However, communities are not equal, they are not always harmonious, and it is therefore possible that decentralisation of power to the local level can result in new forms of patrimonial practices, outside the state but with local elites. As mentioned in Chapter 2, neopatrimonialism is in large part built on traditional relationships that co-exist and intertwine with the institutions of the modern Weberian state. With devolution and ever increasing community-driven governance, there exists the very real possibility that local big men or others will begin a power grab of their own and enact the very same sort of patrimonial ties that have been seen at the state level, at the local level, with ultimately similar damaging effects. This is to say that to give power to communities can indeed be an effective vehicle for local conservation and economic development, however it must be ensured that communities engage in power sharing in a responsible and equitable fashion, where a democratic way of doing things is put in place that ensures no one voice is heard more than the rest.

The next chapter turns to these issues through an analysis of three CBNRM projects in Namibia, Zimbabwe and Tanzania. It will explore the projects based on the criteria that have

been set forth and look at how they may or may not overcome some of the challenges of sustainable development and resource governance in Africa.

Chapter 4: Case Studies – what works and what fails.

This chapter examines the conditions under which CBRM might succeed. It will review the evidence from three projects in three different countries. Each case begins with a brief overview of the country's main development challenges, including information about their resource base and geopolitical variations. It then explains how and when CBNRM came about with a focus on the legislative challenges prior to introducing the individual projects and discussing them in relation to their strengths and weaknesses for contributing to resource governance and sustainable development. It will also provide an understanding of the various outcomes of the projects with regards to concrete benefits that have been accrued as well as possible failings.

Namibia – Home to the largest area of protected communal land in the world.

Namibia is one of the most sparsely populated countries in the world, and also boasts one of the highest GDPs per capita in Africa, although widespread poverty still exists due to high rates of inequalities. Namibia has an extremely small population of just over 2 million people, of which the rich are very few, and the vast majority remain extremely poor. Political stability and sound economic management have helped enable sustained economic growth and has contributed to poverty reduction in the country (World Bank, 2015). Namibia is vulnerable to short- and long-term environmental shocks as most major sources of growth in the country depend heavily on its fragile ecosystem. This includes all of their major production sectors – mining, tourism, livestock and meat production, and fisheries. Namibia is one of the most recent countries in Africa to gain independence. It did so from South Africa in 1990. Prior to this it was

one of Germany's colonial possessions, known as German South-West Africa, and was annexed by South Africa after the first world war. The transition to independence was achieved only after a long and protracted struggle which had a strong and important influence on the development of its constitution (Snively, 2012).

The newly independent and democratic government began taking steps in the 1990s to attempt to reverse wide scale environmental degradation that had been occurring over the last decades. They acted largely under the belief "that the most effective and efficient mechanism for conserving biodiversity (genetic, species, ecosystem, and cultural diversity) [was] to prevent the destruction of landscapes and ecosystems" (Saarinen, 2009, pp.11). Land in Namibia is legally classified as either 'commercial,' 'state,' or 'communal.' Much of the commercial land was acquired prior to independence by white owners and has largely remained in their ownership. Commercial land is considered land and buildings privately owned including farmland, businesses, industrial land and residential properties. Since independence the government has worked hard to protect the remaining state and communal land and has taken concrete steps to ensure it is held for the general welfare of all of the country's people. Most land in Namibia today falls under these latter two categories. State land is composed largely of national parks, while communal land is general land held in trust and to the benefit of those who work and reside on it (Snively, 2012).

Wildlife in Namibia resides largely in communal areas as well as the country's extensive system of national parks. While the government had been successful in administering a national parks system that covers about 15 percent of the country's land, much of the wildlife also roam between parks, through important corridors where many people reside (Brown and Bird, 2010). Wildlife in Namibia, as elsewhere, can be extremely detrimental to people's livelihoods.

Predatory animals pose a threat to people, as well as their livestock, while elephants stampeded through towns to get to scarce water, leaving behind paths of death and destruction. Both elephants and rhinos are also more valuable dead in the short run, as poachers are willing to pay large sums for their tusks and horns (Snively, 2012). Thus between these issues and many seeing more productive value in traditional consumptive land uses such as for livestock and crops – by the 1990s Namibian wildlife populations were in serious trouble (Richardson, 1998).

Initial efforts by the government to protect against the destruction of wildlife resources failed, as centrally administered methods were too costly and largely ineffective (Snively, 2012). Those residing in local communities and on communal land did not want to comply with centrally imposed laws, saw no benefit from doing so and the federal government was too far from so many local communities to be able to efficiently and effectively enforce the laws. This is particularly true for wildlife, as a mobile natural resource, is difficult to protect at all times and illegal poaching is thus hard to prevent. Thus the mobile nature of wildlife means that any one person is easily able to subtract others' ability to enjoy its benefits. As a result, many often chose to act for strictly personal gain whether this be through rational choice and greed, or those who did so for reasons of survival and exclusion (Hoole, 2010; Saarinen, 2009). Moreover, aside from hindering local communities economically, average people viewed the wildlife as largely a state controlled asset of which the Namibian people benefitted very little (Brown and Bird, 2010).

To mitigate these issues, the Namibian government passed the Nature Conservation Act in 1996. The Act gave rights over wildlife and tourism to local communities, who in turn formed their own management 'conservancies', as they came to be called. The Act was drafted through knowledge and evidence gathered from neighbouring countries (including CAMPFIRE in Zimbabwe, discussed below) that had made similar attempts at protection. It also emerged from

the country's own earlier successes in devolving wildlife management to commercial holders (Brown and Bird, 2010). The new conservancies are registered through the Ministry of the Environment and Tourism (which are linked in Namibia not by mistake.) Registration requires "a defined conservancy boundary, voluntary registered membership, a representative conservancy management committee, a constitution and a commitment to producing a benefits distribution plan" (Hoole, 2010). These requirements ensure that a real plan is put in motion by communities in order to develop their respective conservancies. This pushes them to develop a degree of inter-communal organization to ensure that some structure is in place prior to devolution being realized.

The Nature Conservation Act of 1996 was the beginning of communities seeing wildlife and habitat as an economic asset rather than hindrance by placing its control and benefits into the hands of local communities. The law provides the conservancies with "specific geographic jurisdictions and grants to their members the exclusive right to manage wild animals within these areas" (Snively, 2012, 4). The conservancies were developed in line with the idea of ownership instilled in the Paris declaration discussed in chapter 3, and the legislation passed by the Namibian government that allows for communities to take their well being into their own hands is thus grounded in sustainable development thinking.

Concretely in Namibia today there are more than 60 conservancies that manage over 85,000 square kms of communal Namibian land. This number is up from around 50 conservancies in 2010 and still growing (Snively, 2012). The legislation that was passed by the Namibian government, enacted an initial training period through joint efforts by the government as well as NGOs. These efforts enabled members of the community to do the hard work of building and developing the infrastructure necessary for the conservancies as well as undertaking

important training and education programs and directly see gains from their efforts. One of the initial goals for the program was to stop poachers. It early on became clear that there was a big difference however between “catching” poachers and “stopping” them (Kasaona, 2010). As the program developed it became much more effective for community game guards to work at actually stopping poachers rather than enforcement personnel employed in salaried positions by the state trying to catch them (Hoole, 2010). Poachers traditionally hunted wildlife illegally as they saw it as the best or only way to gain from this resource. Environmental conservancies through eco tourism in Namibia can model another way forward through the community working together to manage wildlife in a new way. Those who have affiliations with the community will be much less likely to engage in poaching in the first place as they will better understand the value of managing wildlife sustainably, and will have their neighbours to respond to if they violate local regulations, rather than distant government forces that they may be much more likely to risk violating. Furthermore, the community will work together to ensure outsiders are not poaching creating a thicker net through which would be poachers would have to infiltrate making it harder than having a handful of federal game guards roaming the countryside as would have been the situation previously. This is importantly tied into the distinctions between the affiliations people feel to those within their community compared to those felt towards distant central government agencies – often a strained relationship in Africa.

Prior to 1990 there were many species such as lions, wild dogs, white-headed vultures and bateleur eagles which were nearing extinction, as well as many more that were endangered or threatened (Richardson, 1998). The idea that wildlife diversity is - in and of itself - valuable has been tough to sell in many places around the world. Apart from wildlife management groups, certain NGOs and conservation authorities, there is not a sufficient commitment to making

sacrifices to save precious wildlife and their habitat simply in the name of environmental protection. Thus it would have been extremely difficult for effective government legislation to be passed ordering its protection without giving the people a further impetus for doing so. With eco- and wildlife-based tourism on the rise around the globe, Namibians were given the ability through this legislation to generate income both directly and indirectly by ways of natural conservation of their land and responsible management of their natural endowments.

The conservancies that have been created to date have served to protect close to an additional 50 percent of the already 15 percent of land protected through national parks. 13 million hectares of land are protected by CBNRM in Namibia, more than anywhere else in the world (Kasaona, 2010). This number is still increasing and provides important corridors between protected land that ensures the safety of a far greater number of species than before. Since the inauguration of CBNRM in Namibia there has been an increase in black rhino, cheetah, elephant, oryx, lion, springbok, zebra and many other wildlife populations. In 1995 there were only 20 lions in all of the North West of the country – today there are over 130. These populations have rebounded largely thanks to natural reproduction rates with greater protection, but there have also been efforts to reintroduce game to facilitate faster recovery. These successes are notable as Namibia has been the only country in sub-Saharan Africa to see a marked increase in the populations of so many species of wildlife (Snively, 2012). While CBNRM in the country certainly cannot take credit alone, there is certainly a correlation between these conservation victories and the initiation of these projects.

With so little land in Namibia being considered arable, and agriculture being so unproductive high rates of poverty have persisted for large portions of the population. One of the greatest assets of conservancies is their intended self-sustaining nature. Fees that are received

from campsites, lodges, safaris and tour companies that bring tourists to observe wildlife and the natural beauty of Namibia are used to fund the operations, saving precious government dollars for other important development projects, while generating increased tax dollars for these federal programs. The income generated through the conservancies creates important jobs within local communities. “Managing wildlife is a full time job. Conservancy members often live among wildlife... [they] scare off poachers, construct new elephant watering holes, reimburse farmers for goats killed by cheetahs and supply guard dogs to protect herds of domesticated animals” (Snively, 2012). While proponents are quick to discuss these benefits, concrete numbers of job creation has been much less reported yet some indications of economic benefits follow below.

What this results in then is not simply animal populations and ecological diversity being supported, land being protected and increased national revenues, but jobs are being created that are good for development; higher productivity ones which feed back into the economy positively (McMillan et al., 2014). Revenue in local communities have been used in a multitude of ways deemed important for their development by the locals including; equipment for schools, scholarships, HIV/AIDS prevention and treatment programs, support for orphans, soup kitchens for the elderly, and health-care facilities among other uses (Snively, 2012). Other direct financial impacts include:

Cash, employment, payments for plant products and in-kind benefits such as meat from game or harvested trophies. Cash incomes to communities are bolstered by partnerships with the private sector. By 2004 a total of 180 enterprises were operating under the conservancy program. At that time 27 conservancies were receiving cash incomes totalling approximately \$2.25 million annually. Importantly, 15 of 27 conservancies were

fully self-financing, and 7 were paying over half of their operating expenses (Brown and Bird, 2010).

Beyond those that are self-financing funding is received from the government, NGOs, as well as investments from the private sector. Millions of dollars are brought in through these conservancies every year, hundreds of thousands worth of game meat for local communities, and thousands of jobs have been produced between direct conservancy employment, tourism and hunting, and many other related part time jobs (Richardson, 1998).

Zimbabwe: CAMPFIRE, the cradle of CBNRM

Zimbabwe, like Namibia, also came relatively late to independence, ousting the white minority regime of Ian Smith only in 1980. Like Namibia its economy is also vulnerable to the effects of climate change and since 2012 this has been seen with economic shocks due to commodity price volatility. The country boasts a well-educated workforce as well as abundant natural resources which both provide for the fundamentals for growth and poverty reduction. Zimbabwe was once considered the breadbasket of Africa and was a net exporter of maize, cotton, beef, tobacco, roses and sugarcane (Power, 2003). Yet poverty rates remain high and responsible, effective resource governance is crucial to achieve a more inclusive sustainable development (World Bank, 2015). Zimbabwe under President Robert Mugabe has become an increasingly neopatrimonial state, and this in turn has exacerbated the complex problems associated with resource governance.

As a consequence of historic land appointments along inequitable racial lines, the majority of the Zimbabwean population occupies marginal agricultural land (Murphree, 1998). Traditionally the country's dual economy was constructed of mainly large-scale industrial

agriculture which took place on privately owned titles of freehold land, and subsistence agriculture which took place on communal land. The latter often created a great degree of uncertainty with regards to livelihood and often saw people employ whatever practices they felt could contribute to their well-being, despite their effects on the land or its future sustainability. In the mid-1980s the then Department of National Parks and Wildlife Management (DNPWLM, now the Parks and Wildlife Management Authority PWMA) designed the Communal Areas Management Program for Indigenous Resources (Taylor, 2009). The initiative was presented as a long-term pragmatic approach to rural sustainable development through the effective and responsible local management of wildlife and other natural resources. The cornerstone of the project was to be the devolution of rights to manage, use, dispose of and benefit from natural resources while improving rural institutions and improving governance and livelihoods (Child, 1996). Today the program has further developed in line with development discourse's emphasis on participation and ownership, seeking to become more participatory and ensuring that the community-led focus of the projects is maintained.

In Zimbabwe the PWMA is legally mandated with the responsibility for wildlife. In 1975 the Parks and Wild Life Act decentralized state authority giving privileges to those residing on titled land as custodians of wildlife, fish and plants (Taylor, 2009). These land occupiers were granted de facto control of the resources as well as the benefits accrued from their management and utilization. In 1982 an amendment to the Act extended similar rights to communal farmers, extending Appropriate Authority (AA) to Rural District Councils (RDCs) (Murphree, 1998).

By the early 1990s the program began to align with development thinking and the international community first working with USAID through an agreement with the government of Zimbabwe which initiated an initial investment into the program of USD\$ 7.5 million over 5

years. The project was “designed as a pilot initiative to test the CAMPFIRE hypothesis on a limited scale before committing more substantial USAID resources...” (Child, 1996, p. 374) Much like the case of Namibia it was hoped by the Zimbabwean government, as well as increasingly by foreign donors, that through devolution of rights, local communities would take a more active interest in the preservation of certain natural resources, putting the land to more productive use, protecting the environment, while building capacity through the development of local governance mechanisms and institutions.

Before CBNRM became as fashionable as it is today, the DNPWM developed legislation as a way to devolve authority over profitable resources as well as having developed principles to guide this devolution. This attracted social scientists, social workers, economists as well as ecologists and together a mutual vision was developed that rural empowerment could achieve the twin goals of conservation and development. It was this inherent desire for sustainable rural development that allowed this program and the important devolution to come about for Zimbabwe, which is in many ways the pioneer of CBNRM.

Two of the key principle underpinning CAMPFIRE aside from conservation, like with Namibia, are that monies should be returned to the producer communities and that these communities should have full say in determining how to use incomes and dividends. These two principles underpin precisely two of the main benefits from this form of CBNRM. The first is that there are economic benefits. This is of course important as it is the main impetus for many involved to undertake this initiative in the first place. The second is the community building aspect of this form of management. This includes finding a mechanism by which the community can come together to decide who will speak for them, what their goals will be, how they will share workloads, and importantly share revenues from these projects. All of this requires the

development of some form of bureaucracy, be it on a small scale, but nonetheless there are important local level politics which must be treated effectively to ensure even distribution and responsible management ensues (Kumar, 2005; Rantala et al., 2012; Shackleton, Campbell, Wollenberg, & Edmunds, 2002).

When CAMPFIRE was initially designed donor aid was uncommon in Zimbabwe and the early establishment of the program was conducted under very low levels of external funding (Child, 1996). The DNPWLM initially envisaged using some public funds to begin to create a more robust rural sector economy based on wildlife production. Initially this meant predominantly the sale of trophy hunting rights, but ultimately developed into other both consumptive and non-consumptive wildlife uses, including eco-tourism which has continued to grow (Murphree, 1998). In addition to some of this early public funding, technical and other support was provided by a team of support agencies, initially the University of Zimbabwe's Centre for Applied Social Sciences (CASS), Zimbabwe Trust (ZimTrust), The World Wide Fund for Nature (WWF) and subsequently others, notably the Ministry of Local Government, Rural and Urban Development (MLGRUD). The inputs from this coalition of support was all funnelled through the CAMPFIRE Collaborative Group (CCG) under the leadership of the DNPWLM and later, the CAMPFIRE Association (Taylor, 2009).

These initial legislative actions and financial inputs were able to get the program off the ground. Over time the institutions involved in running the program got a feel for what was working best and as the program came to focus predominantly on the conservation of local wildlife, and funding steadily increased, the program has grown in a multitude of ways.

CAMPFIRE currently derives its revenue almost entirely from safari hunting. In collaboration with DNPWL, and sometimes WWF, quotas are set each year for responsible

allowed levels of extraction. These quotas are then marketed competitively to one of Zimbabwe's many safari outfitters, who in turn use their respective advertisement methods to attract foreign buyers, predominantly from North America and Europe. Clients will often purchase a 'full bag' hunt, which includes an elephant, lion or leopard, a buffalo and some antelope, usually sold as a 21-day hunting package. For this hunters will pay around \$1000/day in addition to trophy fees for each animal shot – approximately US\$10,000 for an elephant, US\$3,000 for a lion and US\$1500 for buffalo (Taylor, 2009).

Tanzania's Community-Based Forest Management (CBFM): A potential global carbon sink.

Tanzania is an East-African nation with a population of around 50 million people. Over the past decade it has had a strong, sustained economic growth rate, however like many African nations poverty remains widespread with a 2015 World Bank Report, placing the number at over 12 million Tanzanians living below the poverty line (World Bank, 2015). The country is a net importer of oil and a net exporter of gold, contributing to making its economy subject to external shocks as the economy has a large resource base. The country transitioned to multi-party democracy in 1992 and on October 25, 2015 held its 5th general election. There has been a relative degree of political stability that has provided a solid foundation for Tanzania's growth which has helped raise the country's profile both in the region and in global rankings (Junge, 2004).

A majority of Tanzanians rely on wood and agricultural products for their energy needs, and this has contributed greatly to deforestation and environmental degradation. This contributes, of course, to a loss of wildlife habitat as well as a continued loss of biodiversity, while making

soils increasingly susceptible to erosion. There is also a massive illegal timber industry that sees millions of dollars worth of timber revenue lost each year due to poor governance and rampant corruption in the forestry sector (Rantala et al., 2012). Furthermore, over-grazing and unsustainable range management has reduced the land's carrying capacity, depleted vegetation and exposed the soil, contributing to further erosion and declining fertility. From here eroded soil also runs into rivers and out to sea where it smothers other vegetation and sensitive corals. Tanzania has also been experiencing high rates of urbanization, like much of the developing world, which has outpaced infrastructure development and resulted in untreated solid and liquid wastes as well as many other forms of pollution leaking into the air and water reservoirs. This has placed further pressure on already struggling eco systems and natural habitat. Poaching is also a serious issue in Tanzania, often in retaliation for the destruction of crops as was explained in the previous two case studies, but also as a result of greed or desperation (Junge, 2004). All of these issues in Tanzania have played perfectly well into the problems described in Chapter 2 with regards to resource governance and it is resultantly a prime candidate for new solutions to ever-increasing problems.

CBFM initially entered into public life in 1998 in Tanzania by making it into the National Forest Policy, before officially entering into law in 2002 with the Forest Act. This was after years of relative success experienced by pilot projects in different parts of the country that were followed by simultaneous land law reforms, including the Land Act and the Village Land Act of 1999, as well as the decentralization of local governance through the Local Government Authority Act 1982 and Local government Reform Programme 2000 that all combined to make CBFM possible (Rantala et al., 2012). As in Namibia, Tanzania has three main types of property or tenure systems, including state, private and common (German, Karsenty, & Tiani, 2010).

Three main types of forest management have emerged in Tanzania; Joint Forest Management (JFM), Participatory Forest Management (PFM), and Community Based Forest Management (CBFM, as a form of CBNRM). CBFM has enabled villages through their administrative units to act as a trustee and to manage forests on village land, as well as reap all the benefits.

In practice what this means for Tanzanians is implementing policies that focus on demarcating and setting aside village land forest reserves (VFR), which will then usually be managed by a village forest committee or environment committee. Individual villages through their respective administrative units are able to decide on rules, as well as enforcement strategies, including harvesting and management of the reserve, methods for excluding use by outsiders, monitoring resource use and sanctioning of violators (URT, 2007). These committees also take charge of harvesting timber and forest products, collecting fines and collecting, retaining and using forest royalties. Again, much like the previous two cases, the VFRs must be officially recognized which requires a management plan and associated by-laws that are approved by the village assembly and the district council. Many of the steps toward CBFM often occur with the facilitation of district personnel from NGOs, according to guidelines approved by the Ministry of Natural Resources and Tourism (URT, 2007). Communities must prove that they have a plan and the capabilities to responsibly manage resources before their rights are handed over.

The three main goals of CBFM in Tanzania are a) sustainable forest management, b) improved rural livelihoods, and c) security of tenure (in other words, the sustainability of the project moving forward) (Rantala et al., 2012). CBFM has largely emerged from environmental concerns and goals. It is generally understood that while improved rural livelihoods are desired, it is also noted that national growth and poverty reduction objectives may be some of the largest threats to sustainable forest management (URT, 2008). For many communities in Tanzania this

has proved a hard sell, as they use limited forest products for survival with close to 30% of the population living in poverty (Junge, 2004). Thus agreeing to protect local forests by using less of their products had been seen by many as all cost and no benefit.

There are several ways that communities can benefit tangibly as well as ecologically from effective CBFM, however, and this case study places a special focus on CBFM working in concert with Reduced Emissions from Deforestation and Degradation + (REDD+). REDD+ was first proposed at the 2005 COP in Montreal. Initially conceived simply as RED, it has evolved over several years to be more inclusive. Initial successes have been realized and these coupled with an ever-increasing need to protect the world's valuable forests as part of the global fight against climate change has allowed for continued efforts on the part of the REDD+ initiative (Robinson et al., 2013). It provides for consideration for sustainable forest management and afforestation¹ and reforestation in developing countries, placing REDD+ firmly in the scope of participatory CBFM. In practice the initiative consists of a global fund that has been developed from partnerships all over the world in collaboration with green initiatives and funds that would see cash transferred to local communities who maintain existing forests, manage them effectively and especially for those who work at afforestation to provide the world with an effective carbon sink, all the while contributing to local sustainability goals (Rantala et al., 2012).

CBFM working in concert with REDD+ is easier to envision in theory than to put in practice however, and there has been plenty of obstacles limiting its effective implementation. CBFM has grown in scope and success in Tanzania over the years, although REDD+ remains in its infancy in the country. Nonetheless it provides a further impetus for communities both in Tanzania and elsewhere to maintain current forest stocks and manage the use of forest products

¹ Forest management that ensures whatever products are harvested are replaced at a similar rate contributing to long-term maintenance of forest size and quality.

sustainably. Thus CBFM in Tanzania provides an impetus for local communities to manage their forests and forest resources responsibly for the future. This can have many of the same advantages of the previous cases of CBNRM already envisioned such as increased park rangers, security, educational personnel, as well as creating infrastructure to house the programs. REDD+ serves as a further way in which communities can benefit financially, as they can obtain funds from international investors who seek to provide the world with a carbon sink. Thus Tanzanian communities will be creating their own version of CBNRM with the discussed possible benefits, but can also be given a direct cash free reward for doing so in a sustained fashion over time.

Chapter 5: CBNRM - Strengths, Limitations and Conclusions

There are many similarities as well as many differences that can be observed from the above case studies. All are driven predominantly by an ethic of environmental sustainability. There is certainly an important economic dimension, and one that some argue can indeed be an important way forward for development, however the predominant goals set forth are conservatory in nature. In this context it is important to appreciate the various possible interpretations or definitions of development: There is the ‘green development,’ that these sort of community-based projects envision, attempting to conserve the environment for its own sake, but there is also ‘brown development’ – the kind focused solely on growth and that has been widely experienced across the continent and much of the world. Both have different dimensions (Toulmin, 2009). These two forms of development quite specifically mirror the tensions previously mentioned contrasting sustainability with economic development. Brown development has created unimaginable amounts of wealth for some, while also leading to horrifying levels of environmental degradation that threatens the livelihoods of so many both in the future as well as increasingly in the present. Green development has often resulted in lower, but more sustainable growth. This sort of growth and development that these projects realize is thus extremely important for the future well being of the planet, so long as this development does indeed result in some form of growth. These tensions between green and brown development are also specifically at play within determining the strengths and weaknesses of CBNRM

The Strengths of CBNRM

The case study evidence reviewed above suggests that the predominant strength of CBNRM lies within conservation. Whether this be the protection of wildlife, forests, natural

habitat, or grasslands, projects around the African continent as well as elsewhere have indeed contributed to a slowing and in some cases reversal of the many harmful effects of climate change and environmental degradation on the continent. This has been demonstrated to varying degrees within all three case studies: Tanzania has succeeded in increasing the protection of important forest cover; Zimbabwe has recorded improvements in its wildlife habitat; whereas Namibia has seen impressive and unprecedented recovery of various wildlife populations. The data presented in chapter 4 proves that while far from a global panacea for climate change, CBNRM can indeed provide at least one small part of the puzzle for local level sustainability, for certain communities in particular situations.

While CBNRM is often presented as a way forward for sustainable development it turns out that much of the literature points to something else entirely as one of the greatest possible benefits that can be provided. The governance, and institution building component that CBNRM necessarily calls for is pointed to by many as one of the greatest benefits (Rantala et al., 2012; Roe et al., 2009; Shackleton et al., 2002). As chapter 2 discusses this form of resource governance came about in part as an answer to neopatrimonial practices and high-level corruption in African states. As a result, CBNRM provides an impetus for communities to organize and attempt to unify under one voice democratically. Although the impetus may be there, and several authors as has been mentioned, point to this aspect as CBNRM's greatest success, it is also one that is written of only from a general analysis with few specifics given. These projects are indeed still young in some cases and thus the literature has perhaps not yet fully developed, however it seems that direct examples of what this community building develops concretely, seems harder to point to. For the case studies examined above this has been seen to a varying degree but has been present in all and has been indicated as one of the

predominant benefits accrued from the implementation of CBNRM. Importantly the federal legislation that was passed in each case, necessitates some form of community registration such as the conservancy registration in Namibia which has a minimum set of criteria set out prior to any form of devolution being possible as explained in chapter 4. Both Zimbabwe and Tanzania had similar conditions to be as well prior to devolution. This proves important because control over resources will only be turned over to communities once these minimal governance capacities are developed. These then provide a framework for communities to continue to build off of as their respective CBNRM projects develop. For Tanzania with regards to REDD+ it proves perhaps more important that anywhere as the community must prove to the international community that they are maintaining their forests effectively in order to continue to receive financial remuneration for doing so.

The Limitations of CBNRM

One of the initial and most obvious limitations of CBNRM as a solution to Africa's resource governance woes is the simple fact that its scope is limited by the types of resources it can work with. As has been explored in the case studies, the main forms of CBRNM have focused on the protection of forest, rangelands, habitat, and wildlife. Ultimately with the majority of Africa's natural resources and certainly those most valuable to global markets such as diamonds, gold, iron, cobalt, uranium, copper, bauxite, silver and petroleum, CBNRM is likely not possible because of the scale, skills and resources needed for the extraction process. This means that while CBNRM can contribute to solving many of the sustainable development and resource governance issues explored in chapter 2, it is not the answer to all of the continent's resource governance problems.

As CBNRM projects tend to be focused on conservation, they largely stem from either governmental agencies, NGO activity, or grassroots/community action. CBNRM falls outside any major private sector initiatives and this is likely largely because the financial incentives are low. In each case study the possibility for financial remuneration and resultant economic development seems to be uncertain at best. Major proponents of the projects often write of the wealth that can be accrued from these community-based initiatives, but these are often vague, and left under developed (Richardson, 1998). It does seem as though many of these projects pose potential for long-term financial remuneration, but that these economic benefits are usually largely overstated (Rantala et al., 2012; Williams et al., 1998). The Namibian case provided the most thorough numbers with regards to job creation and amount of money each year the conservancies were pulling in. CAMPFIRE also highlights the potential for financial benefits from selling the hunting rights of these animals. In the Tanzanian case which remains much more in its infancy stage especially with regards to the potential for REDD+ the direct financial benefits proved abstract at best. The vast majority of the literature to this point also fails to take into consideration the net value of these projects as opposed to gross income. It is one thing to suggest a Conservancy in Namibia will take in USD\$ 2 million per year, but one must certainly take into account the many costs to the community both in terms of direct and indirect costs, including opportunity costs of displaced previous economic activities as will be returned to below. Thus one of the greatest limitations of CBNRM is that as a solution to sustainable development, it seems that it falls short in many respects on the *development* aspect despite often being effective on the *sustainability* side. This poses a problem for the viability and desirability of these projects as it has been discussed that conservation in and of itself is far too seldom a priority, especially in impoverished communities in Africa or indeed elsewhere.

One of the greatest strengths of CBNRM, namely its community building, is also ironically one of its greatest potential weaknesses. While some communities have been able to come together, organize effectively and democratically, and thus facilitate effective management practices and inclusive development (Plant, 1978; Roe et al., 2009; Williams et al., 1998), there is also the fear that devolution of power can recreate patrimonial relationships at the local level. As suggested in chapter 3, the political logic of neopatrimonial practices at the state level can, with devolution, simply be transported to the community level. It is not to say that this will always happen but when the ‘state’ is removed from the equation and we are left with just the community, the ‘neo’ may be removed as well and what could be left is small scale patrimonialism that leads to many of the same problems of resource governance that were seen in the first place at the state level in Africa.

Another important facet that must be taken into consideration is that regardless of whatever governance capacity or institution building communities take on, resource governance is never simple. It is rarely a one dimensional process, that is either in the hands of the state, *or* the local community. Rather the way in which proponents of CBNRM play it off as a virtual either/or situation “may be a very poor reflection of the real situational matrix within which resources are locally used, managed and contested” (Leach et al., 1999, p. 240). This raises even more difficult questions however as it might seem that perhaps the negotiations with a give and take agreement or virtual power sharing might be best in order. However, any form of equitable power sharing assumes that indeed there is an equal balance of power to begin with, which is quite certainly rarely the case.

Finally, an important caveat to understand with the resource governance ideas put forth under CBNRM is the costs of doing so. Not necessarily the financial costs of training employees,

putting up fences, building hotels etc., but the opportunity costs of shifting people's livelihood activities away from subsistence farming and hunting in the Zimbabwean and Namibian cases, and from using local wood for fuel and construction purposes in the case of Tanzania, towards other activities and uses. Shifting away from the harmful and low productivity activities may in fact have long-term net benefits. However, one must not forget the short-term costs that will leave many important unanswered questions of what these people are to do to survive when their previous livelihoods are taken away and shifted towards new economic activities. In this sense communities may lack the wood necessary to continue to build and develop, and if communities cease to engage in some forms of agriculture they may lose their already precarious food security. Moreover, even if they are able to do so as a result of increased financial remuneration through CBNRM projects, importing food from elsewhere can cause entirely new environmental, and political strains as has widely been experienced in other circumstance.

Conclusions

In this paper CBNRM has been proven to be primarily a contributor to conservation and the fight against climate change. I would argue that the protection of wildlife and natural habitat is an inherent good in and of itself, however, for many, this is clearly not enough of an impetus to make any sort of meaningful sacrifice or change from traditional livelihood activities or their current way of life. CBNRM then can appear attractive as it seeks to bridge the tensions of sustainable development – namely economic development, and environmental conservation. It seeks to protect the environment yes, but also places an emphasis on more sustainable, renewable, green and more productive economic development. CBNRM seeks to accomplish these two main overarching goals in concert with responsible community building, that sees the

empowerment of people while reconnecting them with their natural habitat, and allowing them to experience the repercussions of their actions, whether these be positive or negative. The major limitations however still stem from its questionable financial benefits as those living in poverty in Africa and elsewhere have priorities above and beyond environmental conservation simply for conservations sake.

CBNRM's 'community building' aspect can serve as one of the most important ways for working past resource governance issues in Africa. The economic benefits discussed are often those most sought after by communities, and likely the most appealing for development organizations and the international community, but these are more often than not over-stated and rarely sufficient to be transformative in nature. There are however, the more intangible benefits that accrue from various forms of capacity, institution and governance building that seem to be offering real benefits to the communities in question, as has widely been pointed out in the literature (German et al., 2010; Rantala et al., 2012; Williams et al., 1998). Devolution provides new challenges in and of itself however, and as has been pointed out resource governance is not a simple question state *or* community.

Each project presented in chapter 4 does provide evidence of a certain degree of sustainability, each with varying goals and results, but nonetheless effective community-led, or community in concert with government actions leading to overarching goals of environmental conservation. These cases each stem from legislation passed by national governments who acted responsibly and in what appear to be the best interests of their citizens and the local environments. These legislative initiatives all stemmed largely from new ways of thinking grounded in academic and development debate that has continuously put an increased focus on the need for community-led and participatory initiatives of all sorts, not only environmentally. In

each case also we saw governments willing to devolve power, through outside pressure, but a willingness to do so only when strict guidelines were followed to ensure that any form of devolution would be received with a certain level of coherent organization within the community. Thus each community respectively had to engage in institution and governance building from the beginning to prove that they were ready to take control of and effectively and responsibly manage their local resources.

As has been mentioned, any quest for a panacea is doomed to fail, and with CBNRM while there is potential for much good, including with regards to governance at the community level, there exists however, many dangers with devolution as well. The dangers of patrimonial networks developing at the local level are real, and simply calling something community-led, community-driven, or community-based, does not inherently mean it will be good, or successful despite the recent popularity with these sort of initiatives. Rather, one must understand the potential that exists with these projects and employ them strategically, and effectively in the right kinds of places and with the appropriate kinds of resources. This MRP has sought to explore the potentials of CBNRM with particular reference to developing countries in sub-Saharan Africa. Communities all over the world however face many of the same problems with regards to sustainability, growth, and resource governance. Thus one might argue that this form of resource governance, despite its many limitations possesses potential elsewhere and indeed there has been a rise in this sort of initiative all over the world. It is seen even in Canada's aboriginal communities who have increasingly tried to organize, obtain rights to land and resources, and manage them in an effective and sustainable way. This has been experienced routinely with debates around 'prior and informed consent' with resource development and aboriginal lands all over. One must continue to remember however that devolution in and of itself is not an inherent

good and that communities everywhere can suffer from their own forms of patrimonialism developing. It is also very possible that communities taking control of resources locally will not ensure that they are managed effectively in any way, that sustainability and environmental protection will be observed, or that any real economic development will ensue as a result of this renewed form of resource governance.

Thus we come to the question of sustainable development and resource governance, and whether CBNRM might provide a solution to these questions, whether in Africa or elsewhere? Like many issues that exist there is certainly no easy solution and quite likely no single solution. One must approach CBNRM as a potential tool that certain communities may employ as a way forward and way to contribute to loosening some of the tensions that exist between sustainable development and resource governance. It is a tool that, if employed effectively and in the right geo-political locations, while respecting local cultures and nuances, there exists the possibility of relative success within the important goals of sustainable development.

References:

- Becker, E. (2013). *Overbooked: the exploding business of travel and tourism*. New York: Simon & Schuster.
- Besada, H., Sewankambo, N., & Centre for International Governance Innovation. (2009). *Climate change in Africa adaptation, mitigation and governance challenges*. Waterloo, Ont: Centre for International Governance Innovation = Centre pour l'innovation dans la gouvernance internationale. Retrieved from https://login.proxy.bib.uottawa.ca/login?url=http://books.scholarsportal.info/viewdoc.htm?id=/ebooks/ebooks0/gibson_cppc/2010-08-06/5/10368428
- Blaikie, P. (2006). Is small really beautiful? Community-based natural resource management in Malawi and Botswana. *World Development*, 34(11), 1942–1957.
- Bratton, M. (1997). *Democratic experiments in Africa: regime transitions in comparative perspective*. Cambridge, UK; New York, NY, USA: Cambridge University Press.
- Bratton, M., & van de Walle, N. (n.d.). Chapter 2: Neopatrimonial Rule in Africa. In *Democratic Experiments in Africa Regime Transitions in Comparative Perspective*. Cambridge University Press.
- Bratton, M., & Walle, N. van de. (1997). Neopatrimonial Rule in Africa. In *Democratic Experiments in Africa*. Cambridge University Press. Retrieved from <http://dx.doi.org/10.1017/CBO9781139174657.006>
- Burgis, T. (2015). *The Looting Machine: Warlords, Oligarchs, Corporations, Smugglers, and the Theft of Africa's Wealth*. PublicAffairs.

- Child, B. (1996). The practice and principles of community-based wildlife management in Zimbabwe: the CAMPFIRE programme. *Biodiversity & Conservation*, 5(3), 369–398.
<http://doi.org/10.1007/BF00051780>
- Collier, P. (2010). The political economy of natural resources. *Social Research*, 77(4), 1105–1132.
- Cooke, B., & Kothari, U. (2001). *Participation: The new tyranny?* Zed Books. Retrieved from <https://books.google.ca/books?hl=en&lr=&id=aoeTa0OWDnMC&oi=fnd&pg=PR8&dq=kothari+participation+the+new+tyranny&ots=WcyvyWKGcg&sig=cv7bBgCrVnsSNx3VTcZGYKeC5N0>
- Costa, H. K. D. M. (2013). Institutional analysis and the “resource curse” in developing countries. *Energy Policy*, 63, 788–795.
- Dendena, B., & Corsi, S. (2015). The Environmental and Social Impact Assessment: a further step towards an integrated assessment process. *Journal of Cleaner Production*, 108, 965.
<http://doi.org/10.1016/j.jclepro.2015.07.110>
- Fabricius, C., & Collins, S. (2007). Community-based natural resource management: governing the commons. *Water Policy*, 9(S2), 83–97. <http://doi.org/10.2166/wp.2007.132>
- Fairhead, J., Leach, M., & Scoones, I. (2013). *Green grabbing: a new appropriation of nature*. London: Routledge.
- Frost, P. G. H., & Bond, I. (2008). The CAMPFIRE programme in Zimbabwe: Payments for wildlife services. *Ecological Economics*, 65(4), 776–787.
<http://doi.org/10.1016/j.ecolecon.2007.09.018>

- Gardner, B. (2012). Tourism and the politics of the global land grab in Tanzania: markets, appropriation and recognition. *Journal of Peasant Studies*, 39(2), 377–402.
<http://doi.org/10.1080/03066150.2012.666973>
- German, L. A., Karsenty, A., & Tiani, A.-M. (2010). *Governing Africa's forests in a globalized world*. London ; Sterling, VA: Earthscan.
- Herd, T. D., & Sardan, J.-P. O. de. (2015). *Real Governance and Practical Norms in Sub-Saharan Africa: The Game of the Rules*. Routledge.
- Hoole, A. F. (2010). Place-power-prognosis: Community-based conservation, partnerships, and ecotourism enterprises in Namibia. *International Journal of the Commons*, 4(1), 78–99.
- I, G. d'experts intergouvernemental sur l'évolution du climat W. G., & Alley, R. (2007). *Climate change 2007: the physical science basis: summary for policymakers*. IPCC. Retrieved from <http://repository.icse.utah.edu/dspace/handle/123456789/9951>
- Junge, H. (2004). *Democratic Decentralisation of Natural Resources in Tanzania: The Case of Local Governance and Community Based Conservation in Districts Around the Selous Game Reserve*. GTZ.
- Kiss, A. (2004). Is community-based ecotourism a good use of biodiversity conservation funds? *Trends in Ecology & Evolution*, 19(5), 232–237.
- Klein, N. author. (2014). *This changes everything: capitalism vs. the climate* (First Simon & Schuster hardcover edition..). New York: Simon & Schuster.
- Kopiński, D., Polus, A., & Tycholiz, W. (2013). Resource curse or resource disease? Oil in Ghana. *African Affairs*, 112(449), 583–601. <http://doi.org/10.1093/afraf/adt056>
- Kumar, C. (2005). Revisiting “community” in community-based natural resource management. *Community Development Journal*, 40(3), 275–285.

- Leach, M., Mearns, R., & Scoones, I. (1999). Environmental Entitlements: Dynamics and Institutions in Community-Based Natural Resource Management. *World Development*, 27(2), 225–247. [http://doi.org/10.1016/S0305-750X\(98\)00141-7](http://doi.org/10.1016/S0305-750X(98)00141-7)
- Lodge, T. (2014). Neo-patrimonial politics in the ANC. *African Affairs*, 113(450), 1–23. <http://doi.org/10.1093/afraf/adt069>
- Low, P. S. (2006). *Climate Change and Africa*. Cambridge University Press.
- Madison, D. (2007). *The Perception Of And Adaptation To Climate Change In Africa*. World Bank.
- McMillan, M., Rodrik, D., & Verduzco-Gallo, Í. (2014). Globalization, Structural Change, and Productivity Growth, with an Update on Africa. *World Development*, 63, 11–32. <http://doi.org/10.1016/j.worlddev.2013.10.012>
- Murphree, M. W. (1998). *Congruent Objectives, Competing Interests and Strategic Compromise: Concepts and Process in the Evolution of Zimbabwe's CAMPFIRE Programme*. Institute for Development Policy and Management, University of Manchester.
- Obi, C. (2010). Oil as the “curse” of conflict in Africa: peering through the smoke and mirrors. *Review of African Political Economy*, 37(126), 483–495. <http://doi.org/10.1080/03056244.2010.530947>
- Owa, M. (2011). Revisiting the Paris Declaration Agenda – an inclusive, realistic orientation for aid effectiveness. *Development in Practice*, 21(7), 987–998. <http://doi.org/10.1080/09614524.2011.590888>
- Pitcher, M. A., Moran, M. H., & Johnston, M. (2009). Rethinking Patrimonialism and Neopatrimonialism in Africa. *African Studies Review*, 52(1), 125–156.

- Plant, R. (1978). Community: concept, conception and ideology. *Politics and Society*, 8(1), 79–107.
- Rantala, S., Bullock, R., Mbegu, M. A., & German, L. A. (2012). Community-Based Forest Management: What Scope for Conservation and Livelihood Co-Benefits? Experience from the East Usambara Mountains, Tanzania. *Journal of Sustainable Forestry*, 31(8), 777–797. <http://doi.org/10.1080/10549811.2012.725155>
- Ricardo, D. (2010). *On The Principles of Political Economy, and Taxation*. Retrieved from <http://www.gutenberg.org/ebooks/33310#download>
- Richardson, J. (1998). Wildlife utilization and biodiversity conservation in Namibia: conflicting or complementary objectives? *Biodiversity & Conservation*, 7(4), 549–559. <http://doi.org/10.1023/A:1008883813644>
- Robinson, E. J. Z., Albers, H. J., Meshack, C., & Lokina, R. B. (2013). Implementing REDD through community-based forest management: Lessons from Tanzania. *Natural Resources Forum*, 37(3), 141–152. <http://doi.org/10.1111/1477-8947.12018>
- Roe, D., Nelson, F., Sandbrook, C., & International Institute for Environment and Development. (2009). *Community management of natural resources in Africa: impacts, experiences and future directions*. London, UK: International Institute for Environment and Development.
- Saarinen, J. (2009). *Sustainable Tourism in Southern Africa: Local Communities and Natural Resources in Transition*. Channel View Publications.
- Seawright, J., & Gerring, J. (2008). Case selection techniques in case study research: a menu of qualitative and quantitative options.(Author abstract). *Political Research Quarterly*, 61(2), 294.

- Shackleton, S., Campbell, B., Wollenberg, E., & Edmunds, D. (2002). *Devolution and community-based natural resource management: creating space for local people to participate and benefit?* Overseas Development Institute London, UK. Retrieved from <https://dlc.dlib.indiana.edu/dlc/handle/10535/3646>
- Sjöstedt, M. (2013). AID EFFECTIVENESS AND THE PARIS DECLARATION: A MISMATCH BETWEEN OWNERSHIP AND RESULTS-BASED MANAGEMENT? *Public Administration and Development*, 33(2), 143–155.
<http://doi.org/10.1002/pad.1645>
- Snively, S. W. (2012). Environmental laws of Namibia: constitutions, conservation, and cheetahs. *Probate & Property*, 26(3), 44.
- Sustainable natural resource management in Namibia: Successful community-based wildlife conservation. (n.d.). Retrieved from http://www.developmentprogress.org/sites/developmentprogress.org/files/resource_report/namibia_report_-_master_0.pdf
- Taylor, R. (2009). Community based natural resource management in Zimbabwe: the experience of CAMPFIRE. *Biodiversity and Conservation*, 18(10), 2563–2583.
<http://doi.org/10.1007/s10531-009-9612-8>
- Thakadu, O. T. (2005). Success factors in community based natural resources management in northern Botswana: Lessons from practice. *Natural Resources Forum*, 29(3), 199–212.
<http://doi.org/10.1111/j.1477-8947.2005.00130.x>
- Toulmin, C. (2009). *Climate change in Africa*. London ; New York: Zed Books in association with International African Institute, Royal African Society, Social Science Research Council.

- UN Report. (1989). Report of the World Commission on Environment and Development: Our Common Future. Retrieved from <http://www.ask-force.org/web/Sustainability/Brundtland-Our-Common-Future-1987-2008.pdf>
- Williams, A., Masoud, T. S., & Othman, W. J. (1998). Community-based conservation. Retrieved from <http://pubs.iied.org/pubs/pdfs/6147IIED.pdf>
- Ziai, A. (2015). *Development Discourse and Global History: From Colonialism to the Sustainable Development Goals*. Routledge.