



UNIVERSITY OF NAIROBI

INSTITUTE OF DIPLOMACY AND INTERNATIONAL STUDIES

**Research topic: Effects of Shared Resources on Interstate Relations in
The Horn of Africa: case Study of The Mara-Serengeti National Parks in
Kenya and Tanzania**

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**A Research Project submitted in partial fulfilment for the award of degree of
Master of Arts in International Studies**

DECLARATION

I Biliah Kerubo hereby declare that this is my original work has never been submitted in any other institution for examination purposes.

Name:

Sign: _____

Date: _____

Supervisors:

Sign: _____

Date: _____

DEDICATION

I dedicate this work to my loving parents for their support, both financially, mentally and for the undying love they showed me throughout my course.

To my mother, thanks for your support and love. I owe my success to you mum.

ABSTRACT

Kenya and Tanzania spend huge amounts of capital to develop nature-reserves, which are enormous regions of their territory, with examples of the Maasai Mara National Reserve and the Serengeti National Park. However, due to non-existence of proper taxation systems, corruption alongside ineffective administration that lack modernized information technology; these reserves get to be highly unprofitable. The result of unprofitability, raise the inability of the states to run the nature reserves, putting both countries into constant affirmations of seeking monetary infusions from industrialized nations. The seek for aid, constantly puts the two states in a dilemma, over who benefits most from the nature reserves, creating mistrust among the two, on economic gains from international community based aid and donations, meant to maintain the nature reserves. As a result, numerous effects of these shared resources get to emerge, affecting the interstate relations what could be identified to be the ‘tragedy of the commons’. Therefore, through study objectives that sought to identify and assess the effects of shared resources on interstate relations, the study investigated strategies used in addressing these effects and recommend on workable policies and activities that assisted in addressing the effects. The study area was identified through stratified sampling from a list of many interstate shared resources considering the fact that it meets the threshold and scope of the study. The research targeted to interview a total of 15 participants. Other data was collected through multiplicity of data collection methods among them; questionnaire, in-depth interview and observation. Data collected was analysed through qualitative and quantitative data analysis methods and then key findings of this study revealed for recommendations. The study found that sharing of natural resources has an impact on interstate relations. The study found that scarcity of these natural resources, territorial conflicts, political conflicts, revenue administration are the main causes of conflicts between states sharing natural resources. The study concluded that natural resources have an effect on interstate relations. The study recommended that Kenya and Tanzania should implement agreements by mapping the border according to the international regulations governing sharing of natural resources.

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ABBREVIATIONS

CA	Conservation Area
EAC	East African Community
GCA	Game Controlled Area
GPS	Global Positioning System
GR	Game Reserve
KWS	Kenya Wildlife Service
MDGs	Millennium Development Goals
NP	National Park
SENAPA	Serengeti National Park
SPSS	Statistical Package for Social Sciences
TAWIRI	Tanzania Wildlife Research Institute
TWCM	Tanzania Wildlife Conservation Monitoring

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

In the Horn of Africa, conflicts have been witnessed in the shared ecosystems between countries, identified to be disagreements involving economic justifications over nature reserves¹. The most conflicting development opinion is on the state of negotiations concerning the natural resources. The sharing of natural resources has brought contention among the states, through activists. Countries' interest of developing the resources, has called for contemplation of highlights and facts in an unemotional manner.

Actions of some specialized groups and stakeholders on shared resources have often leads to conflicts. States and Governments of the concerned countries provide oversight for management of resources, formulate rules and regulations on trade and development, provide licensing guidelines, levy taxes and engage in natural resource extraction directly or indirectly by selling extraction rights². In cases where the government or the state in control of shared resource receives more benefit from the resource, they would not likely to enter into agreements towards power sharing of the natural resource. They would not find the incentive to promote the building of the democracy efforts. The reason for this trend is that they have the means to buy off or intimidate their opponents. In those cases in which there is little government accountability or financial transparency, government officials are more likely to take bribes, funnel public funds to private accounts and ignore environmental degradation, resource-related violence, and human rights violations. More often in

¹Newsome, D., Dowling, R. K., & Moore, S. A. (2005). *Wildlife tourism* (Vol. 24). Channel View Publications, pp. 4-12.

²Cooter R. and Ulen T. (2008): "*Law and Economics*", (5th edition): Pearson International, pp. 5-9.

developing countries with weak state institutions, powerful groups are able to use persuasion or force to gain improper access to natural resources and their profits³.

Rebel groups have used natural resources as a commodity to fund weapon purchases and mobilize fighters. Using violent means to capture resource-rich territories and forced labor to extract natural resources, rebel groups have set up lucrative businesses that profit from participation in the global market, one notable example being the drug trade. Paul Collier argues that rebel groups in some developing countries have found ripe conditions to make rebellion financially and militarily viable⁴.

As a shared natural resource, the Mara-Serengeti region, any move that tends to affect the ecosystem develops effects that can be felt by the two states⁵. Taking the Tanzanian case, there could have been projected benefits of constructing the highway. However, to the Kenyan case, the highway could have threatened the Kenyan economy through lost tourism. The two considerations are important in ensuring the maintaining of good inter-state relations.

The study anticipates giving a justifiable response to the effects of shared natural resources to inter-state relations alongside its impacts to inter-state co-operation and development.

1.2 Statement of the Research Problem

Mara-Serengeti is at the forefront in the implementation of global goals initiatives for achieving the eight Millennium Development Goals (MDGs) by 2015⁶. However, the

³ Ogallo, V., (2010), *Informal Cross-Border Trade in EAC Implications for Regional Integration and Development*, Nairobi: Cuts Africa Resource Centre, pp. 3-5.

⁴ Walder, B. (2011). "The Road RIPoRTeR", pp 19-21.

⁶ Nwonwu, F. O. C., & Africa Institute of South Africa. (2008). *Millennium development goals: Achievements and prospects of meeting the targets in Africa*. Pretoria, South Africa: Africa Institute of South Africa, pp. 8.

assessment of the manner in which the ecosystem is handled by Kenya and Tanzania, determines could their cooperation.

The consideration of these shared resources by the two states as being public resources, exhibit both: the consumption indivisibilities and the non-excludability aspects that present complexity⁷. Non-excludability depicts the reality that once the resource is provided, even those who don't incur cost over the resource cannot be excluded from enjoying the conferred benefits. With its indivisibility nature: one state's irrational consumption affects both states equally. Such considerations, limits respective states growth due to failed cooperation and partnerships⁸. As a result, the treatment of shared economic systems tend to affect states growth, a gap that poses some research questions for the study; what are the main causes of dispute between states based on shared resources?; what is the current state of relation in the Horn of Africa over the shared ecosystems? What methods have been put in place to curb effects posed by the shared resources in the Horn of Africa? What is the success rate of implementation of recommended solutions on conflicts over shared resources in the Horn of Africa?

1.3 Research Objectives

The main objective of this research was to demonstrate whether shared resources between different states affect their relations either positively or negatively. Other specific objectives are to:

- i. Identify the causes and effects posed by shared resources on inter-state relations in the Horn of Africa.

⁷Cooter R. and Ulen T. (2008): "*Law and Economics*", (5th edition): Pearson International, pp. 5-9.

⁸Tanzania, W. C. M. (1989). *Tanzania Wildlife Division: Selous census*. Arusha: TWCM.

- ii. Investigate strategies used by states in addressing the effects that arise from shared resources in the Horn of Africa and with a key focus on Mara-Serengeti National Parks in Kenya and Tanzania.
- iii. Establish the success rate of implementation of recommended solutions, which exist in the Horn of Africa as well as between Kenya and Tanzania.

1.4 Literature Review

The section below explores the literature review on key issues that may arise due to the inter-state shared resources in the Horn of Africa, and specifically in the case of Mara-Serengeti in Kenya and Tanzania

1.4.1 Causes and Effects of Conflicts on Shared Resources in the Horn of Africa.

States interactions over shared resources, with examples of water, which courses crossing international borders, may result to rise of interstate tensions or rather, ideally, advance cooperative behaviour. A view to developments, through paying attention to international water courses, a major internationally shared natural resource, has grown. Sharing of water, as an example of natural resources is one of the most outstanding factors that affects of relations⁹.

For instance, in the Horn of Africa, the Nile River Basin has been a constant source of tension between the sharing states. The claims over natural historical rights over the Nile Waters by Ancient Egypt, have created a negotiations focal point all through the upstream states. No matter the fact that there is existence of these rights, for Egypt, tampering with the water, then means tampering with national security, and this could be subject to triggered

⁹ Ashton, P. (2002). Avoiding conflicts over Africa's water resources. *Ambio*, 31(3), 236e242.

potential conflict. A focus to Egypt in the past, some interstate occasions over the Nile, has made Egypt to threaten to go to war over the water¹⁰.

The reason for the issuance of threats by Egypt is based on the fact that it has an agriculturally dependent economy that is on the Nile River and virtual water imports, which if disturbed may lead to an attempted water conflict. Such threats have impacted on interstate cooperation in the past, with Ethiopia and Tanzania as states that have befallen victims of Egypt's threats, evident through Egypt arming Somalia separatists in Ethiopia. These threats have in the recent past made the states to enter into agreements and treaties¹¹.

The Mara-Serengeti conservation area has shared seasonal river-lets and wild animals. As a wilderness, the CA attracts tourism, relied upon by Kenya and Tanzania. The area however, faces adverse weather conditions considering that the ecosystem offers services such as recreational services. Notably, Mara–Serengeti faces a number of cross border concerns such as poaching, human wildlife conflicts and poorly coordinated management systems, with poor forms of taxation, corruption, destruction of the ecosystem and poor implemented development plans and policies among other effects calling for attention from both states¹².

A shared basin is positively and significantly related to conflict, while a river boundary is not. Support for the scarcity view of conflict is somewhat ambiguous. As a first test of the importance of the upstream downstream relationship, the number of river crossings is not

¹⁰ Beaumont, P. (1997). Water and armed conflict in the Middle East e Fantasy or reality? 1997. In N. P. Gleditsch (Ed.), *Conflict and the environment* (pp. 355e374). Dordrecht, Netherlands: Kluwer Academic

¹¹ Song, Jennifer & Thomas Whittington (2004) Why have some countries on international rivers been successful negotiating treaties? A global perspective. *Water Resources Research* 40: W05S06.

¹²Walpole, M. J., & International Institute for Environment and Development. (2003). *Wildlife and people: Conflict and conversation in Maasai Mara, Kenya: proceedings of a workshop series...13-16 August 2001*. London: International Institute for Environment and Development, pp. 7-9.

significantly related to conflict. The water scarcity and shared water resource variables did not perform as expected. Drought was not shown to have any effect at all. Dry countries have significantly more conflict, less so when they share a large river basin. The shaded area around each line represents a 90% confidence interval. The estimated probabilities and the confidence bands (based on robust standard error estimates) were obtained using Clarify. Modernization theory receives some support in that shared rivers seem to have less influence on conflict when dyad development is high. This may indicate that wealthier countries can afford to compensate for scarcities by technological substitution or innovation, or that their priorities or challenges are different. The analysis, however, also suggests the existence of an environmental Kuznets curve e shared river basins increase the risk of conflict more for middle-income countries than for low-income countries. The strongest results are found for the overall importance of a river basin. This does not point clearly in the direction of either of the two scenarios that we posited at the start. It could hint at ‘resource curse’ argument the greater the resource, the more conflict over it. Water is not the kind of lootable resource widely believed to stimulate internal armed conflict. But a large river basin can bring other benefits, such as good communications, cheap hydroelectric power, abundant fisheries, and ample opportunities for irrigation. Even if such goods are not the stuff of which wars are made, they may stimulate more serious rivalry over the sharing of the resource than that which arises over trivial shared water resources¹³.

Countries that share rivers have a higher risk of military disputes, even when controlling for a range of standard variables from studies of interstate conflict. A study incorporating the

¹³ Gleditsch, N.P., K. Furlong, H. Hegre, B. Lacina and T. Owen 2006. Conflicts over shared rivers: Resource scarcity or fuzzy boundaries. *Political Geography*, 25, pp. 361–382.

length of the land boundary showed that the shared river variable is not just a proxy for a higher degree of interaction opportunity. A weakness of earlier work is that the existing shared rivers data do not distinguish properly between dyads where the rivers run mainly across the boundary and dyads where the shared river runs along the boundary. Dyads with rivers running across the boundary would be expected to give rise to resource scarcity-related conflict, while in dyads where the river forms the boundary conflict may arise because river boundaries are fluid and fuzzy¹⁴.

Migration of population in search of better sources of water is a widespread phenomenon in Africa with a long-standing history. In the case of the Pangani River Basin in the North East of Tanzania, migration has led to intensive water conflicts caused by the convergence of pastoralists and farmers, traditional irrigation systems and large scale irrigation systems; and other uses including hydropower generation in the basin. The main determinants of these water conflicts in the basin include rapid population increase of both human beings and livestock. The rapid population dynamics of both livestock and human population as a result of natural increase and migration generate additional demands for water as do the irrigation systems, which allow little water downstream for other uses such as generation of power and land alienation, resulting in poor water rights management. Measures that have been taken to resolve some of these water conflicts including the improvement of irrigation systems so they

¹⁴ Ha Le Billon, P. 2001. The political ecology of war: Natural resources and armed conflicts. *Political Geography*, 20, pp. 561–584.

do not waste water and application of environmental impact assessment techniques wherever new projects are introduced in the basin¹⁵.

Environmental conflicts take on different forms and have multiple and varying impacts in different contexts. In particular, key points of conflict are in relation to climate change, conservation, water quality and availability, air quality and management aspects. Furthermore, a disconcerting trend is the migration levels associated with environmental and other conflicts that often result in existing or new conflicts emerging in receiving areas. The matter of vulnerability remains an important aspect of understanding environmental conflicts. This issue highlights that the poor, marginalised groups and especially women are more likely to be impacted by environmental degradation and conflicts, whatever their types. In turn the poor are often dependent on environmental resources for livelihoods and energy – leading to environmental degradation. Furthermore, environmental degradation and diminishing environmental resources are linked to several conflicts from international to intra-national/local levels. However, what is a neglected field of research is the extent to which conflicts result in environmental degradation. Wars and other types of violence (such as invasions and destruction of property) can denude the natural resource base in terms of quality and/ or quantity. This in turn causes further tensions and conflicts as resources become scarce. In particular, the vulnerable, the poor and especially women who remain reliant on the natural resource base in developing contexts are most likely to be affected. Thus, this cycle contributes to both an increase in poverty and vulnerability as well as

¹⁵ Mbonile, M.J. 2005. Migration and intensification of water conflicts in the Pangani Basin, Tanzania. *Habitat International*, 29, pp. 41–67.

environmental degradation. The natural resource base is in itself extremely vulnerable during periods of conflict and becomes the focus for looting and exploitation¹⁶.

1.4.2 Shared resources and the State of Relations between Kenya and Tanzania

In particular, international relations models foresee long-term effects and also predict that more extreme outcomes tend to emerge if poor management of these resources takes course. Such unprecedented effects might bring about changes in socio-economic systems and they might affect intergovernmental behaviour with respect to shared natural resources with a case of water resources at the global scale. With claims that sharing a river increases the risk of interstate conflict, the ‘water war’ hypothesis¹⁷ takes root, with similar studies emphasizing on the non-negligible amount of cooperation that is likely to arise over shared water resources¹⁸.

The essence of argument is that sharing a resource such as a river necessarily does not need to increase the risk of conflict over the shared resource, but that joint democracy and political and economic interlinks foster cooperation over shared resources. Empirical tests on arguments on new events dataset, distinguish different types of events with regard to quality, quantity and joint management of these resources, through differentiating geographical settings.

¹⁶ Mix, T.L. and T.E. Shriver 2007. Neighbours, nuisances and noxious releases: Community rdin, G. 1968. The Tragedy of the Commons. *Science*, 162 (3859), pp. 1243–1248.

¹⁷ Starr, Joyce R (1991) Water wars. *Foreign Policy* 82(spring): 17–36.

¹⁸ Brochmann, Marit & Nils Petter Gleditsch (2006) Shared rivers and international cooperation. Paper presented at the 47th Annual Convention of the International Studies Association, San Diego, March.

In recent past, various large empirical studies on trans-boundary freshwater issues, as an example of natural resources that affect interstate cooperation, have been published.¹⁹ Many of these publications focus on the potential conflict between river sharing countries against the shared water resource or the borders it constitutes.^{20, 21}

In an effort to disentangle conflicts related shared resources, a consideration of Issue Correlates of War Project is important. The importance draws events data on official interaction between states that express claims on cross-border shared resources such as Rivers²². The data assists in finding of asymmetry of relative capabilities, with the example of river-related disputes, drawing the attention of similar institutions in solving arising claims, for the likelihood of successful negotiations over increasing claims²³. In the desire to attain peaceful and militarized means for managing contentious issues the substitution, driven by these similar processes is important²⁴.

1.4.3 Success Rate of the Implemented Strategies

Shared resources management can be a problem that is collective in action and analysed in terms of the costs and benefits of development, cooperation and monitoring, when considering variables like sharing group size, composition, relationship including external powers and characteristics of the resource. Policy debates in the recent past, over natural

¹⁹ An extensive overview of this literature can be found in Bernauer & Kalbhenn (2010) and Dinar & Dinar (2003).

²⁰ Tøset, Hans Petter Wollebæk; Nils Petter Gleditsch & Håvard Hegre (2000) Shared rivers and interstate conflict. *Political Geography* 19(8): 971–996.

²¹ Stroh, Kassian (2004) *Konflikt und Kooperation um Wasser. Eine Fallstudie über den Nil [Conflict and cooperation over water. A case study on the Nile]*. Arbeitspapiere Forschungsstelle Dritte Welt, Ludwig Maximilians University Munich.

²² Hensel, Paul R (2005) Codebook for River Claims Data. Issue Correlates of War (ICOW) Project (<http://garnet.acns.fsu.edu/~phensel/icow.html>).

²³ Hensel, Paul R; Sara McLaughlin Mitchell & Thomas E Sowers (2006) Conflict management of riparian disputes. *Political Geography* 25: 383–411.

²⁴ Hensel, Paul R; Sara McLaughlin Mitchell, Thomas E Sowers & Clayton L Thyne (2008) Bones of contention: Comparing territorial, maritime, and river issues. *Journal of Conflict Resolution* 52(1): 117–143.

resource management, reveal consequences that are unexpected assumption that effects are assumed to be solutions are self-evident.

On cooperation of shared resources, several studies centre on institutionalized cooperation taking a case of rivers and its treaties²⁵. These distinguished efforts to explain why formal cooperation over shared resources as rivers comes about, highlighting the significance of neo-liberal explanatory factors, such as trade relationships, interdependencies and joint democracy²⁶.

The case of the Serengeti Highway, brought about some effects as expressed by activists, however, with the knowledge on definition of problems containment of the effects got to be bearable, through negotiations that were transparent and effective enabling the understand of plurality of prevailing views on interstate shared resource use and management.

A look into wildlife as a fact that affects relations, takes an example on lions in the case of Kenya and Tanzania. In Tanzania, high income from hunting tourism, subjects lions to continued persuasion. Meanwhile, in Kenya, the lion's population has reached a critical point reckoning on them as being extinct in the wild for a period of less than twenty years²⁷.

Kenya and Tanzania that share safari tourism derive part of their foreign income from it. A disruption within the tourist trade that is a shared resource leads to immediate massive

²⁵ Tir, Jaroslav & John T Ackerman (2009) Politics of formalized river cooperation. *Journal of Peace Research* 46(5): 623–640.

²⁶ Mix, T.L. and T.E. Shriver 2007. Neighbours, nuisances and noxious releases: Community rdin, G. 1968. *The Tragedy of the Commons*. *Science*, 162 (3859), pp. 1243–1248.

²⁷ Tanzania Wildlife Research Institute & Tanzania Wildlife Research Institute, (2013). *Proceedings of the Eighth TAWIRI Scientific Conference: 6th-8th December 2011, Corridor Springs Hotel, Arusha, Tanzania*, pp. 6.

payment problems in both countries, creating a braking effect on further economic development. Low economic development, in either of the states creates a perception of one state being the cause of the others low economic gains.

As a result this hinders relationships of the two states. Having the Serengeti planned route creates a position to effect a decrease in Kenya's economy considering the fact that the ecosystem is a serious shared resource. However, the competitive loop that considers market in trade and transportation to Central Africa creates a compromising situation between Kenya and Tanzania, over the establishment of the Serengeti highway. Extensively, this makes no sense. As an outcome, the two states budgets tend to be put under more pressure, and bilateral relationship would deteriorate, affecting their future working relationship²⁸.

Knowledge gaps

In the case of the Serengeti- Mara Ecosystem, scholarly expressions have not exhausted on cross border poaching, human wild conflict and management systems that are linked to taxation, corruption, ecosystem destruction and the poorly implemented policies and plans as key gaps. Therefore, this research will focus into these problematic areas, through reviewing them.

1.4.4 Knowledge Gap

From the above literature, it is evident that studies done have focused on the interstate conflicts in the Horn of Africa. None of the studies have focused on the causes and effects of shared resources, strategies used in addressing the conflicts arising of the sharing of the resources by states and the state of relations on the shared. This study therefore seeks to

²⁸ Sinclair, A. R. E. (1995). *Dynamics, management, and conservation of an ecosystem: [based on papers presented at a workshop held December 1991 at the Serengeti Research Institute, Tanzania]*: Chicago [u.a.: Univ. of Chicago Press, pp. 2-9.

assess these variables on the effect of shared resources between Kenya and Tanzania a case of Mara Serengeti Area.

1.6 Hypothesis

- i. Shared resources posed significant threats to inter-state relations in the Horn of Africa and especially in the case of Mara-Serengeti National Parks.
- ii. Shared resources do not pose by any threat to inter-state relations in the Horn of Africa and especially in the case of Mara-Serengeti National Parks.

1.7 Justification of the study

Inter-state shared resources will continue to affect the predictability and severity of relations if not properly addressed. The failure to properly address the effects of shared resources will complicate states cooperation, economic planning, and even trust²⁹.

Environmental conflicts have emerged as key issues challenging local, regional, national and global security. Environmental crises and problems throughout the world are widespread and increasing rapidly. In relation to these concerns, the article discusses the following aspects: people and the environment, environmental conflicts, climate change and environmental conflicts, and management implications. Access to natural resources and assets is also vital to achieve livelihood security, especially in poor communities and households that often rely directly on natural assets to ensure daily survival and livelihoods. However, livelihood activities can often destroy the natural resource base by over-use and degradation, which can contribute to desertification, deforestation, soil erosion, declining water tables and other

²⁹Sinclair, A. R. E. (1995). *Dynamics, management, and conservation of an ecosystem: [based on papers presented at a workshop held December 1991 at the Serengeti Research Institute, Tanzania]*: Chicago [u.a.: Univ. of Chicago Press, pp. 2-9.

types of environmental damage –that in turn affect livelihoods. Often, in vulnerable contexts where resources are limited, the lack of alternatives results in increased environmental degradation that leads to higher levels of poverty and risk, partly causing what is generally called the poverty trap. In this issue, the role that vulnerability plays in conflicts is emphasised by a number of the authors.

In light of such interactions between the environment, people and conflicts, it is therefore important to understand how interstate relation is an issue of worry; is that regional peace and development relies most on the manner in which states share resources, drawn from respective interests and policies. Therefore, there is need to put in place practices that aim at reducing the effects and potential vulnerability to them, though proper capacitating of respective institutions, facilitation of research and international linkages and creation of proper networks for information updates, suitable adjustment to technological changes, provision of incentive for cooperation innovations and addressing the poverty situation that leads to corruption and financial constraints among stakeholders.

The essence of the policy on Community participation on management of shared resources gets to be critical in enhancing interstate relations³⁰. In the case of Mara-Serengeti ensuring of proper advocacy from the grassroots to interstate fora will enable good relations between Kenya and Tanzania through communities: restoring and protecting the ecosystem, piloting and taking into custody the shared resources financial models, advancing good governance and cultures of peace, alongside creating sustainable livelihoods.

³⁰ Sinclair, A. R. E. (1995). *Dynamics, management, and conservation of an ecosystem: [based on papers presented at a workshop held December 1991 at the Serengeti Research Institute, Tanzania]*: Chicago [u.a.: Univ. of Chicago Press, p 3-9.

Scholars have brought on board critical findings that impact on interstate relations with the case of Kenya and Tanzania. The findings look into: Inter-state border line conflicts, ethnicity, inter-state military aggression and annexation, political differences, persecutions and poor economic performances. However, the need to understand implications of cross border poaching, human wild conflict and management systems that are linked to; taxation, corruption, ecosystem destruction and the poorly implemented policies and plans to Interstate relations is crucial. The understanding of the shared resources sheds light on the fast globally revolving phenomenon of cooperation, which requires each nation to keep up with. Therefore, posing recommendations that should be invested in as appropriate measures to strengthen inter-state relations, especially where there are shared resources.

1.7 Theoretical Framework

This study will be guided by the theoretical framework that relies on (neo)-liberal factors, namely economic, democracy and political interdependence. The argument will be that sharing a resource needs not lead to conflict over the resource, but joint democracy, political and economic inter-linkages hence, creating the liberal triangle that fosters cooperation over shared resources.

Previous studies suggest that joint democracy, political and economic interdependencies of the liberal triangle tend to foster cooperation only under 'fair-weather' conditions. An argument by Gibler (2007) outlines that democratic peace might be an unauthentic result, since countries in transition tend to resolve their border issues prior to being democratic and

then face problems that are relatively easy to solve³¹. Therefore, empirical evidence on effects of shared resources unravels³².

In parallel, Bernauer & Kuhn (2010), emerge with a conclusion that ‘the democracy forces, trade, national and international regulation and institutions do not easily produce civilized international behaviour’³³. The expected interactions regarding the quality of shared resources need to be easier than quantity events, considering the non-excludability and potential externalities that are reciprocal³⁴.

Finally, the need for a joint management calls for this concept that is diverse in scope, which classifies joint management events in a straightforward manner. The effects of the liberal triangle might thus be less distinct than for the shared resource, considering geographic settings on border crossing on demarcated areas. To the Mara-Serengeti case study, the theory gets to be relevant in deducting implications posed by shared natural resources to interstate relations. In that, if there is a joint democracy among states sharing a natural resource, there gets to be more cooperation and if there is a lower joint democracy, the states get to be more prospect to conflict. If there is a high political and economic interdependence in interstate shared resources, more cooperation and mutuality gets to be experienced.

1.8 Methodology of the Research

The research focused on addressing the effects of shared resources on interstate relations, through the case of Mara-Serengeti. Extensively, the research focused at giving

³¹ Gibling, Douglas M (2007) Bordering on peace: Democracy, territorial issues, and conflict. *International Studies Quarterly* 51: 509–532.

³² Gibling, Douglas M & Jaroslav Tir (2010) Settled borders and regime type: Democratic transitions as consequences of peaceful territorial transfers. *American Journal of Political Science* 54(4): 951–968.

³³ Bernauer, Thomas & Patrick Kuhn (2010) Is there an environmental version of the Kantian peace? Insights from water pollution in Europe. *European Journal of International Relations* 16(4): 77–102.

³⁴ Barrett, Scott (1994) Conflict and cooperation in managing international water resources. World Bank Policy Research Working Paper 1303.

recommendations to existing policies and activities that maintain interstate relations on matters pertaining shared resources. Naturally shared resources have been a phenomenon that has initiated diverse effects on different States relations.

The research required understanding of effects and the various issues affecting the states over shared resources. This research therefore was guided by the main objectives that were to identify and assess the effects of shared resources to interstate relations, through investigating strategies in place to address the effects and then offering recommendations.

In this research, the study was on the effects shared resources to interstate relations, taking a case of Mara-Serengeti Area, in the border of Kenya and Tanzania, for the purpose of strategizing measures to address the effects that may hinder the social, political and even economic development of the two states, what can be replicated in other parts of the world, through recommendations to both the existing policies and activities that helped combat the effects in the area.

The research aimed on getting the key information from stakeholders within the Mara-Serengeti Area. The research ensured it sought to get information on the dynamics of interstate relations from the past, drawing relevance from diverse development undertakings that have triggered contention in the past, within the ecosystem. The study further identified ways which had been adapted by respective states in addressing contagious issues that affect the states relations.

Mara-Serengeti generally being a dry area, most of its vegetation is shrubs and thorny trees adapted to dry climate, a suitable habitat for wildlife that has been identified to be a wonder of the world considering the scenic view of wildebeest's migration in a circular systematic

manner. The location according to GPS coordinates, lays in the Longitude of E33°51' and E36°14' and the Latitude of S0°48' to S3°30'.

Figure 1: Map of the Mara-Serengeti Ecosystem



Source: © 2015 Google Map Pictures.

Maasai Mara GR – Serengeti NP are areas is classified as grasslands with numerous wild animals that attract tourism for the two states. As shared ecosystems, the nature reserves subject the states to face challenges, which to some level tend to affect the states relations. Considering the critical economic inputs the areas generate, the areas through their effects pose effects to states relations, therefore making the area appropriate to conduct the research and come up with viable results. Nature reserves being major economic traps for the states, made the area appropriate, for a research study as it directly affected states relations.

Research Design was identified to be a structural concept, within which a research got to be conducted. Research design, constitutes of an outline on: Collection, measurement and analysis of data. Kothari states research design as being vital, because it facilitates smooth

sailing of research and various operations in research in efficient and possible manner, yielding maximum information with minimal expenditures on logistical effort, time and money³⁵.

In this research, primary data, which is information collected from target respondents and general observation was used. Other types of data that were important for the research were secondary and tertiary data which was sourced from relevant books and publications on interstate relations on shared resources, previous research papers on the same, internet sources with information about the general expectations of effects of shares resources among states in the world will be considered. All this data enabled the attainment of necessary information in meeting the study objectives.

The sources of these types of data were from the first-hand information that was collected from respondents and by reviewing of existing literature from publications and the electronic media.

Utilization manner of the research time was another aspect of great importance to the research. The research was conducted on clear time guidelines. The guidelines ensured appropriateness in resource mobilization, field work, data analysis and report writing. This was an essential logistical aspect, in ensuring that the success of the study research is attained in the expected manner.

Activity	Time Interval
1. Proposal writing	2 weeks
2. Resource mobilization	2 weeks

³⁵Kothari (2008:31), *Research Methodology: Methods and Techniques*. New Age International Pvt. Ltd. Publishers, New Delhi, India.

3. Field work	2 weeks
4. Data analysis	3 weeks
5. Report writing	3 weeks

Selective and planned methods of collecting data in the research will be taken into consideration. Main data to be applied in the research will be collected from secondary and primary sources. Primary data will be generated through adopting diverse types of research instruments which will include:

Questionnaires were designed in a manner that draws information from the target respondents. The questionnaires were open that give respondents a chance to add their own responses. From the questionnaires, the researcher would be able to draw the information needed concerning the effects of shared resources on inter-state relations.

Diverse populations affected by the Mara-Serengeti ecosystem, from both policy makers, traders, Tour and travel personnel and even locals were interviewed. To conduct the interview structured questions, were used as a way of creating a general format of getting information while avoiding bias. The interview was conducted in English, within two weeks duration; through conducting personal interviews the researcher was able to seek clarifications. The interviews were structured in a form and order prescribed.

Considerations to available data were also important in offering reference, as a secondary method of data collection. The study population would answer questions on their own, or would be assisted by the researcher in cases where the person doesn't understand the question. Based on the minimal logistical resources, application of this method was appropriate due to the relatively low cost of using the questionnaire method.

This method was also appropriate to this research, because it got to be free from bias of the researcher. However, the greatest challenge could be when the respondents give ambiguous replies, or omissions of replies. But to counter this problem the interview method of data collection would come in handy.

The sampling method employed was simple random sampling. Individuals identified to have a relation with the Mara-Serengeti ecosystem, would have an equal probability of being chosen as a samples without bias. The sampling size of about 15 participants was used to collect the primary data for analysis.

The population under study comprised of policy makers, park and reserves managers, Mara-Serengeti locals and even Tour Guides. Both probability and non-probability sampling techniques will be used. Random sampling is an appropriate method because it gave the population an equal probability of becoming an actual sample.

The other form of sampling that will help in conducting this research project will be network sampling, which is efficient in accessing populations which are spatially populated. The participants will be given room to suggest further participants. Purposive sampling was also applicable because it is an important sampling method, whereby the research will be targeting particular groups of people around the Mara-Serengeti, with conservancies, as they interact with the ecosystem and could have the relevant information needed.

After field work, data collected was analysed and presented in quantitative and qualitative manner. Quantitative data were coded for computer analysis by use of SPSS. The main analytical models and techniques to be used were statistical and non-statistical for non-

numeric data. Descriptive and inferential statistics were used to summarise, analyse and interpret data³⁶.

Descriptive statistics used were the mean, mode and average whereas for the inferential statistics correlation analysis was used. Computer procedures were also used to ensure accuracy of the data to be analysed; software packages was also used to effectively analyse the data. Presentation of results will be in percentages, tables, charts and graphs were used. The outcomes of the analysis were then applied in deducting of recommendations and conclusions.

1.10 Scope of the Study and Limitations of the study

The study was carried out around the Mara-Serengeti Area which was noted to be a share resourceful area between Kenya and Tanzania. The study concentrated in entire Mara-Serengeti Area with a target population of about 15 participants, inclusive of other resourceful personnel, linked to the entire study.

The projected limitations to this study might be logistical, that were on the cost of printing the questionnaires, time limit in collecting information, to some level language barrier, when interacting with the Mara-Serengeti locals. However, other daily miscellaneous activities might be quite expensive.

1.11 Chapter Outline

³⁶Moore, D., & McCabe, G. (1999). Introduction to the practice of statistics: New York, NY: W.H. Freeman, pp. 10-12.

CHAPTER ONE

The section mainly covered; the introduction which will consist of the background of the study, problem statement, objectives of the study, research questions sought to be answered, hypothesis, Justification of the Study, literature review, the methodology to be employed in the study and finally a chapter summary.

CHAPTER TWO

This chapter provided an overview of the causes of disputes on shared resources in the Horn of Africa based on both primary data and secondary data. The primary data was collected from the targeted respondents while the secondary data was collected from books and journals relevant to this study.

CHAPTER THREE

This chapter presents the case of the Mara Serengeti Park which is situated along the border of Tanzania and Kenya. The largest part of the Serengeti Mara ecosystem is found in Tanzanian territory, but Kenya contains, along with the especially fragile Masai Mara, the most important part of the Serengeti, with its roughly three-month long dry season.

CHAPTER FOUR

This chapter presents the current state of relations between Kenya and Tanzania on the shared resources. It depicts what has been put in place to govern the relation between the two countries in terms of laws, agreements and other parameters pertaining the relationship between the two states on matters of shared resources. It also depicts the success rate of the implemented strategies in addressing conflicts arising from sharing of resources between

Kenya and Tanzania. Although many of the resource-related conflicts are low in intensity or in some cases, isolated incidents compared to resource related conflicts in some countries in Africa, the vast resources have the potential to create larger conflicts and destabilize the region.

CHAPTER FIVE

This chapter contains the conclusion and recommendations. The chapter will also seek to provide a comprehensive conclusion and recommendation that can be employed to help solve the identified problems in the study.

CHAPTER TWO

AN OVERVIEW OF MAJOR CAUSES OF DISPUTES ON SHARED RESOURCES IN THE HORN OF AFRICA

2.1 Introduction

This chapter provides an overview of the causes of disputes on shared resources in the Horn of Africa based on both primary data and secondary data. The primary data was collected from the targeted respondents while the secondary data was collected from books and journals relevant to this study.

2.2 Scarcity of Resources

According to the policy makers and the park managers interviewed at Mara – Serengeti area, scarcity of resources causes interstate conflicts. When resources are scarce or abundant, political instability makes countries much more vulnerable to conflict. Instability impacts not only the governance structure, but also all other infrastructures that depend on government

control and oversight, such as the banking system, national oil-production facilities, highways and ports. Population growth, environmental degradation, and resource inequality can combine to weaken an already unstable government's capacity to address the needs of the populace and thus fuel conflicts. And abundance of natural resources can provide the incentive for increased conflict over control of the income-generating sources³⁷.

2.3 Conflict Over Territory

They also noted that, conflict over territory is an important cause of conflict between countries. When two or more countries stake claim over a tract of land, it causes conflict between these nations particularly if the land means a lot to the countries. Conflict over scarce resources is an important cause of conflict between countries³⁸. When countries have scarce resources they might use force to gain more. This causes conflict. Social and international tensions, disputes and conflicts arise over a range of natural resources including oil, natural gas, mining of other resources, logging of forests and exploitation of water. Conflicts have also arisen from the exploitation of marine resources. Some of the conflicts over natural resources and the environment are direct while others are far more complex, though involving natural resources³⁹. For example, In the case of the Nile River, the claims over natural historical rights by Ancient Egypt, alongside its acquired rights, have created a negotiations focal point all through the upstream states. No matter the fact that there is existence of these rights, for Egypt, tampering with the water, then means tampering with national security, and this could be subject to triggered potential conflict. A focus to Egypt in the past, some interstate occasions over the Nile, has made Egypt to threaten to go to war over the water.

³⁷ Walpole, M. J., & International Institute for Environment and Development. (2003). *Wildlife and people: Conflict and conservation in Maasai Mara, Kenya: proceedings of a workshop series...13-16 August 2001*. London: International Institute for Environment and Development, pp. 7-9.

³⁸ Ibid

³⁹ Ibid

The reason for the issuance of threats by Egypt is based on the fact that it has an agriculturally dependent economy that is on the Nile River and virtual water imports, which if disturbed may lead to an attempted water conflict. Such threats have impacted on interstate cooperation in the past, with Ethiopia and Tanzania as states that have befallen victims of Egypt's threats, evident through Egypt arming Somalia separatists in Ethiopia⁴⁰.

2.4 Political Conflicts

Furthermore, they noted that political conflicts that turn violent often result in destruction of the environment and infrastructure that increases the scarcity of resources, which in turn increases the potential for violent conflicts over the scarce resources. Conflicts often damage infrastructure and decrease productivity of mining, thus furthering the downward spiral in economies affected by conflict. In addition, poor management and oversight resulting from political instability accelerate the economic decline. Politics determines the locus, structure and function of power in a society, each with serious implications for access to natural resources within the society. In Eastern Africa, politics plays a very significant role in the allocation of natural resources and is therefore a major cause of natural resource conflicts⁴¹.

2.5 Revenue Administration

According to the locals and tour guides majority of them agreed that revenue administration causes interstate conflict within the park. The raising and sharing of revenue from natural resources constitutes a key issue that causes the conflict in both political terms and with regard to economic stability. They further asserted that revenue-raising and wealth-sharing may naturally follow the allocation of control over regulatory natural resources, but any complex treatment of the issue that involves multiple stakeholders may require a distinct treatment of the financial issues. This is because the raising and sharing of wealth from

⁴⁰ Song, Jennifer & Thomas Whittington (2004) Why have some countries on international rivers been successful negotiating treaties? A global perspective. *Water Resources Research* 40: W05S06.

⁴¹ Brochmann, Marit & Nils Petter Gleditsch (2006) Shared rivers and international cooperation. Paper presented at the 47th Annual Convention of the International Studies Association, San Diego, March.

natural resources may have different objectives and concerns (political settlement of a conflict, or equal sharing of national revenue) from the allocation of control over the regulation and development of natural resources (which may be focused on economic efficiency, equity, Capacity or accountability). Despite the often intense focus on provisions related to the ownership of natural resources, in many senses it is the distribution of their revenue benefits that is at the core of the debate⁴².

According to the tour guides and the locals interviewed at Mara Serengeti area, as much as the issues involved between countries are complex, so are the conflicts within countries that are connected with the use of natural resources and the environment. Although these conflicts are as violent as those arising between nations, the nature of the conflicts is different. Terrorism and separation are some of the distinguishing features in conflicts within these countries⁴³.

2.6 Control over Natural Resources

Control over natural resources can also give rise to violence by those who extract them. Large-scale exploitation of resources not only displaces indigenous people, but also creates tensions in regions. Some of these countries' inhabitants grow illegal opium poppies which are a lucrative trade in the area. The money is not only used by money launderers, but is a potential and an attractive source of revenue for terrorist organizations.

Where natural resources are not at the heart of the conflict, their availability can compound the problems created by cultural conflict. Severe divides between ethnic and religious groups within a country can magnify wealth inequalities, and the competition for political and economic dominance between the groups can lead to conflict. In areas where international demand and newly tapped natural resources have changed the primary economic source from

⁴² Brochmann, Marit & Nils Petter Gleditsch (2006) Shared rivers and international cooperation. Paper presented at the 47th Annual Convention of the International Studies Association, San Diego, March.

⁴³ Ibid

farming or logging to mining or oil extraction, for example, depletion of the reserve or a decrease in price leads to an increase in poverty and ripens existing conflicts. In post-conflict situations, the curses of corruption, disagreement over control and distribution of natural resources, weak governance, and economic instability can threaten the fragile balance of peace⁴⁴.

“Even when natural resources are abundant, countries must deal with debt burden, lack of transparency, a dearth of local capacity, and a generally unstable economy, all of which increase the potential for disaffected groups to resume violent protest”⁴⁵.

Many countries share common borders and this inevitably leads to the sharing of certain resources, such as water. As a result, conflicts and tensions could arise in the sharing of these resources. Some of them are due to over exploitation (e.g. water and inland fisheries), building of barriers and pollution. Other trans-boundary problems arise from air pollution resulting from forest fires, burning of fossil fuel and sandstorms arising from deforestation. Similar problems exist in the sharing of marine resources in the region. All countries are bordered and their borders in many instances overlap each other, especially with the declared exclusive economic zones of each country. In such situations disputes arise in sharing resources. Some countries also dispute the control of territories such as islands, reefs and coral cays. The natural resources are large and valuable. Over-exploitation of resources has led to a depletion of traditional grounds across the countries and hence more and more pressure is being exerted on the resources where stocks are considered plentiful. Sharing these declining transboundary resources results in many disputes. Moreover, poaching by vessels from within these countries is a common problem and several major stand-offs are reported each year. For example in the case of Conflict on Lake Victoria between Kenya and Uganda,

⁴⁴ Hensel, Paul R; Sara McLaughlin Mitchell, Thomas E Sowers & Clayton L Thyne (2008) Bones of contention: Comparing territorial, maritime, and river issues. *Journal of Conflict Resolution* 52(1): 117–143.

⁴⁵ *Ibid*

there was tension between the two countries on the sharing of the Migingo Island. The island brought instability on the state of relations between the two nations and affected the relationship between them⁴⁶.

Malaquias (2001) observed that it is not accidental that some of the nastiest wars in Africa are being fought in countries richly endowed with natural resources⁴⁷. While there are no parallel cases to match the intensity and magnitude of the conflicts in some African countries, many conflicts that have arise either directly or indirectly over the control and use of natural resources⁴⁸. The existence of rich natural resources in parts of countries, especially in large countries and with weak provincial administrative structures in some instances, could contribute to or even be a major cause for calls for separation or breakaway in some countries.

Frequently, social disagreements about the sharing of economic benefits of natural resources assume major significance and often exacerbate existing religious, cultural and social tensions. The security of nations may be undermined by armed conflict, internal or external, by terrorism, as well as by weakening of their economic systems thereby making nations(s) more vulnerable to attack. Geographic cultural diversity (e.g. of ethnic minorities) and geographical inequality in natural resources available within countries and in different regions/nations add to tensions. Furthermore, more economically developed regions/nations

⁴⁶ Song, Jennifer & Thomas Whittington (2004) Why have some countries on international rivers been successful negotiating treaties? A global perspective. *Water Resources Research* 40: W05S06.

⁴⁷ Malaquias, A. (2001) 'Diamonds are a guerrilla's best friend: the impact of illicit wealth on insurgency strategy', *Third World Quarterly*, Vol. 22, No. 3, 311- 325.

⁴⁸ Tadem, E. (1990) 'Conflict over land-based natural resources in the ASEAN countries' in L. T Ghee, and M. J. Valencia (eds) 'Conflict over natural resources in South-East Asia and the Pacific', (Chapter 2), Oxford University Press.

are believed to have a tendency to exploit the natural resources and environments of less developed regions and nations, especially to sustain economic growth⁴⁹.

2.7 Methods Put In Place to Curb Effects Of Disputes From Shared Resources

2.7.1 Introduction

States are generally willing to pursue reasonable, functionalist approaches to interstate conflicts over territory, including cooperative and facilitated methods of dispute resolution. At the same time, many border issues remain unresolved for long periods, during which the absence of the important international institution of defined and recognized borders tends to retard national development due to adverse effects on investment and trade.

2.7.2 Cooperative Approaches

They further noted that many cooperative approaches to resource and border issues have been implemented by states on an agreed basis or as a result of dispute resolution assistance. Examples of such approaches include: joint management and exploitation of contested or shared resources, joint regulation, or cooperative sharing, of contested and/or shared resources, such as grazing rights or water supplies; negotiated access to the resources states or through territorial waters for neighboring states; agreed rights of transit for states with noncontiguous territories; and/or commitments to respect the cultural, historical, or social heritage, as well as political autonomy of national minorities.

2.7.3 Collaboration

Another is collaboration which can be a means through which countries that have past and present conflicts can cooperate. After being engaged in boundary disputes over the region for

⁴⁹ Samaranayake, N. (1998) 'Oil and politics in East Asia', online Journal of Peace and Conflict Resolution, 1.2, May

more than one hundred and fifty years, the two negotiated a peace treaty that set a boundary and established a plan to designate the area as a peace park. Biosphere reserves and eco-parks are innovative solutions to deal with territory-based domestic and international conflicts that address natural resource issues. This calls for the formulation and implementation of national policies and other legal frameworks that are geared towards addressing issues of climate change, particularly the adaptation to and mitigation of climate change impacts. It further calls for stakeholders' dialogue to improve both customary and formal governance systems with regard to natural resources utilization and management.

“We are of course interested in concrete proposals for settling or preventing disputes and violent conflicts. This can be explained by the very dynamics of conflicts over natural resources in Africa, and the comment could be expanded to political conflicts at large. The tendency goes toward calming down conflicts rather than solving them, sweeping under the carpet?. This explains why cases are so frequently reopened later or elsewhere. In a few cases, what is at stake is so to say “too big” for a local handling and it is instrumentalised within supralocal/national arenas”⁵⁰.

According to the locals and tour personnel, despite the woes highlighted by the violence surrounding competition for natural resources such as natural resources can play a positive role in conflict resolution. Indicators of successful management of natural resources that have contributed to peace include establishment of standards and agreements and efforts at cooperation, co-management, and conservation.

“The numerous agreements relating to water and to oil and gas as well as examples of benefit sharing concerning timber. Such cooperative actions by parties in conflict can be

⁵⁰ Tir, Jaroslav & John T Ackerman (2009) Politics of formalized river cooperation. *Journal of Peace Research* 46(5): 623–640.

stepping-stones to continued diplomatic engagement that is necessary to alleviate conflict and build peace”.

2.7.4 International Agreements

According to the park managers and policy makers, outside actors have used many techniques in conflict and post-conflict situations to shape natural resource management. International demand drives the value of many natural resources, and thus outsiders participate in the natural resource market. International organizations, foreign investors, and trade-partner countries that are part of this market can influence the local market and governance. In conflict situations, cooperation from these key actors is necessary for the alleviation of improper natural resource use that can escalate and sustain conflict. For example, outside parties have helped with negotiations and agreements, suggested solutions such as eco-parks or sustainable development and conservation mechanisms, pushed for adherence to international standards, and provided the necessary aid and economic incentives to make changes a possibility and help resolve conflicts. The United Nations, for example, passes resolutions and organizes arms embargos or sanctions to help the natural resource business curb illicit economies and move toward transparency. UN peacekeepers and outside security forces can establish peaceful zones and barriers around disputed land, pipelines, oil fields, and other resource-related structures, to help prevent the return of violence. International financial institutions such as the World Bank Group can help with advice on revenue transparency and management, economic stability, and financing resource-driven debts. International businesses and their affiliates can recognize illicit economies and require certification of legal import, export, and trade.

Locals and tour personnel on the other hand noted that, NGOs are often present in post-conflict situations to deliver humanitarian relief, help resettle refugees and internally displaced persons (IDPs) who have often been forcefully removed from resource-rich areas,

and monitor human rights violations. These NGOs also advocate for enforcement of international standards and other methods of natural resource wealth management. Other international negotiations and agreements have provided ways to mediate natural resource conflicts and build peace.

Environmental organizations at all levels attempt to coordinate international laws and regulations on exclusive economic zones, boundaries in international waters, fisheries management, and conservation and sustainability efforts, among other issues. Such efforts attempt to establish agreement over use of oceans to prevent conflict, environmental degradation, and other unsustainable outcomes.

They further noted that the existence of strong standards often allows for quick dispute resolution and effective resource management. Similarly, respect for international law allows for the existence and safety of important waterways. Another example of trying to address natural resource issues that extend past boundaries is the allocation of international water resources. The river and its tributaries are an essential source of water to these states in the arid Middle East region. Many experts believe that if the natural resources of water could be managed in a comprehensive, cooperative nature it would significantly aid the process of finding a sustainable peaceful solution to the conflict as a whole.

2.7.5 Demarcations

The researcher observed demarcations on the maps on the boundaries of the two states. Mapping helps identify areas that are conflictive. Although no strict correlation can be established between past conflicts and the occurrence of new ones, this information can be useful for identifying the co-presence of different factors. Second point, mapping can have a pedagogical function against widespread tendencies toward ‘amnesia’ in the world of development and policy-making. Beyond descriptive and illustrative functions, maps can be used as a tool for concertation and negotiation between stakeholders around an issue.

Mapping can be useful if used as the tool for identifying issues, interests and stakeholders, and contributing to designing solutions. Mapping is here participatory in the sense that it takes account of the viewpoints of all the stakeholders and relies on them for elaborating spatial tools of negotiation around natural resources use.

To avert such situations, Integrated Water Resources Management (IWRM) approach that has now been adopted internationally as the way forward for efficient, equitable and sustainable development and management of the world's limited water resources and for coping with such conflicting demands, has been incorporated under this Draft national water policy as one of the guiding principles therein.

2.7.6 Negotiations

The respondents argued that negotiation is by far the most efficient conflict management mechanism in terms of management of time, costs and preservation of relationships and has been seen as the preferred route in most disputes. Negotiation can be interest-based, rights-based or power-based and each can result in different outcomes. However, the most common form of negotiation depends upon successfully taking and the giving up a sequence of positions. In conclusion, negotiation can be used in facilitating the effective management of natural resources based conflicts. What needs to be done is ensuring that from the start, parties ought identify their interests and decide on the best way to reach a consensus.

The advantages therein defeat the few disadvantages of power imbalance in some approaches to negotiation, as already discussed. However, where parties in a negotiation hit a deadlock in their talks, a third party can be called in to help them continue negotiating. This process now changes to what is called mediation. Mediation has been defined as a continuation of the negotiation process by other means where instead of having a two way negotiation, it now becomes a three way process: the mediator in essence mediating the negotiations between the parties.

It is also a mechanism worth exploring as it has been successfully used to achieve the right of access to justice for parties.

Numerous efforts have been made through negotiations to establish cooperative water-management agreements. However, the ongoing political conflict and other obstacles of historical and cultural context have impeded negotiations for a comprehensive water agreement. Some nations have tried to depoliticize natural resources through a co-management approach that involves the local community, the government, and other stakeholders in the management of the resource in question. The two countries may chose the biosphere-reserve model to address the environmental conflict that has exacerbated by the years of political conflict the countries have experienced. The biosphere-reserve model seeks to solve environmental degradation and poverty in developing countries by balancing environmental protection with the needs of a growing population that relies heavily on natural resources for subsistence. The biosphere-reserve model depoliticizes the local and regional landscapes, encouraging an institutional framework that will hold the indigenous farmers responsible for degradation and allow for conservation without perpetuating poverty. The project seeks the collaboration of the government, NGOs, international aid partners, and the local population including the indigenous people and migrants living in the region. The reserve encompasses a vast forest that carries many vital natural resources but also carries a rich cultural and ecological history.

The last point, namely the embeddedness of disputes in wider setting, up to the national political arena is a factor of tension. It shows clearly the political nature of the issue, expressed by the intricacy of land-related and other stakes in conflicts over land and natural resources.

These findings are in agreement with those by Haflendorn (2000) that state actors and institutions are players and they are instrumental in the production of institutional uncertainty

and proliferation. State and development interventions tend both to strengthen a tendency toward institutional pluralism⁵¹. Furthermore, they generate an in-flow of resources of various orders (financial, technical, political, and symbolic) without being able to redefine and enforce the rules of the game. The discrepancy between resources in-flow and weak regulations generate room for opportunistic behaviours and conflict emergence⁵². His study is the only one really exploring the conflict settlement issue. He proposes the strong hypothesis of a shifting balance between peace restoring the web of social ties and justice invoking a higher moral or legal principle at the risk of disrupting social relations. Multilocalisation, sequences of conflict, appeasement and reopening, shifting relations and mutual instrumentalization between local and supra-local arenas: none of these conflicts can be seen as merely resulting from a unique – demographic or ecological factor. They are part of the historical trajectory of social relations revolving around the access to and control of natural resources. This means conflict and consensus are the two sides of the same coin.

2.8 Conclusion

The chapter sought to establish the cause of conflicts and effects on shared resources between Kenya and Tanzania. The chapter successfully identified that scarcity of resources, political conflicts; revenue administration and control over resources are the main cause of conflicts on shared resources between the two states. Social disagreements on sharing of economic benefits of natural resources assume major significance and may exacerbate existing religious, cultural and social tensions.

⁵¹ Haflendorn, H (2000) 'Water and international conflict', *Third World Quarterly*, Vol. 21, No.1, pp. 51-68

⁵² Ibid

CHAPTER THREE

CASE STUDY OF MARA SERENGETI PARK

3.1 Introduction

This chapter presents the case of the Mara Serengeti Park which is situated along the border of Tanzania and Kenya. The largest part of the Serengeti Mara ecosystem is found in Tanzanian territory, but Kenya contains, along with the especially fragile Masai Mara, the most important part of the Serengeti, with its roughly three-month long dry season. The Mara River is in addition the most important reservoir of water in the northern ecosystem.

3.2 Case of Mara Serengeti Park

Since its independence Kenya has had a capitalist form of government, whereas until the last twenty years Tanzania has muddled along with socialism. This has led to Kenya, through a massive amount of developmental help from the western world, and a much better building of infrastructure, becoming the strongest national economy of East Africa. Kenya's economic strength is about double that of Tanzania, and that has been the case since the construction of the Trans-Africa Highway from Mombasa to Kampala in Uganda - surfaced

and with four lanes over long stretches - along the most important east-west trade route of East Africa⁵³. Trade, the availability of transport, logistics, and the provision of services have allowed Kenya to develop more quickly and with more economic success than Tanzania. Even tourism to the country has been, over decades, overtaken by that of Kenya. Tanzania was not able to obtain the amount of help from the western world that Kenya did, and even a modern deep-water port at Tanga remains stuck in the planning stages. Because of the Trans-Africa Highway, the city of Mombasa has risen to become the most important port on the East African coast, well ahead of Durban in South Africa⁵⁴.

Both Kenya and Tanzania are spending huge amounts of money on developing as nature-reserves enormous regions of their territory in addition to the Serengeti area⁵⁵. The non-existence of uncompromising taxation systems, an ineffective administration lacking modern information technology, and corruption, ensure that these reserves are even today highly unprofitable. Both countries constantly require money infusions from the industrialised nations. Also, without international aid and donations, it will certainly not be possible to maintain the nature reserves for much longer. In Kenya and Tanzania, because of the climate, just 10 to 20% of the national territories can be used as agricultural land.

There are considerations which prevent the realistic maintenance of the nature conservation areas - beyond a notable increase of income and taxation - and also an improvement within the food sources of this quickly growing indigenous population. This

⁵³ Walpole, M. J., & International Institute for Environment and Development. (2003). *Wildlife and people: Conflict and conversation in Maasai Mara, Kenya: proceedings of a workshop series...13-16 August 2001*. London: International Institute for Environment and Development, pp. 7-9.

⁵⁴ Song, Jennifer & Thomas Whittington (2004) Why have some countries on international rivers been successful negotiating treaties? A global perspective. *Water Resources Research* 40: W05S06.

⁵⁵ Supra

leads as usual to local conflicts of interest. Within the large and poor population, acceptance of the idea of nature reserves is steadily dwindling. Land-reforms decided by earlier Kenyan governments, which involved the displacement of pastoral tribes from their agricultural areas, sent the population and its livestock into the Mara ecosystem, where, during the last few decades, numbers have increased umpteen times. The abundance of fodder available in the Masai Mara for livestock and animal breeding has led to the settlement of the previously pastoral-living Masai.

Since that time the strong and steadily growing competition for food between the livestock of the Masai people and the indigenous wild animal population in the Masai Mara is a long-lasting cause for dispute, and causes quickly falling numbers within the latter group. This problem doesn't just extend to the Serengeti-Mara ecosystem alone, for in many other nature conservation areas within East Africa the same problems exist, leading to similar conflicts and decrease of the wild animal population. Even the large lion population of East Africa, regarded earlier as being completely invulnerable, has decreased by around 70%.

In Tanzania, because of the high income from hunting tourism, lions continue to be pursued. Meanwhile, in Kenya, their population has reached such a critical point that we can reckon on them being extinct in the wild in less than twenty years. This development clearly means that besides the future maintenance costs of the protected areas in East Africa, enormous sums from financial resources must be expended on compensation, resettlement projects, and the education and training of the nomadic and partly-nomadic population. This could be obtained from adjacent countries, international investment funds, or charitable organisations alone. In addition to this, there is a need of strongly sustainable economic growth, aided by the industrialised nations, in order to increase national income directed towards development.

In the absence of functioning economic processes and taxation systems, salaries and wages, (most of which in any case are well below subsistence level), corruption in many parts of Africa has developed what might be called a 'shadow' economic system. Everybody tries to earn a living by soliciting business with others, in order to somehow feed themselves and their family. Because of this, the state coffers of African nations, whether large or small, lose enormous amounts of money. This can only be stemmed through a policy of development which offers much stronger education and training possibilities, and also puts into place properly functioning administration systems. States interactions over shared resources, with examples of water, which courses crossing international borders, may result to rise of interstate tensions or rather, ideally, advance cooperative behaviour. A view to developments, through paying attention to international water courses, a major internationally shared natural resource, has grown. Sharing of water, as an example of natural resources is one of the most outstanding factors that affects of relations⁵⁶.

To summarise: the necessity of economic growth cannot be purely for the benefit of the elite or the corrupt upper class, (as is commonly thought), but above all for fundamental things like ensuring that the population is fed, be that through farming or the additional purchase of food. Without an improvement of the economic situation, agriculture will penetrate further and further into the conservation areas. The northern Masai Mara - from the North Bridge up to Aitong, most suitable for the farming of wheat or maize - will in fewer than twenty years be under the plough, through continuous negative development, and with it a domino-effect will be triggered, which won't stop when it reaches other natural areas. We can presume that the worldwide desire for ecological fuels from bio-mass will just accelerate this effect. These consequences will exceed the damage brought about by the building of the 'Serengeti

⁵⁶ Brochmann, Marit & Nils Petter Gleditsch (2006) Shared rivers and international cooperation. Paper presented at the 47th Annual Convention of the International Studies Association, San Diego, March.

Highway' by a long way; not only will the Serengeti-Mara ecosystem thereby collapse, but also many other nature reserves⁵⁷.

3.3 Conclusion

It is absolutely clear that this great opportunity for nature conservancy and sustainable economic development in East Africa is not only feasible, but with appropriate planning and implementation could lead to a total win-win situation for Tanzania and Kenya, the two countries in which the Serengeti is located. Therefore Kenya must also become fully involved here, and not just from the viewpoint of nature conservancy. A future, successful tourism concept in the Serengeti-Mara ecosystem can only be acquired when both countries work together. It might also be worthwhile to re-open the Serengeti-Mara border crossing on the Sand River for touristic purposes⁵⁸. The success of a cross-border tourist concept has been more than proven by, for example, the ski-routes (inter-linked ski areas) in the Alps. A joint East African tourist visa could lower administrative expenses for all parties with vested interests, including the tourist.

However, for the success of both of them, the preservation of the Masai Mara must be urgently considered in the future tourism planning of the Serengeti-Mara ecosystem. The former has already lost more than seventy percent of its animal stock, and the predators, notably the big cats, can nowadays hardly find enough food to survive. Kenya must finally get its homework done on the Mara ecosystem, and not think about relying any further on the quick, destructive profit that can be made from the tourist trade; it also needs to reduce its agriculture and livestock breeding within the heartland. If not, then in

⁵⁷ Tosef, Hans Petter Wollebæk; Nils Petter Gleditsch & Håvard Hegre (2000) Shared rivers and interstate conflict. *Political Geography* 19(8): 971–996.

⁵⁸ *Ibid*

only a few years the Mara will be left with the consequences of the construction of the Serengeti Highway, which have already been identified.

CHAPTER FOUR

CURRENT STATE OF RELATION BETWEEN KENYA AND TANZANIA

4.0 Introduction

This chapter presents the current state of relations between Kenya and Tanzania on the shared resources. It depicts what has been put in place to govern the relation between the two countries in terms of laws, agreements and other parameters pertaining the relationship between the two states on matters of shared resources.

4.1 Existence of the Treaty

According to the policy makers and the park managers, there exist the East African Community Treaty. The objectives of the Community are to develop policies and programmes aimed at widening and deepening cooperation among the Partner States in

political, economic, social and cultural fields, research and technology, defense, security and legal and judicial affairs, for their mutual benefit.

Furthermore, disputes over access to and use of natural resources are aggravated by the multiple and parallel systems of natural resource management and governance that exist at both the formal and informal level. Combined, these factors create an environment in which confusion over claims to natural resources and land is common and where resource rights – whether those of a pastoralist, farmer, or investor are often vulnerable to dispute. In addition, a mosaic of tenure arrangements, both statutory and customary, overlap and inter-play, further complicating the situation.

According to the park managers and the policy makers, the existence of the Community ensures *inter alia*: the attainment of sustainable growth and development of the Partner States by the promotion of a more balanced and harmonious development of the Partner States; and the promotion of peace, security, and stability within, and good neighborliness among, the two states.

4.2 Principle Governance

They further asserted that, the fundamental principles that are to govern the two states are mutual trust, political will and sovereign equality; peaceful co-existence and good neighborliness; and peaceful settlement of disputes. The Treaty confers the East Africa Court of Justice jurisdiction to hear and determine any matter *inter alia*: arising from an arbitration clause contained in a contract or agreement which confers such jurisdiction to which the Community or any of its institutions is a party; or arising from a dispute between the Partner States regarding this Treaty if the dispute is submitted to it under a special agreement between the Partner States concerned. The EACJ acts as the main institutional instrument for settling disputes among members of the East African Community, namely Kenya and

Tanzania. EACJ thus demonstrates concerted efforts towards averting natural resource based conflicts in East African community.

“However, it has been observed that under the Treaty, there is no mechanism in place for the enforcement of matters which are not of a pecuniary nature and like other International Courts; the EACJ has no enforcement machinery of its own”⁵⁹.

Execution of its orders relies on rules of procedure in force in a Partner State in which it is to take place, and to this extent, even the success of the environment provisions of the Treaty and the Protocol when ratified by all the Partner States, will depend on the willingness of the Partner States to comply with its provisions⁶⁰.

4.3 Protocol on Environment and Natural Resources Management

According to the park managers and the policy makers, the relationship between the states is governed by the Protocol. The Protocol on Environment and Natural Resources Management provides for the cooperation in Environment and natural resources management. More specifically, on its relation to the management of resources, the protocol has these provisions: The partner States are to develop, harmonize and adopt common national policies, laws and programmes relating to the management and sustainable use of water resources and shall utilize water resources, including shared water resources, in an equitable and rational manner. Article 18 of the Protocol is related to the management of natural resources. It requires that: the Partner States develop and harmonize common policies, laws and strategies for access to exploitation of mineral resources for the socio-economic development of the Community; develop common measures for ensuring that mineral resources are exploited in an environmentally sound manner; develop strategies and programmes for restoration and

⁵⁹ Brochmann, Marit & Nils Petter Gleditsch (2006) Shared rivers and international cooperation. Paper presented at the 47th Annual Convention of the International Studies Association, San Diego, March.

⁶⁰ Breitmeier, H. and Wolf, K. (1993) ‘Analysing regime consequences’ *Regime Theory and International Relations*, edited by V. Rittberger, Clarendon Press, Oxford.

rehabilitation of mines and quarries; cooperate in research and exchange of data and information.

4.4 Existing Laws

There are various legal instruments that govern the access, use and management of environment and natural resources in Kenya. Administrative conflict management mechanisms, litigation and arbitration are the main strategies for addressing conflicts over environmental resources under the Kenyan law. They often overlap resulting in different legal bodies that can be complementary, competitive or clashing. Some of the laws set up arbitral tribunals that are tasked with settling natural resource conflicts arising under the particular laws. They set up reporting mechanisms that are mandated to handle complaints against alleged violation of the rights of persons to use access or participate in the management of natural resources as an attempt to forestall any conflicts or disputes. However, some of them hardly provide a comprehensive framework on the management of conflict arising in use and management of such resources. The country's constitution is key in enhancing access to justice including environmental justice and the East African countries' constitutions are no different. The three countries' constitutions in review herein now provisions guaranteeing environmental rights, and also spell out state duties to protect the environment and the state's natural resources⁶¹.

According to majority of the policy makers and park managers, the legal framework that exists binds the relationship between the two states that is the Legal Basis of Natural Resource Conflicts. A legislative framework founded on the presumption that the law of the colonial power is superior to the native customs and traditions that governed access and allocation of property and property rights. This creates an enduring conflict in natural

⁶¹ Ibid

resource management in Eastern Africa. The conflict was borne out of the simultaneous operation of two different legal systems, one based on perceptions of property and the other based on traditional African perceptions. The countries seek to impose their systems and institutions on and for this purpose created an elaborate legal and policy framework. At the same time they seek again through policy and law, to extinguish all native forms of resource management institutions and systems. Even where the administration does not interfere with traditional resource management systems, as in certain parts of Tanzania and Uganda, there were, nevertheless, a tacit policy commitment to changing traditional resource tenure to bring it closer to what the colonial administrators were comfortable with⁶².

According to the locals and the tour personnel, the vast majority of people continue to relate with each other and with their natural resource base on the basis of customary laws and norms. Access to natural resources in these rural areas is governed by customary rules applied by traditional institutions, even though the statute books provide a different basis for such rights founded on the regime of property laws that were imposed by the colonial system. This legal environment creates an abiding conflict situation that is both institutional and systemic. The customary legal arrangement has its own institutional resource management framework that allocates resources, settles disputes when they occur, exacts penalties and inflicts punishment on offenders, and otherwise governs the resource use. It is a framework that is not necessarily within the formal statutory system, and which, in certain instances, is informed by ideals that are contradictory to ideals that are the basis of the formal system. The traditional framework derives its legitimacy not from the policy and legislative actions of the governments, but from the customary norms of traditional society. The sanctions applied within this framework are equally legitimated not by the formal structures of government but

⁶² Brochmann, Marit & Nils Petter Gleditsch (2006) Shared rivers and international cooperation. Paper presented at the 47th Annual Convention of the International Studies Association, San Diego, March.

by the same customary norms and beliefs. Given the political systems discussed above, these legitimization processes that exist outside the formal policy and legal framework are bound to be a source of serious conflicts⁶³.

They further noted that, in the case of conflicts within countries, the distinguishing features in most cases is the inequality in the re-distribution of wealth created from natural resources and in the case of conflicts between countries, the striking feature in most instances is usually conflicts arising over the control of resources. From the present conflicts, it can be seen that conflicts within countries are far more common than conflicts between countries. In certain cases, tensions have been ongoing for decades, if not for centuries, and resource arguments can be traced back to Malthus⁶⁴.

The economic distributional aspects of natural resource conflicts may assume major significance and exacerbate cultural, religious, political and social tensions that already exist in many of these cases. This could be between countries as well as within countries. In certain cases, it could be the sole reason for conflicts. Such conflicts within countries also erode some 'people's support of institutions leading to internal turmoil, which can, in turn, weaken the economy and promote more conflict.

*“Conflicts over natural resources are not only about natural resources. They are about social and cognitive boundaries, “identities” placing enmity here rather than elsewhere”*⁶⁵

While the legal systems and institutions introduced during the colonial era have become formal structures governing resource management in most of Eastern Africa, their traditional

⁶³ Tir, Jaroslav & John T Ackerman (2009) Politics of formalized river cooperation. *Journal of Peace Research* 46(5): 623–640.

⁶⁴ Reuveny, R. (2002) 'Economic growth, environmental scarcity, and conflict', *Global Environmental Politics* 2:1, February, Massachusetts Institute of Technology.

⁶⁵ Ibid

counterparts continue to operate both formally and informally. In Kenya, Uganda, and Tanzania, recognition is given to customary law in the statute books, although in practice the governments and the courts have tended to ignore the customary laws and to institutionalize the imported law. This is virtually inevitable given the limitations on the applicability of customary law. There appears to be a tacit understanding at the formal governmental levels, in all the three former colonies, that the evolution of these societies is from traditional systems to imported, formalized systems. So, even where customary laws are applied, this is done as a temporary measure pending the adoption of statutory systems. Ethiopia is an exception in this regard given its long history as an independent state, although it also has its own situations of resource conflict⁶⁶.

The most serious conflict situation borne out of the legal problems discussed relate to the issue of tenure. Land and resource tenure systems espoused by the formal policy and legal framework, are ones founded on Western perceptions of property, in which ownership and control vests on an individual person or institution to the exclusion of all other claimants. The hallmark of this tenure system is the individualized private title that bestows absolute ownership with the right to exclude others. The individualized tenure system came into existence in Western Europe at a certain stage in the evolution of the capitalist economic system. By the time colonialism commenced in Africa, they recognized this as the best form of tenure, arguing that it was conducive to the most productive exploitation of natural resources. Traditional tenure systems on the other hand, vested the control of land upon the community rather than the individual. There was no concept of land ownership in the sense of excluding all other claimants. Rather, there were strict rules of access and use of land that ensured that all persons had access to land in accordance with their needs, whether for

⁶⁶ Ibid

settlement, farming or pasture. Once a piece of land was allocated to the individual or family, and so long as the allocated remained in effective occupation and use of it, they retained the exclusive control and right to the land and its produce. However, the moment the land was vacated or left idle, control over it reverted to the community and it became part of what was available for allocation to other members of the community⁶⁷.

This communal tenure system did not make much sense to the colonial administrators who had been schooled in the primacy of private property. They considered it a free access system in which nobody was concerned to safeguard the resource, since nobody really owned it. They argued that the system encouraged unsustainable exploitation of the resource as every person sought to maximize the benefits they derived from it. Thus throughout the colonial period, the colonists and the colonial administrations sought to replace the traditional tenure systems with the tenure system they were most familiar with⁶⁸.

Disagreements also arise when these interests and needs are incompatible, or when the priorities of some user groups are not considered in policies, programmes and projects. Such conflicts of interest are often inevitable feature in most societies. It has been posited that four important conditions influence how access to resources could become contested. These are: the scarcity of a natural resource; the extent to which two or more⁶⁹.

Study findings by Reuveny (2002) agrees with these that with a rich resource base, and with diverse cultures, clans, languages, religious beliefs, diametrically opposing economic systems, political ideologies and systems of governance is no exception to conflicts and

⁶⁷ Brochmann, Marit & Nils Petter Gleditsch (2006) Shared rivers and international cooperation. Paper presented at the 47th Annual Convention of the International Studies Association, San Diego, March.

⁶⁸ Tir, Jaroslav & John T Ackerman (2009) Politics of formalized river cooperation. *Journal of Peace Research* 46(5): 623–640.

⁶⁹ Tir, Jaroslav & John T Ackerman (2009) Politics of formalized river cooperation. *Journal of Peace Research* 46(5): 623–640.

terrorism arising from the economic distributional aspects of natural resources⁷⁰. Given the large size of the region with many of the countries sharing common borders, both land and marine, sharing resources is a complex activity and in such cases conflicts are inevitable between neighbors and rivals. It is likely in many cases the larger countries and those that are more economically affluent and dominant are likely to have access to resources more than smaller countries that are also economically weak. Furthermore, weaker countries depend on larger countries for their economic survival, trade and security. In such cases many disputes go unnoticed, although internal tensions may prevail⁷¹. Despite the dominance of some large countries, many conflicts have been reported between large and weaker nations as well as between smaller nations. With a large wealth of transboundary resources in the region, conflicts are likely to prevail in the future⁷².

As a result the issues have become complicated and disputes commonplace. While some of the claims over this territory are based on the exclusive economic zone others have been based on historical grounds. Although at present the natural resources of the disputed zone has been called by some authors as comprising of little more than concentrations of bird droppings and shelters for fisherman, it is potentially rich in oil and natural gas deposits apart from the rich marine resources. The area is also strategically an important sea lane for commercial ships as well as for the security of big trading and maritime powers like the

⁷⁰ Reuveny, R. (2002) 'Economic growth, environmental scarcity, and conflict', *Global Environmental Politics* 2:1, February, Massachusetts Institute of Technology.

⁷¹ Klare, M. T. (2001b) 'Resource Wars: The New Landscape of Global Conflict', Metropolitan Books/Henry Holt & Co.

⁷² Ibid

United States and Japan⁷³. There has been tension between several countries in the region over the islands, mainly involving China and sporadic military action has taken place. For example, China and Vietnam fought a short battle in the Paracels in 1974 and in 1995. Many other disputes have been recorded over this large collection of islands and many more unresolved maritime boundary claims to areas with high petroleum potential remain⁷⁴. Conflicts could potentially arise from disagreements over property rights in the course of development of the resources

Because of the large potential for oil and gas discoveries and the rich marine resources in the South China Sea the disputes are likely to be around and even get bigger depending on the value of the resources. It is most likely that China will play a dominant role and if smaller states confront such moves, it could lead to a larger conflict. Until now, no serious challenge has been forthcoming and hence the conflict has gone mostly unnoticed though the claim over some issues is a contentious one, in the countries involved. The disputes have strained relations between some countries and this could limit cooperation, especially economic, and stifle economic growth in the regions⁷⁵. There is also a possibility that outside superpowers may get involved given its strategic location for commercial and military purposes.

Apart from the off-shore oil and gas conflicts and the strategic importance of the seas to some countries, the sharing of transboundary resources between countries is a major issue and from time to time many conflicts have been reported. All countries, (except land locked),

⁷³ Magno, F. A. (1997) 'Environmental Security in South China Sea', *Security Dialogue*, Vol. **28**, No. 1: 97-112.

⁷⁴ Valencia, M. J. (1990) 'International conflict over marine resources in South-East Asia: Trends in politicization and militarisation' in L. T. Ghee, and M. J. Valencia (eds) *Conflict over Natural Resources in South-East Asia and the Pacific*, (Chapter 4), Oxford University Press.

⁷⁵ *ibid*

engage in traditional fishing in the region and it is an important economic activity where generous incentives have been provided by the respective governments to operate in the areas. However, in many parts of the region over-fishing has severely depleted fishing stocks, except in the South China Sea and as a result many countries compete for the fish stocks in the region often straying into neighboring countries' territorial waters. Such disputes are frequent and in certain instances they flare into bigger conflicts⁷⁶.

Another resource issue that could lead to an armed conflict between nations is that of the control and use of water resources in the region. Sharing of the Rivers which supports one of the biggest inland fisheries between six countries is an issue that has already led to much discussion between the countries involved. Any unequal distribution of this resource or polluting the river could trigger a major conflict⁷⁷. Excessive use of water by one or more nations could create water shortages in downstream countries as well as affect agriculture (through a shortage of water and through salt water intrusion), the recreational use of the river and the water available for generation of electricity. The health of many thousands, if not millions of downstream inhabitants could be affected if water is polluted. The close proximity of many countries in the region sharing common borders and the sea results in several negative externalities arising from the use of natural resources. Furthermore, illegal use of territory and/or resources could also occur. This has the potential to lead to conflicts if appropriate action is not taken or compensation provided to affected parties.

⁷⁶ Ganesan, N. (2001). 'Illegal fishing and illegal migration in Thailand's bilateral relationships with Malaysia and Myanmar', pp. 507-527, in A. T. Tan and J. D. K Boutin (eds), *Non-Traditional Security Issues*, Institute of Defence and Strategic Studies, Singapore, Select Publishing Pty Ltd.

⁷⁷ Ganesan, N. (2001). 'Illegal fishing and illegal migration in Thailand's bilateral relationships with Malaysia and Myanmar', pp. 507-527, in A. T. Tan and J. D. K Boutin (eds), *Non-Traditional Security Issues*, Institute of Defense and Strategic Studies, Singapore, Select Publishing Pty Ltd.

The pollution no doubt could affect the rich fishing and prawn grounds of the region. Air pollution affecting neighboring countries is another major issue in the region. As water becomes scarce owing to prolonged drought, increased temperature and the decrease of rainfall, competition for this vital resource will intensify. Competition for shared transboundary water resources between nations may occur and lead to conflict regarding access to and utilization of the resource⁷⁸. In the Lake Victoria Basin, there are several shared transboundary water sources, including the lake and its tributaries, such as the Mara River. The Mara River, for example, is a transboundary water source shared between Tanzania and Kenya. The river originates from the Mau forest complex in Kenya and flows through large-scale irrigated agriculture in Kenya to open savanna grassland in the Maasai Mara National Park in Kenya and Serengeti National Park in Tanzania. These national parks are renowned protected areas in the region. The Mara River further flows through small-scale agricultural land (crop and livestock husbandry) in Tanzania before discharging into Lake Victoria. Therefore, water from the Mara River is utilized for domestic consumption, livestock farming, irrigated agriculture, wildlife and environmental maintenance. The likely conflicts regarding access to and use of water from the Mara River will be between upstream users in Kenya and downstream users in Tanzania, and between the wildlife and human populations, which may also spark conflicts between Kenya and Tanzania⁷⁹. An inadequate water supply in the Mara River is caused by two main factors, which impact on each other: climate change, and land use and land cover. Climate change leads to a decrease in rainfall and rise in temperature, hence an increase in evaporation. On the other hand, a change in land use and cover, such as the deforestation in the Mau forest complex caused by the expansion of

⁷⁸ Duncan, R and Chand, S (2002) 'The economics of the 'Arc of Instability'', *Asia-Pacific Economic Literature*, **16**(1), May.

⁷⁹ Ibid

agriculture and encroachment on the forests by livestock keepers, alters run-off and infiltration processes, thus interfering in the hydrologic cycle.

Inappropriate land use and land cover can result in land degradation as a result of poor planning and ineffective water resource management systems along the Mara River in both Kenya and Tanzania⁸⁰. Competition for contested or shared resources has become more intense in recent years due to economic developments, such as higher commodity prices, and environmental changes, such as overutilization of agricultural land, overgrazing, and desertification, as well as regional and global climate change. It is unlikely that increasing stresses among states resulting from these factors can be successfully resolved using traditional legal methods, particularly adjudication⁸¹.

4.5 Success Rate of the Implemented And Recommended Solutions

It is important that conflicts arising from resource control and use are managed well because given other tensions that prevail (e.g. as religious, cultural and ethnic) minor conflicts could easily flare into larger conflicts engulfing the entire region. Although many of the resource-related conflicts are low in intensity or in some cases, isolated incidents compared to resource related conflicts in some countries in Africa, the vast resources have the potential to create larger conflicts and destabilize the region.

4.5.1 Improved Water Management

According to them, there has been improved water management and hence reduced the degradation of water sources and enhances equitable access to and utilization of the resource, thus reducing or alleviating sources of conflict pertaining to water access and utilization.

⁸⁰ Duncan, R and Chand, S (2002) 'The economics of the 'Arc of Instability'', *Asia- Pacific Economic Literature*, 16(1), May.

⁸¹ *ibid*

According to the locals and tour guides, countries have shared transboundary natural resources such as water, share information on meteorological, hydrological and socio-economic activities, and the way they are practiced in order to maximize the potential of the transboundary resources by minimizing tensions and conflicts that may otherwise result.

4.5.2 Integrated Application of Litigation

There has been more use of an integrated application of litigation, alternative dispute resolution mechanisms and traditional justice systems in the management of natural resource conflicts. Litigation is desirable in that it is able to secure compliance by bringing unwilling parties to the process and also giving a binding outcome that is enforceable without further agreement. Such parties may have to live with such decisions making them harbor bitterness that may cause recurrence of the dispute in future with possibly worse effects as a way of seeking revenge. Litigation as a settlement process may therefore be the best placed mechanism to handle natural resource conflicts where there is the immediate need to quell warring factions or where there is an urgent need for an injunction to preserve the status quo in environmental matters⁸².

According to the observation by the researcher, a legislative framework and procedures for recognition, protection and registration of community land rights has been established; vesting of community land in the communities identified on the basis of ethnicity, culture or similar community of interests; management and administration of community land by organs of the communities; and holding of unregistered community land in trust by county governments. This legislation has gone a long way in promoting effective management of natural resource based conflicts be it through organized community legal action or through

⁸² Hensel, Paul R (2005) Codebook for River Claims Data. Issue Correlates of War (ICOW)

ADR and traditional justice systems thus promoting the development agenda in the relevant areas.

4.5.3 Balancing Competing Interests

Regarding water resources management, it has rightly been pointed out that adequate institutional structures at the transboundary, national, and regional levels have played a crucial role in balancing competing interests over water resources and enabling sustainable water cooperation. This is believed to be possible through institutionalization of cooperation which can help to build trust and provide solutions for the challenges in shared waters. This is due to the finding that where institutional capacity for dialogue and the management of disputes is present, conflict is less likely. Transboundary Water Users Forum has been formed as a platform to dialogue and spearhead the transboundary water resources management initiative. The East African Community Commission has been involved in the conservation. A collaborative effort with the Nile Basin Initiative (NBI) and the Nile Equatorial Lakes Subsidiary Action Programme (NELSAP) in the management of the River Basin has been greatly achieved to ensure synergy building between WWF and NBI initiative in River Basin. Water sources catchment protected. Successfully sensitized the government authorities and lobbied political leaders for the re-establishment of the original forest boundaries. Catchment Committee has been formed in Tanzanian part of the Basin. This committee is equivalent to WRUA board in Kenya. This committee has 14 Water Users Associations formed by Programme Awareness raised amongst the local communities and other key stakeholders about the Tanzania's National Water Policy.

According to the policy makers and park managers, Information and data documented on environmental, hydrological and social conditions, and now being disseminated. Community Action Plans for water management and other natural resources have been prepared and are under implementation. Catchment Management Strategy has been developed and led to the

development of catchment Joint Water Resources Management Plan. Facilitated the formation of Water Users Associations as legal entities in accordance to the National Water Policy requirements; Capacity built amongst vulnerable Community-Based Groups involved in Income Generating Activities, and using technologies that support sustainable natural resources and conservation Transboundary Water Users Forum has been formed as a platform to dialogue and spearhead the transboundary water resources management initiative.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This thesis has sought to investigate the role of shared resources in interstate sharing resources. The principal research question has been whether conflicts can be motivated and sustained by natural resource exploitation. If interstate peace and democracy are to be achieved, then there is need to adopt an integrated approach to both conflict resolution and dispute settlement mechanisms in order to promote peace, coexistence, justice for all and participation by all the involved parties. There is need to move from the formal justice system in managing natural resource conflicts and incorporate other informal mechanisms as these will promote the spirit of the Constitution of which seeks to adopt a more participatory and just approaches in management of conflicts. There is need for increased integration of principles of sustainable development into the national legal frameworks of the two countries and especially the principle of public participation.

The study concluded that the most important is the proposition that natural resources have a direct effect on interstate relations. If natural resources affected conflict only through their adverse effect on the state, expected would be that all resource revenue sources to have the same effect on conflict. Contrary to this, the study found that natural resources tend to have an effect on conflict only when the resource sites are located in the conflict region.

Developing shared understandings of the resource and conflict context: and preventing violence over resources begins with an analysis of the role that resources can play in conflict. Ideally, the conflict analysis process should be inclusive and participatory. There is a need to make more use of an integrated application of litigation, alternative dispute resolution mechanisms and traditional justice systems in the management of natural resource conflicts. However, Alternative Dispute Resolution mechanisms such as negotiation, fact finding facilitation and mediation have the potential to enhance environmental justice since they allow parties to enjoy autonomy over the process and outcome; they are expeditious, cost-effective, and flexible and employ non-complex procedures. They greatly enhance the principle of public participation in natural resources management. They result in mutually satisfying outcomes which essentially resolves the conflict thus achieving lasting peace among the previously conflicting parties. These mechanisms are also useful in achieving environmental democracy in Kenya and East Africa as a region. There is a need to manage natural resource based conflicts for the sake of peace, prosperity and sustainable development.

5.2 Recommendations

The crux of the matter boils down to strong wills that enable compromise and firm decision-making. The ongoing situation, if left unchecked, could spiral into more disputes. Yet the shared resource dispute resolution and its implementation are impossible without leadership commitment and political will. The best option is a congenial agreement between Kenya and Tanzania. Consequently it is recommended:

Both countries should work together to implement the agreement by mapping the border according to international regulations governing sharing of natural resources.

Each country should undertake measures to control the destruction of water catchments around Serengeti specifically deforestation and bad farming practices. Population control may also be beneficial to Kenya and Tanzania.

Kenya and Tanzania should devise a cooperative framework that will enable joint projects; specifically hydropower production and fishing. Control of bad land practices should be paramount.

What is the relevance of the population you want to study? Have you achieved your objectives? What about the hypotheses of the study? Did you prove/disprove them? Where is Horn of Africa and the case study?

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APPENDICES

APENDIX I: QUESTIONNAIRE FOR LOCALS AND TOUR GUIDES

Please tick where applicable in the questions asked based on your opinion.

1. Do what extend do you agree with the following as the causes on shared resources between Kenya and Tanzania?

a) Disruption in the tourist trade Agree [] Disagree []

Explain briefly.....

b) Revenue collection and administration Agree [] Disagree []

Explain briefly.....

c) Negative perception between the countries Agree [] Disagree []

Explain briefly.....

2. What can you comment on the state of relation between Kenya and Tanzania?

.....
.....

What can you comment on the following regarding the relationship between Kenya and Tanzania;

a) Legal framework governing the relationship;

.....
.....

b) The number of disputes on shared resources;

.....
.....

c) Mutual implementation of policies;

.....

3. (a) Among these methods which have been put in place to solve conflicts that arise from disputes on shared resources?

a) Conflict resolution team in place []

b) Demarcation of boundaries []

c) Negotiations []

3 (b) what other methods have been put in place to ensure peaceful co-existence between the two states?

.....

4. To what extent do you agree with the following statements concerning the success rate of the methods of conflict resolution?

Number of conflicts have declined Agree [] Disagree []

The bilateral relationship has strengthen Agree [] Disagree []

Peaceful implementation of policies Agree [] Disagree []

**APPENDIX II: INTERVIEW GUIDE FOR POLICY MAKERS AND PARK
MANAGERS**

1. What the causes of disputes on shared resources between Kenya and Tanzania?

2. What can you comment on the state of relation between Kenya and Tanzania?

3. What are the methods that have been put in place to solve conflicts that arise from disputes on shared resources?

4. Have the methods implemented been successful in curbing disputes arising from shared resources?

5. What do you think should be done in future to ensure stable interstate relations on sharing of natural resources?

APPENDIX III: OBSERVATION SHEET

SNO	Statement	Indicators	Remarks
1.	Ecosystem destruction		
2.	Differing taxation policies		
3.	Existence of a legal framework		
4.	Guarding of boundaries		
5.	Joint democracy		
6.	Trade relationships		
7.	Interdependencies		
8.	Free criss-crossing of the boundaries		
9.	Peaceful relationship between park personnel of the two states		

yeah, nimehesabu 78.5 ya juzi juzi na 2k nakuowe then (35*2000 farming)