



Effects of collaborative management of shared natural resources on inter-state relations in the Horn of Africa

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ABSTRACT

The management of shared natural resources by Horn of Africa states exerts both positive and negative effects on inter-state relations in the region. On one hand, inability to collaboratively manage these resources for the common good of all states involved risks a trigger to interstate conflict in the region. Conversely, effective and collaborative management of these shared natural resources can provide good avenues for these states to cement their relations for the common good of all parties involved. In line with each state's national interests, huge amounts of capital are spent to develop and protect the resources in the Horn of Africa region. However due to lack of clearly defined policies and inadequate management strategies these resources have been mismanaged and as a result led to conflict, food shortages and environmental problems. The search for aid constantly puts the states in a dilemma, over how to benefit from the resources, creating mistrust among the nations. 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.'

Keywords: Collaborative Management; Shared Natural Resources; Inter-State Relations; Horn of Africa

I. INTRODUCTION

Globally states have shared naturally occurring resources which cut across their respective boundaries sometimes in more cooperative manner while in other instances lead to conflicts and war. For centuries states have found themselves in compromising situations of having to share resources which traverse their territorial boundaries with their allies or their foes. Occasionally, states have established normative institutions responsible for managing these shared resources equitably and sustainably meant to ensure cordial relations are maintained and resources are well used. Some of the notable resources shared among states include rivers, mountains, ecosystem, lakes, oceans and wildlife conservancies.¹ There exist roughly 145 nations whose territories extend to where shared natural water basin resource lie, with about 30 of them lying entirely within shared water basin. There exist 19 international freshwater drainage systems; pooled by five or more riparian nations.² The Danube covers ground in 18 countries, the Congo River, Zambezi Drainage, Rhine, Nile and Niger, are shared by between 9 and 11 countries. Additionally, there are 13 universal freshwater drainage sinks which are shared amongst 5 to 8 riparian states.³

The African continent has a number of shared natural resources ranging from shared geographical features such as shared Mountains to shared wildlife conservancies, shared ecosystems, shared river basins as well as shared Oil resources. Shared Water basins remain the largest shared natural resource in Africa, which constitutes approximately 64 per cent of the continent's land area.⁴ The water basins also contain forests that host most of the continent's terrestrial biodiversity.⁵ Most of the arable land is located around river basins, which make agricultural productivity and food security closely linked and protection of such, is the primary interest of most African states. In total, Africa has

¹Paisley, R.K. & Henshaw, T.W. (2013). *Transboundary Governance of the Nile River Basin: Past, Present and future*. Canada. University of British Columbia: Elsevier Publication

²Ibid.

³Ibid.

⁴UNEP.(2010). "Africa Water Atlas". Division of Early Warning and Assessment (DEWA). United Nations Environment Programme (UNEP). Nairobi, Kenya.

⁵Cop-18 side Event Concept Note.(2015). *Transboundary Natural Resource Management in a changing climate-the case of shared water-sheds in Africa*. Nairobi. Africa Development Bank Publication



approximately 80 shared water basins.⁶ Notably, Mount Kilimanjaro, Mount Elgon, Sudd wetland, Lake Victoria, the Congo River, Nile River, Lake Abbe, the Maasai Mara national parks among others are some of the shared natural resources which have brought cooperation, conflict and even war into the Continent in same magnitude.

In the Horn of Africa region, a number of shared natural resources exists with the most notable ones being Lake Victoria, Nile river basin, Mount Kilimanjaro, the Ilemi Triangle, the rift valley and the Abyei Oil basin. The region also shares colonial legacy largely influencing their domestic politics and their foreign relations. The region also experiences almost the same resource problems.⁷ There is a growing realization that cooperation can solve some of the pertinent problems facing the region. It is on this rationale, that this research seeks to analyze the role of shared natural resources management in enhancing inter-state relations in the Horn of Africa region.

1.1 Statement of the Problem

The matter involving shared natural resources keeps recurring due to the tenets embraced by international law, which mandates sovereign nations to fully administer natural resources found within their territories. The point of contention lies in the jurisdiction within which management of shared natural resources falls. The neoliberal institutionalism theory posits that, interdependence is supposed to bring peace but rather it often brings war.⁸ In this regard, lack of cooperation in use of shared resources could lead to conflicts and vice versa. As such, the daunting challenges confronting sovereign states stems from devising appropriate natural resource management strategies, for shared inter-state resources which achieves tenets of equity, prosperity, security and sustainability in line with the premise of the neoliberal institutionalism theory.

The Horn of Africa is riddled with a number of disputed shared natural resources pitting one sovereign state against the other, or involving several states as exhibited by the case of Ilemi Triangle in the geopolitics of the Horn of Africa.⁹ Whereas, several studies have been undertaken in regards to shared resources, limited knowledge exists explaining the nexus between state cooperation or lack of it thereof and the management and utilization of shared resources. This study realizes a gap in knowledge, explaining how shared management of Ilemi triangle enhances inter-state cooperation. The manner in which the resources in Ilemi Triangle are collaboratively managed by the 3 states (South Sudan, Ethiopia, and Kenya) will determine the degree of cooperation among these countries. The consideration of these shared resources by the three states as being public resources, exhibit both; the consumption indivisibilities and the non-excludability aspects that present complexity in their relations. Essentially, this study explores; what is the nature resulting state relations emanating from sharing Ilemi Triangle? What strategies have been used in the Horn of Africa in addressing the negative effects that arise from shared resources? What are the impediments to collaborative management of shared resources in the Horn of Africa? What are the interests on Ilemi Triangle and state cooperation in Horn of Africa? How does the economic potential of Ilemi Triangle result to economic transformation?

1.2 Research Objective

To examine the extent to which collaborative management of shared natural resources enhances inter-state relations in the Horn of Africa.

II. LITERATURE REVIEW

1.3 Theoretical Framework

This research study adopted the Neoliberal Institutionalism Theory which articulates cooperation under anarchy in international relations. It is one of the big ideas in the practice of international relations also known as the democratic peace thesis.¹⁰ The theory stems from Emmanuel Kant's Philosophy on perpetual peace holding that liberal states do not go to war with other liberal states. The major proponents of the theory include Keohane, Haas and Nye who emphasize that liberal states are peaceful to each other but as well are aggressive as any other type of state in their relations with

⁶Africa Water Task Force.(2002). *Water and Sustainable Development in Africa*. An African Position Paper.

⁷ Omar, M.H. (2015). *The Implications of the Shared Natural Resources on Interstate Relations in the East African Community: A Case Study of Maasai/Serengeti National Parks*. Nairobi.

⁸Baylis, J., & Smith, S. (2001). *The Globalization of World Politics. An introduction to international relations*. (2ndEds). New York: Oxford University Press

⁹Jones, M., Jones, R., & Woods, M (2011). *An Introduction to Political Geography: Space, Place and Politics*. London: Routledge.

¹⁰Baylis, J., & Smith, S. (2001). *The Globalization of World Politics. An introduction to international relations*. (2ndEds). New York: Oxford University Press



authoritarian and stateless people.¹¹The basic principle guiding neoliberal institutionalism theory is the emphasis on commitment to democratic forms of government where interdependence breeds peace. The European Union is one example of neoliberal institution which started like a regional community to encourage multi-lateral teamwork in order to manufacture of coal and steel. Neoliberal institutionalism is considered by numerous authors as the persuading test to authenticity and neo-pragmatist consideration. The theory stipulates that the route towards peace is to have autonomous states pool their assets and considerably surrender some of their sway to make coordinated groups to advance monetary development or react to territorial issues. This presents transnationalism and complex interdependence. Complex reliance gives the world four essential qualities in view of; expanding linkages among states and non-state performers; new motivation of global issues with no refinement amongst low and high legislative issues; acknowledgment of numerous channels of communication among on-screen characters crosswise over national limits and the decrease of adequacy of military power as an instrument of statecraft.

The neoliberal institutionalism theory assumes that states are principal actors in international relations although, not the only the significant actors. In their pursuit of national interest, states will use all means available to it to maximize use of its power to achieve the interests, where as there is no central or supreme authority to regulate the states' actions and relationships with other states in the system. Neoliberal institutionalism theorists see establishments as the intermediary and the means through which cooperation is to be achieved among various entities in the international system. These institutions are considered persistent and having set of rules which govern and propose roles, regulate actions and outline expectations. Institutions can encompass organizations, Treaties, agreements and formal practices which states accept as binding. The neoliberal institutionalism theory is applicable to this study as it will inform the state behavior in efforts towards cooperation in an anarchic system. In this regard, shared resource management in could enhance inter-state cooperation in the sharing of the resources in the Ilemi Triangle. This could lead to interdependence, and by extension, peace in the region. On the other hand, failure to foster commitment to cooperation in the sharing of such resources could breed divisions and conflict in the area.

1.4 Empirical Literature Review

1.4.1 Global Context of shared natural Resources

Paul Collier approximates that around 50 ongoing wars in 21st century can be linked to shared natural resource where the latter has been exploited by legal or illegal means, to help fund the war or sustain it.¹² For instance, in Bolivia and Pakistan, fierce demonstrations broke out due to improper allocation of natural water. In the Gulf, disagreements over Kuwait oil wells in addition to several elements sparked off the first Gulf War. Likewise, the Revolutionary United Front (RUF)-a militia group in Sierra Leone- and the National Union for the Total Independence of Angola (UNITA) utilized proceeds from the sale of diamonds to finance their movements against their respective state governments. Water scarcity leads to and prolongs violent struggles across the world today. Armed combat over water resources have been witnessed in states such as China between the Guangdong and Shandong Provinces in 2000, Ethiopia and Eritrea in 2006, India and Pakistan in 2004, Kenya and Uganda in 2005, over Migingo Island and Yemen and Jordan in 1999.¹³ In Darfur region of South Sudan, a large part of the strife there is due to inadequacy of water and its utilization pitting the new state and the former colonial master; the republic of Sudan. They however discovered underground lake recently, one big enough to match Lake Erie which if well used, can end their water problems. In the 1950s to 1960s, the strife pitying Israel against its neighbors was intensified by conflicts concerning the waters of River Jordan.¹⁴ On several occasions, it led to a breakout of armed war which saw Israel attack neighbors in, 1965 to 1966 especially Syria, which had planned to construct projects which would divert all waters feeding the River Jordan. These disagreements shaped the ground for regional war in 1967. This contravenes the Neoliberal institutionalism theory where interdependence is supposed to bring peace but rather it brought war.

Adekanye argues that access to resources is often linked to inter-group struggles in African countries such as Tanzania.¹⁵ In, studies undertaken in Nigeria, evidence shows that the fact that oil benefits tend to bless a few people often becomes an avenue for violent conflict. This goes on to change the existing "socio-economic and political

¹¹Ibid.

¹² Collier, P. (2003). *The Market for Civil War Foreign Policy*, 2(136), 38–45.

¹³Gleick, P. (2006). *Environment and Security Water Conflict Chronology*. Pacific Institute. Available at <http://www.worldwater.org/chronology.html> Accessed on 17th/10/2017

¹⁴Klare, M. T. (2002). *Resource Wars: The New Landscape of Global Conflict*. New York: Henry Holt

¹⁵Adekanye, J.B. (1995). Structural Adjustment, Democratization and Rising Ethic Tensions in Africa. *Development and Change*, 26 (2), 355-74.



structures and conditions” of existence. ¹⁶This goes on to adversely affect interdependence as posited by the neoliberal institutionalism theory. Shared water bodies have been a source of contention between states for eternity. Water bodies for example rivers, lakes, oceans, and seas are closely associated with severed inter-state relations due to their central role in transportation, culture and development. State’s dependence on fisheries and offshore oil exploration is linked to some of the global conflicts since water bodies do not follow international boundaries. ¹⁷ Disputes over water bodies and fishing activities sparked off cold war between Britain and Iceland between 1950s and 1970s (which saw several shots and destroying of ships with no human casualties). Shared natural resources are also to blame for the conflict in the South China Sea. ¹⁸Many river basins globally are shared between two or more states without a proper institutional and legal framework leading to conflicts. ¹⁹

Timber plays a significant role in income generation for several states. As an easily available product which is versatile, easy to transport, and essential for construction, as well as development, it has taken a central position in causing, sustaining and ending of violent conflicts globally. Some of the timber related conflicts have been witnessed in the Democratic Republic of Congo, Cambodia, Liberia and Burma. On a positive note, timber has been mutually shared in Indonesia and Latin America where the latter has community forest management organs. This conforms to the Neoliberal intuitionism theory which dictates where interdependence breeds cooperation and mutual agreements for peaceful and equitable sharing of natural resources. Oil and natural gas are some of the most valued shared natural resources which have revolutionized world economies for a considerable time. Oil and natural gas have driven global industrialization but the U.S. Department of Energy approximates that by the year 2020, more than half of the world oil will be used. ²⁰ Majority of global largest petroleum reserves are found in civil war-torn areas and states including Venezuela, Iraq, Iran, Sudan and Nigeria. Therefore, fuel demand, especially petroleum, enables war in these states to impact on world economy. Several measures have been adopted to mitigate these negative effects of shared natural resources on inter-state relations all over the world.

1.4.2 African context of shared Natural resources

Africa boasts of a number of shared natural resources which transcend international boundaries of sovereign states. According to a report by Chusei Yamanda on shared natural resources, African states have sovereign rights over the natural resources located within their jurisdiction and they are entitled to utilize them within their territories. ²¹ Some of the shared natural resources found in Africa include 80 shared river basins, ²² forest ecosystems, wildlife biodiversity, oil fields, mountains and water bodies including seas, lakes and aquifers. For instance, river Zambezi is shared between Mozambique and its upstream neighbors Zambia, while Nile River is shared by eleven riparian countries, Mount Kilimanjaro is shared between Kenya and Tanzania while Mount Elgon is shared between Uganda and Kenya. Mozambique is extraordinary as in no less than 50 percent of its territory is crisscrossed by 8 universal shared waterways and 54 percent of all its surface water assets get through its outskirts with neighboring nations. ²³ Ilemi Triangle is a disputed shared territorial land among three Horn of Africa states. The Serengeti-Maasai Mara ecosystem is a shared wildlife biodiversity natural resource shared between Kenya and Tanzania.

The Abyei region is also a shared oil field contested by the new independent state of South Sudan and the republic of Sudan. ²⁴ Lake Victoria transcends Uganda, Kenya and Tanzania, Lake Kivu basin stretches through Rwanda to Burundi with River Kagera too lying within the same basin, while Mount Elgon also stretches between Kenya and Uganda with the Laikipia plains stretching through to Sudan while Lake Turkana basin covers the southern part of Ethiopia and North Kenya. Among the shared aquatic ecosystems include; Lake Jipe shared by Kenya and Tanzania;

¹⁶ Boas, Morten & Dunn K. C. (eds) (2007). *African Guerrillas: Raging Against the Machine*. Boulder: Lynne Rienner.

¹⁷United States Institute of Peace. (2007). *Natural Resources, Conflict and Conflict Resolution*. Washington DC: USIP Publication.

¹⁸ UN News Centre. (2017). “From Water Wars to Bridges of Cooperation: Exploring the Peace-building Potential of a Shared Resource. Available at: <http://www.un.org/events/tenstories/story>. Accessed on 17th /10/2017

¹⁹Ibid.

²⁰Ibid.

²¹Yamanda, C. (2005). *Shared Natural Resources; third report on shared natural resources: transboundary groundwater*. Agenda 4 item. Doc A/CN.4/551 and Add 1.

²²Ibid.

²³ Wolf, A.T., & Hammer, J.H. (2000). *Trends in Transboundary Water Disputes and Dispute Resolution. Water for Peace in the Middle East and Southern Africa*. Green Peace and World Water Vision.

²⁴Op cit.

Lake Victoria covering Kenya, Uganda and Tanzania; the Minziro-Sango Bay Swamp Forest shared by Uganda and Tanzania, it is a swamp area with extensive flood-plain grassland surrounding closed evergreen forest stands; and Marine coastal strip in Western Indian Ocean covering Kenya and Tanzania.²⁵The realization that sharing natural resources was a recipe for interstate conflict, countries particularly those in East Africa established regional integrated bloc to strengthen their interdependence pursuant to the tenets of Neoliberal institutionalism theory hence the creation of EAC.

1.4.3 Rationale for Shared resources management in the Horn of Africa region

There exists a great deal of research on the collaborative management of natural resources found in the Horn of Africa region. For instance, Kameri-Mbote *et al* posit that increased cooperation in administration of natural resources decreases aspects of conflict over natural resources.²⁶ The administration of shared natural resources is a daunting task with potential to cement and solidify state relations but can as well strain inter-state relations. Absence of proper coordination amongst countries lead to building up of pressures on natural resources themselves as well as on communities sharing them and have implications on security and peace building. There exists much research and theories explaining the effectiveness of collaborative management as an instrument fostering cooperation between different states in addition to diffusing resource-fueled conflict. This is because boundaries of states pass over some shared resources and this presents a management challenge.²⁷ International boundaries have divided ethnic groups into different countries and resources which have been shared over time long before the colonial masters came.

Cooperation in the management and development of shared natural resource is a building block of regional integration. The cooperative approach can lead to further collaboration and possible joint action, thereby contributing to peace, stability and integration.²⁸ The success of cooperation lies in the quality of resource potentiality information provided. Vaughan and Wang while emphasizing on the sensitivity of inter-state shared resources opine that shared resource-issues also, challenge avenues for cooperation among national government.²⁹ These issues not just present one of a kind remote arrangement challenges due to their proximate nature, given the solid residential parts, they have dynamic and vocal local ramifications. Massimiliano and Slavko argue that regular regions shared by neighboring nations are a typical fortune, as well as a typical obligation.³⁰ Additionally, Antoni *et al.* are of the view that positive spill-over effects of public goods, based on geographic proximity or shared natural resources, would make co-operation arrangements a strategic choice for neighboring countries to optimize benefits from such public goods and natural resources.³¹

Zewedineh and Ian in their case study of the Nile Basin as a shared resource, present the argument that, the issue of accomplishing powerful participation between important gatherings speaks to one of the best impediments to guaranteeing the fair and reasonable administration inter-state shared natural resources.³² They are of the view that, it is unfortunate that meaningful cooperation can be undone by wars over natural resources, and this has been seen in the example of shared inter-state natural resources. In order for regional states to avoid conflicts over shared natural resources spreading across their territorial boundaries, it is imperative for the sharing states to find the common values and accepted universal customs and ethics, by which the shared resources can be used equitably and efficiently with utmost protection of the regional biodiversity and environment. This is demonstrated by Gamini in his application of Game theory in shared resource management and governance of treasured resources, that range from atmospheric sinks,

²⁵Eldis, F. (2002). *Shared Aquatic Ecosystems of East Africa: Status and Trends. A Cross-border Survey of Aquatic resources Management in East Africa*. Arusha: Big-Fountain publishers

²⁶Kameri-Mbote, M., Patricia, H., & Jeremy, L. (2001). *Improving Tools and Techniques for Crisis Management: The Ecological Sources of Conflict: Experiences from Eastern Africa*. (Working Paper)

²⁷Van der Linde, H., Oglethorpe, J., , Sandwich, T., , Snelson, D., & Tessema, Y. (with contributions from AnadaTiéga and Thomas Price). (2001). *Beyond Boundaries: Trans-boundary Natural Resource Management in Sub-Saharan Africa*. Washington, D.C: Biodiversity Support Program

²⁸Ibid.

²⁹Vaughan, C.T., & Wang, T.C. (2015). *Transboundary Issues and Shared Spaces: An Education Resource*. Accessed 16th October 2017

³⁰Massimiliano, M., & Slavko, B. (2011). (eds) *Environmental Security in South-Eastern Europe: International Agreements and their Implementation*. Netherlands: Springer Publishers

³¹Antoni, E et al. (2002). *Regional Public Goods: From Theory to Practice*. Washington D.C:(Inter-American Development Bank Publication

³²Zewedineh, B, & Ian, L. W. (2004). *Common Goods and the Common Good: Trans boundary Natural Resources, Principled Cooperation, and the Nile Basin Initiative*. Sage Publication. Accessed on 16th /10.2017



fisheries, genetic material and oceans.³³ The Common Property Theory further helps to explain the context of opposing the rational actor and associated 'tragedy of the commons' models in managing natural resource.³⁴ It has been observed that, a wide assortment of research on basic pool assets has shown that basic property hypothesis gives a helpful point of view to looking at social trades among cooperative states and stakeholders with interest.

International law forms the fundamental structure of the worldwide framework for allotting assets, by setting up essential standards about conditions under which countries can attest property rights in assets.³⁵ Therefore, the role of international law remains vital in examining matters touching on State affairs. With the cardinal principle of State sovereignty over its own natural resources, it therefore follows that inter-states shared natural resources cannot escape the scrutiny of the international community. For instance, management of shared mountain ecosystems within the region is provided for under Article 19 of the Treaty Establishing the East African Community.³⁶ Partner countries consented to participate in the administration of shared regular assets, and to take coordinated measures to cultivate collaboration in the joint and productive administration and maintainable use of common assets, inside the community for the common advantages of the partners. This can be demonstrated in the shared management of the Serengeti/Maasai Mara wildlife conservancy involving Kenya and Tanzania. International law and norms of sharing the natural resource have been operationalized in the management of the ecosystem and the mountain resource.

1.4.4 International Agreements and cooperation on shared natural Resources

Under the UN Charter and tenets of international law, countries are fully entitled to use their natural resources as they chose to according to their own terms but must ensure that the environment is protected while doing so, and their neighbors' environment is not affected also.³⁷ While municipal regimes are sufficient in regulating use, conservation and protection of resources within the territory of any one state, international law calls for treaties as well as joint commissions or frameworks to govern cooperation on exploitation and utilization of shared natural resources. In shared natural resources, one state cannot unilaterally use the resource because such utilization without the regard to others can upset quantity and quality of the resource and equitable sharing of the resource. It is for this sharing challenge that states have developed relevant agreements for cooperation on sharing of the resources. Some of the agreements that have been developed to regulate state behaviors concerning shared natural resources include, sub-regional accords, global legal regimes and shared natural resources treaties.³⁸ For decades the states have used international agreements as legal mechanisms through which they have articulated cooperation through frameworks and legal instruments. For instance, in 1966 several states established the Helsinki rules which regulates states in coming up with agreements on shared water resources. International agreements are developed in cooperation to address the mutual concerns and challenges which confront sharing of natural resources. States should cooperate based on good faith and on spirit of good neighborliness so as to establish communication channels in aiding formation of avenues of cooperation agreeable to all states. International laws and Agreements foster cooperation and partnership on the administration of resources and where suitable take combined efforts to utilize these resources mutually. The following are some of the global case studies of agreements entered to foster cooperation in the sharing of inter-state natural resources.

14.5 Implications of shared natural resource management

Shared natural resources have an extended influence over relations among the states involved which range from positive to negative. When the objective is to realize maintainable socio-economic expansion through impartial distribution of benefits, states focus on maximizing their own interests which at times collides with those of the other partner state producing a stalemate and conflict may ensue.

³³Gamini H. (2006). *Game Theory Applications in Natural Resource Management: Review of Evidence, Problems and Potential*. Geneva: Available at <http://www.resourceresearch-governance.org.uk>. Accessed on 16th/10/2017

³⁴Food and Agriculture Organization. (2015). *Common Property: Cause or Remedy of Poverty for Small-Scale Fisheries*. Washington: UN publication

³⁵Bilder, B.R. (2011). *International Law and Natural Resources Policies*. Washington: Environment Law Institute Publication

³⁶East African Community. (2015). *Transboundary Environmental Assessment Guidelines for Shared Ecosystems in East Africa*. East Africa Community. (accessed 16th/10/2017)

³⁷Bankobeza, S. (2010). *International Agreements on Transboundary Natural Resource*. Nairobi: UNEP/DELG

³⁸Ibid.

1.4.5.1 Fostering cooperation and Unity of Purpose

One of the realized implications of sharing management of a natural resource is unification and cooperation with an objective of achieving mutual benefit. Omar posits that shared resources bring into fore a situation whereby States have to work together in order to manage and enjoy the full benefits of such shared resources. A key example is the Mara- Serengeti ecosystem which is shared by Kenya and Tanzania, which has brought the two States together with a common purpose of enjoying the benefits of tourism among others.³⁹ Another example is that of Minziro Sango Bay Swamp forest which as a shared natural resource has brought Tanzania and Uganda close with the common aim of enjoying the benefits of utilizing the products of the Forest to the maximum. Another example in this context is the Nile River Basin Initiative which was established in 1999 to help reach consensus, originally designed as a way to share scientific information and as it stands today, this initiative collects government officials from the riparian states to foster economic development through impartial use of, and benefiting from the common Nile Basin water resources.⁴⁰ The shared management of the Nile Basin has brought trust and mutual benefit for the eleven riparian states which share the basin in a mutual manner. The Sangha River Tri-national Protected Areas Complex initiative is based in Northwest Congolian Moist Lowland Forest eco-region. It comprises 4 conservation projects that cover 3 countries: the Dzanga-Ndoki National Park and Dzanga-Sangha Dense Forest Special Reserve (created 1990), Central African Republic (CAR), the Nouabalé-Ndoki National Park (created 1993), Republic of Congo, the Lobéké National Park (created 2001), Republic of Cameroon and the Republic of Congo. The frontiers of these states have not been altered and these countries have existed in harmony cooperating in the utilization of the River in a mutual manner. The collaborative utilization of Sangha River has led to the adoption and operationalization of the Sangha River Tri-national Initiative which has regulated and governed the respective national land-use zoning policies.

To contrast the Sangha River Tri-national initiative, is the unilateral utilization of the Juba and Shebelle Rivers in the Horn of Africa which are shared among three sovereign states of Kenya, Ethiopia and Somalia. Most of the waters originate from Ethiopia and are essential for economic survival in Somalia. In this case there exists no sharing agreement among the basin sharing states.⁴¹ Ethiopia is currently implementing grand projects for irrigation and hydro-electric power production which potentially reduces the amount of water which reaches Somalia making the shared resource a point of contention and a possible cause of inter-state conflict since the unilateral utilization of the project is highly contested. Shared Rivers in dry climatic regions can be a cause of skirmish or a basis for cooperation amongst riparian countries. The Juba and Shebelle Rivers are imperative resource bases for Somalia since they provide a bulk of the state's rice farming. Indigenous socio-economic undertakings in Somalia depend largely on the level of water in these two rivers unlike in Ethiopia which has large rivers in its territory.⁴² As per internationally accepted water norms, Ethiopia's utilization of Juba and Shebelle Rivers are not based on the principle of *reasonable and equitable utilization*, in addition the country does not support the rule of *not to cause significant harm*. This guideline is seen as an impediment to its arranged advancement supporting downstream employments. In the ground breaking strategies of the two waterways, which investigated the impact of these standards on the arranged improvements, Ethiopia demonstrated clear hesitance to the UN Convention on the laws of non-navigational employments of the universal conduits, and tended to apply to the Helsinki Rules.

None of the nations has however marked or approved the UN Charter on the use of shared common assets. Ethiopia is especially stressed over the "*no harm*" standard, contending that the rule stops them from utilizing streams, especially when waterways are broadly utilized by downstream Somalia.⁴³ Because of the non-attendance of a worldwide concurrence on these common streams, Ethiopia contends that it has the sovereign right to continue singularly with its advancement of water assets inside its domain without considering impacts on downstream uses in Somalia. Unilateralism is along these lines the real impediment to the frantically required participation over the usage of the two streams. Ethiopia, being the most grounded country in the bowls, faces the best water shortage due to their generally substantial populace and developing economy. While Somalia has developed a national master plan for the development of the two rivers as national assets, Ethiopia on the other hand has developed similar national development plans for the

³⁹Op cit.

⁴⁰NBI. (2017). *The Nile Basin Initiative*. Accessed on 16th/10/2017

⁴¹ Mohamed, A.E. (2013). *Managing shared Basins in the Horn of Africa-Ethiopian Projects on the Juba and Shebelle Rivers and Downstream effects in Somalia*. Stockholm: Horizon Research Publishing

⁴²Kitissouet al. (2007). *The Hydropolitics of Africa. A contemporary challenge*. Cambridge: Cambridge Scholars Publishing

⁴³Ministry of Water Resources, Ethiopia. (2007). *Genale-Dawa river basin integrated resource development master plan study*. Lahmeyer International / Yeshi-Ber Consult. Final Report. Volume I.1 Main Report. p20, 22



utilization of the waters from the two rivers for her own rational uses. These unilateral actions for river development reflect and imply policies of no will to cooperate which have potential for causing conflict.

1.4.5.2 Harmonization of laws and Regulatory Frameworks Governing the Commons

Inter-state resources are subject to different legal jurisdictions which often overlap and contradict. Since the state has sovereign authority over resources under its jurisdiction management of shared inter-state resources becomes contextually difficult to achieve cooperation and thus states are obligated to harmonize their laws as well as some of their institutional frameworks so as to have one uniform legislative regime and institutional framework that can facilitate proper management and utilization of the shared resource in question. This may be observed from the East Africa Community where the Treaty establishing the regional bloc requires that the Member States adopt and harmonize their respective national laws so as to accord to the principles and aims of the EAC in regards to shared natural resources.⁴⁴ Agreements are usually necessary methods for announcing normal interests, expressing managing standards, recognizing goals or guaranteeing responsibility among all partners. Agreements guarantee that the gatherings are obviously recognized and that their parts and duties are characterized.⁴⁵ They empower an all-encompassing spotlight on the wide issues required, as a rule, single locales are managing biological systems and groups. They guarantee that issues of national sway are not bargained, and they enable legislative and nongovernmental partners to work inside a concurred arrangement.

1.4.5.3 Recipe for Conflicts

In many cases, one dominant State may seek to acquire the resource in question and deny usage by the other States. This follows a realization in economic opportunity in the shared natural resource which breeds competition. A notable example is the conflict pertaining to Migingo Island which is located in Lake Victoria. In this particular case a conflict arose between Kenya and Uganda over the ownership of the Island and the extent of fishing for both states in the lake. The once relatively low-intensity conflict escalated to involve expulsion of Kenyan fishermen on the Island by the Ugandan authorities citing sovereignty and territoriality claims over the island.⁴⁶ Kameri-Mbote posits that conflicts involving grazing grounds between Ugandan and Tanzanian livestock keepers in the grazing corridor between Ankole/Rakai in Uganda and Minziro/Kagera in Tanzania are very intense with no documented formal action from the respective governments in the area.⁴⁷ The shared resource can be a cause of conflict if the management is skewed to favor one state, as it is claimed by the Republic of South Sudan in the dispute over Ilemi Triangle.

1.5 Literature Gaps

This review of literature has established that there is absence of formal agreement concerning the collaborative management of shared resources in the Horn of Africa. There is no available information documenting the sharing of the resource potential of Ilemi triangle, Migingo island among others, which presents an academic gap worth of pursuit and a policy gap as well. The literature review also notes keenly a gap in knowledge concerning the political future of the shared Nile River given the contested nature presented by Ethiopia and disputed by Egypt on the utilization of Nile waters. This presents a policy gap which needs further probing. Additionally, the literature review reveals lack of institutional legal framework and environmental legislation and specific sectorial legislations, guiding the utilization of Ilemi Triangle and the Mount Elgon shared resources which presents an opportunity for further investigation by this study. Lastly, the literature review summarizes that without international guideline, especially in areas beyond the reach of national jurisdictions, shared natural resources are susceptible to the *tragedy of the commons* through depletion or exhaustion as competing states aim at maximizing self-benefit in using the resource.

⁴⁴Op cit.

⁴⁵Van der Linde, H., Oglethorpe, J., , Sandwich, T., , Snelson, D., & Tessema, Y. (with contributions from AnadaTiéga and Thomas Price).(2001). *Beyond Boundaries: Transboundary Natural Resource Management in Sub-Saharan Africa*. Washington, D.C., U.S.A.: Biodiversity Support Program

⁴⁶Daily Nation. (2009). *Row over Migingo Intensifies*. Nairobi: NMG Publication Dated 12/4/2009

⁴⁷Kameri-Mbote, P. (2005). *Sustainable Management of Wildlife Resources in East Africa: A Critical Analysis of the Legal, Policy and Institutional Frameworks*. International Environmental Law Research Centre Working Paper



III. RESEARCH METHODOLOGY

1.6 Research Design

This study utilized a descriptive and explorative research design to examine the extent to which collaborative management of shared natural resources enhances inter-state relations in the Horn of Africa. Mugenda and Mugenda, note that a descriptive research design regulates and states the way things are exactly. Therefore, this research design can bring out information on aspects of education that can benefit policy makers and researchers.⁴⁸ Its favorable position is that, it permits the gathering of a lot of information from a sizeable populace in a profoundly powerful, effectively and in a prudent way, frequently utilizing questionnaires and interviews. In order to ensure the study encompasses the crucial elements for the research objectives, mixed methods approach was for triangulation purposes.⁴⁹ In this regard, quantitative and qualitative data collection methods were used to enrich the content of data collected for this study. Questionnaires were employed to collect data on the extent to which collaborative management of shared natural resources enhances inter-state relations in the Horn of Africa. However, in-depth interviews were conducted between the researcher and respondents in order to obtain the context of the problem and interpret the findings. The research study utilized this design to arrive at a comprehensive conclusion and offer recommendations.

1.7 Study Site

The research site was in the horn of Africa countries. The three countries of Kenya, Ethiopia and South Sudan were chosen for key respondents on the study topic, because all of them in one way or another are affected by shared resources in areas such as the Ilemi Triangle region. In many cases, one dominant state may seek to acquire the resource in question and deny usage by the other States. This follows a realization in economic opportunity in the shared natural resource which breeds competition. The shared resource can be a cause of conflict if the management is skewed to favor one state, as it is the case of Ilemi Triangle which is being claimed by the three countries. However, the geopolitical prominence of the Horn of Africa, where Ilemi lies makes it a pivotal factor in the regional balance of power. The top officials in the diplomatic corps, security institutions and academicians operating were targeted in the horn of Africa countries as key respondents with precise information.

1.8 Data Collection Methods

The study employed both qualitative and quantitative processes of data gathering. Primary data was collected through questionnaires and in-depth interview, meanwhile secondary was obtained from detailed reviews of journals, Newspapers and document analysis on the issues of how collaborative management of shared natural resources enhances inter-state relations in the Horn of Africa. Questionnaires were the principal tool of quantitative data collection. Questionnaires had both structured and unstructured questions which aided in gathering standardized answers on the relationship between shared resource management and conflicts in the Horn of Africa while alongside providing respondents the opportunity to respond without restrictions. Open ended questionnaires, gave the respondents a chance to express their views, experiences and attitude on the research problem, while closed ended questionnaires allowed the respondent to give precise information on the study. However, in-depth interviews were conducted between the researcher and the respondents in a confidential and secure ways using an interview guide which had identical questions.

1.9 Sample Population the Sampling Size

Collecting data for the research in the three countries in the horn of Africa countries with a combined population of 171,887,458 people is impractical and equally cumbersome. Therefore, a sample has to be chosen to be a representative of the entire set of units termed as “population”.⁵⁰ The sample size for this study was arrived at through sample size computation at 95% confidence level and 5% margin of error.⁵¹ The study used Proportionate stratified sampling, Purposive Sampling and Random Sampling Techniques. Proportionate stratified sampling was used to identify the necessary study population in Kenya, Ethiopia and in Sudan. To identify the study units purposive sampling

⁴⁸ Mugenda, O.M., & Mugenda, A.G. (2003). *Research methods .Quantitative and qualitative approaches*. Nairobi: Acts Press.

⁴⁹ Saunders, M., Lewis, P., & Thornhill, A. (2015). *Research method for business student (7th Ed.)*. New York: Pearson Education.

⁵⁰ Graziano, A., & Raulin, M. (1997). *Research methods: a process of inquiry*. New York: Longman Pub Group.

⁵¹ Ibid.



was used to identify the eight study units which included civil servants, government institutions, security agencies and Academicians, NGO's, Media Professionals, Religious Leaders and Business Entrepreneurs who were well informed and involved in issues surrounding shared natural resource management accounting for 160 key informants.

The target population refers to specified groupings which the researcher intends to study.⁵² Thus, the population should conform to certain specifications that the study is interested in.⁵³ However, from the eight units random sampling technique was used to pick specific professional groups where at least 20 people were interviewed randomly taking into consideration, gender, and age and education level. This gave total of 160 respondents as shown in Table 1.

Table 1 Target Populations and the Sampling Size

Target sample	Size of sample
Civil Servants	20
Academicians	20
Government agencies	20
Security agencies	20
Media Professionals	20
Religious Leaders	20
Business Entrepreneurs	20
NGO's	20
Total	160

Source; Researcher, 2017

The researcher used non-probability sampling method of purposive or judgmental sampling in accordance with the research objectives. Purposive sampling takes into account the ordinary personalities of the kind it is intended to test, it attempts to outline where these groups of people can be found and attempts to investigate them. Accordingly Focused Group discussions were held with different personalities from the three countries. It helped in obtaining in-depth information on the research problem. The focus group of 48, 48, and 48 were held in Kenya, South Sudan and Ethiopia respectively. This gave a sample population size of 304 (160+48+48+48) as envisaged by the study. The data obtained from the Focus Group Discussions was useful in helping the research to obtain in-depth qualitative information on the research problem. The information obtained from the discussions was also useful in supplementing and confirming issues found from the survey and secondary data.

1.10 Data Analysis and Presentation

After collecting data, editing, coding, classification, tabulation and analysis was done. Coding involves giving all statements numeric codes based on their meaning for ease of capturing data. The analysis was carried out using SPSS version 20 and Microsoft Excel Statistical Packages where quantitative data was analyzed in tables and charts. Data from the research was presented using descriptive statistics such as tables, pie charts, bar-diagrams and percentages for interpretation and clarity. Verbal reports that rose during the research process were presented as direct quotations.

1.11 Scope and Limitations of the Study

The research covered the shared natural resources in enhancing inter-state relation in the Horn of African States. The study specifically covered the state of Kenya, South Sudan and Ethiopia between 2011 and 2016. This study was limited by certain challenges which included sensitivity of information of which many respondents were not willing to provide some information. To overcome this challenge there was need to convince the informants that the confidential information provided was used solely for academic purposes. Language barrier presented another limitation, since all communities targeted in the research do not share a common language, hence necessitating an interpreter. Lastly, transport and logistics presented a paramount challenge due poor infrastructure in the regions, but the researcher employed state of the art automobile (four-wheel drive) to navigate the region.

⁵²Neuman, L. (2006). *Social Research Methods. Qualitative and Quantitative Approaches*. Whitewater: University of Wisconsin, p.224.

⁵³Cooper, D.R. &Schindler, P.S. (2003). *Business research methods*. Massachusetts: Allyn and Bacon, p. 560.

IV. FINDINGS AND DISCUSSIONS

1.12 A review of Shared Resource Management in Africa

There exists a lot of study and theories explaining the efficiency of shared resource management as an instrument fostering collaboration between different states in addition to diffusing resource-fueled conflict. This is because state boundaries pass over some shared resources and this presents a management challenge. International boundaries have divided ethnic groups into different countries and resources which have been shared over time long before the colonial masters came. The following are some selected shared resource management cases in Africa, which abundantly informs the nature and context of the resulting inter-state relations.⁵⁴

Table 2 Shared Resources

Shared Resources	No. Sharing of states
Lake Victoria	11 (riparian-Upstream/downstream)
Mt. Kilimanjaro	2
Mt. Elgon	2
Ilemi Triangle	3
Nile River Basin	11
Lake Turkana	2
Maasai Mara National Reserve	2
Lake Jipe	3
Ilemi Triangle	3
Umba River	2

Source: Field Data, 2017

The discussion focused on the experiences and procedures of collaboration at four natural shared resources sectors which include the Nile River Basin, the Mount Elgon experience, the Kilimanjaro Heartland case and the shared Ilemi Triangle. These cases shed light on the state interactions as they collaborate to control natural resources collectively shared. The review of above cases is imperative in informing on the Strengths, Opportunities, Weaknesses and Threats of shared resources.

First, this research sought to know the respondent’s perception concerning the importance of shared resources management between the republic of Kenya, South Sudan and Ethiopia in regards to Ilemi Triangle; a shared resource. The respondents were required to show the value of forming a joint commission among the three sharing countries to manage and safeguard the territoriality of the Ilemi Triangle. The figure below shows the perception of respondents on the importance of managing such a shared resource jointly.

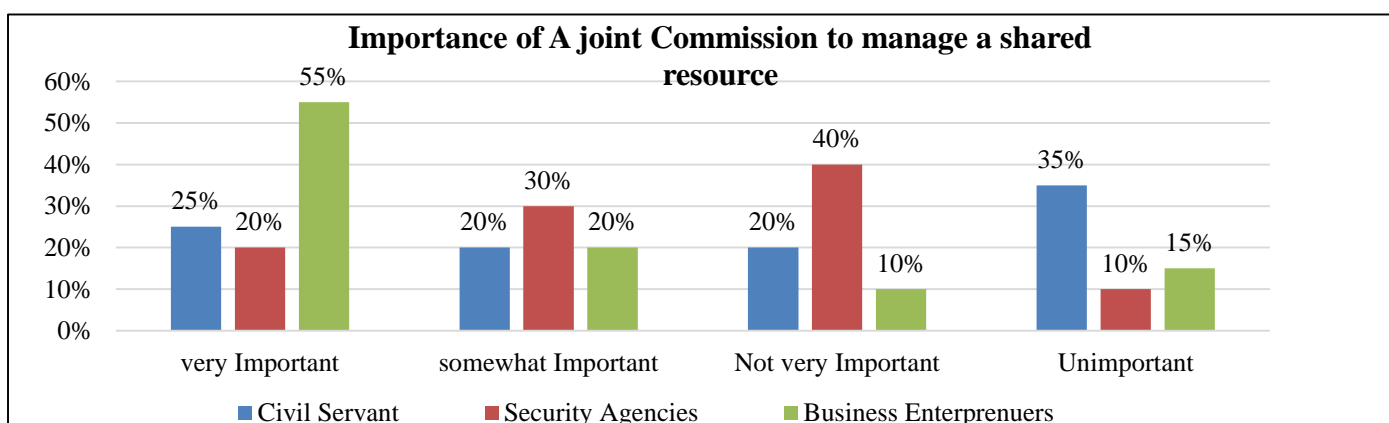


Figure 1 Perceptions on managing a shared natural resource jointly

Source: Field Data, 2017

⁵⁴Ibid.



The figure above shows, the perception of respondents concerning the importance of forming a joint commission to investigate and determine aspects of sharing the management of the Ilemi Triangle, which lies across the three countries. The results show that, majority of respondents-55% (Business entrepreneurs) preferred that the three countries should form a joint commission of inquiry to determine the bonafide ownership of the Ilemi Triangle. Security agencies (20%) preferred that each sharing country should collaborate with other partner state. The Civil servants who participated in this research (25%) said that, it is imperative for the three countries to collaboratively manage the shared resources through a joint commission. On average 25% of the civil servant respondents, saw it meaningless for the three sharing states to jointly manage Ilemi Triangle. 35% of them (civil servants) indicated that, it was not important for the three countries to manage the shared resources, citing lack of national capacities within some of the sharing countries (particularly South Sudan) as the main impediment. This is a classical evidence of cooperation among different sovereign states in an environment, without supranational authority as explained in the cooperation under anarchy theoretical paradigm.

1.13 The Nile River Basin

The Nile River is among the world's longest rivers draining through Lake Victoria.⁵⁵ Nile River is shared with Burundi, Sudan, Rwanda, Uganda, Ethiopia, Kenya, Egypt, DRC, Tanzania, Rwanda and Eritrea. Burundi and Rwanda are linked to the River by Kagera River, which also empties its waters into Lake Victoria.⁵⁶ The Nile Basin, is approximately 3 million sq. km, and occupies roughly 10% of the African continent, as well 2.3% of earth's lands.⁵⁷ The Nile Basin depletes an aggregate of roughly 3 million sq. km of domain in 11 riparian conditions of Ethiopia, Uganda, Sudan, Burundi, South Sudan, Kenya, Egypt, Rwanda, Tanzania, DRC, and Eritrea.⁵⁸ The tributaries of Nile River are joined in Sudan and flow for thousands of kilometers to Mediterranean Sea where it is estimated that Blue Nile provides 64% of waters available in Aswan.⁵⁹

Combined, Nile River and Lake Victoria make up one bowl, to be particular a watershed adding to one principal conduit, lake, stream, or another fundamental end. As Nile together with its tributaries stream particularly into Mediterranean, same way Lake Victoria drains direct into the Nile.⁶⁰ Kagera basin occupies roughly 59,800 km² of Burundi, Uganda, Tanzania and Rwanda and it contributes roughly 25% for every penny of the yearly release to Lake Victoria.⁶¹ According to Henshaw and other, water cutting across state boundaries present many issues and there is not a single approach to manage this shared water resource.⁶² This research sought to establish the nature of state relations which share Nile Basin. The respondents were asked to indicate whether the relations were peaceful and cooperative or whether they were conflictual and anarchic?

⁵⁵Okidi C. (1994). *History of the Nile and Lake Victoria Basins through Treaties*. London: Cambridge University Press.

⁵⁶Hurst, H.E. et al. (1959). *The Nile Basins; The Hydrology of the Blue Nile and Akbara and the Main Nile to Aswan*. Cairo: Government Printing

⁵⁷Ibid.

⁵⁸ Richard, K.P., &Henshaw, T.W. (2013). *Trans-boundary governance of the Nile River Basin: Past, Present and Future*. Vancouver: University of British Columbia

⁵⁹Ibid.

⁶⁰Ibid.

⁶¹Mbote, P.K. (2005). *From conflict to cooperation in the management of Trans-boundary Waters: The Nile experience*. Washington, DC.: Heinrich Boell Foundation

⁶²Ibid.

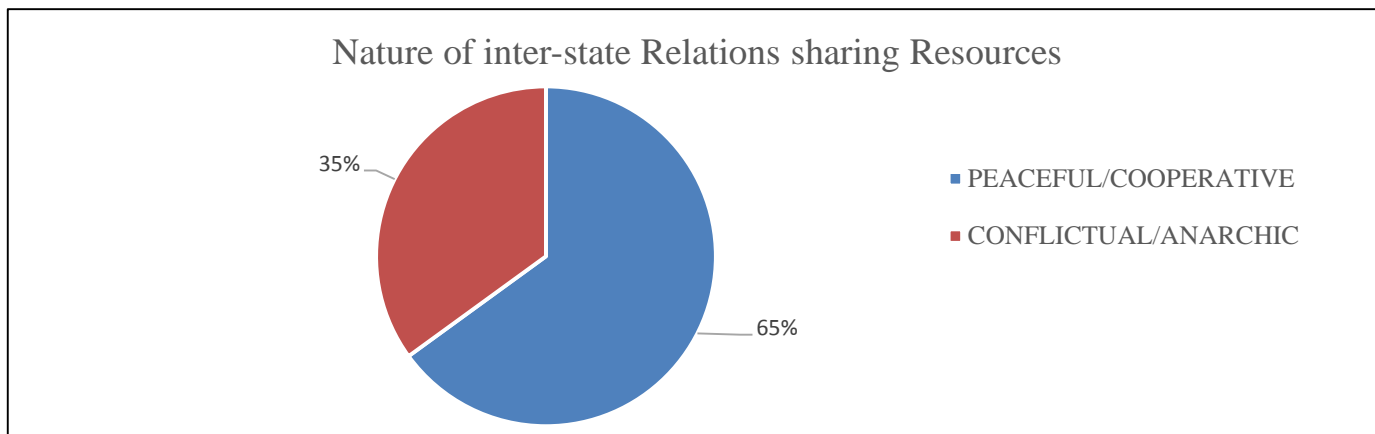


Figure 2 Perceptions on Inter-state Relations due to Shared Resources
Source; Field Data, 2017

From the findings established by this study, 65% of the respondents indicated that states which share natural resources are more peaceful and cooperate with each other. 35% of the respondents indicated that states which share resources are more conflict-prone and exist in an anarchic environment. This was echoed by respondent D8 who posited that;

‘The sharing states experience different political, economic, social and ecological drivers which hinder cooperation of these states in sharing of natural resources.’ Berlando and Gerlak assert that, institutions of joint management play a critical role in addressing conflicts and enhancing cooperation by empowering users of the resource users, to effectively deal with rapidly changing social-political and economic circumstances.⁶³

Respondent D10 affirmed that;

“Regionally shared waterways encourage pressures and question about conveyance and utilization of asset administration. The expanded potential for strife escalates dangers to state soundness and national security.”

This research sought to establish some of the established management practices and initiatives adopted by sharing states. The study established that Treaties (68%) were the most quoted practices and initiatives governing the management of shared resources. Joint Commissions (32%) were indicated as other management tools employed by states sharing resources and 5% referred to international initiatives and 5% referred to memorandums of Understanding (MoUs) as the widely used management tools for shared resources. This study established that states which share resources cooperate as exemplified by 65% of respondents in this study. This can be explained under the cooperation under anarchy theory since shared waters portray a huge array of issues around water management issues. The Cooperation under anarchy phenomenon is clearly demonstrated by the Nile Waters Treaty of 1929 between Sudan and Egypt which gave priority to Egypt’s needs for water seemed to accord Egypt a veto power and a right on future power production ventures on communities under British rule like Tanganyika, Kenya, Uganda, and Sudan along the Nile over other riparian states.

Table 3 Management practices and initiatives adopted by sharing states

Management Tool	(%) of Respondents
Treaties	68
Joint Commissions	22
International Initiatives/MoUs/Conventions	5
Initiatives/Agreements/regulations	5

Source: Field Data, 2017

⁶³Berlando, R., & Gerlak, A.K.(2012). *Conflict and cooperation along international rivers. Crafting a model of institutional effectiveness*. Global Environmental Politics Vol.12 No. 1



1.14 Cooperative utilization of Lake Victoria as a Shared Natural Resource

Lake Victoria is originally shared amongst three neighboring countries with Kenya having 6%, Uganda having 45% and Tanzania the remaining 49%.⁶⁴ However, in feeding the lake, Tanzania contributes 61.2% of the water, Kenya empties 37.6% of the water with Uganda contributing just 1.3%.⁶⁵ The implication is that sovereign authority by the riparian states will be done incongruently. This is because in the international system, a nation is charged by much it brings on the table and since these states do not contribute equally, they should not share equally. Furthermore, the amount of water each brings into the lake, influences how they see the rights of managing shared resources across the region. Uganda has 45% of the lake under its territory, it only feeds 1.3% of the Lake and therefore does not deserve to control such a large mass of the Lake as it disadvantageous to Kenya and Tanzania.⁶⁶ On the other side, Kenya owns just a portion of the Lake, but is clearly seen to do more intensive fishing on the Lake waters, as compared to her other riparian neighbors due to its superior fishing technology and high number of fishermen. These activities cause more damage to the ecology of the lake and also causes more harm to economies of states sharing Lake Victoria. Widely accepted norms of shared resources demand that riparian states should share territorial integrity and sovereign power in regards to utilization of shared natural resource.⁶⁷

According to Were, administration of Lake Victoria regular assets falls under the Lake Victoria Basin Commission and the Lake Victoria Fisheries Organization convention, yet the real administration has been consigned to the individual member countries.⁶⁸ From the state level provision in the convention setting up the Lake Victoria Fisheries Organization, partly states have been enabled to found laws and controls that specifically deal with usage of assets to their greatest advantage. The formation of the Lake Victoria Basin Commission within the EAC was done in with the view that the lake and its resources constitute an area of common interest to all member states and necessitated a regional economic zone to look after its interest. The administration of the Lake focused on lining up cross-border aspects by coming up with guidelines which aimed at increasing cooperation and extending partnerships between states in strategic areas of social, cultural, political, research, economic, security, technology, defense, judicial, and legal for the benefit of ever member state.⁶⁹ Kenya alone has more than 500,000 people who specifically rely on the natural resources of the Lake while more than one million in the East African region are directly employed by the lake activities.⁷⁰ The wider mandate for managing Lake Victoria lies with the Lake Victoria Basin Commission. While Lake Victoria Basin Commission includes a more extensive order inside the Lake Victoria Basin, the Lake Victoria Fisheries Organization was set up deliberately to blend residential laws and directions for the maintainable utilization of living assets of Lake Victoria and create and embrace protection and administration measures.⁷¹ At the core of the order, in any case, lie protection, extraction, use and advertising of Lake Victoria's assets for the advantage of state, anglers, fishmongers, angle processors, angle advertisers and fish transporters among others.⁷²

1.15 The Kilimanjaro Heartland Case

The Kilimanjaro Heartland is a shared Resource between sovereign states of Kenya and Tanzania. It encompassed the semi-arid vegetation in the larger Amboseli ecological habitat and is situated north of Mt. Kilimajaro (Africa's tallest mountain) in Tanzania. Other features of the of the Heartland's include the Amboseli National Park (located in Kenya) and a major tourist attraction, six Maasai ranches (situated in Kenya and Tanzania); Arusha and Kilimanjaro National Parks in Tanzania, and Lake Natron as well as the savannas of Longido.⁷³ As indicated by Barrow,

⁶⁴Wirkus, L., &Boege, V. (2006).*Trans-boundary Water Management on African International Rivers and Lakes. Current State and Experiences*". In Waltina S. and Susan N. (2006) (Ed), *Trans-boundary Water Management in Africa. Challenges for Development Cooperation*. Bonn: Deutsches Institute

⁶⁵Ibid.

⁶⁶Ibid.

⁶⁷Rahaman, M. (2009). *Principles of Trans-boundary Water Resource Management and Ganges Treaties: An Analysis, Water Resource Development*, Vol. 25 No. 1. pp. 159-173.

⁶⁸Ibid. p.10

⁶⁹ Adar, K. (2011). *East African Community. First International Democracy Report*. Moncalieri: Center for Studies on Federalism

⁷⁰Ibid.

⁷¹ LVFO. (2013). *Lake Victoria Fisheries Organization, Regional Status Report of Lake Victoria Biennial Surveys between 2000 and 2012*. Jinja: LVFO

⁷²Ibid.

⁷³Muruthi, P., & Frohardt, K. (2003). *Study on the Development of Trans-boundary Natural Resource Management Areas in Africa: Kilimanjaro Heartland Case study*. Nairobi: African Wildlife Foundation.



Tanzania and Kenya agree that preservation adds to a scope of national and international goals. All things considered, protection related laws and approaches in Kenya and Tanzania make a complex institutional and strategy regime, where orders over land and rights over assets are not clearly spelt out.⁷⁴ The two nations are signatories of protection accords, for example, World heritage, CITES, African Convention on Nature and Natural Resources, Biosphere Reserves and the Convention on Biodiversity (CBD).⁷⁵ Tanzania has honored the Ramsar Convention of which Kenya is additionally a signatory.⁷⁶ Tanzania and Kenya are making guidelines that will decentralize the administration of wildlife, giving more powers to the neighborhood groups residing out of the national parks.⁷⁷

In the Heartland of Kilimanjaro, the common highlights and their association propel at any rate some level of powerful preservation. The transient and spatial circulations of natural life advance such an expansive scale way to deal with protection and management. Notwithstanding occasional relocations, there are day by day developments of untamed life and residential ungulates between the bogs and waterholes in Kenya and the higher touching grounds in Tanzania.⁷⁸ Transient species, for example, flamingos eat at Amboseli in Kenya and go home at Lake Natron in Tanzania crossing the political boundaries of the two states. A sharing approach can possibly battle a few of the dangers that originate from either the two sides of the outskirt. This is especially so for those that require joint shared fruitful outcomes for instance, dangers, such as poaching, fire, and infections, or rinderpest. As of now there is a joint law authorization program between the secured zones to battle poaching and dangers to tourism.⁷⁹ This unofficial agreement between KWS staff and their partners in Tanzania appears to function admirably.

An existing collaborative sharing arrangement in the Heartland of Kilimanjaro has additionally energized collaboration by different segments across state lines such as culture, immigration and customs, agriculture and education. As proved at the HCP meeting held in December 2000, joint arrangements can bring lawmakers and other stakeholder from the two nations together.⁸⁰ This has been made easier by common culture and traditions of the Maasai and dialects basically Kiswahili and English between the two nations. The process of dealing with tourism in the Kilimanjaro area would get the advantages of expansive scale, more guests and more monetary advantages to a wide range of partners, including administration of both nations.

1.16 The Ilemi Triangle

Ilemi Triangle is a resource jointly shared by Kenya, Ethiopia and South Sudan.⁸¹ Ilemi Triangle is on the border of South Sudan, which is rich with unexplored oil.⁸² The Ilemi Triangle is the area joining Kenya, Sudan and Ethiopia, roughly measuring between 10,320 and 14,000sq kilometers and named after Anuak Chief Ilemi Akwon.⁸³ The Triangle is on the fringe of Southern Sudan and is habited by five communities: the Turkana, Toposa, Didinga, Dassanench and Toposa and Inyangatom who fit into larger heterogeneous communities in their home states but are known to migrate and move within the Triangle since time immemorial.⁸⁴ The politics of Ilemi Triangle dates back the period when Africa was being partitioned by colonial powers. Political developments in Ethiopia by a large extent explain the politics surrounding Ilemi Triangle, since it was not colonized and there was no urgency for delimitation of Kenya-Sudan-Ethiopia border.⁸⁵ Kenya remains to have the de facto control of Ilemi Triangle and has continued to arm the Turkana in the region to protect themselves against external threats posed by the nomadic raiders from the neighboring Ethiopia.

However, South Sudan and Kenya are set to engage in a diplomatic row if the former takes it head on that, the Triangle in question lies in its territory and embarks on castigated measures to reclaim it. Territoriality is therefore a new dimension that is cropping up in the new republic, and the new state seems to avoid the ugly traditional conflict

⁷⁴ Barrow, E.H., & Gichohi A. (2000). *Rhetoric or reality? A review of community conservation and practice in East Africa*. International Institute for Environment and Development, London, UK.

⁷⁵Ibid.

⁷⁶Ibid.

⁷⁷Wamukoya, G.M. (2000). *Environmental management in Kenya. A guide to the Environmental Management and Coordination Act*. Nairobi: Center for Research and Education on Environmental Law

⁷⁸Ibid.

⁷⁹Newmark, W.D. (1991). *The conservation of Mt. Kilimanjaro*. IUCN: Gland

⁸⁰ Op cit.

⁸¹ Martin, J. (2011). *The Elemi triangle history*. Nairobi: Opinion Kenya Ltd.

⁸²Waithaka, E., & Maluki, P. (2016). *Emerging Dimensions of the Geopolitics of the Horn of Africa*. International Journal of Science Arts and Commerce. Vol. 1 No. 4

⁸³ Collins, R. (2010). *The Ilemi triangle*. Santa Barbara: University of California.

⁸⁴ Robert O., & Collins O.R (2004). *The Ilemi Triangle*. University of California Santa Barbara

⁸⁵Ibid.

resolution by filing its claims at the International Court of Justice and the AU. South Sudan has established diplomatic ties with regional powers like Kenya to catalyze its infrastructural development as is evidenced by the LAPSSSET (Lamu South Sudan Ethiopia Transport Corridor Project.) which aims at linking the three countries. The attainment of the activity will increase cross-border business it will administer a transit network encompassing the SGR which is intended to go all the way to Juba, oil pipelines, refineries and three airports.⁸⁶ Additionally South Sudan has forged mutual cooperation with the republic of Ethiopia, through signing of memorandum of understanding (MoU), to construct pipeline running from Djibouti through Ethiopia to South Sudan which will facilitate transportation of crude oil to the international markets. Ethiopia stands to benefit from Ilemi Triangle by accessing pastures for her Dassenech pastoral community, which could graze in the area harmoniously, given that both South Sudan and Kenya will cooperate to utilize the Triangle mutually. It is also a partner state in the LAPSSSET project and her economic development is pegged on peaceful sharing of economic potential of Ilemi Triangle.

This study sought to establish how the economic potential of the resources available in the Ilemi Triangle, can be exploited with the aim of benefiting all the three countries (Kenya, Ethiopia and South Sudan). The respondents were required to opine on the nature of state relations concerning the sharing of Ilemi triangle and the appropriate means, through which the economic potential of the disputed territory can be exploited. There was a growing concern among the respondents that, no single state can manage to effectively control the resource shared among other sovereign states, without conflict and therefore, it was imperative for the sharing states to adopt joint initiatives, which need collective responsibility drawn from the sharing states for the mutual benefit of both states as exposed by Neoliberal Institutionalism Theory.

This study sought to establish some of the initiatives employed by the states sharing the Ilemi Triangle in order of priority. The initiatives reflected different state's interest and were made from rational decision-making calculation. Although, there were different means quoted in the field, the responses centered on the economic exploitation of the resources in the Ilemi Triangle and means of increasing interstate cooperation, given states were sovereign and acted on their own volition without higher authority to regulate their behavior. Some of the preferred means of exploiting Ilemi potential are shown in the figure 3 below.

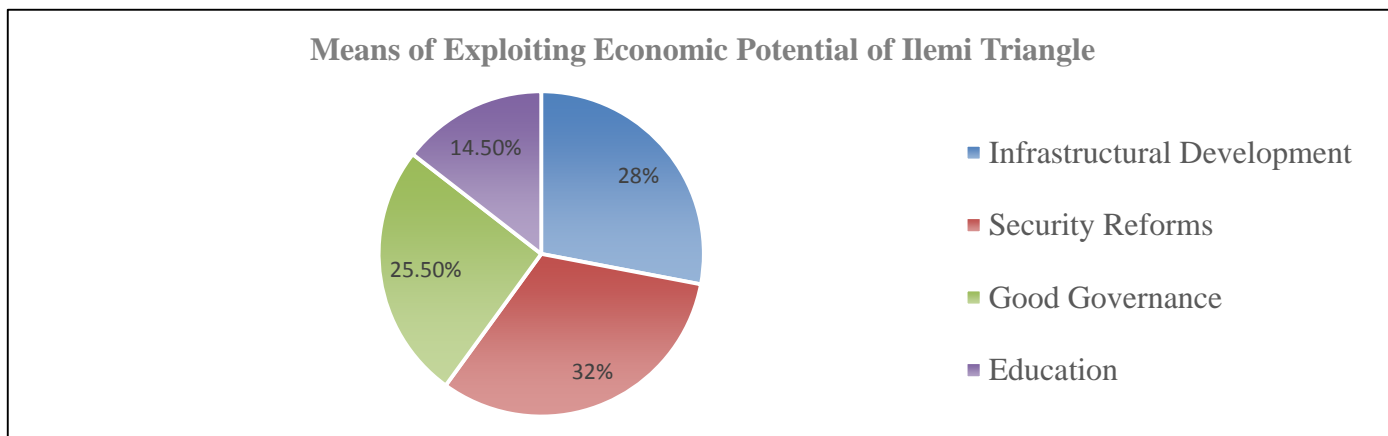


Figure 3 Respondents' perceptions for exploiting resource potential of Ilemi Triangle

Source: Field Data, 2017

From the response obtained in this research, majority of all the respondents (32%) preferred security reforms, as the best means through which Ilemi sharing states can optimally exploit economic potential of Ilemi Triangle. Security reforms were more preferred to infrastructural development, which was quoted by only 28% of all the respondents. Good governance and Education were cited by 25.5% and 14.5% of all respondents respectively as the most appropriate means of exploiting the economic potential of Ilemi. The study also sought to establish, whether the resources were in any way fuelling interstate conflict as states sharing Ilemi competed with each other to control the resources.

⁸⁶Ibid.



Respondent D11 indicated that;

“There are growing political developments in Sudan and South Sudan, which have reignited the old rivalries surrounding the ownership of the Triangle with the latter claiming ownership and reporting Kenya to the ICJ in a case of territoriality. This has created an international stalemate which needs an international arbitration.”

This study undertook to understand the economic and political policies initiated by Kenya to consolidate her grip on Ilemi Triangle and which led to the fallout with the Republic of South Sudan. South Sudan invoked liberal institutionalism principal by the referring the dispute to the ICJ as part of dispute resolution anchored on good offices abandoning the anarchic root of going to the war. The respondents were asked to indicate on a level of 0-10, the prioritization of security reforms, humanitarian and social reforms, governance and administration, economic transformation and reforms programs and infrastructural development programs by the republic of Kenya in controlling Ilemi Triangle. The results show that security reforms (7.5) were highly rated as the priority programs initiated by Kenya in her bid to control and exploit Ilemi Triangle. Infrastructural development was given a score of 5.5 on average by respondents while humanitarian and social reforms was given a score of 4.5 on average by all respondents. Economic transformation reforms programs and governance/administration were rated by a score of 2.5 and 1.5 respectively.

Table 4 Economic transformation reforms programs and governance/administration

Political & Economic Policy	Priority Scale (0-10)
Humanitarian and social programs	4.5
Governance and administration	1.5
Economic transformation and reforms programs	2.5
Infrastructure development programs	5.5
Security reforms	7.5

Source: Field Data, 2017

From the above results, the government of Kenya has prioritized security of Ilemi triangle over the other economic and political policies. The prioritization of security reforms is specifically targeted at securing the inhabitants and the resources found in the area. The policy of initiating infrastructural development reforms is higher on the scale indicating concerted efforts by the republic of Kenya to exploit the resource endowment of Ilemi Triangle. The issue of good governance recorded the lowest score of 1.5 on a scale of 10 perhaps due to decades old marginalization of the region by successive Kenyan Governments.

From the above findings Respondent D13 affirmed that;

“The prioritization of security reforms in the Triangle has triggered a new territorial competition capable of harming inter-state relations.”

1.17 SWOT Analysis and Challenges of Shared Inter-State Natural Resources

The respondents opined that Natural Resources present a number of Strengths, Weaknesses, Opportunities and Threats to countries which share them. Given the multiple reasons as to why different states share natural resources, there exists multiple opportunities and threats which present themselves in such arrangements.

According to Respondent D13 added that,

“Resources exhibit various ecological, social-cultural, political and economic opportunities. Social prospects encourage restoration in collaboration and social ties among groups separated by boundaries, and expand welfare for populace. Economic prospects flourish the advancement, for example, in tourism and economies to a bigger scale. Political prospects enhance security in outskirt territories and upgrade straightforwardness and responsibility in the utilization of natural resources.”

The respondents in this study were of the opinion that sharing can be a successful way for common resources administration and biodiversity preservation, where shared inter-state dangers can be handled together and common advantages can be picked up cooperatively over a border. For instance, respondent D8 was of the opinion that Kenya, South Sudan and Ethiopia were to benefit from cooperative sharing of natural resources in the boundaries of these countries.

She said;

“Turkanas from Kenya graze in the Ilemi triangle just as Toposa and Inyangatom from South Sudan. Both countries should cooperate to jointly construct a meat processing plant, which will benefit all these pastoralists communicate and enhance international trade among the three countries, hence promoting peace and security.”

Sharing is not in any case, a widespread panacea for administration of resources over state lines. Now and again, it is more compelling for nations to deal with their mutual assets freely on the grounds that there is minimal net pick up from joint efforts. Derived from the case of Ilemi Triangle, it is evident that administration of natural resources found therein is more meaning and feasible when done unilaterally, than when it is a shared venture with other states, which constitutes one of the weaknesses of sharing resources. This study undertook to establish some of the benefits of sharing these resources. The respondents had varied opinions on the benefit accrued to a particular state as a result of sharing natural resource.

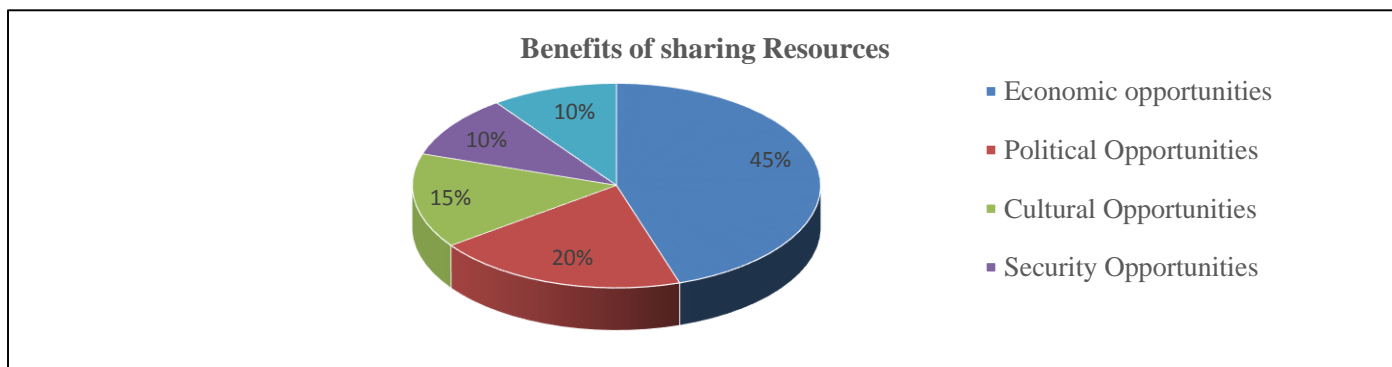


Figure 4 Benefits of Shared Resources
Source Field Data, 2017

Economic opportunities as the shared benefit which states stand to gain as a result of managing a shared natural resource. 20% of the respondents remarked that political gains could be realized. Additionally, 15% termed cultural opportunities as the tangible benefits while security opportunities and environmental and biodiversity opportunities were preferred by 10 % of the respondents respectively. From shared resource comes a shared identity which citizens from the sharing states adopt and identify with consequently, solidifying cultural ties from the sharing states. Kenya, South Sudan and Ethiopia have communities which graze in the Ilemi Triangle and share almost common cultural practice and thus their security needs are almost the same.

The respondents were skeptic of adopting shared resources management with anxiety of states losing sovereignty through sharing resources, due to ceding of control of parts of their territory to neighboring states. However, by submitting part of her territory to share administration, countries will gain much from shared resource management process. They were also concerned over security. For instance, Respondent D5 was of the opinion that sharing natural resources was a recipe for conflict as well as an opportunity for cooperation.

She said;

“Shared management of natural resources increased the risk of insecurity significantly. These include porousness of the boundaries which can lead to free movement of illegal migrants and criminal elements and light weapons from countries with different economic capabilities infused with spread of disease and pests.”

National security and territorial sovereignty aspects are likely to constrain the ability of states to cooperate and manage their shared resources collectively.⁸⁷ Pursuant to Neoliberal institutionalism theory, sharing of natural resources presents aspects of interdependence, where states hold mutual interests in the management and exploitation of such resources, thereby increasing mutual benefits which necessitate integration and cooperation. The respondents were asked to mention some of the shared regional and continental protocols and treaties relevant to shared resource management. Some of the mentioned Conventions and Agreements related to management of climate and natural resources in African Continent while others were for protection of biodiversity. Although some of the quoted shared

⁸⁷ Mburu, N. (2003). *Delimitation of elastic Ilemi triangle. Pastoral conflict and official indifference in the horn of Africa*. African Studies Quarterly, The Online Journal for African Studies, Spring



resources management agreements and conventions were not found in the Horn of Africa region, they were found in the African continent with shared responsibility.

However, the existing literature reviewed has revealed that agreements among countries have not been broadly tested and proven to be beneficial. Most of them take considerably long time to be implemented and to yield any significant results. For instance, in the case of Kilimanjaro Heartland the negative sides effects of protecting wild animals and life are detrimental to locals in terms of restricted access to clean water, denied user rights and very few resources to be shared in terms of income. In Kenya and Tanzania therefore, the locals cannot be said to have benefitted from joint wildlife preservation.⁸⁸ Resource management should be founded on trust and openness. Monitoring and evaluation of any partnership is critical on a frequent basis, and change according to need. The case of Ilemi Triangle shared among South Sudan, Kenya and Ethiopia is one case where trust issues have taken hostage of the delimitation process and delayed the demarcation of the international boundaries.

V. CONCLUSIONS AND RECOMMENDATIONS

1.18 Conclusions

Shared resource management can effectively be a tool of managing natural resources as shared problems and challenges will be easily shared and riparian states benefit equally and mutually. Although states which share natural resources accrue other socio-political and ecological benefits, economic interests pursued by the sharing states to a large extent dictate the nature of cooperation or rather lack of it, thereof. Economic considerations are the driving force characterizing state behavior towards the others and foreign policies are based on these economic considerations. Shared management of natural resources is debatable and produces a myriad of results. Shared management of natural resource is proven unsuccessful due to trust issues and national chauvinistic tendencies. For instance, the case of Ilemi Triangle shared among South Sudan, Kenya and Ethiopia is one case where trust issues have taken hostage of the delimitation process and delayed the demarcation of the international boundaries. Despite formation of a number of joint commissions to demarcate and delimit the Ilemi Triangle little has been achieved, consequently the sharing states are at loggerheads particularly Kenya and South Sudan with the latter referring a delimitation suit to an International Court of Justice (ICJ) for adjudication. The Ilemi Triangle therefore, presents a challenging territory souring inter-state relations in the HOA region. However, an existing collaborative sharing arrangement in the Heartland of Kilimanjaro has additionally energized collaboration by different segments across state lines such as culture, immigration and customs, agriculture and education. The process of dealing with tourism in the Kilimanjaro area would get the advantages of expansive scale, more guests and more monetary advantages to a wide range of partners, including administration of both nations. It offers solid potential for the improvement of financial activities focused on maintainable utilization of untamed life and other characteristic assets. It's important to note that, no single state can manage to effectively control the resource shared among other sovereign states, without conflict and therefore, it is imperative for the sharing states to adopt joint initiatives, which need collective responsibility drawn from the sharing states for the mutual benefit of both states as exposed by Neoliberal Institutionalism Theory.

1.19 Recommendations

Resource management should be founded on trust and openness. Trust builds over time and openness will come from shared behavior. Shared resources must hence be flexible and point towards the needs of each stakeholder. Monitoring and evaluation of any partnership is critical on a frequent basis, and change according to need.

For shared resources to be successful there must be political will and durable commitment. Good relations between political leaders on the global stage can facilitate shared resources which can be constrained by state interests and national security. There must be collaboration so as to handle local-level conflicts across state borders through establishment of common ground on shared objectives.

States sharing natural resource should invest in great diplomatic engagements among themselves as this can significantly help in shared resources management, and are essential for bigger scale activities. Improved diplomatic ties amongst neighboring states improve collaborative management of shared resources and play a critical role in setting up large-scale activities. Good diplomatic relations aid in settling cross-boundary strife by employing shared

⁸⁸ Barrow, E.H., & Gichohi, A. (2000). *Rhetoric or reality? A review of community conservation and practice in East Africa*. International Institute for Environment and Development, London, UK.



values. This will increase security at the boundaries and ensure states enjoy the benefits of the resources. Good diplomatic relations create foundation for enhanced development within states.

Collaborative utilization of shared resource does not provide a one-stop solution to exploitation of resources across state borders. In reality though, it behooves states to manage cross-border resources independently, as so doing may seem profitable than when sharing them with neighbors. At times, cross-border cooperation of states, lead to emergence of cartel networks which intervene in the buying and selling of the products leaving states making losses. Therefore, individual state efforts are more suitable to drive economic benefit and sustainably manage resources.

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