



**CONSTRAINTS IN IMPLEMENTING INTERNATIONAL WATER TREATIES: A CASE STUDY OF NILE BASIN
TREATY OF 1929**

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TREATY OF 1929**

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Abstract

The River Nile is shared by 10 river basin countries also known as riparian states. It is the main vital water artery in the North Eastern region of Africa. The river is fed by several tributaries originating from downstream states which join to form the might Nile the White Nile from the East Africa lake region and the Blue Nile rising from Ethiopia highlands, the main tributaries. The prevailing water policy regulating the distribution of water among the countries of the Nile basin is dictated by the Nile Treaty of 1929 signed between Egypt and Great Britain representing her colonies giving exclusive rights to Egypt for the use of the Nile and also the bilateral agreement of 1959 signed between Egypt and Sudan sharing the river flows volumes to the two states with Egypt getting the larger share. The study made use of extensive interviews with government officers, Non-Governmental officers, Ministry of Foreign Affairs, politicians, key individuals and academicians and reviewed vast literature on the subject of study.

The study established that there are constraints in implementing international treaties and hence all main actors must work toward a common vision in order to avoid conflict. Also that, there are no uniform formula to enforce the signing and ratification of treaties which guarantee that parties are bound by the treaty. The creation of institutions which are beneficial for all the riparian states, are key. Institutional frameworks like the Nile Basin Initiative (NBI), Steering committee meeting, Nile Technical Advisory Committee and the Nile Equatorial Lakes Subsidiary Action Program (NELSAP), has seen member states cooperate beyond water issues to demonstrate belief through effective joint action.

The challenge for implementing international water treaty is on how to get parties on the negotiation table to ratify them. Article 27 of the Vienna Convention on the Law of Treaties States "A party cannot invoke the provisions of its internal law as justification for its failure to carry out a treaty". The policy adopted by the world community serves the goal of stability and change for states fundamental rights which are essential, absolute and self-evident. To avert conflicts and long disputes associated with water and international water treaty, guidance is sort on sovereign equality of all member states on legal status. Although it is easy to enumerate duties of states, it is very difficult to get them observed in practice. Treaties at best are only standards of conduct that states are enjoined to observe as a moral duty.

Key Words: *International Water Treaties, Nile Basin, Water Policy*

Introduction

Whereas international treaties and conventions are considered to be the most important sources of International law, treaties and customs are regarded as the exclusive sources of the law of the nation. Treaties are divided into two groups: law making treaties and treaty contracts covering special matter between contracting states. On their part, law making treaties are the source of international law. A state automatically subjects itself to the customary law of nations state when it becomes a member of the international community.

According to Tripel, international law governs relationship between states. Consequently, the intention of these treaties is to enforce judicial law-making. In corroboration to this view, Kelsen argues that International law represents a higher legal order and is as such supreme because it is derived from the practice of states. However, it is asserted that in the international community some treaties are binding while others are not. For instance, the UN Charter is binding even to none state members. It is also noted that there are other factors which contribute to states' observance of international treaties such as balance of power, collective security and guarantee of third party. To this end, almost all states endeavor not to violate international treaties or show disobedience but instead recognize their existence. As a result, most of international law is often observed by states.

Nile River is one of the major rivers sharing international waters amongst riparian states. Wherever a major river or a lake is shared by two or more sovereign nations, the shared international waters become vulnerable to indiscriminate exploitation and degradation. This results from population augmentation, acute climate change and environmental degradation. Whenever this happens, nations sharing such water resources become vulnerable to conflict. It has been historically proven that as a result of environmental obligation, and recognizing nation's vulnerability of shared water resources,

riparian states are compelled to seek cooperative and resilient ways of developing, managing and using their shared water resources.

Universally, water-related conflicts tend to be internal (between local groups and not between states). As a result, competing cross-border water needs have led to persistent tensions and have hampered interstate development. Tensions between citizens and authorities over water issues may initially manifest themselves in the form of civil disobedience. Tensions over water in international river basins often mean that such shared resources are not developed. It is on record that Nile River is one of the world's longest trans-boundary rivers. The river is shared by ten riparian countries which include Burundi, the Democratic Republic of Congo, Egypt, Ethiopia, Eritrea, Kenya, Rwanda, Sudan, Tanzania and Uganda currently, the Nile is a crucial resource for the economic development of the Nile Basin States. The East African States argue that the 1929 treaty, which came to force before independence, is a colonial relic and is hence not binding. Apparently, Egypt claims water rights from a long list of treaties dating far back into the colonial era. As a result, the riparian states have contested the validity of the 1929 treaty. For instance, a Ugandan commentator, Charles Onyango-Obbo wrote recently that Egypt could not enjoy the benefits of having unlimited access to the basin waters while blocking a landlocked country like Uganda from enjoying the same benefits while it sat at the source of the Nile.

Certainly, the renegotiation of the 1959 treaty still gave Egypt a lion share of the Nile waters to Egypt. As a result of the conflict of the shared waters among the riparian states, a substantial amount of discussion between ministers from the basin countries has been in place. These deliberations have focused on ways of achieving equitable utilization of the Nile Basin waters as well as developing appropriate institutions to address resource allocation.

In the backdrop of the weight of implementing international treaties, there is a clear need for the

Nile cooperation to pursue sustainable solutions to these complex needs. It is from such challenges of seeking new strategy for better performance that fresh research is needed on specific examples. The underlying reasons for are: to gain better understanding of how river basin commissions function and to establish why politically powerful states should move from power-based to interests-based approaches to management in implementing international treaties.

Statement of the Research Problem

The Long standing conflict among the riparian states of the Nile River over its use and management is increasingly being blamed on the lack of authentic information on the mundane issue concerning the .conflict. The Nile Basin Treaty of 1929 was signed between the colonial master, Britain and Egypt with no consideration of the other states within the region. The treaty, which Britain signed on behalf of its East African colonies, forbids any projects that could threaten the volume of water reaching Egypt.. Under the treaty, Egypt is guaranteed access to 55.5 billion of the 84 billion cubic meters cubic meters of water.

Since winning their independence, the East African countries have gravely resented the Nile Basin Treaty. The Tanzanian Minister of Water, Edward Lowasa once said, "These are people with no water". The other riparian states are given no rights and are restricted from drawing the Nile River waters. This has resulted to serious negotiations on the equitable distribution of these international waters among the benefiting states. The riparian states began registering their complaints since the signing of the Nile Basin Treaty of 1929. In addition, though initiatives towards cooperation of the riparian states in the management of the Nile are on-going, discontent about the measures taken so far is still evident among the riparian states. The rigors of unilateral decisions by the riparian states, that may not be necessarily sustainable, are

indications of dissatisfactions. Yet unilateral actions by the states have been based on raw information in the public domain. Unilateralism, in this regard, has been pursued as an effort to counter Egypt's unwillingness to review its stand on the Nile waters. Uganda has recently (2005) passed a Bill, which renders the Nile Treaties signed before independence invalid. Indeed, since the signing of the treaty, Egypt and Sudan have used force or the threat of force to sustain it. The oppression of this treaty has been demonstrated by some East Africa states. For instance, Tanzania defied the colonial treaty and has embarked on the construction of a 170 kilometer inland pipe for its country's domestic water supply. Mbote maintains that, in June 1980, Egypt nearly went to war with Ethiopia after Addis Ababa opposed attempts by the late President Anwar Sadat to divert the Nile waters to the Sinai Desert.

Tanzania's action to defy orders and initiate a project is an example of the constraints of implementing international treaties. In this note, the action by the government to initiate a project to draw water from Lake Victoria to supply Kahama in Shinyanga region is a contravention of colonial treaties that gave Egypt and Sudan unbridled control over the use of water from the lake. In addition, trans-boundary water resource management faces the challenge of different parts of one ecosystem being managed by different institutions under different legal frameworks. With the possibility of giving rise to conflicting management policies, this may lead to poor management of the natural resource in question. Therefore absence of an appropriate management structure for the whole unit creates a high risk of conflicts over the right to use the shared resources.

Objectives of the Study

The broad objective of the study was to analyze the constraints encountered in the implementation of international water treaties for cooperation and development focusing on the key

aspects of the Nile Basin Treaty of 1929. The specific objectives were:-

- To examine the extent to which the perceived illegality of the 1929 treaty by the main actors has affected its implementation;
- To critically analyze to what extent the 1929 Nile treaty is binding to the riparian states;
- To assess how the implementation processes of treaty has affected the institutions for dialogue on equitable distribution of the River Nile waters among the beneficiary states

Hypotheses

- H1: The riparian upstream states position expose them to conflict and low rates of bargaining power on the treaty implementation than downstream Nile ones;
- H2: Some states hardliner on the 1929 treaty constitutes to effective division in the implementation of the treaty;
- H3: The failure to revise the 1929 Nile treaty has created a conflict system among the riparian states of river Nile.

Literature Review

It is in the field of studying international shared water systems within the greater framework of international relations that water resource relations, water-related legislation and legal conventions, and development challenges that lie ahead of the Nile Basin conflict are examined. The notion that there are constraints inherent in the implementation of the international water treaties from cooperation to development is a current debate. The vast majority of international shared water systems theoretical perspective take track one aspects are classified as realist or liberalist.

The Nile trans-boundary water resources traversing different states present a challenge in terms of management. This is because they involve different states with different interests based on national needs and those of their constituent different groups of people.

The potential for conflict over such resources is great and points to the need for cooperation between states as well as between users. An example of these resources is the watercourse in which International law has been provided to form the basis for the negotiation of rules that govern trans-boundary watercourses. In consideration of the various schools of thoughts, it is an essential fact that development processes set in the Nile Basin require appropriate institutions and clear strategies for negotiation among the basin users. Consequently, negotiators need to embrace tactful approaches in addressing implementation. This is to avoid disconnection between the goals of dispute resolution, the move to cooperation, the transition to development and the achievement of benefits for all states within the basin.

It is asserted that in recent years, political conditions have emerged in the basin countries that have provided a window of opportunity for taking forwards cooperative development of the transboundary shared waters. A prominent thinker in this school is Waterbury. He asserts that with the support of external agencies since the late 1990s, nine of the ten Nile riparian countries have been setting a process of institutional development that has cemented cooperation and charted a way forward for future development in the Nile Basin. In his view however, Bricheri asserts that the challenge remains on how to put institutional development and cooperative thinking into practice through the development of projects of mutual benefit through dialogue which is both sustainable and able to deliver benefits to the poorest.

In her analysis, Freudenschuss-Reichl asserts that international negotiation, agreement making and implementation have several inhibiting barriers. She notes that while regional and international inter-session meetings can yield substantive recommendations, endorsed by the relevant regional authorities, they have several shortcomings. One of these limitations could be the severe imbalance in the resources invested in

the negotiation process from the interested parties. Another one is the lack of coordination with other major international processes. However Barston asserts that for cooperation within riparian states, one limitation is the environment or available assets and continent variable.

Hughes Butts, views this complexity from a global approach saying that many conflicts over water could be alleviated through efficient use of water. In the Nile basin such activities are realized through the Nile Basin Initiative (NBI) and the steering committee meetings of member states. Scholars in this school of thought include Peter Gleick and Thomass Naff. They argue that water shortage in international river systems result to conflict and that helping end water problem would reduce the conflict, sighting the complexities in international treaties and the transboundary international waters where protection levels are necessary.

The Review

A major problem in the management and use of a shared natural resource like the river Nile is the sovereignty of states. This is because cooperation will be anchored first on the national interest of these states economically, politically and even ideologically. According to the United Nations office in New York' in claiming their rights to international waters, states have adopted four theoretical positions namely: territorial integrity, absolute territorial sovereignty, community of so-riparian states and limited territorial sovereignty. The concept of territorial integrity is based on the old common law of private waters right where a lower riparian is entitled to demand continuous natural resources flow of river water even when the state itself has interfered with the natural flow within its territory It is either quantitatively or qualitatively. This, put in the context of the conflict, would mean that Egypt has a right to complain when countries of the East African countries and Ethiopia interfered with the flow of the Nile waters despite the fact that Egypt was

doing the same within her territory by virtue of being a lower riparian. This is absolute violation of the upper riparian states' right and would not acceptable in modern international relations. The concept of absolute territorial sovereignty contends that a state is free to use and dispose of the natural resource within its territory according to its needs and wishes and under no restrain whatsoever, from external sources.

This theory though nationalistic in nature is in conflict with the rights of the lower riparian. In this case the East African countries and Ethiopia can build dams, use the water for irrigation among other activities without due regard that they would be strangling Egypt to its knees since the Nile is its lifeline. This law was invoked to take care of political sentiments but is no doubt a highly potential cause of disagreements.

The theory of co-riparian states on the other hand takes a communal approach where the basin states are regarded as an economic and geographic unit irrespective of national boundaries and that the water is vested in the community at large .and is to be divided amongst the co-riparian states by agreement. The theory takes into account that as a hydrological unit, the river ought to be managed as an integrated system because very often the ideal location for construction of dams for storage, hydraulic power, or flood control may not be within the state in need of such structures - like in the case of Egypt where the Aswan dam was built to restore water due to its full dependency on the Nile waters despite the fact that it does not contributes to the amount of water being the furthest downstream. Thus the agreements may in some instances provide for the construction of structures by a lower riparian in the territory of an upper riparian and depending of the structure to be constructed, the agreement may include sharing of costs and benefits among the states involved. In some instances the financing of the project may involve external donors. An example of this is the 1929 Nile waters agreement between Egypt and Sudan. The same principle is

used to rationalize Egypt's control of the levels of the Lake Victoria from a vantage point in Jinja, Uganda. This remains a bone of contention especially with the upper riparian states.

Limited territorial sovereignty theory gives every co-riparian a right to "reasonable" use of the waters of the river flowing through the states territory. This theory in essence is opposed to the theory of absolute territorial sovereignty. It argues that each co-riparian is under obligation to permit equitable and reasonable access to each other despite the fact that they may have a joint management or share of the cost and benefits. Similar to the community of co-riparian states theory, it allows for international cooperation and suggests that the vagaries of geography such as Egypt being the lowest riparian as well as being situated in the hot desert should not be reason for its extinction.

However, on the same token it is untenable for a lower riparian to demand absolute rights all the waters to the exclusion of the upper riparian states as is the case with Egypt's use of 90% of the waters of the Nile while only 10 % is left for the rest of the riparian states which logically brings about discomfort unless it is mutually agreed upon. Okidi argues that underlying the theoretical positions mentioned above, there are two principles in international law which is said to consolidate the legal framework in guiding the conduct of state in instances where a resource is international like in the case of the Nile. First, is the principle that a state should use the resource located in its territory in a manner that ensures its activities do not cause injury beyond the limits of its national jurisdiction. This principle has been acknowledged as a rule of general international law to facilitate good neighbor lines and the prevention of abuse of rights.

Nonetheless, Egypt is not taking any chances and does not lay her trust on co-riparian states to adhere to this principle hence the posting of an overseer based in Jinja Uganda. The Owens's Falls dam in Uganda, having raised the water table of Lake Victoria, has been viewed by some scientist

as the cause of the perennial floods in Budalangi and Nyando plains in Kenya. Uganda in this case did not consider the injury it would cause its neighbor Kenya.

This principle has also been entrenched in more than 24 different conventions and declaration; the popular one being principle 21 of the Stockholm conference on Human Environmental Rights which states that: "States have in accordance with the character of the United Nations charter and the principle of International law on the Sovereign right to exploit their own resources pursuit to their own environment policies, asserts Okidi. With specific reference to international rivers, the principle was adopted by the Helsinki rules of 1966 where articles state that: - Consistent with the principle of equitable utilization of waters of an international drainage basin, a state must:-

- Prevent any form of water pollution or any degree of existing water pollution in an international drainage basin which could cause substantial injury in the territory of a co-basin state and
- Should take all reasonable measures to abate existing water pollution in an international drainage basin to such an extent that no substantial drainage is caused in the territory of a co-basin state.

Second is the principle of Equitable Utilization that affirms the basin state to allow another reasonable and equitable sharing of the waters of the basin. The principle relates both the qualitative aspects and sharing of the resource. Okidi explains the character of the Nile basin as an international drainage basin and why it is special. This special character is the fact that it is shared by a number of states. He discusses the problems of law that may arise in international drainage basins which depend so much on the use by the upper or lower riparian states, that may affect the quality and quantity of the waters. These problems are actually the root causes of the conflict and the reason why certain countries like

Egypt and Sudan want to be in control of the Nile waters.

Pundits say the Nile Treaty is technically obsolete owing to the fact that it was a treaty signed when most of the riparian states were under the colonial rule. However, Shaw' explains the role of treaties by correctly affirming that treaties are an important source of international law therefore, in terminating or reviewing a treaty there are rules that must be adhered to this is a process that cannot be done unilaterally but by involving all stakeholders. The Vienna Convention of 1969 on the Law of Treaties, stipulates the principle governing laws on treaties that are found in the procedure for deciding that a treaty is invalid and the grounds for termination (article 45 — 72)' giving insight to this project and putting emphasis on an all inclusive approach that is lacking in the treaties and the management of the conflict so far. The object and purpose of a treaty, it says, is to involve all stakeholders through consent and reciprocity. A part from Egypt and Sudan all the other riparian claim they did not consent to the 1929 and 1959 Nile agreements.

Though international law lacks a structure to make and there are some areas of agreement in terms of laws. The United Nations Convention on the Law of Non-Navigable Uses of International Water Courses sets basic rules of internationally shared water which are: the principle of "equitable utilization and due diligence to avoid causing 'significant harm' (article 5 and 7) One of the influences of the Nile treaties on the riparian states is the inequitable use and management that the conflict anchors on. Though Egypt may claim its historical rights over control of the Nile the more significant point on a Human Rights perspective is that she is actually fighting for her survival.

An important aspect of transboundary water conflict is how this water is to be controlled with the involvement of each country. "The Nile is a river shared by ten riparian States. Out of these countries, five are among the ten poorest in the world. Their state of poverty, coupled with the

alarming population explosion and environmental degradation, necessitate the development of the Nile Water resources by all riparian States." Lemma attributes this status the riparian states of the Nile finds themselves to the policies of the international financial institutions like the World Bank who have made it difficult for the upper riparian states to access finance for development projects without the consent of the downstream riparian states.

This has ensured the maintenance of the status quo in which Egypt and Sudan are the only ones with the veto power. However, despite all these problems Lemma, like other scholars, argues that water sharing gives better reason for cooperation than conflict. He further notes that though the United Nations and the World Bank have been perceived by the riparian states as part of the problem in the development of the Nile projects, they have actually been part of the solution in their funding of such projects like the Nile Basin Initiative, Nile Cooperation Framework among others that are all-inclusive programmes initiated to united all riparian states. To attain equitable and legitimate rights of the water Lemma sees institutionalization of cooperation between riparian states as imperative.

However, Catherine Ferrier seeks possible initiatives for sustainable management of international water basins by studying, the participation of stakeholders and the legal regimes of Lake Geneva as a case in point. Her conviction is that "the challenges that transboundary water courses face are the lack of co-ordination between national water policies, creating barrier in information exchange and diverging economic and political interests" which are some of the problems being witnessed by the riparian states of the Nile. She notes that the fact that states take different approaches in dealing with their sovereignty over water sources is subject to their interpretation of the law, was the reason for the adoption of the Helsinki convention on transboundary watercourses and international lakes.

The convention was passed with the view that water is a public good and therefore should be made accessible to everyone. Diversity should be taken into account in the planning and management and use of the waters to ensure sustainability. Key to this is the management of quality and quantity of the water course harmonize the legal instruments, economic and financial instruments (taxation, price of water management of structures that enable the participation of all actors.

Also central is the use of public information and participation as a tool for policy implementation. The case study of Lake Geneva show the impact of a concerted effort of a transboundary water course whose legal regimes (European, French and Swiss) have been harmonized leading to common action that has improved the lake's water quality. In cooperation in management of transboundary waters Ferrier cites the following as critical in the operation.

Clear legal basis that harmonizes the interpretation and application of the law by the riparian states, financial resources which is the clear definition of shares of investments and running costs, administrative services sharing information in order to have a common agenda and information and participation of the public for awareness of their responsibilities and how to handle violations. In light of the above there is need to understand the provisions of the legal regimes that control the Nile waters. The Nile Water treaty (1929) and The Nile Water Agreements (1959) provide for the legal framework that exists in reference to the use and management of the Nile waters legitimizing the relationship of the parties involved. The 1929 agreement was signed between Egypt and Britain (on behalf Sudan) and its other colonies within the Nile basin. Britain pledged not to undertake works that would reduce the volume of the Nile waters before reaching Egypt.

The Agreement regulates the usage of the Nile waters in the ten riparian states. After Sudan gained independence in 1956 it demanded for a

review of this treat for a rational and fair distribution of the Nile waters, hence the 1959 agreement. This agreement was signed in 1959 giving Egypt and Sudan the mandate to control the use and management of the Nile waters. In essence it is the reason for the existing inequality that has triggered the current conflict. The treaty lays down the legal framework that guides the running of the Nile waters against the backdrop of the competing demands of the riparian states. The Treaty was drafted with the awareness of its limitation to the other riparian states and has a provision on how Sudan and Egypt should handle the review of the Treaty in case the other riparian states seek redress. In light of the awareness of the unfair distribution, one would have expected this conflict to be much easier to resolve since Egypt and Sudan had already foreseen the likelihood of counter actions from other riparian states. On the contrary, the conflict is more complex and these two treaties have sighted as key causal factors to this conflict.

Mwagiru contributes to the growing literature in Conflict Management that is a fairly new discipline. He examines the process, approaches and identifies factors that explain or predict outbreaks of conflict. Drawing from a rich literature by great scholars like Johan Galtung and Zartman .I.W.; he gives an in-depth comprehension on Conflict analysis. Mwagiru advances the view that "it is not possible to understand, analyze, or even manage conflict before defining its nature and content". Conflict is said to arise when the parties have incompatible goals.

The Nile riparian states have been planning on how to use the Nile waters. Looking at their demands, most of their goals are incompatible. Though several interventions have been made towards having an integrated approach to development, the conflict has continued to escalate because of the different interest and demands. "The tendency, in most cases, is to see only the dysfunctional effects of conflict. Dysfunctional conflict leads to the breakdown of

social order” which is indeed one of the presuppositions of the project and the justification for the need for a proper analysis. Castelein and Otte, stress in their document that when analyzing conflict it is important to capture its memory. The document indicates the importance of history in conflict analysis and management of International shared waters. Historical evidence shows that shared waters are a catalyst to cooperation rather than armed conflict. However with this understanding water remains a potential cause of conflict because it is about life. History mirrors the past giving an understanding of current events in analyzing the conflict over the Nile waters. The past informs our present and the present informs our future, this is why the project has heavily relies on history for fact gathering.

The Convention on the Law of Non-navigable uses of International Waters stresses “equitable and reasonable utilization and participation of the waters courses states”. States should therefore use the water course equitably and reasonably with regard to other users. The Convention also provides for “states to cooperate on the basis of sovereign equality, territorial integrity , mutual benefits and good faith in order to attain optimal utilization and adequate protection of International water courses”. Mutual cooperation would be enhanced through exchange of information on the courses and this is stated in article 9 of this Convention which states that “water courses states shall on regular basis exchange readily available data and information on the condition of the water course, and if not readily available, the state concerned shall employ its best efforts to comply with the request. The most perturbing issue is that though this convention would provide for a way forward on how to use the water equitably none of the Nile Basin states had ratified it by 26 August 2003. This could have been occasioned by the suspicions surrounding the conflict. The request for states to avail information is an indication that some states hoard information causing speculation. One of the

mechanisms the co-riparian states are initiating does address the inequality evident in the use and management of the Nile water resource is the reviewing of the law. The riparian states believe that if the treaties are reviewed to address the current needs and realities then cooperation amongst them would be easy to nurture.

One of the mechanisms the riparian states of the Nile are pursuing is trying to review the Nile treaties in a way that reflects the riparian states current needs and realities. Treaties are important because they “permit states to define with greater specificity the rules governing, potentially all aspects of their fluvial relationship”. Though even in the absence of the treaties or when a treaty does not cover certain aspects co-riparian states will depend on the customary international law especially those in the 1997 United Nations Convention on the law of non-navigational uses of International Watercourses.

McCaffrey, however argues that it is noteworthy that treaties have their disadvantages too. Unlike rules of customary international law that are flexible to change “treaties are in principle rigid instruments that are modifiable only pursuant to their terms or by mutual agreement, and that may not be suspended or terminated except under limited conditions” stipulated in the Vienna Convention of 1969. With this background therefore the riparian states of the Nile need to go through their demands for the review of the treaties that control the Nile waters with a fine tooth comb before any concrete decisions are made. However, flexibility in treaties can be tailored made to suit the negotiating parties’ needs.

From a database of transboundary fresh water disputes Jesse and Aaron give an account and trends of the resource water treaties that have taken place prior to 1997. Noting that water is a vital resource, with no substitute whose needs a constant and immediate yet has poorly developed laws thus the need for an insight of these laws to understand their problems. In the findings 86 % of these treaties are bilateral while only 14% are

multi-lateral. There is no clear indication as to the reason to this proportion. However due to selfish interest of Egypt and Sudan the Nile agreement of 1959 was bilateral instead of multi-lateral as would have been the case since it involved ten countries.

Also from the findings, out of the 145 treaties that govern the world's international watersheds and the International Law in which they are based are said to be in their respective infancies, more than half exclude monitoring provisions consequently "two thirds do not delineate specific allocations and four-fifths have no enforcement mechanism. It is no wonder then that these treaties have been a source of disagreement amongst the riparian states. However it is obscured that "The fonate corollary of water as an inducement to conflict is that water, by its very nature, tends to induce even hostile co-riparian states to cooperate and the weight of historic evidence tends to favor water as a catalyst for cooperation.

According to Dr. Patricia Kameri-Mbote the very nature of transboundary waters traversing several national boundaries poses a great potential for conflict hence the need for cooperation. The fact that water has no substitutes makes it very vulnerable to conflict. However, like other scholars (Yoffe, S. et al among others) Mbote argues that there is more cooperation in the management than there is conflict. With specific reference to the 1929 and 1959 Nile water agreements and livelihood of the Nile Basin communities she agrees that there are challenges that need to be overcome through cooperation for peace to prevail in the region. In their words cooperation is lacking amongst the Nile Basin States and is a threat to peace.

One of the main principles she quotes as the means of achieving cooperation among the stakeholders is "Principle 10 of the Rio Declaration, namely access to information by all, public participation in decision making, freedom of association and access to justice" this is a pointer to the need for reliable sources of information, and this project takes the option of a

critical analysis to fulfill this need as revealed by this literature review.

Theoretical Framework

Realism

Realism propagates that the state pursues national interest which is generally power. In the international system realists stipulate that it is anarchical to have no supreme organ above a state which regulates its behavior. States are in this system for relationships with other states purely on their own volition and there is no power above the state to influence how or who it associates with.

Realism, also known as political realism, in the context of international relations encompasses a variety of theories and approaches, all of which share the belief that states are primarily motivated by the desire for military and economic power or security, rather than ideals or ethics. This term is often synonymous with power politics. Further, they believe that states are inherently aggressive (offensive realism) and/or obsessed with security (defensive realism); and that territorial expansion is only constrained by opposing power(s). Classical realism states that it is fundamentally the nature of man that pushes states and individuals to act in a way that places interests over ideologies. Modern realism began as a serious field of research in the United States during and after World War II.

Key assumptions

Realist theories share the following key assumptions:

- The international system is anarchic. There is no authority above states capable of regulating their interactions; states must arrive at relations with other states on their own, rather than it being dictated to them by some higher controlling entity.
- Sovereign states are the principal actors in the international system. International institutions, non-governmental organizations, multinational corporations, individuals and

other sub-state or trans-state actors are viewed as having little independent influence.

- States are rational unitary actors each moving towards their own national interest. The overriding 'national interest' of each state is its national security and survival.
- In pursuit of national security, states strive to amass resources.
- Relations between states are determined by their comparative level of power derived primarily from their military and economic capabilities.
- There are no universal principles which all states can use to guide their actions. Instead, a state must be ever aware of the actions of the states around it and must use a pragmatic approach to resolve the problems that arise.

Neorealism derives from classical realism except that instead of human nature, its focus is predominantly on the *international system*. While states remain the principal actors, greater attention is given to the forces above and below the states through levels of analysis or structure-agency debate. The international system is seen as a *structure* acting on the state with individuals below the level of the state acting as *agency* on the state as a whole. While neorealism shares a focus on the *international system* with the English School, neorealism differs in the emphasis it places on the permanence of conflict. To ensure state security, states must be on constant preparation for conflict through economic and military build-up.

Prominent neorealists:

- Robert Jervis - Defensive realism
- Kenneth Waltz - Defensive realism
- Stephen Walt - Defensive realism
- John Mearsheimer - Offensive realism
- Robert Gilpin - Hegemonic theory

Neoclassical Realism can be seen as the third generation of realism, coming after the classical authors of the first wave (Thucydides, Machiavelli, Hobbes, Morgenthau), and the neorealists (esp. Kenneth Waltz). Its designation as "neoclassical" has two meanings: (1) It offers the classics a

renaissance; (2) It is a synthesis of the neorealist and the classical realist approaches.

Gideon Rose is responsible for coining the term in a book review he wrote: The primary motivation underlying the development of neoclassical realism was the fact that neorealism was only useful in explaining political outcomes (classified as being 'theories of international politics'), but had nothing to offer about particular states' behavior (or 'theories of foreign policy'). The basic approach, then, was for these authors to "refine, not refute, Kenneth Waltz", by adding domestic intervening variables between systemic incentives and a state's foreign policy decision. Thus, the basic theoretical architecture of Neoclassical Realism is:

- Distribution of power in the international system (independent variable)
- Domestic perception of the system and/or domestic incentives (intervening variable).
- Foreign Policy decision (dependent variable)

While neoclassical realism has only been used for theories of foreign policy, so far Randall notes that it could be useful in explaining certain types of political outcomes as well. Neoclassical realism is particularly appealing from a research standpoint because it still retains a lot of the theoretical rigor that Waltz has brought to realism. However, at the same time, it can easily incorporate a content-rich analysis since its main method for testing theories is the process-tracing of case studies.

Prominent neoclassical realists are:- Randall Schweller, Fareed Zakaria, Thomas J. Christensen, William Wohlforth, Aaron Friedberg and Nicholas Rengger.

States will strategize to form alliances when a single state emerges as a centre of power. Balance for power is therefore dominant in realism and its relevance is seen in this study.

The Nile Basin Conflict

The Nile is one of the world's longest rivers with a length of about 6,700 Kilometers covering 2.9 million cubic kilometers and serving a population

of approximately 300 million within its basin. The Nile Basin covers only a very small part of the territory of some of the countries, such as the Democratic Republic of Congo (1%), Kenya (8%) and Tanzania (9%) (Figure 2.1) In other countries, such as in Burundi and Rwanda that lie nearly totally within the Nile watershed, the water resources are predominately renewed within the country, so that the dependence on other countries is small. According to a rule of the thumb, a country is considered as being absolutely water scarce if it has less than 500 m³/capita & year, as chronically water scarce with 500–1'000 m³/capita & year and as water stressed if it has between 1'000–1'700 m³/capita & year. With more than 1'700 m³/capita & year, water resources are considered to be relatively sufficient

In 2002 Burundi, Egypt, Kenya and Rwanda fall in the category of chronically water scarce countries, and Eritrea in the group of water stressed countries asserts Falkenmark.

According to the projected situation of the Nile countries in the year 2025; D.R. Congo is the only country in the Nile Basin in 2025 to enjoy a situation of relative water sufficiency.

On the other hand, Egypt and Sudan hold absolute rights to use 100 percent of the river's water under agreements reached in 1929 between Egypt and Britain (which was then the colonial power in Kenya, Sudan, Tanzania, and Uganda) and in 1959 between Egypt and Sudan. Since Egypt must consent to other nations' use of the Nile's water, most of the other basin countries have not developed projects that use it extensively. Not surprisingly, over the years other basin countries have contested the validity of these treaties and demanded their revocation to make way for a more equitable system of management, asserts Mbote.

The Nature of the Conflict

The Nile basin waters have led to conflict as a result of competition. In the Nile river basin, conflict is most likely to emerge when the

downstream nation is militarily stronger than nations upstream, and the downstream nation believes its interests in the shared water resource are threatened by actions of the upstream nations. In the Nile basin, the downstream nation, Egypt, controls the region's most powerful military, and fears that its upstream neighbors will reduce its water supply by constructing dams without its consent.

In light of the awareness of the unfair distribution, one would have expected this conflict to be much easier to resolve since Egypt and Sudan had already foreseen the likelihood of counter actions from other riparian states. On the contrary, the conflict is more complex and these two treaties have sighted as key causal factors to this conflict. The concept of trans-boundary natural resources is not new globally and was developed for the better management of shared natural resources. While trans-boundary co-operations have been going on for a long time in other parts of the world, it's only now that they are taking root in Africa. If these shared resources are not managed properly, there is a potential for regional conflicts and disputes that can lead to the destruction of ecosystems that transcends national boundaries. On the other hand, if these shared resources are properly managed, they can be a vehicle for co-operation and prosperity for the whole Africa.

Conflicts brought about by trans-boundary resources are fuelled by competing motives to attain scarce resources. Each party wants to get the most that it can, and the behavior and emotions of each party are directed toward maximizing its gain. Usually, natural resources and ecosystems disregard the artificial divisions between countries and extend beyond the range of action of any one state. It is therefore not unusual to see important resources like watershed or internationally significant natural areas transcending national boundaries. Flowing water referred to as river has been the most common resource that transcends across national boundaries and it is prone to causing conflict due to its flowing nature.

Water is central to every human activity, be it in agriculture, industrial production, or power generation. Water is also an important mode of transport for both people and cargo besides serving to keep the ecosystem intact. It is estimated that about 10% of the world water withdrawal serves domestic purposes, 20% goes to industrial uses and 70% for irrigated agriculture. But it is for more sentimental reasons that water evokes powerful emotions and symbolic values.

Historically, water has not sparked any violent conflict. However, tensions between states emerge from time to time. The co-existence of a variety of uses and users – such as agriculture, industry, ethnic groups, rural and urban users increases the likelihood of conflicting interests over water. That water is always going to cause interstate or communal conflict is indisputable. Therefore, the challenge of sustainable water management is a question of understanding the different dynamics that define the use of any shared resource with such priceless value as water. This scenario has informed several schools of thought about how best countries can share water resources.

Water Availability in the Nile Basin

The climate of the Nile countries varies from rainforest, temperate climate to semi-arid regions and desert. While in some countries of the Nile rainwater is available, in others, such as Egypt and Northern Sudan, the Nile River is almost the only renewable source of freshwater. The average flow of the Nile between 1899 and 1959, upon which the agreement of 1959 between Egypt and Sudan was based, was 84 km³/year. The average flow between 1869 and 1984 was 87.1 km³/year. In the 1980s fears were expressed that precipitation over the Nile watershed was decreasing as part of global climate warming. Indeed, the annual amount of precipitation in the Nile watershed decreased between 1965 and 1984. Since 1984, however, the yearly amount of precipitation began to increase again. About 14%

of the Nile flow measured at Aswan originates from the equatorial lakes region. In the recent years, the inequitable use and management of the Nile water resource has caused a lot of friction between the ten riparian states and a thorn in the flesh for Egypt who has been fighting hard to retain the status quo.

Nile Basin Troubled Water – Social Cultural Factors

The social cultural factors within this conflict such as the ethnic tension and divisions among the Nile basin countries over the water are implicit of conflict. The political exploitation of ethnic, cultural and identity differences dates back to the western colonization and scramble for Africa where the continent was divided into colonies.

The differences regarding the Nile basin waters and the 1929 treaty have been highlighted by various scholars. For instance, Yamany quoting Dr. Eglal Rafat, professor of political science at Cairo University, warned that differences in this issue could lead to war in the future if countries did not reach an agreement about sharing water. She told Xinhua that Egypt sees that the past agreements about sharing Nile water are legal and the international law is in its side, so it is impossible that Egypt would compromise any of its historical rights as it is already suffering from water poverty.

The catchment of the Nile impinges on the territory of nine African states, but only one of these, Sudan, is well located to make substantial use of the river for irrigation. The prime beneficiary, Egypt, makes no contribution to its discharge. He further asserts that, no other major river valley is shared by so many autonomous states and no other downstream state is as utterly dependent on a river as Egypt. Hence her uneasiness about any untoward event upstream, especially in Sudan and Ethiopia.

On the other hand, Egypt reiterated that it would not recognize any agreement or any organization for the Nile basin countries unless it admits clearly the Egyptian rights in Nile water and that Egypt

should be consulted before carrying out any project on the Nile which could affect the water quota of Egypt. The report further said, Egypt's water needs will surpass its resources by 2017 because of its population of about 77 million people, and would never give up its historic rights in the Nile water. It cited a recent report by the cabinet's Information and Decision Support Center said that Egypt would need 86.2 billion cubic meters of water in 2017 while its resources would only be 71.4 billion cubic meters. It argued that, Egypt's water resources stood at 64 billion cubic meters in 2006, of which the River Nile provided 55.5 billion cubic meters, or 86.7 %, the report said.

The situation faced by the May 13th signing of the agreement by the 7 riparian states, was earlier predicted by Adam sighting the rising population to complement Rafat. He maintained that, the combination of rising population and rising demand for Nile water in both countries will place increasing pressure on the resources available and that this scarcity will be further aggravated by the short-term survival tactics of project-mongering politicians and disingenuous foreign experts. He further asserts that, notably, the crunch is unlikely to come in the 1980s. He maintains that, when it does the interests of both countries will probably be served best by upholding the 1959 agreement and by a united front in the face of demands by upstream users, which is now happening.

Supporting the same view, Waterbury examines the future water supply and demand in each of the states and concludes that water will become a major constraint within a decade. He premises that the 1959 agreement will not stand up to the impending water crisis and that further confrontation of existing and potential needs will reoccur. In his suggestion, he quoted information which confirm that in the absence of detailed plans and finance for the White Nile conservation scheme there is insufficient water for Egypt to irrigate an additional 1.1 million feddans of desert by 1990

In a contrary view, Conway quoting Al-Mashet Director of Search and Studies Center in the prestigious Cairo University argues that, differences among the Nile Basin countries could be normal if they did not have an agreement organizing the relations among them signed in 1929 and so no country can change the water quota for each country. In his view, Abu Zeid Minister of Public Works and Water Resources asserts that, Egypt is suffering from a serious shortage of water, and that "Egypt has already entered the cycle of water poverty," he said. He further asserts that the Nile water is enough for every country if these countries concentrated on how to manage and use it.

Table 1: Water and Land Resources in the Nile Basin

Country	Precipitation (a) km ³ /year	Total internal renewable water resources (a) km ³ /year	Total actual renewable water resources (a) km ³ /year	Dependency ratio (a) %	Total actual renewable water resources (d) m ³ /capita + year 2002	Total actual renewable water resources (e) m ³ /capita + year 2025
Burundi	33.9	3.6	3.6	0	537	310
D.R. Congo	3'618.12	900.0	1'283.0	30	23'628	12'242
Egypt	51.37	1.8	58.3	97	829	610
Eritrea	45.15	2.8	6.3	56	1575	940
Ethiopia	936	123.2 (b)	123.2 (b)	0 (b)	1'867	1'068
Kenya	401.91	20.2	30.2	33	947	722
Rwanda	31.93	5.2	5.3	0	654	427
Sudan	1'043.67	9.5 (c)	28.0 (c)	66 (c)	859	605
Tanzania	1'012.19	82	91.0	10	2'473	1'572
Uganda	284.5	39	66.0	41	2'661	1'486

Sources: a) If not specified otherwise: Aquastat database. b) Ethiopia 2000. c) Hamad 2002. d) Population figures from UNFPA 2002, water amounts from previous columns. e) Population figures from UNFPA 2000, water amounts from previous columns.

Water and Conflict

Vast amounts of literature describe water as an historic and, by extrapolation, a future cause of interstate warfare. In describing the threat lurking on the bed of the Nile Basin, Matshanda says, "The so-called scramble for fish in Lake Victoria is turning out to be a source of conflict between nations bordering the lake and could potentially threaten regional stability." Matshanda attributes the growing tensions between countries in the Lake Victoria basin to "lack of a clearly delimited and demarcated border between the three countries sharing Lake Victoria."

He further makes an observation about the shift in water relations as an illustration of the strain that the growing Nile Basin populations have on the allocation and use of transnational waters. "Initially, the contestation over the waters of Lake Victoria was mainly between Egypt and the main riparian states – Tanzania, Uganda and Kenya. However, recently, the contestations have become more localized, with riparian states finding it more difficult to share the lake due to

increased exploitation of its resources and demand for more water from Egypt and Sudan." Kameri-Mbote argues that, "Trans-boundary watercourses traversing different states present a challenge in terms of management as they constitute different states with different interests as per their national needs and different groups of people in the different states with different needs." This is to imply that, "while demand for resources in the Nile region will increase, the supply is likely to remain unchanged, drastically increasing the chances for armed conflict over the waters of the Nile River." Katendeko captures it even more dramatically, saying that while "The Nile may be flowing to the Mediterranean Sea quietly; all is not well among its predators." On his part, Wolf pre-empts that, "At the heart of most international water conflicts is the question of equitable allocations, criteria for which are vague and often contradictory" and that "equitable water-sharing agreement along the volatile waterways of the globe is a prerequisite to hydro-political stability."

Westing as cited by Wolf noted that "competition for the limited water resource leads to severe political tensions and even to war." Citing Gleick, Wolf also described water resources as both military and political goals. He uses illustrations from the Middle East, South America, and South Asia as "well-known examples" of water as a cause of armed conflict; noting that "... conflicts linked to fresh water are already apparent" and warned that "growing conflict looms ahead." Finally, Homer-Dixon, citing the Jordan and other water disputes, came to the conclusion that "the renewable resource most likely to stimulate interstate resource war is river water." Despite all these threats of potential war on water resources, there is little in fact and substance that authenticates the naysayers and various doomsday arguments. The historic reality has been quite different from what the water wars literature would have one believe. In modern history, only seven minor skirmishes have occurred over international waters invariably, other interrelated issues also factor in. Wolf submits that on closer examination, "The very cases most commonly cited as water conflicts reveals ongoing dialogue, creative exchanges, and negotiations leading fairly regularly to new treaties." Wolf also arrives at another observation noting that, "A close examination of the various studies cited in the literature revealed looseness in classification." He argues that on the contrary, incidents of water conflict are generally common at the sub-national level, generally between tribes, water-use sectors, or regions. This argument by no means implies that everything is all right. In fact, Burness, and Quirk say that, "Very serious water scarcity and pollution problems exist in many transboundary freshwater systems."

Strategy for Management of the Conflict

A synthesis of the core issues in the Nile conflict is carried out, focusing on the interaction between national and international water management, and the implications of this on cooperation over

the waters of the Nile. The synthesis leads up to the outlook, which concerns a framework of cooperation in the Nile Basin. The Nile Basin Initiative (NBI) is one of the recent international historic cooperative river basin management program and regional partnership where all the Nile basin states except Eritrea unite to pursue long-term sustainable development, improved land use practices and management of the Nile water resource for the benefit of all without discrimination. The history of the Nile Basin Initiative dates back in 1992 when the Council of Ministers of Water Affairs of the Nile Basin states recognized the need for regional cooperation and integration for regional growth, environmental conservation and the equitable sustainable development of the entire Nile Basin This recognition by the Nile Basin States has given birth to the Nile Basin Initiative which reflects various aspects of integrated water resource management. The Nile Basin Initiative (NBI) has a political head, that is, the Nile Council of Ministers (Nile-COM); it also has a technical council and a secretary in Entebbe/ Uganda. There are also financial means that may help to find a peaceful solution and lead the way to replacing outdated colonial 'agreements' that were, in fact, imposed by former colonial powers on the region.

The Nile Basin Initiative (NBI) was launched with the understanding that a cooperative effort in the development and management of Nile waters will bring the greatest level of mutual benefit on the region. All nations of the basin, Burundi, D.R. Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda, joined the organization. In May 2004, the "Nile Trans boundary Environmental Action Project," the first of eight basin-wide projects under the NBI, was launched in Sudan. Sudanese president, General Omar El-Bashir, declared, "Since environmental hazards are not restricted within geographical boundaries, local and international efforts are required to overcome the dangers and threats in the environmental arena. This project is providing solutions to these problems."

State Plans some initiatives

The regional cooperation among the riparian states to manage this conflict led to the establishments of structures to run the affairs of the Nile River. Some of these institutions were the Hydroment of 1967 to 1992, with the support from the United Nations development program, allowed for coordinated collection of meteorological data. The others were; Tecconile 1993 to 1999 and the Nile basin Initiative 1998 to present. Recognizing their common concerns and interests, the NBI embarked with a participatory process of dialogue among the Nile basin states that fashioned a shared vision “to achieve sustainable socioeconomic development through the equitable utilization of, and benefit from, the common Nile Basin water resources” The policy guideline which accompanies the agreed joint shared vision provides a basin- wide cooperative water resource management framework and also defines the primary objectives of NBI. These objectives include:- To develop the water resources of the Nile Basin in a sustainable and equitable way, To ensure prosperity, security, and peace for all its peoples, To ensure efficient water management and the optimal use of the resources, To ensure cooperation and joint action between the riparian countries, seeking win-win gains, To target poverty eradication and promote economic integration; and To ensure that the program results in a move from planning to action.

In order to implement and achieve the NBI objectives as well as translating the agreed shared vision into action and fostering co-operative development on the Nile, the riparian governments developed a Strategic Action Program composed of two complementary sub-programs which include Shared Vision Program (SVP) and Subsidiary Action Programs (SAPs) . As of today, the Nile Basin Initiative with its strategic Action Program represents a deep commitment by the Nile riparian countries to foster

cooperation, regional integration and sustainable development of the Nile River.

The Constraints of Implementing International Treaties

International Treaties

The Vienna Convention of 1969 on the Law of Treaties, stipulates the principle governing laws on treaties that are found in the procedure for deciding that a treaty is invalid and the grounds for termination (article 45-72) When states conclude treaties and bilateral agreements with each other, they are in essence emphasizing that they rely on each other in different spheres such as trade, economic relations, political affairs and others. Treaties are a good mirror of this interdependence of states, and they underline its reality in contemporary international life.

According to Mbote, it is unfortunately that there are very little mechanisms and models, if any, of resolving conflicts between states sharing water resources. Further to this, she asserts that, not even international models of hydro-economic cooperation and trans-boundary water management promise adequate answers to Africa’s water problem. The fundamental issue at the heart of international shared water disputes is the fact that there are no internationally accepted criteria for allocating shared water resources. Okidi argues that whenever such arrangements exist, their success largely depends on the riparian states’ ability to cooperate without the push of any legal or binding instruments. The 1929 Treaty is challenged by the fact that some riparian states were not considered in the agreements. For instance Ethiopia being a major supplier of the Nile water, it was not included in the Nile water agreement of 1959.

Ethiopia is not the only casualty in this treaty. The Nile basin lies within ten states namely: Egypt, Sudan, Ethiopia, Eritrea, Kenya, Uganda, Tanzania, Democratic republic of Congo, Rwanda and Burundi, yet only Egypt and Sudan have authority to control the use and management of the Nile waters. Egypt draws about 90% of its

waters from the Nile river, as has been earlier explained in this study, and is therefore reluctant to make compromises because of its over-dependency on the river. The restrictions that are in the Nile treaties are directed to some of the riparian states while others (Egypt and Sudan) enjoy the waters, and this have been viewed as a major obstacle in the cooperation efforts and the implementation of this international treaty.

Overall, it can be said that it is the history of the development and management of the irrigation in the two-lower most basin states and particularly the lower most one (Egypt) that has been the source of controversy and the birth of a bi-lateral treaties designed to control the use of the Nile waters. These bilateral treaties are now being contested by the riparian states of the Nile who feel that it was not inclusive hence not binding. These past Treaties and Agreements on the Nile river waters can be traced way back when the Anglo Italian Protocol was signed between two colonial powers, Britain and Italy. This agreement was based on the recommendations of the chair of the Nile waters commission (set up in January 1925), a Briton, and an Egyptian member. This was done without any contribution from the rest of the other Nile riparian states.

Principles of Treaties

The Vienna Convention which consists of 85 articles, eight parts and an annex includes and materializes five fundamental legal principles, i.e. free consent, good faith *pacta sunt servanda*, *rebus sic stantibus* and favor Contractus. According to the principle of free consent, international agreements are binding upon the parties and solely upon themselves. These parties cannot create either obligations or rights for third States without their consent (rule of *pacta tertiis nec nocent nec prosunt* - Article 34). The only explicit exception to this rule appears in Article 22 (1) which is an expression of the favor contractus principle and concerns the withdrawal of reservations. It is embodied in paragraph.3 of the Vienna Convention on the Law of Treaties. As well

as free consent, good faith is of fundamental importance for the conduct of international relations in general and is therefore recognized as an international principle according to the very terms of the Vienna convention.

An abuse of right is contrary to the principle of good faith and in Article 300 of the United Nations convention on the law of the Sea. According to the *rebus sic stantibus* principle (understood in a broad sense), extraordinary circumstances can lead to the termination of a treaty. These circumstances can consist either in a material breach of a given treaty by one of the States Parties (Article 60),

Favor Contractus Principle

This principle expresses the preference of international treaty law for the maintenance and the conclusion of treaties over expiry for reasons of form. Hence, unless the treaty otherwise provides, a multilateral treaty is not terminate by reason only of the fact that the number of the parties falls below the number necessary for its entry into force (Article 55).

Principles of Law

This part examines the role of international laws and the emerging complex issues from states acceptance and implementation of the same, while exploring its necessity in the international system environment.

International law is also seen to provide the law of the country by the legal system of the nation. Agreeing with the provision of international law, Nafziger argues that although international law acts as a reference and permits exceptions and limitations, many of the provisions restrict national sovereignty with respect to limitations and exceptions by delineating a notional maximum extent of such provisions. Nafziger further maintains that, exceptions and limitations already exist in the laws of most developed countries and many developing countries.

With treaties, various interests of states are secured through signing treaties in bilateral agreements. For instance, when states feel that

they require certain things which they do not have, or when they feel the need to exchange those things they have with those that they do not have, they conclude agreements establishing this system of exchange. If states do not do this, they would never be able to secure those things that they consider basic for their survival.

Negotiation Process

In regards to the negotiations of the Nile Basin waters, the upper riparian rights-holding nations usually claim absolute territorial sovereignty, proclaiming the right to exploit the water source, regardless of the effects of this water use on riparian countries. Lower riparian nations seek to preserve the absolute integrity of the water source, claiming that the upper riparian states should not adversely affect the quality or the quantity of water. Godana asserts that, cooperation between states that share international water basins is difficult to achieve, especially when sovereignty, territorial integrity, and security are at stake.

Pre-negotiation include a commitment to negotiation. Here each side defines a problem and develops negotiation strategies including how to arrange the venue, agenda and rules in one favor.

Resolution can only be achieved if the parties are willing to negotiation. In order for the conditions to be ripe there must be both a perception on all sides that the present course is unsustainable, and a perception that there is a suitable "way out" of the conflict.

The Constraints of Implementing International Treaties

Physical geography

The countries of the Horn of Africa are unequally endowed with natural resources hence the various conflicts arising from competition over scarce resources especially those are shared across borders like the river Nile, makes or becomes constraints of implementation of Nile water treaties. The fact that the Nile meanders

through ten countries, is linked to the second largest fresh water lake in the world; Lake Victoria makes it only one of the most conspicuous geographical sites in the world but also a potential source for conflicts. The fact that many actors want to share this resource is a recipe for agreements.

Population make-up of the Nile basin stress to the Nile waters, hence becoming barriers of the Nile water treaties. The inequitable use and management of the shared natural resource becomes constraints to implementation of the Nile water Treaties.

Egypt is a desert agricultural country solely dependent on the Nile waters for there is hardly any rainfall.' 86% of Egypt is classified as arid, and the only exception to the extreme aridity are the narrow band of the Nile Valley and the narrow coastal strip where some 150mm of winter rainfall.

The East African countries' concern is why Egypt should control the use of the Lake Victoria waters yet the resource does not lie within its territory.

Social Networks: the Nile basin is trapped in three conflict systems namely The Great Lakes Conflict System, The Horn of Africa Conflict System and the East Africa Conflict System, which have become constraints in the implementation of the Nile Basin Treaties.

Mistrust, among the leaders in this region still lingers especially where there has been the involvement of exogenous actors in attempted coups in some of the Nile basin countries, hence creating tension among riparian states to the detriment of the implementation of the Nile basin treat.

Elections in the Region: is an issue that can fuel tensions. The fact that conflict boundaries are porous, other issues in a conflict like elections that sometimes taken for granted may be a source of tension.

State and Military Power :The presence of 'armed force has been heavy in the Nile basin region due to the proliferation of small arms in the civil strives for instance in the Sudan, Ethiopia,

Uganda, the Democratic Republic of Congo over the Diamond mines and the Rwanda Genocide that took place in 1993-1994. These civil strifes have left millions of military officials and civilians dead, thus having a tremendous negative impact on development.

Other Causes

The exploitation of water resource by upstream countries affects downstream countries through water shortages, floods and pollution. This explains Egypt's reason for inspecting and wanting to control the activities on the Lake Victoria.

Exploitation of the water resource, may result to reclamation and replanting of wetlands upstream. At present the upstream countries namely Uganda, Tanzania, Kenya, Ethiopia have no such plans other than exploiting the resource.

A group among the riparian counties contribute to and suffer from the damages like water shortage, pollution and services; hence the intensifying complaints from other riparian states.

The global effects — the pollution and global warming and acid rains affect not only the riparian states but also the world climate as a whole. Therefore the Nile Conflict is not just a concern of only the ten riparian states but rather a global issue. This conflict is internationalized from this point of view bringing the concerns of global institutions like the United Nations Environmental Programme (UNEP) into the picture.

Apart from this, riparian countries have different interest and priorities on the use of the Nile waters that may affect Egypt adversely. For this reason, Egypt fears the equitable distribution of the Nile waters because it has enjoyed having the lion share and has made itself totally dependent on the Nile waters. Further to this, the development of small and large-scale irrigation schemes in Sudan and Egypt, which are the most downstream country, and with very little rainfall depends entirely on the Nile for hydroelectricity power generation, domestic, irrigation, leisure and industrial water supplies these are all

programmes taken by the two countries without agreement with the rest of the riparian states.

Positions on the Legitimacy of the Nile Treaties of 1929 and 1959

Egypt

Egypt's position is that with or without the Agreement it is entitled to the Nile waters by virtue of her natural and historical rights. She quotes the principle of *Facta sunt servanda* in International law as one that the riparian states should adhere to.

Sudan

Sudan like all other African states at independence rejected all Agreements concluded by their former colonial administrators, who could not have acted in their interest. This was one of reason why the riparian countries would want to have fresh negotiations done by themselves in the interest of their nations.

Legal Framework

The current hurdles facing the efforts that have been made towards resolving the Nile Treaty conflict have taken various forms, one being the legal framework hence the calls for reviewing of the treaties. However, this process of review has been deeply rooted in the political maneuvers by Egypt and other actors, to maintain the status quo on arguments of 'natural' and 'historical rights'. Egypt is reluctant to make compromises because of the country's over-dependence on the Nile waters and has continued with its desert reclamation programmes, irrespective of objections from its co-riparian states, as has earlier been discussed.

Weakness of Treaties

Historically as elaborated international treaties have required minimum sets of exclusive rights vested in the rights holders, while leaving exceptions and limitations to individual countries to regulate asserts Nafziger. The existing inequality in the management and use of the Nile

waters are attributed to the underlying restrictions of this treaty.

Political Interactions – Barrier to implementation

The riparian states political interaction as concerns the Nile basin mainly emanates for the need to utilize its waters. The report asserted that, in Consideration of the political history of the states all of which at one time was under a colonial power, interactions were carried out among them as an area of the colonies with one country with no involvement of the local populace. This is evident in the Nile Water Treaties of late 19th and early 20th century. The main contention to date is the 1929 Anglo-Egyptian treaty and this is what stimulates international relations among the riparian states. There is resistance to the validity of the 1929 treaty that favors Egypt against other states and the position by Egypt sighting its threats should any country try to interfere with the Nile waters. The illegality of the 1929 treaty is expressed by the other Nile African countries who consider the treaty as a colonial relic which no longer reflects their national interests and aspirations and hence it should be annulled.

Implementation of international treaties is not an easy exercise. However, the implementation of the international treaties can be only achieved through observing the basic principles of treaty relations. Mwangi argues that, treaty relations are an important aspect of diplomacy, and for this reason states must take treaties that they have entered into very seriously, and abide faithfully by what they have undertaken to do. He further emphasizes the principle of *Pacta Sunt Servanda*; as the principle underlies all relations between states based on two elements: first, that treaties are binding on the states that are party to them; and secondly, that treaties must be performed in good faith. Therefore without the fundamental principle – *Pacta Sunt Servanda*, implementation of international treaty becomes impossible. A party is not authorized to invoke the provisions of

its internal law as justification for its failure to perform a treaty (Article 27).

Generally speaking, this solid legal link is not even weakened in the case severance of diplomatic relations between the parties to a given treaty (Article 63). The only limit to the "*pacta sunt servanda*" rule is to be found in the notion of "peremptory norm of general international law" (or *jus cogens*). But apparently States expect increasingly out of realism that the treaties they conclude in certain areas, in particular with regard to the protection of the environment, will not be properly implemented by all States parties just out of respect for the "*pacta sunt servanda*" rule. This is why several recent treaties contain obligations to cooperate in order to facilitate compliance with the treaty obligations, for instance.

The Nile Basin Treaties

Historical Background of Nile Basin Treaties

As this study has shown in the previous chapters, the international treaties are as a result of international conventions and legal regulations. However as analyzed in this study, the colonial era in regards to the riparian states brings a narrative to the more recent years when the newly independent states sought to abrogate the old treaties which championed the interests of the colonial powers to replace them with new regional agreements more in line with their own interests. The Nile basin waters have undergone major bilateral and multilateral agreements on the use of its waters during the colonial period. The inhabitants of this river basin play critical roles in bringing the success of an international agreement.

In pushing for the renegotiation of the 1929 treaty, the 8 riparian countries would capitalize on the doctrine of *rebus sic stantibus* ("things standing thus") which asserts that if circumstances which constituted an essential basis of the consent of the parties to be bound by a treaty undergo such far-reaching changes as to transform radically, the nature and scope of

obligations to be performed, the Agreement may be terminated on the initiative of either party.

The doctrine of *rebus sic stantibus* can be successfully applied to the Sudan and the East African states of Kenya, Tanzania and Uganda because their independence amounted to a vital change of circumstances with regard to the presumptions under which the 1929 Agreement was made in that the Sudan (and the other three) can no longer be regarded as territories whose claim to development could be taken up only once the interests of Egypt, present and potential, have been assured.

Unlike Tanganyika today Tanzania, the states of Kenya and Uganda did not specifically contest the devolution of the 1929 Agreement and the other instruments regarding the Nile which were concluded during the colonial period on their behalf by the United Kingdom and Egypt. It is likely the two States might argue that, after the expiry of the two-year grace period [they declared and which took effect upon independence to allow renegotiation of), the 1929 Agreement, having been neither renegotiated nor repudiated, was considered by them as having lapsed automatically on their accession to independence.

Major Nile Water-Related Treaties and Agreements made during colonization

Most of these treaties consist only of an article in the treaties and agreements about colonial boundaries and economic territories. The treaties are here listed in chronological order:

- The Anglo Italian protocol signed on 15th April 1891
- The treaty between Britain and Ethiopia of 15th May 1902.
- The agreement between Britain and the government of the independent state of the Congo signed on 9th of May 1906.
- The 1901 agreement between Britain and Italy over the use of the River Gash.
- The *Tripartite* (Britain-France-Italy) *Treaty* of December 13, 1906.

- The 1925 exchange of notes between Britain and Italy concerning Lake Tanner.
- The agreement between Egypt and Anglo Egyptian Sudan dated 7th May 1925.
- The 1959 Nile Waters Agreement (between Egypt and Sudan)

Although on sufficient evidence show whether or not the parties to the agreement were bound by this treaty, of all treaties made during the colonial period the Anglo Italian protocol one is said to be the most equitable. Since ensuring equitable water use is not easy, this agreement was defined and reinforced later by the "*the Anglo- Egyptian Exchange of Notes*" with subsequent detailed arrangements of 1925, which include Technical provisions suitable for practical implementation. For instance, terms and conditions for water allocation, and the amount of annual payment by the Sudan to Eritrea as a proportion of Sudanese revenues may obtain from Ethiopia the concession to carry out works of barrage in the lake itself."

The Nile Treaty between Egypt and Anglo-Egyptian Sudan, 07 May 1925

According to Whittington and Guariso, this agreement included the following:

- Egypt and Sudan utilize 48 and 4 billion cubic meters of the Nile flow per year, respectively;
- The flow of the Nile during January 20 to July 15 (dry season) would be reserved for Egypt;
- Egypt reserves the right to monitor the Nile flow in the upstream countries;
- Egypt assumed the right to undertake Nile river related projects without the consent of upper riparian states
- Egypt assumed the right to veto any construction projects that would affect her interests adversely

The 1959 Nile Agreement between the Sudan and Egypt for Full Utilization of Nile Waters

The objective of the 1959 treaty was therefore to gain full control and utilization of the annual Nile flow. The Nile water agreement effectively

divided all the Nile waters between the two riparian states on the basis of an assumed annual average discharge as measured at Aswan of 84 billion cubic meters (bcm).

The key legal principle within the Agreement was expressed as “present acquired rights.” historic patterns of usage took precedence, in effect, over the future need of other upstream states. Though neither the Sudan nor Egypt were contributors to the Nile water but only users, the treaty for the Full Utilization of the Nile waters was signed between Sudan and Egypt without participation of other riparian countries. The agreement contained the following main points:- The controversy on the quantity of average annual Nile flow was settled and agreed to be about 84 billion cubic meters measured at Aswan High Dam, in Egypt; the treaty allowed the entire average annual flow of the Nile to be shared among the Sudan and Egypt at 18.5 and 55.5 billion cubic meters, respectively. The annual water loss due to evaporation and other factors were agreed to be about 10 billion cubic meters. This quantity would be deducted from the Nile before share was assigned to Egypt and Sudan. Sudan, in agreement with Egypt, would construct projects that would enhance the Nile flow by preventing evaporation losses in the Sudd swamps of the White Nile located in the southern Sudan. The cost and benefit of same to be divided equally between them. It further stated that, if claims would come from the remaining riparian countries over the Nile water resources, both Sudan and Egypt shall, together handle the claims.

The Entebbe Nile Pact – May 13 2010 between the 7 East and Central riparian Countries

The decision of the Eastern African countries to sign the new Nile Treaty is said to usher in a new dawn in the management of water resources in the Nile basin. Kenya, Uganda, Tanzania, Rwanda, Burundi, Democratic Republic of Congo (DRC) and Ethiopia are better placed to negotiate for resources to facilitate their projects. Reported by Joseph Kipkoech, Daily Nation 19th in an article,

The New Nile Treaty; Mixed fortunes for Egypt, the director of Water Resources, Kenya, John Nyaoro, said the new Nile Treaty would enable the region to exploit sustainable Lake Victoria basin water resources. Mr. Nyaoro said the excess water would be used by the riparian states for hydroelectricity generation, irrigation and domestic consumption.

Ethiopian government spokesman Shimelis Kemal talking to the news reporters asserted that , it would go ahead with a new deal with six other countries on sharing the waters of the Nile and accused Egypt of "dragging its feet" on a more equitable treaty. However, Egyptian Water Resources Minister Mohammed Allam prior to the signing warned Nile basin countries against linking the deal which excluded his country. Burundi, DR Congo, Ethiopia, Kenya, Rwanda, Tanzania and Uganda agreed to the new deal on May 13, only to be shunned by both Egypt and Sudan seen as the river's two largest consumers. Recent developments are seen with the riparian states on issues of Nile waters. A recent report said that Egypt has decided to offers financial support to upstream countries as part of its diplomatic and political effort to ease the ongoing tension over the Nile Basin.

Challenges of the 1929 Nile Basin Treaty

Attempts of multilateral cooperation of Nile basin states have failed because of some countries position as observer states like Kenya and Ethiopia. This was due to the perception that the scene was dominated by Egypt causing a wide gap between the countries of upstream Nile and lower stream Nile. These efforts have also been hampered by tensions in the Greater Horn of Africa. The civil war in Ethiopia and Sudan has been a major setback to these talks. Conflicts emerging here are near the Middle East and might spread political, social and economic instability in the surrounding areas.

Critical Analysis of implementing International Treaties

The critical issue identified was that of the British granting massive shares of the Nile Basin water to one state at the expense of the nine other states. The “re-negotiation of the 1929 treaty”, in 1959 and 2010 respectively, done in order to bring harmony in the region and prevent conflict emanating from this international trans-boundary water.

This brings the study to the third critical issue to be raised. The issue, as it has been demonstrated, is about the common and ideal institutions and their role in seeking to heal and unify a divided society in regard to the scramble for the Nile water. For instance, these institutions included the Nile Basin Initiative, the commission of committee members and NEPATR, in order to attain a shared vision and common goals. The fourth critical issue concerns the role of international law in bringing relationship between states. What its impact is on this regional governance and its contribution in managing conflict.

In recent times International water treaties has been a common subject for scholars and writers as demonstrated by the study. The much hyped eminent “water Wars” have put the Nile basin on the spotlight as one of the potential pressure points in the world today. Though, some scholars have argued that shared water provide more reason for cooperation than war, drawing from the analysis this study cautions on the blanket application of the concept of cooperation without looking at the other side of the coin, that is, shared waters, without proper structures to control its use and management is a recipe for violent conflict, as demonstrated here “talk of water wars reverberates around the globe these days. United Nations Secretary-General Kofi Annan said last Month that “fierce competition for fresh water may well become a source of conflict and wars in future.” And a recent report of the US National Intelligence Council concludes

that the likelihood of interstate conflict will increase during the next 15 years “as countries press against the limits of available water.” It would therefore be prudent to use these early warning signs to prevent the occurrence of war over water. Further to this, it is also important to note that the systematic relationships of the causes of the disagreement among the actors must also be taken into account in order to understand the dynamics in the conflict.

The consequences of the failure to implement international water treaties may be vast, depending on the success or failure of states commitment to sign and ratifying the said treaties. According to Bonaya, the dilemma as explained here is that, Public international law as a special status as law because there is no international policy force. Courts for instance the International Court of Justice (as the primary UN judicial organ) is said to lack the capacity to penalize disobedience.(insert- FPA Dr. farah) Therefore, often, these may result to conflict and tension among individual states, property disruption of socio-economic activities, heightened hatred amongst communities, environmental threats and threat to international peace and security.

Whereas the consequences of non ratification in order to implement international treaties are apparent, the causes are as a result of a complex web of multiple intervening variables, both visible and invisible. For instance trying to negotiate with ten sovereign riparian states for a common goal and vision by engaging on cooperation institution to solve the problem of mistrust and injustice. Mistrust may in this case be remotely connected as a causal variable in this conflict whereas the perceived injustice is directly linked to the quantity and quality of the Nile waters. It is therefore essential to understand the broader context of the different effects and the competing demands of riparian states in order to draw out sound policies.

Therefore, beginning from the premise that the failure to ratify international agreement is multi-

causal the critique of the situation will include the assessment of the significance of the different indicators and their systemic relationship. This conflict has been largely systemic in orientation where some coercion remarks, unilateral action and some civil wars in the region have been largely viewed as products and creation of disagreements over the control of the Nile waters. The indicators used in this study will be predictive of conditions that might lead to further dispute. It is noteworthy that the unjust nature of the legal regimes in question (The Nile Treaty of 1929 and 1959) is obviously a reason for distress among the involved riparian states parties. However though the treaties have served as a legal deterrent to an extent for majority of the riparian states it is just but one of the many intervening variable to reduce conflict. Cooperation between states that share international water basins is difficult to achieve, especially when sovereignty, territorial integrity, and security are at stake. Furthermore, negotiations and opportunities for joint development of water resources are constrained by imbalances in economic, political or military powers among the countries involved and due to the asymmetric availability of information. Although, to the best of our knowledge, no quantitative studies of bilateral, international water treaties have been conducted, there is a sizeable body of literature on water rights, by scholars such as, Ditwiler, Johnson, Gisser, and Werner, Ostrom, Dudley. There is also a sizeable body of literature on apportionment of river basin management. However, there is no clear indication whether the water resource has been scarce or abundant, due to unconfirmed technical data, or whether this has been the reason for the escalation of the conflict. The study can only predict that the use of the water is directly proportionate to the population growth. This is to say that; the population growth will lead to more use of the Nile water and by extension scarcity and environmental degradations. What is clear however, is that whenever there are statements form one of the riparian states on

their position on the waters there is a reaction from an opposing party, most of these statements are based on questionable sources of information, for instant political statements in the media. This suggests that the communication system being used is inadequate for the riparian states to achieve the much-needed cooperation. (Insert) Though it was hoped that with the establishment of all-inclusive normative structures like the NBI, the parties involved would be reading from the same script, the study has demonstrated that these structures still operate like the said treaties which were selective and therefore partial in their management style.

This study had demonstrated that perennial grievances by the riparian states of the Nile over access to and control of the waters have elicited unilateral action from the co-riparian. These actions are being driven by emotions rising from lack of attention to the concerns raised by some riparian states regarding the legality of the 1929 Nile basin Treaty, and greed on the part of other co-riparian states who would rather maintain the status quo. Evidently some of the countries have resorted to taking up projects using the water of the Nile regardless of whether they are sustainable, or whether they feel bound by this colonial treaty, as demonstrated by the study.

The overwhelming lesson to draw from the role of international treat in curbing disputes is not that worsening scarcity will, but it is rather that unilateral actions to construct a dam or river diversion in the absence of a treaty or institutional mechanism that safeguard the interest of other countries in the basin which is highly destabilizing to a region, often spurring decades of hostility before cooperation is pursued. The signing of a treaty between the two counties in 1959 defused tensions before the dam was built. But no water-sharing agreement exists between Egypt and Ethiopia, where some 85% of the Nile's flow originates, and a war of words has raged between these two nations for decades. Wescoat presents an historical account of multilateral water agreements over the past three

centuries; as an example of efforts being deployed to reduce transboundary water tension.

Constraints of implementation International Water treaty

An in-depth analysis of the constraints of implementing international treaty also crystallizes certain concepts that may be of use in formulating strategies to manage the incompatible goals. These concepts are listed below:

Amendment of the 1929 colonial Nile water Treaty

These issues have been demonstrated in Chapter three and four, for instance talking about the type of institutions put in place and their role in seeking to ensure a unified divided society. A report by the World Bank alleged that, to achieve mutual benefit of the Nile water resources, the NBI in conjunction with other institutions and the international community should focus on serious amendment of the 1929 colonial Nile water treaty which possess significant challenge for realization of the initiative's goals. Indeed the report said, it is important for the re-signing of this treaty that all the riparian states feel justice is being done. It further maintained that, there can be no harmony without justice.

Emanating from such feeling, a task has been accorded to the commission of committee which spearheads the process Kyovi from the ministry of foreign affairs agreed. He explained that, the process for this committee is such that it convenes meeting of all members from the riparian states to discuss emerging issues of the Nile basin for the benefit of all the states. These deliberations involve all states and their representative hence ensuring the participation of all for justice.

As indicated from the various interviews, all the constituencies express the hope that the re-negotiations of the 1929 treaty will pave way for reconciliation. A recent report from the standard paper quoted Nyoro of Kenya, from the Ministry of water after the signing of the Entebbe Pack

Agreement, saying that the excess waters of the Nile should be used for hydroelectric and agriculture. And further that the water can enhance economic growth, here their interests being the utilization of the Nile waters for various development needs such as irrigation.

On the other hand, Nations which are not in the upper Nile have the hope to enjoy this transboundary water and those which have taken the position of wait and see like Eritrea, will look forward for quickened ratification of the 2010 treaty.

This is an indication that there is some optimism, and that international water treaty has some legal authority and that as supported from the international community and the horn of Africa states.

During the interview Dr. Mumma revealed that, the international water treaty guided by the member states who have initiated the renegotiation process, is timely as it will enable to reduce the tension and imbalance of power among the riparian states, which has taken a long time to be resolved. Commenting on the recent occurrence, where some of the ten riparian states are yet to sign, the Minister for water expressed that, all the riparian states have been encouraged to sign the treaty to put to rest the long disputed rights to Egypt by the British government at the expense of the other state.

In the case of the Nile Basin, upper riparian rights-holding nations usually claim absolute territorial sovereignty, proclaiming the right to exploit the water source, regardless of the effects of this water use on riparian countries. Lower riparian nations seek to preserve the absolute integrity of the water source, claiming that the upper riparian states should not adversely affect the quality or the quantity of water. In their argument, Becker and Easter consider water conflicts in the light of externalities and open access public goods using co-operative game theory. Just and Netanyahu maintain and discuss the doctrines and guidelines for water apportionment among countries. While Krutilla and Eckstein analyze the relative efficiency

of river development projects at any particular instance to national income and product redistribution, as compared to other projects. On the other hand, Biosson de Chazournes examines the management of the Aral Sea Basin, while Hirji and Grey examine transboundary water resources in Africa and find that negotiations for the joint development of shared water resources are constrained by capacity imbalances between countries.

In his part, Dellapenna asserts and demonstrates that international law plays a crucial role in fostering cooperation over shared water in preventing future conflicts.

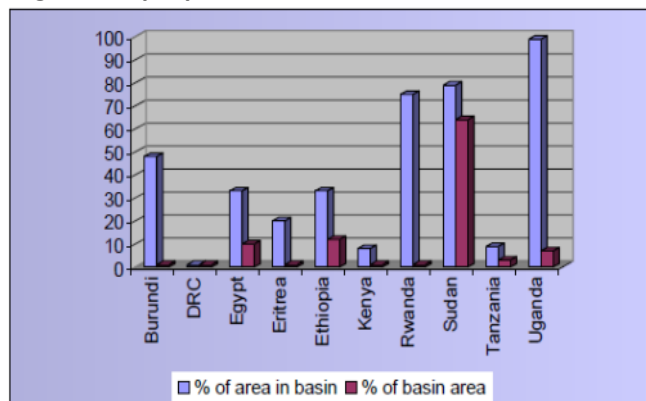
Notably, there are illustrations of political and historical dimensions of water resources and their primordial role for conflict, cooperation and development within and among countries and regions. Of course, the examples chosen from Africa, the Arab States, Europe, Central and East Asia, and the Americas do not claim to be exhaustive nor geographically representative. However, they are an arbitrary but valid sample of the diversity of historical, political and cultural perspectives of water-related cooperation and conflict. This diversity needs to be taken into account in the governance of international water resources: as precondition and, especially, as major asset for the creation of efficient solutions for the planets water problems.

Population Variation in the Basin

The geography of the Nile Basin is both distinct and varied. The ten Nile Basin states embed Nile Basin processes within the wider social and economic development of Africa across all major parts of the continent. These ten countries link processes in southern Africa to northern Africa and the Mediterranean, development in Central Africa to the West African Atlantic coast, and the regional systems of the Middle East to the Indian Ocean. The crises-crossing of borders ensures little congruence between state boundaries and the basin's physical or human geography. As a result, the proportions of basin area within each

state and the extent of state contributions to the basin area vary widely, as depicted in the Figure below.

Fig 1: The proportions of basin area within each



Citing Cau, Dhliway defines Transboundary natural resources management as “any process of cooperation across international boundaries that facilitates, improves or purports to facilitate or improve the management of resources to the benefits of all parties concerned.” Dhliwayo further says the process of managing natural resources shared by two or more nations represent a “significant opportunity for both the development of peaceful co-operation and the effective and equitable management of resources to the benefit of the local, regional and international community”.

Dhliwayo further asserts that trans-boundary water cooperation provides a wide range of important benefits including the “reduction of conflicts, the promotion of peace, more effective management of natural resources and environments, promotion of the economic welfare of a region’s communities and the preservation and enhancement of cultural values.”

Literature on water dispute resolution, in contrast to that of conflict, is much more imposing. The Food and Agriculture Organization has identified more than 3,600 treaties relating to international water resources. The majority of these deal with some aspect of navigation (FAO 1978, 1984). Since 1814, about 300 international treaties have been negotiated to deal with non-navigational

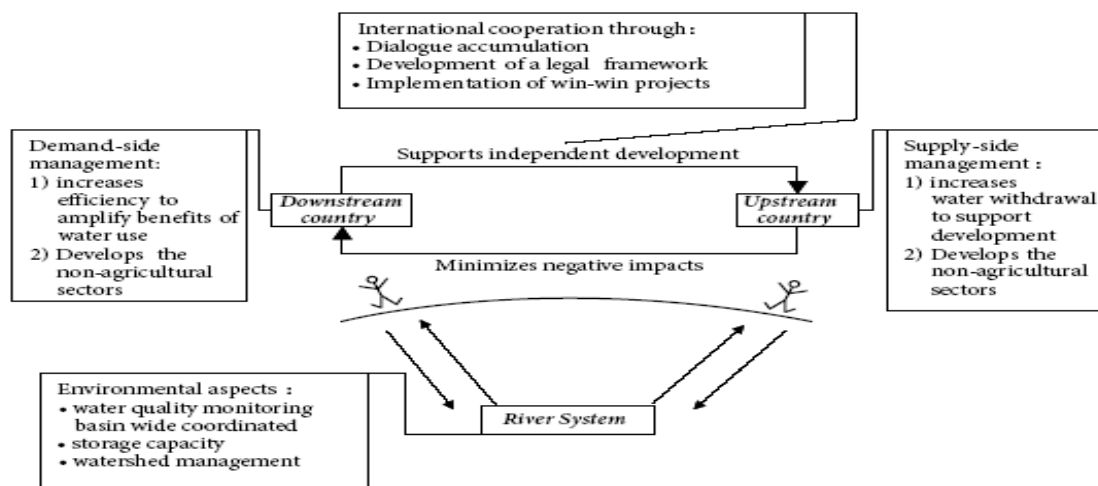
issues of water management such as flood control, hydropower projects, and allocations for consumptive or non-consumptive uses in international basins. Despite limited precedents on water resource cooperation and management, what is perceptible through the practice of water cooperation, conflict prevention and resolution is just how rarely the general principles are explicitly invoked, particularly the extreme principles of absolute sovereignty or absolute riverine integrity.

The framework for cooperation in the Eastern Nile Basin seek to satisfy the basic interests of all the

involved countries. The agreement may be accepted but not implemented. Non-legal problems hindering development may prove to be more important than legal ones, or the development of Egypt, Ethiopia or another Nile country may be hindered by an unbalanced agreement. Balancing these possible gains and losses, it seems unlikely that any agreement will be reached soon.

The following possible framework for cooperation in the Nile Basin is based on the above synthesis, combining with other aspects demonstrated in the diagram below

Figure 2: Framework for Cooperation in the Nile Basin



Outlook on a possible framework for international cooperation and sustainable development in the Eastern Nile Basin.

As a gesture of cooperation, within the Nile basin, in May of 1999, the Nile Basin Initiative was launched with the understanding that a cooperative effort in the development and management of Nile waters to bring the greatest level of mutual benefit on the region. All nations of the basin, Burundi, D.R. Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan Tanzania and Uganda, joined the organization. The objective was developing the water resources of the Nile in a sustainable and equitable way to ensure prosperity, security and peace for its entire people while ensuring cooperation and joint action between the riparian countries, seeking win-win gains.

Role of International Law

According to Tripel international law governs relationship between states, and therefore the intent of these treaties is to enforce judicial law-making. For instance, the relevant international practice from the standpoint of both International criminal law, and state responsibility. Notable, the various connections and issues arising from the parallel establishment of state and individual responsibility for the commission of the same international crimes (ICC). These types of connections indicate a growing need to better coordinate these regimes of international responsibility. For example, in recent years the ICC has ordered the arrest of Omar Al-Bashir of

Sudan. The challenge for this international law has been that for one to be delivered to the ICJ the country must be willing to apprehend the culprit. The dilemma is that, Public international law has a special status as law because there is no international police force, and courts for instance the International Court of Justice as the primary UN judicial organ is said to lack the capacity to penalize disobedience. A good example was seen in the case of Saddam Hussein, where the country took responsibility to try him. On the other hand, the case of Omar Bashir, the country insists that their president was innocent, though internationally he has been alleged to commit crime against humanity hence wanted at the international Criminal Court (ICC). Indeed, for international law, though a state may be willing to cooperate, powerful individuals can be a challenge.

Data

Hamner and Wolf contribute valuable information to the framework surrounding water treaties. He asserts that of 145 existing treaties, 86% of these treaties are bilateral and 14% are multilateral. The treaties are mostly bilateral because the difficulty of negotiation increases with each increase in the number of parties involved. Hamner and Wolf summarize the general findings from comparative assessments of river basin treaties that are compiled in a database called the Transboundary Freshwater Dispute Database (TFDD).

Bilateral treaties observation

Due to time constraints for the purpose of this study, 15 bilateral treaties (110 observations) dating from 1922 to 1996, related to river basin development, along with 73 river basins without treaties (146 observations), were examined.

The data, which examines international rivers, is taken from each continent of the world, with the exception of Australia and Antarctica. Much of the treaty specific and water basin data used in this research is from the Transboundary Freshwater Dispute Database (TFDD). This data is

supplemented by GDP, international trade, area of a country, population, and annual water freshwater withdrawals, as well as facts pertaining to national governments, languages, and ethnicities, which are obtained from the International Financial Statistics Yearbook, the Penn World **Table 5.6**, and the World Bank.

Empirical Analysis of Treaty Existence

Treaty = (difference in GDP between countries, % of international trade, trade partners, Area of individual countries, basin area within individual countries, percentage of the basin area within a country, percentage of water withdrawals associated with agriculture, percentage of water withdrawals for domestic use, political similarity, similarity in language and tradition). Non-existence of treaty may be attributable to existing disagreements, or to the lack of need for formal contracts.

Percentage of the Water Basin within the riparian states; shows the total river basin utilization in each state as in the table below. The sign on the coefficient of the variable is expected to be negative, signifying that a country controlling a smaller percentage of a given basin is more likely to seek formal, international measures that would enhance that degree of control. Conversely, a country already controlling the majority of a river basin is less likely to profit from formal apportionment.

Table 2: Water basin area consumption

Item	Frequency	Percentage
Water		
Egypt	18	90
Sudan	0.5	2.5
Kenya	.05	0.0
Tanzania	0.5	2.5
Uganda	0.5	2.5
Ethiopia	0.5	2.5
Others	0.0	0.0
Total	20	100

Source: compiled by Researcher

Sample Size of 20 (respondents) were administered with structured questionnaire and the study revealed the above mentioned water use in the basin area. Egypt used 90% of the basin water, where most of it is for irrigation purposes. Emanating from the same, Egypt is not ready to reduce her use of the water and this goes in line with Burton view that, "resolution is based on the belief that at the bottom of every conflict, are certain needs which are not negotiable". The hydrological variable percentage of water withdrawals associated with agriculture is expected to be negative, since agricultural economies tend to be developing economies, and are therefore expected to have less bargaining power. These nations are therefore less likely to form treaties, although they might desire the formation of treaties.

Table 3: Water as a cause of conflict

Item	Frequency	Percentage
Water		
Egypt	180	60%
Sudan	9	30%
Other Riparian States	3	10%
Total	30	100%

Source: compiled by the researcher

From table 3 there is indication that water has contributed 60% to the conflicts in Nile Basin and Mbote considered water as the main causes of conflict in the area. While other states would want equitable distribution of the water for example to use it in irrigation, the survey respondents from the key informants, all agreed that water had caused 60% conflict between the riparian states. 30% felt that the control of water by Egypt as a result of the renegotiation of the 1959 Nile basin treaty is a source of conflicts, while 10% said that water had caused conflicts several times. Most of the members interviewed

also concurred that indeed water related issues are a matter of agency and need to be solved amicably to avoid conflict between states sharing international waters. On one hand it has deterred states from exploiting this natural resource for development and on the other hand, it has enabled the reservation of this precious commodity by restricting the overexploitation of the resource.

The variable

Percentage of water withdrawals for domestic use is expected to a negative sign as well, because countries that are forced to use the majority of their withdrawals for domestic purposes are generally those countries in which water is relatively scarce. It can therefore be expected that these countries will have a lesser degree of control over a given river basin and will be less likely to form treaties. Again, this is not to suggest that such countries will not seek the formation of treaties, but rather that they wield insufficient bargaining power to affect treaty formation.

Political similarity shows the similarity in government structure, while 'similarity in language and tradition' captures the similarity in the norms, traditions, and cultures of the two countries. Coefficients of both of these institutional variables should be negative, because similar governments are expected to have better understandings or international relations with each other, leading to less probability of conflict. In other words, countries with institutional and cultural similarities are generally on good terms, and less in need of formal dispute resolution mechanisms.

Table 4: Water Withdrawal as Percentage of

Country	Year (b)	Total freshwater withdrawal, km ³ /year (a)	withdrawal / availability in % (a & table 5.3)	Estimated year 2000/capita withdrawal, m ³ (b)	Domestic use, % (a)	Industrial use, % (a)	Agricultural use, % (a)
Burundi	1987	0.10	2.8	14	36	0	64
DR Congo	1990	0.36	0.04	7	61	16	23
Egypt	1993	55.10	95.5	809	6	8	86
Eritrea							
Ethiopia	1987	2.21	1.8	31	11	3	86
Kenya	1990	2.05	6.8	68	20	4	76
Rwanda	1993	0.77	12.2	100	5	2	94
Sudan	1995	17.80	20.1	597	4	1	94
Tanzania	1994	1.16	1.3	35	9	2	89
Uganda	1970	0.20	0.3	9	32	8	60

Water Availability

Data (a) WRI 1999 (b) Gleick 1998

Table 4 summarizes the Water Withdrawal as Percentage of Water Availability.

The percentage of trade, for which the expected sign was ambiguous, is negative and significant at the 15% level, suggesting that the majority of international trade may be occurring with non-neighboring countries. Recalling that the expected sign of basin area within individual countries was ambiguous, we can now observe that the sign is positive and significant, indicating a heavier reliance on the Nile river basin.

Summary, Conclusions and Recommendations

Though the analysis of the implementation of Nile treaties clearly depicts that there are several intervening variables, the positive relationship between the dependent and independent variable in the three hypotheses is exhibited in this manner: There are indications that the information being channeled to the parties in the conflict is not always from a reliable source hence the implementation of the Nile treaties has been conditioned to a large extent by misunderstandings coming from lack of authentic information. Going by the qualitative data in the study there is a definite positive relationship between reliable information enhancing

communication and sustainable peaceful co-existence among the Nile riparian states by virtue of the fact that peace dividend has paid off since the riparian states have agreed to have negotiations on the sharing of the Nile water resource. The parties in the conflict are now sharing information in workshops and meetings. However, the study also noted that though the two Nile treaties of 1929 and 1959 serves, as a legal frame work in the control of the Nile waters it is incorrect to attribute its influence as the main cause of the conflict because by and large the conflict is systemic in nature with other intervening variables that keep mutating. Indeed, the influence has had both its negative and positive side.

On one hand it has deterred states from exploiting this natural resource for development and on the other hand, it has enabled the reservation of this precious commodity by restricting the overexploitation of the resource. However, this should be done in an equitable manner for peace to prevail.

By and large, the political, environmental, diplomatic and socio-economic underpinnings of the collective involvement of all parties in the conflict must be paramount, especially given the fact that parties have been using selective approaches which have led to parties being ill-informed and thereby releasing ill-reactions.

Recommendations

Owing to the complex nature of this constrains the study will not endeavour to confer conclusive prescriptions in terms of policy but rather tease out critical issues that would then be used as policy guidelines. In understanding these issues, it is hoped that the policy makers and negotiators will realize the existing gaps which they will attempt to fill while formulating policies.

The increase in population and the drought and famine situations in some of the riparian states continue to lay a lot of stress on the Nile water system. The dynamism of implementing international water treaties allows for reshaping

of the elements and thus “the notion that the ‘beginning’ and ‘end’ of a negotiation can be identified is inappropriate in contemporary conflicts. It would therefore be more useful to approach these negotiations from the management point of view, bearing in mind that we can only marriage, and not end it, using diplomacy.

As the demographic alarm ticks on with the rapid increase of population in the ten riparian States of the Nile, more and more pressure is being exerted on Egypt to allow for the reviewing of the Nile treaties. Water, says Islamic law, is a source of life, and food security is unthinkable without land and water: It would therefore, be immoral, unethical and a political blunder for the riparian states to endorse the status quo for the fear of causing violent conflict with Egypt, over the current provisions in the Nile Water Agreements. The masses in these states will definitely cause a greater conflict by defining the odds and revolting against the treaties, by using the law of the jungle in their exploitation of the resource. This may seem far-fetched but environmental degradation that is currently being witnessed in the Nile Basin is a course for worry.

According to Beach and others 2000 and UNESCO and Green Cross International 2002) findings “shared waters offer more potential for cooperation than for conflict”. The findings confirmed by an examination of the history of water-related treaties. Policy managers should therefore put emphasis on areas of cooperation and exploit the strengths and opportunities available as a matter of priority. In this case, the conflict regarding the Nile basin may fade away with the gains. This is not to say that the early warning signs of a violent conflict breaking up should be ignored. On the contrary both interventions should run concurrently to avoid being caught by a ‘sudden crisis’. Aaron T. Wolf notes that “water is the only scarce resource for which there is no substitute, over which there is poorly- developed international law, and the need to which is overwhelming, constant, and

immediate”. That being the case then policy managers should not bask in the glory of cooperative diligence but rather continue working around the early-warning signs for future policies. Though history has given evidence that there has been more cooperation than conflict in water sharing nations as noted in a UNESCO periodical that “in fact Aaron Wolf and Sandra Postel, two American academics who have studied this issue in great detail, have found only one outright war over water in the past 4,500 years. That was between two city states, (Lagash and Umma) in the region now called southern Iraq. There have been many skirmishes and conflicts in which water was a factor, but the authors have identified more than 3,600 water treaties signed in the past 12 centuries, many of which have survived wars over other issues,” historical data alone cannot be used conclusively as scientific evidence to predict the future especially in social sciences research where their several intervening variables.

Moreover there are certain limitations in historical data, for instant historicists look back at historical facts tainted with present lenses and therefore there is no definitive history here, certain events cannot be predicted using historical trends for instant the Rwanda genocide of 1994, out breaks of the HIV/AIDS pandemic, or Pluto losing its status as a planet for that matter. These phenomena some of which are accidents, others may be discoveries, making them complex just like the renegotiation of the Nile basin treaties in discussion. Therefore whenever we make predictions it is important to note that we are speculating about the future on the basis of speculation about the past. This is very common international relations where we make generalization are made from past studies hence the relativity of the end results.

The same periodical however also observes that “population and economic pressures are mounting faster than the Nile’s capacity to sustain civilization, and as a result the choice is becoming more and more stark between conflict over an

increasingly scarce resource or co-operation to manage that resource more equitably". This is to say that there should not only be cooperation but also conflict management preparedness. Having said that, the question therefore is not whether to predict or not to predict but rather how best one could predict with the limitations in mind. The policy makers and conflict managers should not be complacent and tied up in self-limiting tendencies by extrapolating trends for example the trend of more cooperation than war may change in future due to water scarcity. It would be more useful to adopt a multi-level and a multi-disciplinary approach in drawing policies.

In choosing to cooperate as one of the mechanisms to manage this constrains, winning the trust of the parties in the riparian states. The importance of transparency in the running of the Nile water institutions and in sharing information amongst the stakeholders to ensure ownership by the riparian states cannot be overemphasized. Key also is the involvement of all parties in the negotiation on the Nile Treaty to ensure equity, sustainability and efficiency in the management and use of the Nile water resource. The Nile Basin initiative- like all multilateral organizations — is supposed to serve all its member equally and its success is partly dependent on its capacity to be impartial independent.

The two Nile treaties of 1929 and 1959 rendered the Nile waters a private resource by giving authority to Sudan and to a larger extent Egypt. It then technically ceased to be a shared-water between the ten riparian states as ideally should be the case. Given the economic and social-political importance of the Nile waters to the international system it is incumbent upon policy managers and diplomats to ensure that the steps are taken to streamline the legal framework in order to achieve democratic governance in the operations of this resource. In this respect, a review of the Nile Treaties from an informed point of view seems inevitable if the looming crisis is to be tamed.

In undertaking a new framework therefore, the ten riparian states must focus on an all-inclusive approach especially in the institutions charged with the management and use of the waters. Zartman in *Ripe for Resolution* offers an insight to various approaches to conflict management. He emphasizes on policies based on preemptive treatment rather than military intervention. In his advice to policy-makers is to devise policies that avoid the dilemma of where small state conflicts can pull great powers towards unwanted outcomes. The main interest of the riparian states of the Nile is obviously equitable distribution; other dynamics at play are secondary. "a unilaterally selfish policy challenged leaves everyone worse off whereas a cooperative agreement is better for both parties (and here for the third parties as well) than every other alternative except the unilaterally selfish policy if it can go unchallenged."

As the demographic graph continues to move upwards with the rapid increase of population in the ten riparian States of the Nile, the more complex the conflict gets. Water is a source of life and food security is unthinkable without land and water. It would therefore be immoral, unethical and a political blunder for the riparian states to endorse the status quo for the fears of causing violent conflict. The expectations of this project is that the analysis of the constraints of implementing treaties based on the effects of the Nile treaties to the riparian states in relation to their competing demands, will inform views that will converge towards good policies, that are all-inclusive and ultimately de-escalating the conflict to a manageable level by reviewing the Nile treaties. It is imperative for the riparian states of the Nile to criticize and check the strategy of the institutions that manage the waters like the Nile Basin Initiative and have a consensus on the management policies. The NBI has been managing resource by giving some of the riparian states priority while discriminating on others whose situation can be compared with those without any water resource.

Zartman argues that “looked at from the African stand point, the states on the continent are developing greater military power, thereby raising their conflicts to higher levels of unilateral effectiveness but also to higher levels of bilateral stalemates.” Going by this statement the need for a multilateral approach cannot be over emphasized. Indeed the past bilateral negotiations have only led to stalemates and should be seen as some of the lessons learnt in the conflict. Much has and can be said about natural resource based conflicts and how they can be managed. It is certainly useful to note that correct information exchange between the riparian states and the conflict managers is essential. On benefits of communication Deutsch, Burell, Kahn el. “show that the most important aspect to peaceful relations are communication and transactions” the Nile Basin countries will therefore have to inculcate the culture of sharing information by building up a body of shared information and knowledge about the Nile water resource. Though acknowledging this as critical to win the trust of all parties is not to deny constructive criticism and novelty from circulation. Policy makers must also keep in mind the propensity of having policies that cannot be domesticated due to lack of consultations with all parties including communities within the basin. Currently, meetings are held in Boardrooms and the information is not relayed to the common men who are the users of the waters. This is an important component in streamlining effective communication and understanding among the riparian states. The role that the civic educators will play is to educate the parties on the importance of managing the conflict by understanding the concepts that come to fore. The study has demonstrated that there is a clear gap that needs to be filled by the engagement of the citizenry in a rigorous civic education exercise to allow the discourse of the Nile waters to continue from a point of knowledge. The absence

of technical experts in some of the riparian states as earlier noted by the study suggests that their representatives have not been well equipped in terms of technical skill and hence the need to step down the available information. This raises questions on the capacity of actors to negotiate these treaties. Indeed it is not enough for the representatives of riparian states to lock themselves in meetings discussing technical issues they don’t understand.

Areas for Further Research

Carrying out research on the methods of application of the already formulated policies of the Nile institutions. This would be to find out whether and how they are being implemented, in light of the all-inclusive approach when it comes to international law. It would be interesting to attempt to inquire whether these policies reach the targeted group and whether they understand them.

In conflict management, international treaties are often mentioned as examples of cooperation. In the literature, I found statements such as the following (my translation): ...conflicts over water distribution much more often lead to cooperation than confrontation: The International Water Treaties Data Base of the University of Oregon, for example, lists more than 400 water agreements, of which more than a hundred were signed after World War II. In this statement, international treaties are taken as evidence for successful conflict management. However, the relationship between international legal regulations and conflict is much more complex – primarily and most principally, because change often questions the acceptability of political solutions once recorded in treaties. Treaties may just as well be a subject matter of conflict, as they may be successful solutions of conflict and a pathway to international cooperation. However, the most relevant difference between these two ways of looking at treaties is time.

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