

**ASSESSMENT OF THE ROLE OF PREVENTIVE DIPLOMACY IN
MANAGEMENT OF WATER SECURITY DISPUTES IN THE NILE
RIVER BASIN, 1929 - 2023**

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**A RESEARCH THESIS SUBMITTED TO THE SCHOOL OF LAW, ARTS
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DECLARATION

I hereby declare that the content of this written research is my original work and has not been presented for a degree award in any other university or examination body.

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DEDICATION

This thesis is dedicated to my family members, especially my parents Mr. & Mrs. Lebbi Changullah and my sister Ruth Lebbi who have been my source of inspiration and strength whenever I thought of giving up in undertaking this study.

Further, special dedication to the Almighty God. Thank you for the guidance, protection, strength and wisdom. All of these I offer to you God.

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ABBREVIATIONS AND ACRONYMS

| | |
|---------------|--|
| AU | African Union |
| BBC | British Broadcasting Corporation |
| CFA | Comprehensive Framework Agreement |
| CSC | Century Storage Systems |
| ECOSOC | Economic and Social Council |
| FAO | Food and Agriculture Organization |
| GDP | Gross Domestic Product |
| GRD | Grand Renaissance Dam |
| ICAB | Interstate Council for the Problem of the Arab Sea Basin |
| IFAS | International Fund to Save the Arab Sea |
| MoU | Memorandum of Understanding |
| NATO | North Atlantic Treaty Organization |
| NBC | Nile Basin Commission |
| NBI | Nile Basin Initiative |
| NPC | Nile Project Commission |
| PM | Prime Minister |
| SADC | Southern African Development Community |
| UN | United Nation |
| USD | United States Dollar |
| WRM | Water Resource Management |

OPERATIONAL DEFINITION OF TERMS

- Disputes** Disputes are diplomatic spats of arguments or serious expression of disagreement over decision by one or more states between opposing sides of the lower and upper riparian's states in the Nile River Basin.
- Management** Is the process of controlling negative outcome of disputes in the Nile River Basin in view of promoting cooperation in the utilization of the Nile Water.
- Nile River** The Nile River Basin holds the record for being one of the longest rivers globally, spanning approximately 6800km. There are two major sources of water that feed into it, namely the Blue Nile, which takes its origin from Ethiopia's Lake Tana, and the White Nile, which takes its source from Uganda's Lake Victoria. The Nile River is the causes for transboundary cooperation and conflict within the region which is subject under review.
- Preventive Diplomacy** Preventive diplomacy in this study is understood as a process involving the action and strategies geared towards averting rising water disputes between upper and lower streams state in the Nile River Basin.
- Water Security** Water Security in this study described as an adequate degree of water- related threats in the Nile water dispute which leads to political uncertainty, armed conflicts and severe shortage of food.

ABSTRACT

Management of transboundary water resources is increasingly becoming a contentious issue among riparian states. This study examined management of transboundary water disputes which has become an international security issue among riparian states that lie along the Nile water basin through preventive diplomacy. The specific objectives of this study were to: investigate preventive diplomacy mechanisms employed by actors in the management of Water security disputes in Nile River Basin, assess effectiveness of preventive mechanisms in containing water security disputes in Nile River and to explore alternative mechanisms for the management of water security disputes in the Nile River Basin. This study reviewed scholarly works to shed light on study variables and objectives and applied the theoretical framework of problem-solving negotiation to demystify preventive diplomacy and management of water security disputes in the Nile River. To guide this study, cross-sectional survey design was used. This study was carried in the Nile Basin Initiative headquarters and Embassies of riparian states within East Africa. The target population was officials of the Nile Basin Initiative, officials from respective embassies and International Relations experts. A sample size of 130 respondents was used in this study. The qualitative and quantitative methodological approaches were employed to conduct the study. This study relied on both secondary and primary sources of data. Data were collected through questionnaires and interviews. Descriptive statistics were used in presenting and analyzing quantitative data while thematic and content analysis was applied in analyzing qualitative data presented in narratives and verbatim. The findings of the study revealed that there are various strategies employed by actors in management and containment of water disputes in Nile River Basin including treaties, consensus building, and the Nile River Basin Initiative. Despite these efforts, the preventive measures so far enacted have been largely ineffective, as stakeholders view them as insufficient and inapplicable. Furthermore, the findings revealed the alternative dispute resolution methods like mediation, arbitration, conciliation, and judicial settlement were seen as viable options in containing the disputes. The findings conclude that although various diplomatic efforts have been initiated, their effectiveness remains limited. To improve outcomes, this study recommends promoting conciliation among riparian states to facilitate voluntary participation in dispute resolution, enhancing regional integration among basin states, reducing dependency on single water sources, and encouraging more negotiations and judicial interventions to resolve the existing conflicts decisively.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Management of transboundary water as shared resource is increasingly becoming a contentious issue among riparian states in many regions around the world (Henshaw & Leb, 2018). In the Horn and East Africa, the need to find an amicable solution to the management of Nile Water has become a priority for the Nile River Basin riparian states namely, Eritrea, Rwanda, Congo, Ethiopia, Tanzania, Kenya, Burundi, Egypt, South Sudan, Sudan and Uganda. The Nile River's water and resources therein are diversely needed by the Nile basin's riparian states. While other states require it for irrigation and agriculture, the other require it for power generation and source of fresh water. These divergent needs for water by riparian states demand for good management to avoid the recurrence of conflicts.

Conflict over the Nile waters stem from precolonial agreement the seem to have granted some states advantage over others. For instance, Egypt claims to have historical rights to the Nile Water while over other states. States which feel have disinherited rights over the Nile are those that gained political independence much after the signing of the Nile Treaty in 1929. These states are opposed to Egypt's inherent rights and demand to receive their lion's share of Nile River thus, causing diplomatic discomfort among Nile River Basin States. These disgruntled states feel the agreement disempowers them and that their economic development is pegged on harnessing the Nile Water.

One of the most important concepts of International Relations, since the foundation of the United Nations at the end of World War II, has been the peaceful resolution

of disputes. According to article 2 (3) of the Charter of the United Nations (UN), all its members are required to resolving their international conflicts in a peaceful manner in order to ensure that international peace, security, and justice are not jeopardized. As such, preventive diplomacy has become one of the strategies applied to management of disputes before they escalate into full brown conflicts by UN member states.

Preventive diplomacy can be understood as a mechanism of conflict prevention intended to forestall looming armed violence before it escalates (Zyck & Muggah 2012). Preventive diplomacy has come of age. The onset of the dictum of preventive diplomacy can be associated with former United Nation Secretary-General Dag Hammarskjöld who first uttered the phrase "preventive diplomacy" in 1960 (Lund, 2008). Over time, preventive diplomacy has become essential in pacific resolution of disputes. It has been upheld and supported by successive UN Secretary Generals. Keen to this was the United Nation Agenda for Peace 1992 by Boutros-Ghali. In which he (Ghali) explains preventive diplomacy as "the effort" of preventing disputes among parties (Boutros-Ghali, 1992).

The second decade of 21st century saw increase in water security disputes between Egypt, Ethiopia and Sudan. The tension rose over Ethiopia's decision to construct the Millennium Dam (Grech-Madin et al, 2018). The increased dispute called for urgent preventive measures including tripartite interstate dialogue that has lagged over time. Commenting in the British Broadcasting Corporation news in 2019, on the way forward of the three-way negotiation between Egypt, Ethiopia and Sudan, the then Ethiopian Minister Water, Seleshi Bekele, lamented that the country's vision of constructing the dam and overflow its reservoir did not make any progress in four years as result conflict and stalled talks between Ethiopia and Egypt. He

argued that Egypt had no plans of reaching an agreement by suggesting an extended period so that the level of the river would not drop intensely (Soteras, 2020). This staggering process is not only increasing the buildup of tension between the states but also casts doubts of the efficiency of preventive mechanisms put in place to avert crisis in the Nile Basin.

The on and off diplomatic row that exists between these states has a long history. The intrigues in diplomatic relations among member countries dates back to 1882, when British Royal Government ratified treaties that gave Egypt a lower riparian state more rights over the Nile water and the right to control any project being built along the Nile. This was followed by 1929 Nile Water treaty that gave Egypt express utility right of the water beyond other riparian countries. This treaty does not sit well with the upper riparian countries (Mwangi & Mbaku, 2015) and over time, other disenfranchised countries they claimed more rights to the Nile and sought to make full use of the Nile water for their economic development and prosperity. This leaves Sudan and Egypt as the only states that are keen and committed to be bound by the 1929 Nile Treaty. The rest of the nations are calling for the renegotiation of the treaty on basis that they were not represented on the table at the time.

The Economic and Social Council report (2011) demonstrated that all the countries within the Nile basin save for Kenya, Sudan and Egypt are poverty stricken and are dependent on rain fed agriculture. Harnessing the Nile Water for irrigation purposes and for generation power would boost their economy. However, the express utility rights granted to lower riparian states under the 1929 treaty disallows encroaching of the Nile and establishment of irrigation schemes along the Nile. Further, lack of amenability between the lower and upper riparian states has hindered infrastructural

development in upper riparian countries since the 1929 agreement requires that infrastructural development along the rivers with cross border flows must be consented all the countries.

Premised on these arguments, and with the desire to erect mega development project, Ethiopia one of the Upper riparian states in 2011 embarked on plans to construct a mega project. The Grand Renaissance Dam which upon completion would be one of Africa's mega projects that will give a major boost to the Ethiopian power grid hence improving the country economic standing within the region. To Egypt, the construction of this dam is catastrophic to its survival. River Nile has for centuries been the lifeline of Egypt. Being a desert, interruption to the flow of River Nile into Egypt is a very big reason for the nation to worry. Egypt has therefore, vowed that loss of the water of river Nile by a single drop means that bloodletting will surrogate existing diplomatic means of conflict resolution (Verhoeven, 2013). In response to Cairo threats, Ethiopia categorically warned that nothing stops its bid in constructing the dam. This chest tamping between riparian states is likely to perpetuate the already existing conflict in the Nile basin and reignite the call for re-negotiation of the 1929 agreement. Considering the unprecedented diplomatic row among states, it is of critical significance to demonstrate that preventive diplomacy, proper engagement and cooperation among states is vital to deflate the diplomatic tensions that exist among the Nile Riparian states.

It should be emphasized that the contestation over the waters of the Nile increased when more African states in the river Basin became independent in the 1960s. As sovereign states, the independent acquired right to access to the Nile water for their national needs as opposed to rights bequeathed to Egypt in the earlier agreements made between British colonial administration and Egypt. The developments in Nile

Basin, draws our attention to the question of water security and its implication in international relations, security and peace. Water security refers to the ability to access a sufficient amount of high-quality water for the purposes of sustaining life, promoting health and supporting economic productivity, while also minimizing associated risks and challenges. Many water-related problems threaten human health and can contribute to political unrest, violent mass migrations, and severe food shortages, all of which can jeopardize national, international and even regional security. Egypt and Ethiopia's divergent dual approach to water security may result to a disagreement amid rising demand for water security due to the ever-increasing concern posed by climate change as well as the rapidly growing nations. However, it is possible for domestic measures to become less dependent on Nile water, through greater investment in water-saving technologies (Colton 2021).

Controversy over transboundary waters security is not unique to the Nile Basin. Similar situation arose in the Euphrates and Tigris Basin where there have been tensions between Iraq, Turkey and Syria on the watershed of the Euphrates and Tigris (Kibaroglu and amp; Scheumann 2013). The source of the Euphrates is located in Turkey and empties into the Shatt Al Arab basin located in southern Iraq. It flows through Iraq and Syria as the Tigris flows to Iraq from Turkey. Turkey contributes ninety percent to Euphrates while Syria does 19% (Kibaroglu and Scheuman, 2013). For the Tigris, on the other hand, Turkey contributes 40%, Iraq 51% and Iran 9%. This makes these countries around this region a co parent state in the Tigris and Euphrates basin.

Another water security dispute is to be found in the Shatt Al-Arab Basin. The water conflict around the Shatt Al- Arab basin started when the unilateral irrigation plans were initiated in 1960 by Iraq. This scheme altered the flow of the river. This and

coupled by political tensions between Turkey, Syria, Iraq and Iran strained their relationship around the Tigris basin. Syria and Iraq reacted angrily to Turkey's plan to commence building of the South Eastern Anatolian Project. Both nations, Syria and Iraq, were aware that the magnitude of the project was bound to restrict their access to water resources, which heightened regional tensions. Subsequently, the construction of the Tabqa Dam in 1975 pushed Iraq and Syria to the verge of war, since it concurred with the start of the South Eastern Anatolian Project and a severe drought in Iraq, resulting in acute water shortages. When Turkey closed off the Euphrates to fill the Atatürk Dam in 1990, it had to mobilize its forces to provide security. The implication of this was reduced flow of Euphrates water to Iraq and Syria by 75 percent. This dispute remains unresolved and anxiety between both nations remain high. Further, the numbers of droughts in Iraq in contemporary years has raised the probability of a future conflict, since years of stress induced by water scarcity have made Iraqis even more desperate (Wilson 2012).

There are different strategies which have been implemented in order to improve severed relations between the co- riparian in the Middle East from the late 1990s to the early 2000s. These strategies have yielded fruits and somewhat improved relations between participatory states. Politicians at the highest decision-making level facilitated the reform of water scheme from hostile to corporate. In 1998, Syria conveyed interest in resuming meetings of the Joint Technical Committee, which was unsuccessfully tested in 1983. (Lorenz & Erickson 2013).

The collaborative discussion between Syria and Turkey in 2001, which recommended consistent land and the region's management of water resources via joint efforts and knowledge exchange, was a turning point in the region's cohesive

ties. Despite of this proclamation did not result in any actual action, it served as a platform for the signing of the late-2000s Water Accords (Kibaroglu, 2014). The most notable of these agreements was Memorandum of Understanding on Water Management signed in 2009 by Syria, Iraq and Turkey. In 2009, both partners decided to construct the dam on the shared Orontes River in Hatay region, which had been the source of contention between these neighbors. This is yet another evidence of better ties between Turkey and Syria in management of transboundary water disputes. Disputes in this region have forbid various states from adequately co-managing the Tigris basin. In the wake of these happenings, cooperation efforts were resumed in the year 2000 but they are yet to achieve any tangible outcome in the management of the Euphrates River around the Tigris Basin.

Returning to the Nile River Basin, which is the focus of this study, the riparian states involved have been aware of the potential opportunities and also challenges which could arise from the (mis)management and (mis)usage of Nile Water among themselves hence the need to preventive diplomacy mechanisms. The Nile River Basin Initiative established in February 1999, seeks to promote peace and safety of all peoples by offering a platform for the cooperation and engagement between riparian states for the sustainable operation and development of transboundary water, Furthermore, it is imperative to guarantee collaboration and concerted efforts amongst riparian states with the aim of achieving mutually beneficial results (Taylor & Francis, 2011). In addition, to the meeting of heads of government and state, the secretariat includes the Technical advisory committee, advisory groups and Council of ministers.

Furthermore, riparian states in the Nile Basin have been conducting bilateral negotiations, the negotiations between the upper riparian and down riparian states

are restricted by internal constraints and the highly symbolic nature of the contest beyond the Nile waters. On one hand the river occupies a distinctive location and a stronghold, many Egyptians see it as a part of their history and heritage. On the other hand, the current potential for upper riparian countries to use Nile water reflects their transformation from years of economic and political demotion. The Grand Renaissance Dam in particular, has a significant influence in the nation building of Ethiopia. So, the controversy over the Nile River is considered as a 'political mining arena' where extremely liberal agreements can be met with strong internal opposition (Gebreluel, 2014). This research is intrigued by the fact that since the Nile Water Problem emerged dating back to 1882 and as of 2021, there has been no direct confrontation or escalation of the dispute. This does not however, rule out emergence of bloody conflict. It is from the desires to avoid inevitable future from happening, that this study calls to reflect on how the states concerned have so far managed to avoid the escalation of the conflict. The proposed research's point of departure and assumption is that, preventive diplomacy appears to have been the critical strategy applied by states either individually or collectively to avoid the escalation.

1.2 Statement of the Problem

The states within the river Nile basin have different needs for the water and resources of the Nile River. These countries have a cumulative population totaling to 280 million peoples who utilize the river Nile waters for various purposes. Maintaining and sustaining the river for a shared value purpose becomes a bottle neck thereby creating trans-boundary clash between the nations in the upstream and the riparian countries (Parhi,2014). The 1929 Nile Treaty agreement that granted downstream's states control over the water resources increases the regional tension and it's

considered to be one of the most important causes of the tripartite water security dispute between Egypt, Ethiopia and Sudan. In addition, the increased desire to further exploit the Nile water by riparian states, particularly by Ethiopia, seeking to build a mega dam to serve as irrigation reservoirs and for generating electricity is remounting tension between Egypt and other riparian states in the Nile Basin (Zeidan, 2015). There being no concrete agreement on how to share the waters of river Nile, the countries within the Nile basin have always had strong diplomatic tensions among themselves and this has stalled development of iconic economic growth projects within the region.

Although the nature of raising tension between Egypt and other riparian states of the Nile is well known and documented, less attention has been paid into understanding and explaining why the tension has not escalated into full blown conflict. Egypt is known to have declared its readiness to go to war, above the Nile's access and use (Verhoeven, 2013). It is also known to have powerful allies in the form of the United States, at the same time, other riparian states have shown a degree of assertiveness in their claim over their sovereign right to access and use of water towards their development. Ethiopia has demonstrated to be resolute in this endeavor raising the stakes with Egypt and to a lesser extend Sudan. What is curious is that despite diplomatic tantrums between the states in the Nile River basin, there has not been escalation of conflict. The question then is how and why have the riparian managed to avoid conflict over the use of the Nile Waters and what has worked to avoid the outbreak of open conflict? These themes are the essence of this study seeking to assess the use of preventive diplomacy in containing water security disputes in the Nile Basin.

1.3 Objectives of the study

Objectives of this study were stated as follows:

1.3.1 General Objective

To nuance a better understanding on the management of water security disputes along the Nile Water Basin between the upper and lower riparian states through preventive diplomacy.

1.3.2 Specific Objective

More explicitly, this study sought to:

- i. Examine preventive diplomacy mechanisms employed by actors in the management of water security disputes in Nile River Basin.
- ii. Assess the effectiveness of preventive diplomacy mechanisms in containing water security disputes in Nile River Basin
- iii. Explore alternative mechanisms for the management of water security dispute in the Nile River Basin.

1.4 Research Questions

- i. How do actors implement preventive diplomacy mechanisms for managing water security disputes in Nile River Basin?
- ii. To what extent have preventive diplomacy mechanism employed by actors succeeded in managing water security disputes in Nile River Basin?
- iii. Which other alternative mechanisms can be internationalized in the management of water security disputes in Nile River Basin?

1.5 Justification of the study

The assessment of the role of preventive diplomacy in managing water security disputes in the Nile River Basin represents a critical endeavor with multifaceted significance. Firstly, the Nile River Basin illustrates the complex geopolitical dynamics surrounding transboundary water resources. Given the strategic importance of the Nile River for numerous riparian states and reasons, understanding how preventive diplomacy can mitigate tensions and foster cooperation is paramount. By conducting this assessment, the researcher aims to contribute valuable insights into the nuanced interplay of political, economic, and environmental factors shaping water security in one of the world's most geopolitically sensitive regions.

Secondly, this study holds significant implications for regional stability and peacebuilding efforts. Diplomatic tensions over water resources in the Nile River Basin have the potential to escalate into broader conflicts with far-reaching consequences for regional stability. By comprehensively assessing the role of preventive diplomacy, researcher seek to identify opportunities for conflict prevention and resolution, thereby promoting peaceful coexistence among riparian states. Moreover, the findings may inform the development of stronger diplomatic frameworks and institutional mechanisms suited to the unique challenges of managing transboundary water resources in the Nile River Basin.

Lastly, the research contributes to the broader scholarly discourse on preventive diplomacy and international conflict resolution. By focusing on a real-world case study of water security disputes in the Nile River Basin, the researcher offers empirical evidence to enrich theoretical understandings of preventive diplomacy's

efficacy and limitations in managing complex geopolitical challenges. This interdisciplinary approach bridges the gap between academic research and practical policy implications, fostering dialogue between scholars, policymakers, and practitioners. Ultimately, by elucidating the role of preventive diplomacy in water security management, our study aims to advance knowledge, inform policy and promote peaceful cooperation in one of the world's most disputed regions.

1.6 Scope of the study

The study specifically focused on the entire eleven Nile basin riparian states, however, the rationale for selecting Entebbe, Uganda, as the area of study derived from its pivotal role as the headquarters of the Nile Basin Initiative (NBI), serving as a central hub for collaborative efforts among the eleven Nile Basin states. By situating the research within the NBI headquarters, the study gains direct access to the institutional mechanisms and decision-making processes shaping cooperative endeavours and dispute resolution strategies within the Nile River Basin. Additionally, Entebbe's proximity to the embassies of the Nile Basin states facilitates convenient interaction with diplomatic representatives, providing valuable insights into each nation's policies, perspectives, and challenges related to water security and regional cooperation. This strategic positioning enables the research to comprehensively assess the role of preventive diplomacy in management of water security disputes in the Nile River Basin, contributing to the discourse on sustainable transboundary water governance and fostering cooperation among riparian states.

1.7 Limitations and Delimitations of the Study

There were many limitations that emerged during the whole procedure of carrying out this study particularly during data collection. One of the emergent challenges

was difficulties in obtaining respondents. Considering that data collection process was carried out during office hours, there were difficulties in obtaining respondents especially officers. The officers were busy with their day-to-day schedules in their respective departments. However, this challenge was overcome through seeking for appointments with officers during break time or after accomplishing their duties. Those who were obtained during break time were provided with questionnaires to attempt them in their respective departments. Those who were obtained after working hours were provided with questionnaires to attempt them as home works.

Another challenge emerged was reluctance of participation in the study by some of officers. Despite of pre-information provided to respondents on what the study was about, there were others who did not wish to participate. This is because they perceived that they are unlawfully disclosing information. This challenge was overcome through using permit obtained which legalized the process of data collection as well as assuring them that confidentiality was highly observed.

Furthermore, other challenges arose, particularly during the data collection phase. The onset of the COVID-19 pandemic significantly disrupted standard procedures, introducing constraints such as movement restrictions, social distancing measures, and shifts in healthcare priorities. Consequently, these factors impeded the smooth execution of data collection efforts, resulting in potential delays, limited access to participants, and difficulties in reaching certain geographical areas for data acquisition. Moreover, participant availability emerged as a significant concern. Many potential participants were either hesitant or unable to engage in the study due to apprehensions surrounding COVID-19 transmission, personal health concerns, or other pandemic-related factors. This reluctance or unavailability hindered our ability

to achieve the desired sample size and may have introduced bias into the collected data.

In response to these challenges, we implemented innovative strategies to adapt our data collection methods. Recognizing the need for flexibility, the researcher leveraged remote data collection techniques, such as online surveys and virtual interviews, to engage participants who were unable to meet in person due to pandemic-related restrictions or health considerations. Further, the researcher proactively scheduled appointments with participants during opportune break periods or after their work commitments, ensuring minimal disruption to their professional responsibilities. For those respondents accessed during working hours, we administered questionnaires within their familiar work environments, facilitating ease of completion. Alternatively, questionnaires were provided as take-home assignments for participants available after working hours, allowing them the flexibility to complete them at their convenience.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The literature review in this study examines thematic areas under review in order to build better comprehension of this study on preventive diplomacy and its potential in addressing Nile River Basin water security problems. This section therefore, addressed, first, the empirical studies pertaining to preventive diplomacy strategies implemented in water disputes around the world. Secondly, a background of the water dispute situation arising from the Nile River basin. Thirdly, the review gives insights into the theoretical aspect surrounding preventive diplomacy, specifically in the area of water disputes.

2.1 Literature Review

The main focus in this review is limited to conceptualizing preventive diplomacy, how it has been implemented in other previous events and the prospects for successful application when it comes to its relevance in the Nile Basin situation.

2.1.1 The Notion of Preventive Diplomacy

There are major interrelated aims in preventative diplomacy, according to Yldz (2015), which include encouraging peace and reconciliation via integrated prevention. Many riparian governments have competing interests, such as the need for water to provide food security while still maintaining economic stability, as argued by Kraska (2009). Water diplomacy may aid in resolving the issue of water allocation and promoting a more effective water allocation in massing areas. Yldz (2015) and Kraska (2009) opine that water diplomacy, seek to address the security dilemma by integrating preventive, peace-building, and water resource management.

This study examines how preventive diplomacy promote peace and security in the Nile River Basin.

Gown (2011) asserts that multilateral political missions namely the Organization of America, African Union and European Union are the team of civilian experts established in many international and regional organizations, participate in an important role in conflict prevention. Examples from the conflict in the Baltic States, West Africa and Central Asia, to demonstrate the significance of multilateral organization in preventive diplomacy. Gown (2011) notes that there is generally increased crave among United Nations and other intergovernmental organization to adopt preventive diplomacy. For this reason, there are approximately more than six thousand people deployed by the Organization for security and cooperation in Europe for politics missions to carry out preventive diplomacy and to prevent emergence and resurgence of conflicts. Their roles are multifaceted including the rule of law, and the facilities of advice on socioeconomic matter. African Union, the Organization of America and European Union are associated with human rights issues monitoring and the enactment of political accord. Some individuals possess regional jurisdiction, which empowers them to handle diverse prospective exigencies. Furthermore, their roles are contingent upon the advancement of a possible disagreement and the likelihood of its exacerbation. In the event that a conflict has already reached a state of deterioration, it may be necessary for a mission to become directly engaged in the process of mediating a peaceful resolution (Gown, 2011). Preventive diplomacy is advantageous as it is cost effective compared to huge financial resources that are associated with armed conflicts or required to support peacekeeping, reconstruction and stabilization operation (Gown, 2011). The intended study assessed whether the use of preventive diplomacy in appealing in the

Nile Water Basin Initiative and which international organization are involved and how many personnel in this political mission are dedicated in avert looming crisis over the Nile Water Basin.

Salman (2003) in the case of Pakistan – India water dispute stated that the Tibetan plateau is the source of the Indus River, which eventually flows into the Arabian Sea from Pakistan and India. A long running disagreement over Kashmir and cross-border terrorism have been the major sources of conflict between the two Countries. Zawahri (2009) argue that after long years of resolution. The 1960 Indus Water Treaty signed between India and Pakistan was devised by the World Bank mediation as a way to divide water resources between Pakistan and India. In one article, it was claimed that India will not construct a dam in the rivers belonging to Pakistan without Pakistan's approval. Speaking of Salman, the Indus Water Treaty succeed due to long-term high-level contact between World Bank President Black and the riparian state Prime ministers, Capacity to both "obtain concessions and to apply pressure" because of monetary aid, Capability to raise the 800 million United State dollars vital for the "dynamic role in execution" stage by the World Bank to keep the settlement in force in The Indus Water Treaty is regarded as Currently, one of the most efficacious water sharing schemes in the world is evident.

Cahan (2017) in the case of Water Security in the Middle East, nearly 16 streams in Israel are transboundary in nature and shared by Israel and Occupied Territories Palestine. One third of the streams start in Palestinian territory and flow into Israel before reaching the Mediterranean Sea. Lack of collaboration between Israel and Palestinians in water management resulted in high levels of pollution in certain rivers and an end to beneficial agricultural, recreational, and environmental activities.

Speaking of Cahan (2017) previously revelation indicates that powerful recuperation of Israel's streams calls for a coordinated attempt among Israelis and Palestinians. If one facet invests in infrastructure to enhance water quality, however the difference will continue to pollute, the investments will now no longer bring about significant upgrades to the high-satisfactory of the local environment. However, such cooperation has been minimum and collaboration is difficult. Cahan (2017) further contends that water does now no longer recognize political borders, the continuing Israeli-Palestinian struggle makes the adoption of watershed- based approaches harder due to the fact maximum watersheds on this region, as indicated above, are transboundary in nature. Cahan argued that a comprehensive watershed management plan must include ecological, historical, physical, financial and geographical phrases agreed upon via way of means of both sides.

Preventive diplomacy aims to prevent disputes, de-escalate current ones and restrict their spread, according to Bukari (2013), in his article on survey local methods to dispute settlement stated that precaution is always preferable than remedy, preventive diplomacy offers enormous advantages for society as whole as for the nation society at massive when it involves dispute settlement with dispute surge. The world has faced tumultuous periods characterized by conflicts and instability arising from the contest for power, resources, and the protection of human rights. This is especially true in light of (Ozcelik, 2006, p.106) 's assertion that "the universe has gone through some rough times." Due to the need for more proactive conflict management and the use of preventative diplomacy in order to avoid catastrophic humanitarian disasters and the loss of lives and property, preventive diplomacy has proved successful. These outcomes may be seen in the deployment of UN peacekeeping forces to Macedonia following the breakup of Yugoslavia was also a

success. Interwar, negotiation and harmonious arrangement by preventative diplomacy enhancing as well as increasing practice at preventative diplomacy are vital in the Nile Basin problem because they generate significant advantages.

2.1.2 Management of Water Security Disputes

According to Mekonnen (2010) in the study focusing on conflict and cooperation in the Nile, Mekonnen reasoned that the Nile Basin Initiative was founded with the purpose of establishing a basin-water treaty which obtains full support from all riparian state. The Nile Basin Initiative serve as a step forward to cooperation from competition hallmarked with bilateralism, the entire focused on technical matters, and the riparian intervention which won't encourage it to be done to extend the level of the sub-basin as much as possible. With respect to the Nile Basin Water dispute, the Nile basin initiative is among of the circumstances were strife and cooperation have co-existed nearby one another where water collaboration was identified locale in investment project and basin-wide accord, come into possession of the full consent of all the riparian countries. Concerning Nile Basin Water Conflict an example were disagreement and agreement coexist side by side is the Nile Basin Initiative while water cooperation was realized locale in investment project and water conflict was prevalent within the process of drafting the Cooperative Framework Agreement.

According to Salman (2013), The Cooperative Framework Agreement was initiated right away upon the NBI's official establishment and it has been in effect for more than ten years at this point. It was established for the aim of providing regional framework of legal and institutional arrangements, accepted by basin countries to enhance basin-wide cooperation in water resources management and planning. The

cooperative Framework Agreement approve key basis of international water law and establishes permanent Nile Basin Commission. Speaking of Salman, the agreement faces major challenges as a direct effect of the emergence and solidifying of the various perspectives held by the riparian with regard to the colonial treaties also countries of Sudan and Egypt have proclaimed their adherence to what they perceive as their duly acquired rights and customary practices pertaining to the utilization of the waters of the Nile.

Mekonnen (2010) argued that Negotiation of the Cooperative Framework Agreement faced intensive impasse because of the formation of water security concept. Elective concept of water security by Mekonnen (2010) offers assistance to bring the unique riparian positions into an agreement as it, supposed, has the important impact of consigning current agreements to the background in pursuit from the more performance of the fundamental laws governing water usage across borders at a global level in Nile Water Basin. Mekonnen (2010) avers that some of the issues which have been identified as the manifestations of the Nile water crisis includes the emergence of water scarcity as a significant risk to the safety of the world's food supply. The Nile River reaches the Mediterranean, carries very little water with it, conflicts downstream as a result of high dependence on river water Egyptian has intimidate war, if Ethiopian attempt to block the Nile flow, most upper riparian's state are trying to use more water before it reaches Egypt. Nile River basin issue hence provides a concrete illustration of the difficulties engaged in the development of an all-encompassing trans-border water management scheme with great emphasis on preventive diplomacy and the role it has played so far in limiting escalation of violence over the river.

Ferede and Abebe (2014) assert that the Nile water agreement of 1959 served as the cornerstone for water sharing among African states, primarily benefiting Egypt with long-term dam storage rights. However, this agreement fostered a partnership between Egypt and Sudan, solidifying their stance against the upper riparian states of the Nile. Abebe (2014) contends that the 1959 agreements disregarded the interests of other riparian nations, notably Ethiopia, which contributes 70% to 80% of the river's waters. Consequently, none of the other Nile basin nations ratified these agreements. Ferede and Abebe (2014) argue that in the event of objections from persistent riparian nations, Egypt and Sudan would collectively address them. Should a grievance warrant a renegotiation of Nile water sharing, Sudan and Egypt agreed to redistribute the allocated amount proportionally among all riparian states. The researcher argues that strength of past agreements in modern instances and Egypt's threats to apply military unit are questionable for two motives first, environmental situations have changed precipitation is increasingly into additional intermittent and periods of drought are getting longer, secondly, the previous colonies at the instant are unbiased countries and ought to be a part of negotiating a new deal.

Wolf (2002) contend that shortage of water is most likely to course peaceful settlement and collaboration rather than strife. He understands that co-riparian nations have always embraced agreement rather than battle over water since it is so fundamental to life. Tim (2000) also claims that water shortage functions an incitement for peace as compared to strife as it drives the requirement for cooperative management of shared water resources. Mostafa and Tim (2000) argued that single riparian state unable to monopolize water resource by its own. In reality, they claim that governments have come to recognize that collaboration over shared

water is not a zero-sum game, but rather a win-win scenario. As Wolf points out, most cultures have sought to develop subtle, sometimes tacit norms for jointly managing shared water resources for the sake of the community.

Fadel *et al.*, (2003) studied on water conflict in Nile Basin. The study had revealed that formulation of agreements and treaties was considered as among mechanisms to ensure security of water supply around Nile River basin. They showed that in 1902, there were agreements signed with Ethiopia which were considered necessary in ensuring security of water supply considering that Ethiopia is one the countries that supply water to the Nile River basin. The treaty was duly executed between the United Kingdom and the reigning monarch of Ethiopia, Emperor Menelik. The treaty described the boundaries of the British rule alongside the border between Ethiopia and Sudan. The agreement stipulates that there should be no any construction which is undertaken along the Blue Nile which could lead into waters into the Nile River without meeting formal agreements with British.

2.1.3 Alternate Mechanisms for Water Security Disputes

Boutellis and Mikulaschek (2011) argue that peaceful process has prompted the United Nations to look at a more empirical method to conflict resolution, one that aims to protect and decompress conflicts to avoid expensive past-war reformation, because of this, a dispute may be resolved more cheaply and effectively using a power-based approach a form of preventative diplomacy. According to Maiese (2004), power -based approach is the most destructive conflict management approach mainly seeks a win-lose outcome. War and diplomacy are two methods of coercion that fall under power- based approach, when President Salva Kiir sacked his deputy over an alleged coup in South Sudan, a battle ensued that pitted the two

communities against Nuer and Dinka. The formation of a government of national reconciliation follows months of negotiations and mediation by the African Union and Intergovernmental Authority on Development. This study developed dispute resolution mechanism which will be applicable in the perspective of the Nile Water Basin.

Research on Transboundary Water Governance by Genderen (2011), shows water insufficient is also a result of water resources being poorly managed. In order to avoid strife and accelerate settlements, it is important to have good transboundary water governance as well as good national governance. Yet cross border settlement reduces complete occurrence. According to Genderen (2011), results can be achieved in various ways, it is conceivable for states to pervade in river basins for the purpose of retain water during the rainy season and to recharge groundwater supplies. Third-party assistance on water governance, including economic, technical, and social aspects, can be an essential component in finding mutually beneficial solutions during dry seasons. There's little doubt that regional integration and stability have been strengthened by regional water cooperation projects. The study analyzed dispute resolution mechanism which will be applicable in the context of Nile water Basin.

In their paper, Spirkovski and Kodzoman (2001), aver that mediation is done in many entities including North Atlantic Treaty Organization, Embassies, the United Nations, and the United State Department. Often the mediator can be publicly identified or serve in secrecy. Mediators cap potential conduct dialogue. Cases of third-party engagement in control of a shared basin are the Lake Ohrid water and Lake Victoria sub-basin. The World Bank served as a ground among nations of

Macedonia and Albania to broaden and signal an MoU withinside the Lake Ohrid watershed, which had been no politic touch for numerous times because of ancient political circumstances.

Keohane and Nye (1977) argue that various factors that plays an important role in the negotiation of water-sharing settlements includes side payment, which is an effective tool in treaty negotiation for compensating for downstream and upper stream irregularities if the lower riparian state has the financial capacity to do so. Referring to Dinar (2006), downstream states can settle up with upstream states for hydroelectric, pollution, and flood control projects in an effort to reach mutually agreements. Hutchinson (2009) In the case of South Sudan, the conflict between the Dinka and Nuer ethnic groups in South Sudan, rooted in historical tensions over resources and political power, has endured for decades, aggravated by colonial legacies and the Second Sudanese Civil War. Peace efforts, notably the Comprehensive Peace Agreement (CPA) in 2005, utilized side payments as crucial tools, offering incentives for cooperation and reconciliation between the factions. These payments included allocations of political positions, power-sharing arrangements, and development assistance aimed at addressing socio-economic grievances. While challenges persist, the use of side payments in the Dinka-Nuer conflict offers valuable lessons for resolving the Nile Basin conflict. By adopting similar strategies, such as promoting inclusive dialogue and equitable resource allocation, riparian states can address grievances and foster cooperation, ultimately working towards sustainable solutions for water resource management and regional stability

Dinar (2006) avers that Issue linkage is another mechanism that can help riparian states resolve competing interests. In cases where a downstream state holds authority over an upstream state in a distinct matter, this factor holds considerable importance. Mostert (2005) argue Water disputes are ideally suited for issue-linking since they include several uses, including consumption, agricultural, and energy demands, as well as their connection to state security. The benefit-sharing approach is fundamentally issue-based, since the approach aims to convert situations where one individual's gain results in another's loss into situations where all parties involved can benefit by leveraging a range of advantages.

According to Jongerden (2010), the Tigris Watershed is linked by an issue between Turkish and its Antitaurus Mountain ranges. A 1999 NATO war scenario anticipated that three dry summers would culminate to an encroachment of Turkey by Iraq and Syria in 2010, if there were no rain. The recent tension is aggravated by the Greater Anatolia Project which focus on constructing 22 dams in total (Jongerden 2010,). Since 1984 and 1987, Turkey has guaranteed a minimum average course of 500 cubic meters per second in bilateral agreements with Syria and Iraq because of the political agreement Syria made to be harsher upon that Kurdistan Labor Party, its leader Abdullah was forced to retreat Syria.

Albert (2019) in his study, looked at case of peaceful settlement in the Paraná, a cross-border river originating from Brazil and flowing into Paraguay, ultimately reaching the Río de la Plata. The river's water capacity has led to the construction of numerous hydroelectric plants, taking advantage of both waterfalls and rapids. Given the political and economic significance of the Paraná, which supports the most industrialized and populated areas of South America, collaborative efforts have been

particularly crucial. The Itaipú dam, the world's largest producer, stands as a proof to this cooperation, being the first binational dam jointly built by Paraguay and Brazil. Despite initial border disputes dating back to 1872, the completion of the dam in 1984 marked a milestone. Today, Itaipú, overseen by the binational Itaipu organization, provides over 16% of Brazil's total energy consumption and more than 75% of Paraguay's. While environmental impacts were significant, Itaipú has undertaken initiatives to preserve biological reserves, protect flora and fauna, and reforest areas around the reservoir to maintain water quality. Albert Vidal emphasizes the cooperation on the Paraná as a prime example of the benefits that collaborative water usage can bring to countries. Therefore, the upper and lower riparian states of the Nile Basin should carefully consider these examples of cooperation, recognizing their imperfections while learning valuable lessons for sustainable water management and regional cooperation.

Nile River basin issue hence provides a concrete illustration of the difficulties engaged in the development of an all-encompassing trans-border water management scheme with great emphasis on preventive diplomacy and the role it has played so far in limiting escalation of violence over the river.

2.2 Theoretical Framework

2.2.1 Problem Solving Negotiation Theory

This theory posits that problem solving involves negotiations that offer despotic supremacy of their approach in conflicts resolution and results. Various commentators and scholars of this school of thought refer to it coordinative, cooperative and integrative. Gerard Nierenberg (1968) birthed this theory and demonstrated that there is always the need to work together for a consensus that appeases both parties. Premises on this theory position it discrete from the example

of self-interest and egoistic tendencies. This theory posits that a problem solver sees the world a place where enlightenment and self-interest take center stage in the control and use of resources. This theory suggests that riparian countries should put much emphasis on the common interest on matters that will benefit cooperation to sail through even as most of them attempt to accelerate the returns for their own self-interest matters. According to Menkel-Meadow (2015), negotiation is not meant to solely benefit one individual, it is instead focused on finding a mutually beneficial outcome for both parties involved in the conflict. This theory is relevant to the study, its demonstrates that states which share Trans Boundary Rivers are also depending on one another for hydrological security. A case in point is that the use and consumption of the river water in one country affects its availability on the other. Socio-economic dependence also crops in as water are essential in the creation of prosperity. For this reason, absolute exploitation of the Nile River by one state denies the other members in the realm an opportunity of economic growth.

2.2.2 The Reciprocity Theory

Reciprocity theory developed by Alvin Gouldner, which posits that the principle of mutual exchange and the expectation that individuals or groups will respond to actions in kind. It emphasizes the reciprocal nature of social relationships, where behaviors are influenced by the expectation of receiving benefits or facing consequences in return. The conflict within the Nile Basin, characterized by contention over water allocation, hydroelectric undertakings, and regional power dynamics, these issues create complex challenges that can only be solved through cooperation among the countries involved. In the context of the Nile River Basin conflict, reciprocity theory provides invaluable perspectives concerning water

resource management through understanding the dynamics of interaction and negotiation among the riparian states.

Embracing reciprocity enables policymakers to determine the interdependency among riparian states and the mutual advantages of cooperative water governance. As posited by Appelgren, B & Klohn, W (1997), reciprocity theory underscores the significance of reciprocal actions and mutual benefits in fostering cooperation among states sharing transboundary water resources. This theory underscores the relevance of equitable water allocation and collaborative mechanisms in addressing water security concerns and improving conflicts within the Nile River Basin. Thus, the application of reciprocity theory in the action of water management holds promise for mitigating tensions and fostering sustainable development within the region. Furthermore, reciprocity theory underscores the significance of trust-building mechanisms in resolving conflicts and fostering sustainable cooperation. In the context of the Nile Basin, where historical tensions and power asymmetries exist among riparian states, establishing trust is essential for meaningful dialogue and agreement implementation. Reciprocal actions, such as honoring commitments and demonstrating goodwill, can contribute to building trust over time and reducing the likelihood of future conflicts.

2.3 Conceptual Framework

Conceptual framework translates its objectives which were used to show the nexus between the variables in this study. The conceptual model in Figure 2.1 lays forth the nexus between preventive diplomacy and the management of water security dispute so that it does not escalate into full blown conflict. Different aspects of preventive diplomacy were interrogated. They include the common mechanism of

preventive diplomacy used such as treaties, consensus building and the establishment of the Nile Basin Initiatives (NBI). The second aspect of preventive diplomacy examine was the efficiency of these strategies in forestalling disputes. The third aspect measure where alternative strategies can be or were used alongside preventive measures. The alternative strategies included mediation, arbitration, conciliation and negotiation. All these aspects of preventive diplomacy had direct influence on managing conflict between the upper and lower riparian states. Thus, the conceptual model adopted by the study conceptualized that the conflict in the Nile basin shall deepen if preventive diplomacy mechanisms used as shown.

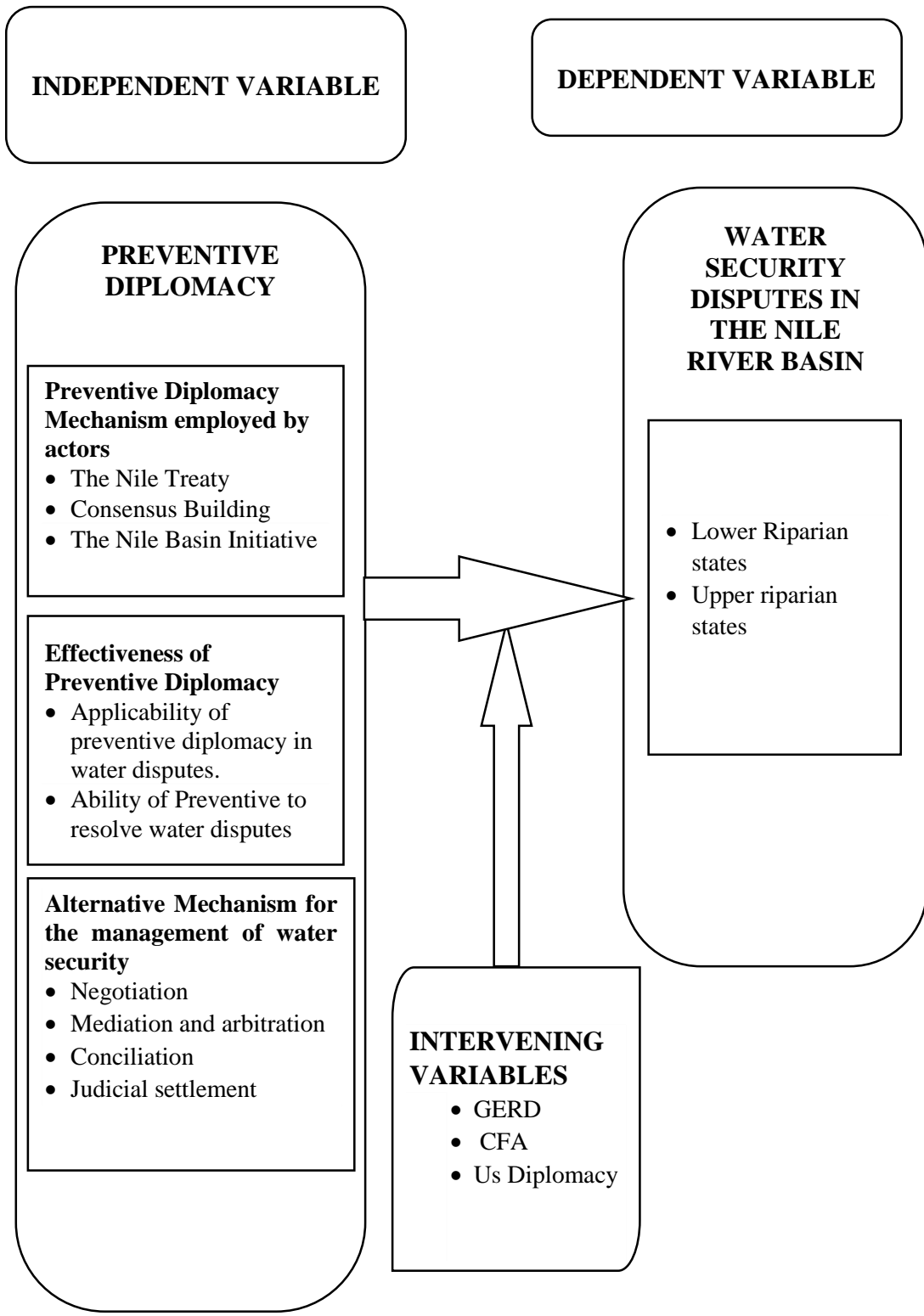


Figure 2.1: Conceptual Framework

Source, Researcher 2022)

2.4 Conclusion

This section has been able to put forth the literature review, theoretical and conceptual framework of the study. In the literature review, this study has focused on assessment of the role of preventive diplomacy in management of water security disputes in the Nile River Basin, also it delved into preventive mechanism employed by actors and how effective preventive diplomacy are in the management of water conflict in Nile Basin. In the flip side, this study has focused on the problem-solving theory and Reciprocity theory to come up with a strategy that can be deployed by the conflicting states to solve the stalemate occasioned by these of the Nile waters. In the conceptual framework, this section illustrated the correspondence between the independent variable preventive diplomacy and management of water security dispute and the dependent variables the Nile River Basin.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter presented the research design, location of the study, target population, sampling techniques, sample size, data collection and data analysis.

3.2 Research Design

The research design utilized by this study was a cross-sectional survey. This design allowed the researcher to acquire data from a particular population at a certain period of time. This had to do with choosing a relatively large sample of participants from a population that had already been identified, in conjunction with acquiring information on the participants. Hence, the researcher deployed data from the immense population from a sample to draw an inference. In this study data were gathered in a uniform procedure using distributed questionnaires and scheduled interviews.

For this particular study, this design seek to explain the management of water security along Nile water Basin through preventive diplomacy. The choice of this research design was considered appropriate because it was distinguish by a high point of flexibility on the aim to recognize the boundaries of the condition in which the probes, opportunities or positions of interest are likely to be ground in , like in this study, the study had mapped in on the key locations like in Nile Basin Initiative, and respective embassies. These locations were key in data collection and flexible in changing direction of the initial approach. Lastly, this design helped the study to identify the major factors or variables that might be found within the mapped locations of the research.

3.3 Study Area

The study specifically focuses on the entire eleven Nile basin states, the rationale for selecting Entebbe, Uganda, as the area of study derived from its pivotal role as the headquarters of the Nile Basin Initiative (NBI), serving as a central hub for collaborative efforts among the eleven Nile Basin states. By situating the research within the NBI headquarters, the study gains direct access to the institutional mechanisms and decision-making processes shaping cooperative endeavours and dispute resolution strategies within the Nile River Basin. Additionally, Entebbe's proximity to the embassies of the Nile Basin states facilitates convenient interaction with diplomatic representatives, providing valuable insights into each nation's policies, perspectives, and challenges related to water security and regional cooperation. This strategic positioning enables the research to comprehensively assess the role of preventive diplomacy in management of water security disputes in the Nile River Basin, contributing to the discourse on sustainable transboundary water governance and fostering cooperation among riparian states.

3.4 Target Population

Ogula (2005) posits that population is a group of institutions, objects or people who share common traits. The targeted population for this study consisted of 70 officials from the eleven respective embassies and International Relations expert, 60 officials from the Nile Basin Initiatives. For this reason, therefore the accessible population was 130 respondents. They were sampled to get the definite sample for the study.

3.5 Sampling Procedure

Mugenda and Mugenda (2003) opines that sampling is a method or approach that involves selecting of sub group from the population to take part in research. They

further discuss sampling as the process of selecting individuals in a way that the respondents represent the larger group from which they were selected. Simple random sampling along with Judgmental sampling technique were engaged in selecting the respondents throughout pre-testing and on the actual study.

3.6 Sample Size

Mugenda and Mugenda (2003) explains that a sample size of 10-50% is sustainable. In this study, a sample size of 130 respondents, which translates to 70 officials from respective embassies and the International Relations expert and 60 officials from Nile Basin Initiative was used. Yamoah (2016) argued that the research can study the entire population if the population is well defined. Given that the population of this study was 130, all members of the population were enrolled into the study.

Table 3.1: Target Population Sampling Matrix

| Government Ministry | Target Population | Percentage |
|---|--------------------------|-------------------|
| Respective Embassies &International Relations expert | 70 | 54.3% |
| Nile Basin Initiative (NBI) | 60 | 46.7% |
| Total | 130 | 100% |

3.7 Instruments of Data Collection

The research instruments deployed in this study to collect data were scheduled interviews and questionnaires to officials from eleven respective embassies. In this section, this study gives the description of these tools in brief.

3.7.1 Questionnaire

The questionnaires were sequenced in logically to resonates with the topic of the study. They questions were used to illicit responses from the respondents. The

questionnaires had both open ended along with closed questions format. In distributing the questionnaires to the respondents, the researcher was able to obtain more information as they filled their answers. Subsequently, the closed-ended questions were adopted since they were more convenient to analyze due to their concise format, simpler to use, and cost-effective in terms of time and money (Mugenda & Mugenda, 2003). Therefore, questionnaires achieved highly contributed to other quantitative data form the primary sources, as the information was fast-hand and original hence passed through the lenses of authenticity, reliability and validity.

3.7.2 Interviews

Kombo and Tomp (2006) in their opinion agree that when it comes to essay, thesis and proposal writing, interviews should be scheduled to collect accurate data and statistics. The two proponents define interview as verbal or oral interaction between the interviewer and interviewee. While conducting an interview, the researcher is able to pick non-verbal clues which are not expressed in the questionnaire Cohen and Manion (1999). Therefore, for this research, the interview guide contained about twenty different questions but within the scope of the study, the questions enabled the informant's respond to the key tenets around the research objectives as most of the questions were similar to those in the questionnaire. Unlike the scope that the questionnaire covers, the interview schedules were limited to key informants, the top officials in the intergovernmental partnership NBI. This was conducted in order to gather information from the individual who were knowledgeable about the subject.

3.8 Validity and Reliability of the Instruments

3.8.1 Validity

Validity shows the correlation between findings and variable. Content validity is the degree where the sample test illustrates the substance that test is intend to be measured (Orodho, 2008). To assure that the data is accurate, the researcher pre-tested the questionnaires and interpreted the findings, the researcher conducted the pre-test among the official of respective embassies in Uganda in order to make adjustments to every question that are unclear. The reliability of the collected data was ensured through the implementation of a pre-testing process on the chosen sample, which helped maintain its validity. In addition, the researcher personally contacted the selected participants to emphasize the significance of the study. This guaranteed that the accuracy of the collected information is validated. Due to the use of the same location for data collection and pre-testing, the researcher had to exclude participants who took part in the pre-testing phase from the final study. This measure was necessary to prevent potential biases and ensure the validity of the research findings.

3.8.2 Reliability

Reliability is characterized as the tendency of accuracy that the instrument technique indicated (Golafshani, 2003). Reliability measurement is the degree to which certain measure of reliability is tested. The researcher distributed questionnaires to the respondents, collect them, and evaluate the responses. After fourteen days the questionnaires were re-tested to the same participants. This ensures the internal coherence of the questionnaires and confirms the findings from the chosen selected sample (Allan, 2013).

3.9 Data Collection Procedure & Techniques

An authorization letter was obtained from Kenyatta University and other permits was sought from the National Commission for Science, Technology & Innovation (NACOSTI). Primary data were derived from interactive and one-one interviews with five officials from each of the targeted area and the administration of questionnaires was done to all key respondents. The researcher visited the officials responsible in handling the issues concerning the basin cooperation and water resources management and the officials at the embassies in the department of political affairs to make prior arrangements to meet the relevant respondents.

Secondary data collection was gotten from journal articles, books and documents that provide information on Basin Cooperation, water resources management and conflict prevention. The purpose of carrying out primary and secondary data research in this study was to first acquire the basic knowledge on what relevant information had already been provided by other researchers in the past and then through primary data, collect information and answer questions on the topic of the assessment of the role of preventive diplomacy in management of water security disputes in the Nile River basin that have not been addressed before. This study relied on both secondary and primary sources of data. Data collected and composed were both qualitative and quantitative and they were analysed through content analysis (Kothari, 2004), Miriam and Wamahiu, (1995).

3.10 Data Analysis

The data that was gathered underwent analysis through the use of SPSS version 20 and the results were shown in frequency distribution and percentage through tables and bar graphs. Secondary data were obtained from academic papers and journals,

reports, books, unpublished papers and periodicals. These were engaged through rigorous and critical analysis and quantitative data were analysed using content analysis. Thematic analysis was used to analyse qualitative data into themes such as Preventive Diplomacy and regulation of Water security disputes in Nile River Basin. This enabled description of findings. The findings developed from the final analysis were used to assemble and compile the final document. Content analysis was further used to analyse the open-ended questions.

3.11 Ethical Considerations

Discussed under here are the following,

3.11.1 Ethical Considerations for the Process

Permission to pursue the study was sought from Kenyatta University; the School of Security, Diplomacy and Peace Studies. In resonance to this, further permit was sought from the administration of the relevant embassies of study and in Uganda where the Nile Basin secretariat is stationed. Furthermore, cautious selection of data collection method was necessary in all types of study to ensure validity and reliability.

3.11.2 Ethical Considerations for the Researcher

In research this study, important fundamentals are the ability of the researcher, the meticulous design, attentive and valuable consistent outputs. Researchers must acquire the required skills, information, and knowledge to conduct the specific investigation, as well as be aware of the constraints of personal capability and competency in research. Any deficiency of familiarity or knowledge on the area under research must be evidently specified.

3.11.3 Ethical Considerations for the participants

A formal consent in written form was used to seek permission from the respondents and key informants before such is included in the study and more importantly confidentiality respect to privacy were highly emphasized and were made aware of those ethical considerations for human subjects under the study. Anonymity is sheltered when the subject's individuality that cannot be connected with personal replies. If the researcher is not capable of promising anonymity, she has to address discretion, which is the supervision of confidential information sought by the researcher in purposely to safeguard the subject's identity.

3.12 Conclusion

This section has been able to put forward the research methodology that the study will engage to come up with a concrete data on assessment of the role of preventive diplomacy un management of water security disputes in the Nile River basin Within it, focus has been emphasized on data collection procedure, research design, instrument of data collection, target population, study area, data collection techniques and procedure, sampling techniques/procedure, data analysis, sample size and ethical considerations for the human subjects in research.

CHAPTER FOUR

PRESANTATION & DISCUSSION OF THE STUDY

4.1 Introduction

This chapter presents primary and secondary findings gathered and analyzed in the course of this study. Findings presented in this chapter are on demographic characteristics of respondents as well as findings on research question of every specific objective sated in this study. This study further provides discussion of these findings. In discussing the findings, the researcher made effort to relate the findings with the existing body of literature through corroboration and triangulation. The specific objectives of this study as outlined in chapter one of this study were; to examine preventive diplomacy mechanisms employed by actors in the management of water security disputes in Nile River Basin, to assess the effectiveness of preventive mechanisms in containing water security disputes in Nile River, and to investigate alternative mechanisms for the management of water security dispute in the Nile River Basin. Before an analysis of the findings on these objectives, the study commences by analyzing the response rate and the demographic characteristics of the participants.

4.2 Response Rate

Response rate refers to a percentage of duly filled and returned questionnaires out of the sum total of questionnaire distributed to the participants. It obtained by calculating the percentage of returned questionnaires from the sum to total of the respondents who received questionnaires. In this study the sum total was the sample

size of this study which was 130 participants. Out of the 130 participants 100 fully participated and was regarded as the response rate. The response rate is shown in Figure 4.1.

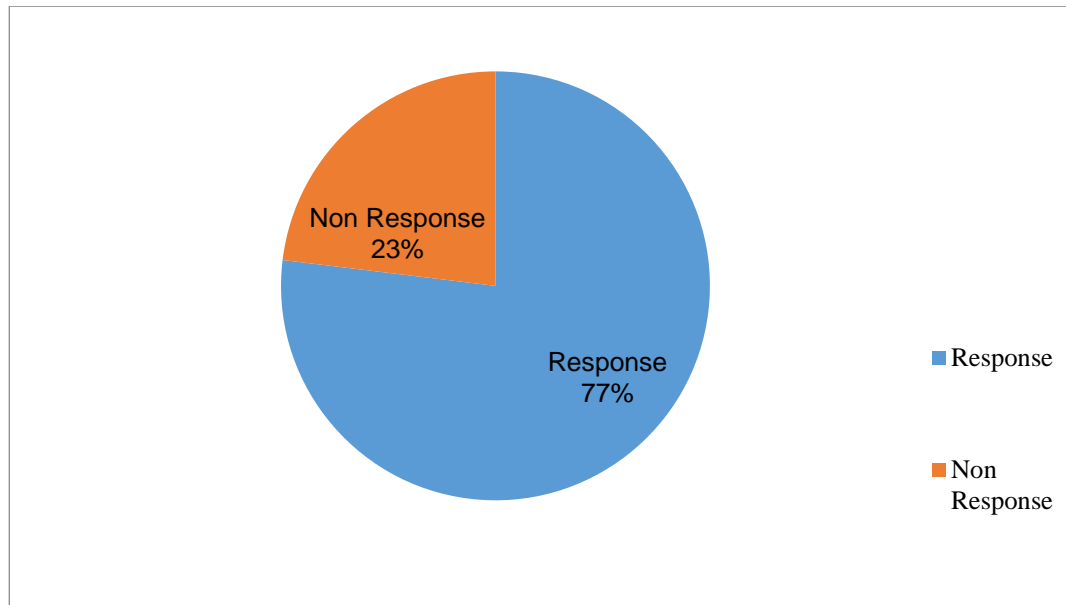


Figure 4.1 Response Rate
Source: Field data, 2022

From Figure 4.1, Out of the 130 participants, 77% volunteered to respond to the research instruments while 23% of respondents declined to provide answers to items listed in the questionnaires or attend scheduled interviews. Further interrogation of the response rate revealed that 85% of the study participants attempted to fill the questionnaires while 15% of respondents participated in the scheduled interviews. More so, 55% of respondents were from respective Embassies and International Relation Experts while 45% of respondents were from Nile Basin Initiative. The percentage of response was 77% which was large enough to influence provision of information useful for attaining objectives of the study. This relates to arguments by Finchman (2008) who argued that a response rate of above 60 percent should be the target of the researcher as it is adequate enough.

4.3 Demographic Characteristics of Study Participants

This part provides analysis of biographic information of the study participants. In research, it is important to ascertain personal information of participants so as to determine their legibility to provide the desired data. The analysis here focuses on the 100 participants who either responded to questionnaires or attended interviews. This translated to 77% of the total sample. Demographic characteristics of respondents provided in this part included gender of respondents, age of respondents, education level as well as period of services in the ministries. These were analyzed as follows.

4.3.1 Gender

In analyzing gender, only two categories of gender were considered. This were male and female gender. This though may sound unexclusive; the decision was made in view of the cultural perceptions held in regards to other genders in the area of this study. The distribution of gender of informants and respondents was as follows.

Table 4.1 Gender of respondents

| Target population category | Sample size | Male | Female |
|---|--------------------|-------------|---------------|
| Respective Embassies &International Relations expert | 55 | 32 | 23 |
| Nile Basin Initiative | 45 | 29 | 16 |
| Total | 100 | 61 | 39 |
| Percentage | 100% | 61% | 39% |

Source: Field data, 2022

Result in Table 4.1 show that 61% key informants and respondents were males while 39%, were females. Out of them, 32 male informants and respondents were from respective Embassies & International Relations experts while 29 male informants and respondents were from the Nile Basin Initiative. Furthermore, 23 female informants and respondents were from respective Embassies & International

Relations expert while 16 female informants and respondents were from Nile Basin Initiative. Male participants were many as compared to female participants. Also, considering that respondents from both genders were used, this was helpful in obtaining varied responses on objectives of the study. Simmons (2015) argued that it is better to use respondents from both gender in order to ensure inclusive research results as well as increased excellence of results. Based on this scientific the observation, it was imperative for this study to use informants and respondents of either gender to ensure inclusive results on preventive diplomacy initiatives implemented in ensuring safety at Nile River Basin. Respondents from both genders were helpful in avoiding biased results as each gender had its contribution in revealing diplomatic measures adopted in resolving disputes. Gender was studied in relation to the water dispute in the Nile Basin so demonstrate the gendered perception on the contestation over the use of the Nile Water. Men and women have diverse usage of water. Where men would examine water in terms of mega projects women considered the water usage in domestic and pastoralists use. These dynamics also influence the gendered participation in preventative diplomacy in one way or another. Therefore, gender dimension of the preventive diplomacy in water scarcity dispute was core in this study.

4.3.2 Age of respondents

Another biographic aspect of participants studied was the age. This study sought to collect data from adults of different ages so as to ascertain views per age quartiles of 5 years. Cleave (2020) argues that it is important to include age in research because it is helpful in obtaining an insight on respondents of the study. It is further helpful in acquiring details and valuable information from respondents and being in better position to determine their opinions. The study asked participants to indicate

their age in the stated quartiles. Data gathered and analyzed on the age of the informants and respondents was as follows.

Table 4.2 Age of Respondents

| Target population category | 26-30 years | 31-35 years | 36-40 years | 41 years and above | Total |
|---|--------------------|--------------------|--------------------|---------------------------|--------------|
| Respective | 5 | 21 | 12 | 23 | 61 |
| Embassies &International Relations expert | 8.2% | 34.4% | 19.7% | 37.7% | 100.0% |
| | 62.5% | 67.7% | 52.2% | 60.5% | 61.0% |
| | 5% | 21% | 12% | 23% | 61.0% |
| Nile Basin Initiative | 3 | 10 | 11 | 15 | 39 |
| | 7.7% | 25.6% | 28.2% | 38.5% | 100.0% |
| | 37.5% | 32.3% | 47.8% | 39.5% | 39.0% |
| | 3% | 10% | 11% | 15% | 39.0% |
| Total | 8 | 31 | 23 | 38 | 100 |
| | 8% | 31% | 23% | 38% | 100.0% |
| | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |
| | 8% | 31% | 23% | 38% | 100.0% |

Source: Field data, 2022

The findings in Table 4.2 show that age of respondents range from 26-30 years 8%, 31-35 years 31%, 36-40 years 23%, and 41 years and above 38%. Therefore, large number of respondents were aged between 41 years and above the aforesaid group of respondents' entails that they have knowledge and are more experienced on preventive diplomacy in management of water security disputes. This group also had enough experience for having witnessed the contestation of the Nile for over 20 years in their adult hood years. Age of respondents was crucial in influencing competence of participants on different diplomatic measures which have been implemented from time to time in resolving Nile basin water dispute.

4.3.3 Level of Education

This study was also interested to ascertain the level of education of the informants and respondents so as to be sure of the accuracy of the information provided. Ordinarily, an individual's education level refers the highest academic qualification

in terms of grade he or she has finished or awarded certificate for. in this study however, the level of education was considered as the highest or current academic grade of the participants irrespective of completed or not. The grades were certificate, diploma, bachelors, masters and Doctor of Philosophy. The analysis yielded was as follows.

Table 4.3 Education level of respondents

| Target population category | Certificate | Diploma | Bachelor's degree | Master's degree | PhD | Total |
|---|--------------------|----------------|--------------------------|------------------------|------------|--------------|
| Respective Embassies & International Relations expert | 0 | 17 | 30 | 13 | 1 | 61 |
| | 0% | 27.7% | 49.2% | 21.3% | 1.6% | 100.0% |
| | 0% | 58.6% | 65.2% | 56.5% | 50% | 61.0% |
| | 0% | 17% | 30%% | 13%% | 1% | 61.0% |
| Nile Basin Initiative | 0 | 12 | 16 | 10 | 1 | 39 |
| | 0% | 30.8% | 41.0% | 25.6% | 2.6% | 100.0% |
| | 0% | 41.4% | 34.8% | 43.5% | 50% | 39.0% |
| | 0% | 12% | 16% | 10% | 1% | 39.0% |
| Total | 0 | 29 | 46 | 23 | 2 | 100 |
| | 0% | 29% | 46% | 23% | 2% | 100.0% |
| | 100.0% | 100.0% | 100.0% | 100.0% | 100% | 100.0% |
| | 0% | 31% | 23% | 38% | 2% | 100.0% |

(Source: Field data, 2022)

The findings in Table 4.3 shows that education level of respondents range from Diploma level of education (29%), Bachelor degree (46%), Master's degree (23%) and PhD (2%). Considering the presented findings, it is obvious that majority of respondents had Bachelor degree education. The implication is that majority of officials of Respective Embassies & International Relation Expert as well as the Nile Basin Initiative had a qualification of Bachelor degree education. This level of education is crucial in influencing their knowledge on Preventive diplomacy in management of water security disputes. Therefore, respondents with higher level of education had good knowledge on diplomatic measures as well as alternative measures which can be useful in resolving the disputes. Connelyet *al.*, (2016) asserts

that measuring education is important in social research since it is a powerful tool that explains changes in population, as well as socio-economic situations. This study thus contended that the data sourced was valid and representative enough.

4.3.4 Period of Service

Period in service refers to job experience. The choice of this was informed by the understanding of diplomatic service. Work or job experience is the metric of cumulative experience one has acquired through many years in the same career. Work experience provides wealth of knowledge. This study sought analyses the work experience of the participants. The experience was measured against years ranging from five to over twenty years in service. The analysis was as follows.

Table 4.4 Period of service

| Target population category | Below 5 years | 6-10years | 11-15 years | 16-20 years | 21 years and above | Total |
|--|----------------------|------------------|--------------------|--------------------|---------------------------|--------------|
| Respective Embassies &International Relations expert | 4 | 10 | 12 | 25 | 10 | 61 |
| | 6.5% | 16.4% | 19.7% | 41.0% | 16.4% | 100.0% |
| | 40% | 66.7% | 60% | 71.4% | 50% | 61.0% |
| | 40% | 10% | 12% % | 25% % | 10% | 61.0% |
| Nile Basin Initiative | 6 | 5 | 8 | 10 | 10 | 39 |
| | 15.4% | 12.8% | 20.5% | 25.6% | 25.6% | 100.0% |
| | 60% | 33.3% | 40% | 28.6% | 50% | 39.0% |
| | 60% | 5% | 8% | 10% | 10% | 39.0% |
| Total | 10 | 15 | 20 | 35 | 20 | 100 |
| | 10% | 15% | 20% | 35% | 20% | 100.0% |
| | 100.0% | 100.0% | 100.0% | 100.0% | 100% | 100.0% |
| | 10% | 15% | 20% | 35% | 20% | 100.0% |

Source: Field data, 2022

Results in Table 4.4 show that period of service among participants from below 5 years (10%), 6-10 years (15%), 11-15 years (20%), 16-20 years (35%) and 21 years and above (20%). From this data, the study inferred that majority of respondents had experience ranging from 16-20 years. The implication is that majority of officials of Respective Embassies & International Relation Expert as well as the Nile Basin

Initiative had work experience of between 16 and 20 years. These years of service were crucial in influencing experience among officials and employees on Preventive diplomacy in the management of water security disputes in the Nile River basin. Powell, (2001) elucidates in an article that working experience should be checked to establish the relationship between the findings and the nature of the respondents in terms of working experience.

4.4 Preventive Diplomacy Mechanisms Employed by Actors in the Management of Water Security Disputes in Nile River Basin.

In this section, this study analysed data sourced to fulfil the first study objective. In the first objective, the study intended to examine preventive diplomacy mechanisms employed by actors within the Nile Basin in managing water security disputes. The study had identified a series of mechanisms of preventive diplomacy. After careful examination three stood out. These were; formation of treaties, establishment of the Nile Basin Initiative and Consensus Building by riparian states. Analysis of these was helpful in showing commitment of actors towards managing security disputes which arise in the Nile River Basin. It was also beneficial in figuring out measures that have been initiated by actors around the Nile River Basin towards reducing disputes which could lead to war among actors. In order to meet this objective, the study asked the respondents to rate and explain further on the three identified preventive diplomacy mechanisms that have been employed by the actors in the Nile Basin over time. In its imperative to recall the preventive diplomacy is described in this study as actions which are implemented for the purpose of preventing emergence of disputes between two parties. It also refers to action of preventing already emerged dispute from escalating to become full blown out armed conflict as well as limiting spread of disputes. Common examples of preventive diplomacy measures

include early warning, consensus building and confidence building among others. Table 4.5 shows the most common mechanisms which participants of this study rated in terms of how often they were used.

Table 4.5 Preventive Diplomacy Mechanisms Employed by Actors in the Nile Basin

| Preventive Diplomacy Strategies | Frequency | Percentage |
|--|------------------|-------------------|
| Formulation of treaties/agreements | 43 | 43% |
| Consensus Building | 31 | 31% |
| Formulation of Nile Basin Initiative | 26 | 26% |
| Total | 100 | 100.0% |

Source: Field data, 2022

From Table 4.5, results prove that 43 respondents (43%) mentioned formulation of treaties or agreements, 31 respondents (31%) mentioned consensus building and 26 respondents (26%) mentioned formulation of Nile Basin Initiative. These were mentioned as diplomatic measures initiated in order to resolve the conflicts at Nile River Basin.

4.4.1 Formulation of Treaties or Agreements

In international relations, treaties exist as the oldest form of legal binding document that govern the relations and conduct of states over something considered of mutual sovereignty interest (Beth, 2010). Treaties come in many forms, such as conventions, covenants, agreements, pacts or exchange of letter (Anders, 2017). The Nile has since immemorial determined the life line and culture of Egypt. It is used in agriculture, transport, irrigation and generation of electricity among other. After visibility studies on the building of the Suez Canal, Britain developed interest on mutual use of the waters of River Nile. To ensure peaceful utilization of the waters of the Nile, Egypt and Britain entered into the 1929 Anglo-Egyptian treaty. Since then, a number of treaties have been made by the riparian states in the Nile Basin.

They included the 1959 Nile water agreements, the 2015 agreement between Sudan, Ethiopia and Egypt, and lately the Cooperative Framework Agreement.

Treaties are the most preferred mechanism for defining states obligations. They are respected since they are form of international law. State is therefore bound by it. States that breach the treaty are considered to have contravened international order law. The results presented in Table 4.5 revealed that treaties were most preferred as the means of preventive diplomacy. Approximately 43% of respondents mentioned formulation of treaties/agreements as one of preventive diplomacy mechanism employed by actors in management of water security disputes in Nile River Basin. This can also be revealed from interviews conducted as Participant 4 of the interview who was Nile Basin Initiative Officer said;

As part of ensuring that there is improved peaceful settlement of water disputes at the basin, there are different treaties signed among member states. Some good examples include the Cooperative Framework Agreement of 2007 which came up with agreements on governance of the basin. The treaty was based on deciding principles and structures which could act as mechanisms for governing the Nile basin water resources. The agreement was signed by member countries such as Congo, Uganda, Kenya, Ethiopia, Tanzania, Egypt and Sudan. The treaty did not last for a long period as it ended in 2017(Nile Participant 4, Basin Initiative officer)

Considering explanations provided by one of participants of interviews, the implication is that actors in this area considered formulating treaty/agreements as one of the strategies which could be helpful in managing water security across the basin. An example of treaties provided by participant of interview is negotiated agreements which were undertaken around the Cooperative Framework Agreement (CFA) on June 2007 which was centered in deciding on principles and structures as well as institution to jointly govern the Nile basin water resources and it lasted for a period of 10 years ranging from 2007 to 2017. This was considered to be an important approach towards ensuring security around the basin. The most notable

agreement to date is the Cooperative Framework Agreement (CFA). The framework was initiated for the purpose of establishing principles, rights as well as obligations which could in turn contribute to long-term sustainability as well as management of the basin. This was considered to be a historical agreement among riparian states considering that in the year 2010, all 10 member countries especially Congo, Uganda, Kenya, Ethiopia, Tanzania, Egypt, Sudan signed the agreement. Currently, almost all riparian countries have signed the agreement while others have ratified the agreement to become the law governing land (Messy, 2020).

The views of participants of the study are that governing the Nile basin through joint agreement could be helpful in ensuring safety and security as well as having common objectives among actors. Other negotiations provided by participants of the study include trilateral negotiations which were held between Egypt, Sudan and Ethiopia in 2015. The negotiations were based on construction of major dam in Ethiopia. These negotiations led to a framework agreement which prepared the ground for broader agreements in the future. These agreements were also considered as among diplomatic measures to ensure peace and security around River Nile basin and avoid emerging disputes between riparian's state. Therefore, one of preventive diplomacy mechanism employed by the actors in management of water security disputes in Nile River Basin was treaties and agreements.

Dehshiri and Hekmatara (2019) analyzed preventive diplomacy in relation to the Aral Sea Basin dispute management in 1991-1999, 2000-2009, and 2010-2019. The Aral Sea Basin is located in the heart of Central Asia that consists of two major river that run through Afghanistan, Tajikistan, Kyrgyzstan, Turkmenistan, Uzbekistan and Kazakhstan. Starting in the early 1990s the World Bank led negotiations on

international agreements and the creation of independent basin institutions to work with the Aral Sea Basin through loan agreements. This is relevant to this study considering that treaties/agreements were implemented as among diplomatic mechanisms for resolution of disputes among riparian states.

Mitchell and Zewahir (2015) studied on effectiveness of treaty design in addressing water disputes. Their study suggested that the mostly applied mechanisms in prevention of militarization of river claims as well as opening up chances for peaceful negotiations were information exchange and enforcement provisions. This is relevant to this study considering that treaties/agreements were implemented as among diplomatic mechanisms for resolution of disputes among riparian states.

4.4.2 Consensus Building

Results in Table 4.5 reveal that 31% of respondents mentioned consensus building as another preventive diplomacy mechanism which was employed by the actors in the Nile River basin in ensuing management of water security. Consensus is defined as a general or wide agreement between a group of people. This is an act of lobbying which is useful in ensuring that there is an agreement reached among stakeholders and ensure that there is maximization of gains among them. This can also be revealed from interviews conducted with Nile Basin Initiative Officers as Participant 2 said;

One of the mechanisms which have been considered to be important in resolving disputes among countries around the Nile River basin is Consensus building. This approach emphasizes the importance of collaborative dialogue and mutual agreement among disputing parties to resolve conflicts in a peaceful manner. Consensus building has played a critical role in the Nile River basin, where the intricate web of geopolitical, environmental, and economic interests often leads to complex disputes. An illustrative example of this approach in action is the negotiation process surrounding the Cooperative Framework Agreement (CFA). In this instance, consensus building was pivotal in facilitating discussions and agreements among the riparian states (Nile Basin Initiative Officer)

Explanations by one of officers of the Nile River Basin show that Consensus building has been implemented as among mechanisms for resolution of disputes. During the negotiations in Entebbe, Uganda, the spirit of consensus building was evident as four Nile basin countries came together to ratify the CFA, signifying a collective effort to manage and utilize the Nile waters in a sustainable and equitable manner. The journey toward achieving consensus was fraught with difficulties. Egypt, one of the key stakeholders in the Nile River basin, presented unique challenges to the consensus-building process. Historically reliant on the Nile for virtually all its freshwater needs, Egypt has long claimed "historical rights" over the river, based on treaties dating back to the colonial era. The country's apprehensions regarding the CFA stemmed from concerns over potential reductions in its water allocations and the implications for its national security. This scenario highlighted the inherent difficulties in navigating the diverse interests and historical positions of the Nile basin countries. Despite the progress made in Entebbe, Egypt's reservations underscored the ongoing need for dialogue, flexibility, and mutual concessions in the path toward a truly inclusive and equitable agreement (Salman, 2004).

The views of respondents of the study shows the importance of consensus building in navigating the complexities of transboundary water management. By fostering an environment where all parties are encouraged to participate actively in the dialogue, consensus building helps to ensure that agreements are not only reached but are also more likely to be respected and upheld by all involved. Through this approach, the Nile River basin countries demonstrate the potential for collaborative solutions to shared challenges, emphasizing the value of consensus building in international water diplomacy.

Despite application of consensus building, the agreements between the leaders of the two streams were not effective. Therefore, consensus building are another preventive diplomacy mechanism which was employed by actors of the Nile River basin in ensuing management of water security but could still not be successful in managing the emerging disputes.

4.4.3 Formulation of the Nile Basin Initiative

The Nile Basin Initiative (NBI) was initiated in 1999. The aim was to ensure sustainable use of the Nile Water on volumes acceptable by all the riparian states. It was form of cooperative agreement. While conducting the study, this form of preventive mechanism for solving conflict emerged the third most prefers after treaty making and consensus building. Officials from riparian states interviewed affirmed that the NBI aimed to sure that there is acceptable basis for cooperation in the Nile basin in terms of volumes of water used by each state. Results presented in Table 4.4 show attested that 26% of respondents indicated that Nile Basin Initiative as another most preferred avenue for preventive diplomacy mechanism employed by actors of the Nile River basin in ensuing management of water security. Speaking in support of the NBI one of the key informants interviewed asserted that the NBI was to ensure peaceful use of the water. During the interview conducted with Nile Basin Initiative Officers who participated in interviews, Participant 5 said;

We had the Nile Basin Initiative which was implemented with the hopes of making peaceful settle of emerging disputes among states around the basin. The initiative was expected to increase peace, security and prosperity among people around the basin something which could act as a base for reduced hostility and disputes over use of basin resources. Establishment of Nile Basin Initiative led to increased participation of external third parties such as the World Bank in bringing together all riparian countries. All states joined together to support the initiative as an effective approach towards resolving disputes and ensuring security of Nile water (Participant 5, Nile Basin Initiative Officer).

The excerpt above showing the explanations provided by one of officers of Nile Basin Initiative show that one of mechanisms employed to resolve disputes was formulation of the Nile Basin Initiative which was initiated in 1999 as part of efforts by riparian states to make sure that there is acceptable basis for cooperation in the Nile basin. The objective of establishment of the Nile Basin initiative was developing the river in a sustainable and equitable ways to which would in turn ensure that there is peace, security as well as prosperity among all people around the basin. The members are Burundi, DR Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, The Sudan, Tanzania and Uganda. Eritrea participates in the intergovernmental body as only an observer. The main goals are: developing water sources at the Nile basin which could in turn contribute to increased prosperity, security and peace among member states, ensuring that there is effective management of water and efficient utilization of resources, ensuring that there is improved cooperation as well as join actions among member states, eradicating poverty among member states and ensuring that all programs planned are turned into actions.

Therefore, this initiative was expected to resolve the emerging disputes over the Nile River basin considering that it could lead to equitable use of water resources in the Nile River. Establishment of Nile Basin Initiative led to increased participation of

external third parties such as the World Bank in bringing together all riparian countries. All states joined together to support the initiative as an effective approach towards resolving disputes and ensuring security of Nile water. However, only one state did not join with others which was Eritrea. The motivation behind joining together among riparian states through the Nile Basin Initiative was to increase investments of huge infrastructures across the basin. The main achievements so far include: Preparation of investments worth more than USD 65 Billion which are at various stages of preparation, implementation and operation in the area of power generation, power transmission lines, restoration of watershed; capacity of over 30,000 people built; common planning tools; more than 10,000 Knowledge products generated; cadre of professionals engaged through the technical work of NBI. The body also acts as a means to convene all participating countries and engage in constructive dialogue about shared concerns, culminating in the adoption and execution of coordinated measures that adhere to the "One River-One People-One Vision" philosophy. Through NBI, all participating members have laid down their knowledge, technical as well as managerial foundation for the purpose of supporting closer cooperation upon establishment of the commission Knowledge Hub (CoE). The body's efforts towards Nile Basin outreach programs have fostered a greater sense of mutual recognition, appreciation, and acknowledgment of the importance of cooperation for sustainable management of transboundary water resources.

There are some achievements which resulted from implementation of the Nile Basin Initiative. The initiative has led to a pipeline of nearly \$6 billion of investment projects, with nearly \$1.5 billion of total under implementation. Example of project which succeeded following implementation of Nile Basin Initiative is Resume falls hydroelectric project which is financed by the World Bank. The project generates

power to Burundi, Rwanda and Tanzania. Nile Basin Initiative helped countries in preparation and implementation of the project something which entails that implementation of Nile Basin Initiative has led to improved cooperation among countries around Nile River Basin. This is why it is regarded as among implemented diplomatic mechanisms for resolution of conflicts around the area. The main challenges have been mobilization of resources to implement commensurate basin projects to match the challenges, and increasing environmental degradation, habitat destruction and unsustainable use of water-related ecosystems.

4.5 Effectiveness of preventive diplomacy mechanisms in containing water security disputes in Nile River

The second objective was geared to examining the effectiveness of preventive diplomacy mechanisms employed in resolving water security disputes in the Nile River Basin. This could be helpful in determining whether these mechanisms have been useful in meeting the intended objectives or not. This could also lead to an opportunity for suggestion of more conflict resolution mechanisms which will be helpful in resolving the disputes. In order to meet the objective, respondents of the study were provided with several questions. The first question asked them on whether they think the formulated preventive measures were applicable. The second question asked them on whether they think formulated preventive measures provided possible and long lasting solutions to the disputes witnessed in the Nile Basin.

4.5.1 Applicability of Preventive Measures

In the first question, respondents were asked on whether preventive measures which have been implemented are applicable. This could be helpful in determining whether

the diplomatic measures which have been implemented in resolving the dispute are applied effectively or not. They were supposed to reply whether “yes” or “no”. The findings from this question are presented in figure 4.2 below.

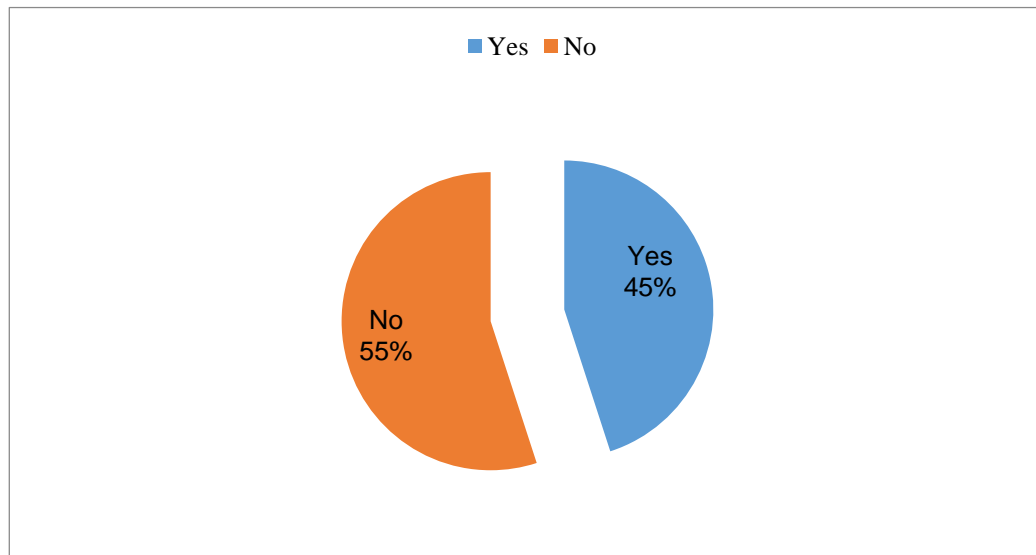


Figure 4.2 Preventive measures are applicable

Source: Field data, 2022

Results presented in Figure 4.2 show that 45% of respondents agreed by replying “yes” while 55% of respondents disagreed by replying “no”. Therefore, results show that majority of respondents disagreed that the implemented preventive measures are applicable. This implies that the implemented preventive measures have not been effective in ensuring resolution to emerging disputes at the Nile River basin. They could be effective if all respondents could have perceived them as applicable and capable of resolving the disputes. This can further be revealed from Respective Embassies & International Relations expert who participated in the study as he said;

These measures are yet to bring the expected results because there are still misunderstandings between the countries using the river Nile basin. treaties have been established initiatives have been formulated but they seem as less applicable in resolving the disputes. More needs to be done in order to ensure that there is increased security of water and resolution to emerging disputes (Official from Respective Embassy and International Relation Expert).

Considering explanations provided by the Official from Respective Embassy and International Relation Expert above, it is obvious that the implemented measures for resolution of disputes are still ineffective in managing disputes at the Nile River basin. Ethiopia can be cited as an example of countries to reveal that measures initiated were not effective. Ethiopia was reluctant to participate in discussions which was led by US as an external third party of mediating the disputing parties. The belief by Ethiopia was that US favored Egypt and thus disagreed with the conclusion of US. Furthermore, Ethiopia disagreed with the arbitration by the World Bank in January 2018 something which entails that the implemented measures have not been applicable and effective in managing disputes around Nile River basin. The findings are in line with those in the study by Mekonnen (2010) who revealed that the initiatives implemented in the Nile Basin were not effective to resolve the existing dispute. However, the findings are contrary to those in the study by Albert (2019) who studied on peaceful settlement in Parana. It was revealed that implemented measures in settling dispute between Brazil and Paraguay were effective.

4.5.2 Ability of Formulated Preventive Measures to Provide Solutions to the Water Disputes

In the second question, participants of the study were asked on whether the formulated preventive measures were capable of providing possible long-lasting solutions to the water disputes. This could be helpful in determining whether diplomatic mechanisms are effective to ensure management of conflict in the region or not. Respondents were required to agree by reply “yes” or disagree by replying “no”. Responses from this question are presented in figure 4.3.

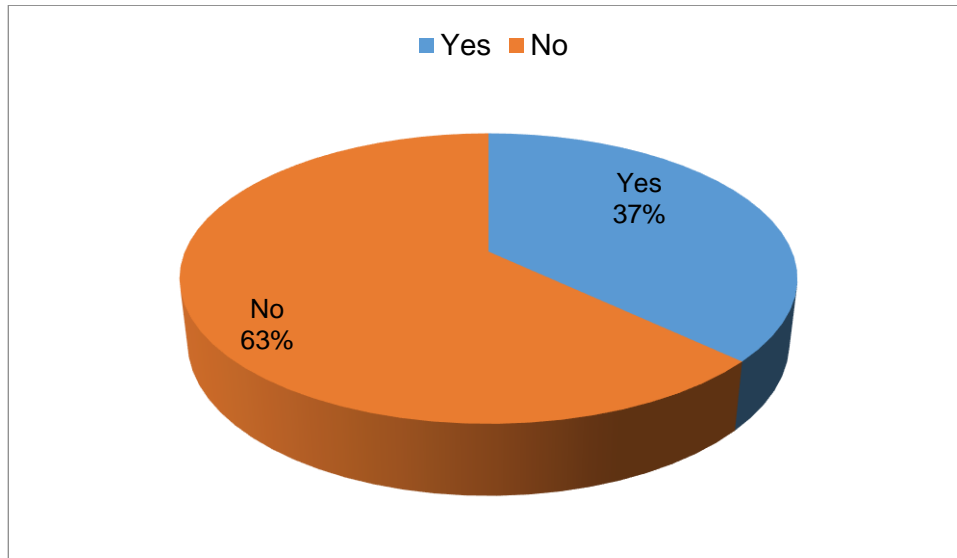


Figure 4.3 Extend Formulated preventive measures in providing possible solutions to the disputes

Source: Field data, 2022

The findings in figure 4.3 show that 63% of respondents disagreed by replying “no” while 37% of respondents agreeing by replying “yes”. It is revealed that majority of participants disagreed that the formulated preventive measures are the possible solutions to the dispute. This can also be revealed from interviews which were conducted by officials participated in the study as Participant 1 said;

Preventive measures which have been formulated for the purpose of resolving dispute among riparian states cannot guarantee that the disputes are already resolved. This is because there are still misunderstandings among countries across the basin regardless of presence of these measures. I think there is a need for deep evaluation to come up with more effective measures which can be useful in bringing to end the emerging disputes. (Nile Basin Initiative Officer).

Considering the views of one of participants of interviews, the implication is that diplomatic measures which have been initiated by states around Nile River basin with the intention of resolving disputes and ensure security of water are not effective. This is because the measures are not considered to be possible solutions to the disputes.

Respondents of the study are of the view that measures are still not effective considering that the dispute between Ethiopia and Egypt still ravages on. There are recent tensions which have grown among Egypt, Ethiopia and Sudan over the Grand Ethiopian Renaissance Dam on the Blue Nile. These tensions have grown after announcement by Ethiopia that it has started filling the GERD's reservoir, an action which is contrary to Egypt's mandate that the dam not to be filled without a legally binding agreement over the equitable allocation of the Nile waters. These tensions have led to involvement of international organizations as the United States has threatened to withhold development aid to Ethiopia if the conflict is not resolved and agreements are not met (Mbaku, 2020).

Considering the continuous tensions growing among riparian countries over the use of Nile waters, it is obvious that measures which were initiated as part of resolving the disputes among countries have not been effective at least to certain extent. The dam project for electricity has continued to be key factor towards emerging disputes between Egypt and Sudan as downstream countries and Ethiopia as the upstream riparian. Given that these measures are still not effective, it is obvious that there is a need for more effective measures which can be helpful in resolving the emerging disputes and ensure total regional security and peace around the basin.

More so, consensus building among actors as preventive mechanism of dispute resolution has helped avert a crisis between upper and downstream countries in the river Nile as evidenced by the Grand Ethiopian Renaissance Dam project which was constricted in the Beishangul-Gumuz area. The project is a joint effort between Ethiopia, Sudan, and Egypt and the countries formed a tripartite committee in 2012 to acquire full information on how the project would benefit all the three countries.

The project although facing obstacles now and then, talks have been held between the countries and is currently in final stages with the third dam being filled in August, 2022.

4.6 Alternative Mechanisms for the Management of Water Security Dispute in the Nile River Basin

The third objective of this study aimed to explore other plausible alternative mechanisms to preventive diplomacy for managing water security dispute in the Nile River basin. Alternative mechanisms for management of water security disputes comprise of the mainstream conflict resolution strategies. They are in this study referred to as alternative to preventive strategies. The strategies are usually employed to resolve and existing water Disputes. Whereas preventive diplomacy mechanisms are proactive, the alternative disputes resolution strategies examined here are reactive. Usually used as forms of crisis diplomacy.

In order to fulfil the third objective, set of questions aimed to explore other plausible alternative mechanisms to preventive diplomacy for managing water security dispute in the Nile River basin were set. This was thought to be helpful in determining measures which can be implemented by disputing parties in resolving the ongoing disputes over Nile water. In order to meet the objective, respondents were asked to propose alternative dispute resolution mechanisms which can be employed. Results presented in table 4.6 show that 30% of respondents mentioned mediation and arbitration, 27% of respondents mentioned conciliation, 23% of respondents mentioned judicial settlement while 20% of respondents mentioned negotiations.

Table 4.6 Alternative Mechanisms for the Management of Water Security Disputes

| Strategies | Frequency | Percentage |
|-------------------------|------------------|-------------------|
| Mediation & Arbitration | 30 | 30% |
| Conciliation | 27 | 27% |
| Judicial settlement | 23 | 23% |
| Negotiations | 20 | 20% |
| Total | 100 | 100.0% |

Source: Field data, 2022

4.6.1 Mediation and Arbitration

Mediation and Arbitration emerged as among of the most preferred alternative mechanism which was suggested by participants of this study which will be helpful in resolving the dispute among riparian states. Mediation in this context is when a capable mediator helps the riparian countries come to a conclusion on their own whereas arbitration; the outside person acts as a judge. In case of water disputes at the Nile basin, Mediation and Arbitration will act as effective means to resolve the conflict. Mediation could be facilitated by international organizations or mutually respected third-party states to help Nile basin countries discuss allocations, usage, and management strategies that are fair and sustainable. This could be particularly useful in complex scenarios involving multiple countries with varied interests and Arbitration could be considered if there are specific legal disputes between two or more countries over the interpretation or application of agreements related to the Nile waters. An arbitration panel could make binding decisions based on international law, providing a clear resolution to disputes.

This was also revealed from interviews conducted with Respective Embassies & International Relations experts as Participant 2 said;

The adoption of alternative mechanisms, specifically mediation and arbitration, as essential pathways towards a peaceful and sustainable resolution. Mediation could be particularly effective by providing a structured yet flexible environment for dialogue among the riparian states. A neutral third-party mediator could facilitate discussions, allowing each party to express its concerns, interests, and needs openly. Mediation can offer the disputing parties a wider room for crafting mutually acceptable agreements and arbitration could serve as a formalized mechanism to address specific legal disputes or interpretations of existing agreements related to the Nile waters. This approach provides clarity and finality, ensuring that disputes are resolved in a manner that is consistent with legal frameworks and precedents. (Respective Embassies & International Relations expert).

One of the conflicts resolved through mediation and arbitration is Kishenganga Arbitration (India vs. Pakistan) the case brought by Pakistan against India under the provisions of the Indus Water Treaty (Moussa, J, 2015). The dispute was over India's construction of the Kishenganga Hydroelectric Plant. The Permanent Court of Arbitration (PCA) in The Hague issued a final award that allowed India to proceed with the construction of the dam but with specific conditions to ensure the flow of water to Pakistan was not significantly affected.

Both mediation and arbitration offer viable alternatives that could pave the way for a more collaborative and peaceful management of the Nile River's precious resources. By providing structured platforms for dialogue and decision-making, these mechanisms can help bridge the gaps between the divergent interests and priorities of the Nile basin countries, ultimately contributing to a more equitable and sustainable water management regime.

According to Southern African Development Community protocol of defense, politics and security cooperation require members to adhere to the principle of peaceful settlement of disputes through diplomatic means which area conciliation, good offices, negotiation, mediation, adjudication and arbitration by international tribunal (Strachan, 2013). Respondents of this study also considered mediation and

arbitration as an alternative dispute resolution mechanism which can be helpful in resolving the emerging disputes over Nile River basin among riparian countries.

4.6.2 Conciliation

Another alternative dispute resolution mechanism which was suggested by participants of this study which will be helpful in resolving the dispute among riparian countries over Nile River basin is conciliation. Conciliation is defined as a voluntary, flexible, and confidential and interest-based process which is an alternative out-of-court dispute resolution instrument two parties involved which are disputing riparian countries are free to agree and attempt to resolve the disputes. In case of water dispute at Nile basin, conciliation will act as a good option for resolving the dispute because there shall be conciliator who will assist disputing parties to identify disputed issue, develop possible options, consider alternatives and reach an agreement. The agreement which will be met during conciliation will be formal and regarded as the creed of the court. Effective implementation of the agreement reached during conciliation will lead to permanent settlement of disputes.

This was also revealed from interviews conducted with Respective Embassies & International Relations experts as Participant 8 said;

I think there is a need for applying conciliation in order to provide room for agreements between the two sides on resolving the conflict. Given that the two parties will have a wider room for making agreements, they may also decide on terms which can be satisfactory to both sides. Conciliation will act as a good option for resolving the dispute because there shall be conciliator who will assist disputing parties to identify disputed issue, develop possible options, consider alternatives and reach an agreement. (Respective Embassies & International Relations expert).

One of the conflicts resolved through conciliation is that of Hon. Edward N. Lowassa Vs Heko Newspaper (Case no 1 of 1997). The complainant argued before the Ethics Committee of the Media Council of Tanzania that the defendant had published which

the former considered wrong and inaccurate. The argument was upheld by the committee which in turn ordered *Heko* Newspaper to pay 1,000,000 TZS to the complainant as compensation. The newspaper was also ordered to publish an apology in the same prominence as that before. The defendant complied with the aforementioned ruling and the issue was resolved (Kishenyi, 2017). Conciliation will be useful in resolving the disputes among riparian countries given that the parties will be free to select time, language to be used, place for conducting agreements as well as content of the conciliation proceedings. The mechanisms will also be useful given that the riparian countries which are in dispute will be free to choose their own conciliator, the mechanisms in time and cost efficient and also ensures confidentiality.

According to Southern African Development Community protocol of defense, politics and security cooperation require members to adhere to the principle of peaceful settlement of disputes through diplomatic means which area conciliation, good offices, negotiation, mediation, adjudication and arbitration by international tribunal (Strachan, 2013). Respondents of this study also considered conciliation as an alternative dispute resolution mechanism which can be helpful in resolving the emerging disputes over Nile River basin among riparian countries.

4.6.3 Judicial Settlement

Another alternative dispute resolution mechanism which was provided by respondents of the study which can be helpful in resolving the emerging disputes over Nile River basin among riparian countries is judicial settlement or adjudication. This can also be revealed from participants of interviews as Participant 3 said;

Riparian states can opt for judicial settlement of disputes in case of failure of other measures in resolving the disputes. The decisions of the judiciary are final and conclusive especially those which are made by the international judiciary. Therefore, disputing parties can involve judicial settlement as the alternative mechanism to resolve the disputes. They can use the international tribunal which will make decisions using rules set by the international court. This will bind all member states in dispute (Nile Basin Initiative Officer).

In case of Nile basin water dispute, the international tribunal can resolve conflicts using rules which are set by international law. Therefore, the decisions which will be made by the international tribunal will be regarded as decisions of the international court. All riparian states will have the duty of implementing the decisions made including who to use particular resources of the basin. Therefore, inclusion of judicial settlement through decisions of the court will lead to resolution of conflict at Nile River basin.

Judicial settlement involves the application of law in resolving disputes between parties. In Tanzania, a clear example is the case of Sun lodges Ltd (BVI) and The United Republic of Tanzania (PCA Case No. 2018-09) in which the complainant alleged that the defendant had seized the claimants' cattle farming land in order to build a cement works and a power station. The Permanent Court of Arbitration (PCA) made use of the UNCITRAL arbitration rules. The matter was decided in favor of the claimant and the republic was ordered to pay 11.30 million USD instead of the initially claimed 34.70 million USD (UNCTAD, 2018).

This means that the dispute among riparian countries over the Nile basin can be taken to international law and require intervention of the international law. Judicial settlement is considered to be among alternative peaceful mechanisms to resolve the conflicts between these parties considering that there is less opportunity for abusing the process of settling disputes. Judicial settlement ensures safeguards for the parties

and the decision declared by the court is binding to the disputed parties. Hence, Egypt, Ethiopia and Sudan can resolve the emerging disputes over waters of Nile through forwarding the matter to the international law and seek for the decisions from the international court.

According to Southern African Development Community protocol of defense, Politics and security cooperation require members to adhere to the principle of peaceful settlement of disputes through diplomatic means which area conciliation, good offices, negotiation, mediation, adjudication and arbitration by international tribunal (Strachan, 2013). Respondents of this study have also considered judicial settlement as an alternative dispute resolution mechanism which can be helpful in resolving the emerging disputes over Nile River basin among riparian countries.

4.6.4 Negotiations

Furthermore, another alternative dispute resolution mechanism provided by respondents of the study which can be helpful in resolving the emerging disputes over Nile River basin among riparian countries is negotiations. During interviews with Respective Embassies &International Relations experts, Participant 6 said;

From my opinions, there is a need for negotiations between the disputing parties. Negotiations are useful in resolving conflicts among sides and they can also be used in resolving disputes among states over the basin. There shall be formal agreements among sides which will satisfy the demands of every side (Respective Embassies &International Relations expert).

From this except, it is clear that key informants of this study recognize that Negotiation involves an extensive exchange of ideas and options between conflicting parties in order to explore potential outcomes. Riparian nations contesting the Nile River basin have an opportunity to engage in productive dialogue, exchanging proposals and demands, presenting compelling arguments and

pushing for resolution or, alternatively, acknowledging a stalemate. Negotiations will be important considering that they will contribute to increased relationship among disputing parties especially after final agreement has been reached among the parties. Negotiations can also be helpful in preventing any conflicts to emerge between the riparian countries. It can also improve communication between the parties and thus increasing the odds of a positive outcome. Through negotiations, Ethiopia convinced Sudan, and Egypt to sign declaration of principles on the Grand Ethiopian Renaissance Dam (GERD) dispute which have assisted Ethiopia to carry on the construction project which is now in final stages (Upandhyay and Gaudel, 2017).

According to Southern African Development Community protocol of defense, Politics and security cooperation require members to adhere to the principle of peaceful settlement of disputes through diplomatic means which area conciliation, good offices, negotiation, mediation, adjudication and arbitration by international tribunal (Strachan, 2013). Respondents of this study have also considered negotiations as an alternative dispute resolution mechanism which can be helpful in resolving the emerging disputes over Nile River basin among riparian countries.

4.7 Conclusion

In this chapter, the study has presented and discussed primary and secondary findings gathered in this study. Findings were discussed thematically in line with study objectives which were; to examine preventive diplomacy mechanisms employed by actors in the management of water security disputes in Nile River Basin, to assess the effectiveness of preventive mechanisms in containing water security disputes in Nile River, and to investigate alternative mechanisms for the

management of water security dispute in the Nile River Basin. The findings revealed that the preventive diplomacy mechanisms employed by actors in the management of water security disputes in Nile River Basin included formulation of treaties, consensus building and establishment of the Nile Basin Initiative. The study also noted that the preventive mechanisms were effectiveness in preventive in containing water security disputes in Nile River before they escalate into bloody armed conflict. Finally, the participants noted that the following; Judicial Settlement, Mediation & Arbitration, conciliation and negotiation were the other alternative mechanisms for the management of water security dispute in the Nile River Basin.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides summary of the study, conclusion and recommendations. Summary of the study covers objectives of the study, methodology used and findings from each specific objective. Recommendations are provided on what to be done to ensure effective management of conflicts around Nile River Basin.

5.2 Summary of the study

The general objective of the study was to interrogate the management of water security along the Nile Water Basin through preventive diplomacy. The study contained three specific objectives which were; to examine preventive diplomacy mechanisms employed by state and non-state actors in the management of Water security disputes in Nile River Basin, to assess the effectiveness of preventive mechanisms in containing water security disputes in Nile River, to investigate alternative mechanisms for the management of water security dispute in the Nile River Basin.

Cross-sectional survey design was used in the study. The study was carried out at Entebbe, Uganda which is an upper riparian state. The target population of the study was officials from representative embassies and international relation expert as well as officials from Nile Basin Initiative. Respondents were selected through simple random and purposive sampling techniques. The study used a sample size of 130 respondents. Data were collected through questionnaires and interviews. Descriptive statistics were used in analyzing data.

5.2.1 Preventive diplomacy mechanisms employed by actors in the management of Water security disputes in Nile River Basin

The study identified strategies employed by actors in managing water disputes within the Nile River Basin. These strategies are integral to addressing and mitigating conflicts over water resources among the riparian states.

The study identified three strategies importance of these methods in fostering cooperation and ensuring sustainable water management in the region. These strategies include formulation of treaties/ agreements, consensus building and establishment of Nile Basin Initiative. Treaties provide a legal framework for equitable water distribution, helping to prevent conflicts and foster mutual understanding among riparian states. Consensus building involves collaborative dialogue and negotiation to address diverse interests and create a shared vision for the river's management. The NBI serves as a cooperative platform for joint projects and policy implementation, playing a crucial role in coordinating efforts and promoting regional stability.

The implementation of these mechanisms underscores the collaborative efforts aimed at ensuring sustainable water management and conflict resolution in the region. By focusing on diplomatic and cooperative approaches, the involved states have aimed to foster long-term stability and equitable water usage. The study highlights the importance of such diplomatic tools in preventing and resolving disputes, thereby promoting regional cooperation and peace.

5.2.2 Effectiveness of preventive diplomacy mechanisms in containing water security disputes in Nile River

The study assessed the effectiveness of preventive diplomacy mechanisms in addressing water security disputes in the Nile River Basin. The findings reveal that the implemented measures, including the formulation of treaties and agreements, have not been successful in ensuring the resolution of emerging disputes. These legal instruments, while intended to provide a structured framework for water resource management, were perceived as less applicable and less capable of addressing the complex and dynamic nature of the disputes.

Another key preventive measure analyzed is consensus building, which involves collaborative dialogue and negotiation among the riparian states. Despite its potential to foster mutual understanding and cooperation, consensus building was found to be ineffective in this context. The approach did not adequately address the diverse interests and concerns of the states involved, leading to limited success in resolving conflicts.

The establishment of the Nile Basin Initiative (NBI) was also examined as a preventive diplomacy mechanism. Although the NBI aimed to serve as a cooperative platform for joint projects and policy implementation, it fell short in resolving the water security disputes. The initiative was seen as less capable of providing viable solutions, highlighting the challenges in achieving holistic and inclusive management of the Nile River Basin.

Furthermore, the study revealed that other diplomatic measures initiated by the states around the Nile River Basin were not effective. These efforts, intended to resolve

disputes and ensure water security, were not perceived as possible solutions by the involved parties. The research identified the need for more robust, adaptable, and specific strategies to effectively manage and resolve water security disputes in the region.

5.2.3 Alternative Mechanisms for the Management of Water Security Dispute in the Nile River Basin

The study identified several alternative mechanisms for managing water security disputes in the Nile River Basin. Mediation and arbitration emerge as key strategies, facilitating collaborative efforts among parties to develop long-term solutions that address the needs and limitations of all stakeholders. These mechanisms provide a structured yet adaptable framework for dispute resolution, encouraging mutual understanding and cooperation among the riparian states. The flexibility of mediation and arbitration allows for customized approaches that can accommodate the unique contexts of each dispute.

Conciliation is another alternative mechanism highlighted by the study. This approach grants the involved parties the autonomy to determine the timing, language, place, structure, and content of the conciliation proceedings. Such flexibility can enhance the relevance and effectiveness of the dispute resolution process by ensuring that it aligns with the specific preferences and circumstances of the parties. Conciliation thus offers a tailored and participatory method for resolving water security disputes in the Nile River Basin.

The researcher also identified the potential of judicial settlement as an alternative mechanism. Judicial settlement involves resolving disputes through formal legal processes, which can provide a more structured and predictable framework for

adjudication. This approach minimizes opportunities for parties to abuse the dispute resolution process and ensures that outcomes are grounded in legal principles and precedents. Judicial settlement offers a level of formality and authority that can be particularly useful in addressing complex and contentious disputes.

Lastly, the study identified negotiations as a vital alternative dispute resolution mechanism. Negotiations enable parties to exchange proposals, present demands, and articulate arguments in a dynamic and iterative process. This method fosters open communication and continuous dialogue, allowing parties to explore various options and work towards mutually acceptable solutions. Negotiations can continue until an agreement is reached or an impasse is declared, making it a flexible and adaptive approach for managing water security disputes in the Nile River Basin. Collectively, these alternative mechanisms provide a comprehensive toolkit for effectively addressing and resolving conflicts over water resources in the region.

5.3 Conclusion

The study identified several alternative mechanisms for managing water security disputes in the Nile River Basin. Mediation and arbitration emerge as key strategies, facilitating collaborative efforts among parties to develop long-term solutions that address the needs and limitations of all stakeholders. These mechanisms provide a structured yet adaptable framework for dispute resolution, encouraging mutual understanding and cooperation among the riparian states. The flexibility of mediation and arbitration allows for customized approaches that can accommodate the unique contexts of each dispute.

Conciliation is yet another alternative mechanism highlighted by the study. This approach grants the involved parties the autonomy to determine the timing, language, place, structure, and content of the conciliation proceedings. Such

flexibility can enhance the relevance and effectiveness of the dispute resolution process by ensuring that it aligns with the specific preferences and circumstances of the parties. Conciliation thus offers a tailored and participatory method for resolving water security disputes in the Nile River Basin.

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5.4 Recommendations

Officials from African Union (AU) and Nile Basin Initiatives should ensure effective adoption of conciliation in order to make conflicting parties free to join and resolve disputes. This process will be interest based which will enhance achievement of interests of each side. The process will also be voluntarily and flexible which will

lead to peaceful resolution of emerging disputes regarding usage of Nile River Basin. Effective adoption of reconciliation will further lead to creation of equity and equality as well as building positive relationship among riparian states. This will in turn contribute to minimization of disputes on usage of Nile River Basin.

There should be increased focus on regional integration among riparian states. These states should be committed much at enhancing regional economic integration in order to improve efficiency in resource use particularly water resources. Improved regional economic integration will lead to equality in usage of resources available at Nile River Basin and thus minimizing disputes among riparian states. Regional economic integration will further create peaceful environment for resolution of any emerging dispute among member states.

Ministries of Water Resources and Irrigation should ensure the reduction in dependency on specific supplies. Riparian states could shift their economies to other sectors apart from agriculture sector in order to reduce dependency on Nile water. Disputes emerge because riparian states are in need of Nile water for supporting agriculture sector. Hence, shifting to other economic sectors will reduce dependency on Nile water for agricultural growth and thus reducing tension over use of Nile water.

United Nation and African Union should increase negotiations among riparian states as well as judicial settlement of disputes. Negotiations among riparian states will lead to exchange of proposals and demands, arguments and discussions which will lead to achievement of a particular agreement. Judicial settlement will be helpful in ensuring that disputes among riparian states are taken to international law and acquire intervention from the international law. Judicial settlement will further be

useful in safeguarding the parties and the decision made by the court will be binding to all disputing parties.

5.5 Areas of Further Research

This study was limited to preventive diplomacy in managing water dispute at the Nile River basin. However, there is still the need for determining how riparian countries can benefit from improved relationship over the Nile Basin. Therefore, more studies should be conducted and provide detailed information on benefits which will be achieved by disputing parties from the Nile River Basin.

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APPENDICES

Appendix 1: Template of Informed Consent

Dear Participant,

I am Gloria Lebby Changullah, a Kenyatta University Student pursuing a Master Degree of Arts in International Relations and Diplomacy. As part of requirement for Master of Arts in International Relations and Diplomacy degree, I am expected to undertake this research project. 'The study is on the Assessment of the role of preventive diplomacy in management of water security disputes in the Nile River Basin'.

Your sincere response to the items in this paper will make the study successful and will help the riparian's states to make clear decision that will reduce conflict within the states also will contribute to scholarly literature of the subject matter. Hence, with your consent, I will like to obtain data that will aid in achieving the objectives of this study, please kindly respond to the interview as honestly as you can.

Please note that:

- a. Your responses will be traced with confidentiality can be accessed only by myself and my supervisors.
- b. All information provided by you is for educational purposes only.
- c. Participation in this study is totally voluntary.
- c. All information acquired from you will be anonymous. Identities will not be revealed in any part of this research.

I can be accessed through email: glorylebby@gmail.com; cell: +255784024116, +254791391976.

Grateful for your participation in this research.

Appendix II: Questionnaire

This questionnaire has been developed for the aim of collecting data on assessment of the role of preventive diplomacy in the management of water scarcity disputes in the Nile Basin, 1929 to 2023. The questionnaire is meant to assist the researcher in accomplishing her thesis for partial fulfilment for the award of Master of Arts in International Relations and Diplomacy. You are therefore invited to complete these questionnaires. The information given here will be used for academic purpose only. Please be assured of outmost confidentiality and that your personal details will not be published in thesis without your consent.

Thanks

DEMOGRAPHIC INFORMATION

Please tick the most appropriate answer (✓) within the space provided.

1. What is your gender?

Male Female

What is your age category?

- a) 20 to 30 years
- b) 31 to 40 years
- c) 41 to 50 years
- d) 50 years and above

What is your highest level of education?

- a) High School
- b) Diploma
- c) Degree
- d) Masters
- e) PHD

Please indicate the duration of your tenure in diplomatic service

- a) Below 5 years
- b) 6 to 10 years
- c) 11 to 15 years
- d) 16 to 20 years
- e) 21 years and above

SECTION. A

PREVENTIVE MECHANISMS EMPLOYED BY THE ACTOR

1. Explain the Background of Nile basin water conflict?

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2. How scarce is the Nile water?

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3. What are the conflicting interest for each of the riparian states?

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4. What contentious issues arise between the lower and upper riparian states?

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5. Do you know any mechanisms used to solve the Nile River dispute. If YES explain how?

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6. What does preventive diplomacy entails, and do you think is the better mechanism for solving the conflict?

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7. Which institution play the third-party role in the Nile Basin Initiatives and why?

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SECTION B: EFFIVENTIVENESS OF PREVENTIVE MECHANISMS

1. Do you think the preventive measure applicable? (Tick where appropriate)

No

Yes

2. Do you think the Grand Renaissance Dam is the better strategic in managing the use of Water? (Tick where appropriate)

No

Yes

3. Do you believe transboundary basin management is a possible solution to the conflict? For all countries to work together to manage the river. (Tick where appropriate)

No

Yes

4. Why was the Nile Basin Initiatives established?

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5. what are success and challenges of Nile Basin Initiative?

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6.What were the reasons for the establishment of the Cooperative Framework Agreement? success and pitfall.

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7. How are preventive mechanisms applied in conflict resolution, and do you believe they are effective in preventing and managing conflict?

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8. What is the content of the Nile Basin treaty of 1929? And why does it not sit well with upper riparian states?

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9. What is the content of 2015 Nile Basin Agreement?

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10. Do you think that the 2015 agreement will avert future disputes? if yes why?

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11. Is Egypt using power-based approach that seek win lose outcome in the Nile basin negotiations? If so, why do think so?

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12. Which other international agreement have been signed on Nile?

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SECTION C: ALTERNATIVE MECHANISMS FOR THE MANAGEMENT OF WATER SECURITY

1. Do believe that a comprehensive treaty that satisfies all Nile basin countries could be reached? (Tick where appropriate)

No

Yes

2. Do you believe that all riparian countries must participate in order for an agreement to be successful? (Or be taken into account) in the negotiations? (Tick where appropriate)

No

Yes

3. What other forms of water diplomacy are used in averting crisis in the Nile Basin?

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4. Which forms of public diplomacy have been carried to avert crisis in the Nile Basin?

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5. Which alternative dispute resolution mechanisms are used in the Nile Basin Initiative?

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6. What are the tents of Integrative Water Resource Management? How does it work, and what are its success and challenge?

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7. What could riparian states do to end this conflict on good terms?

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8. How could diplomacy be enhanced to be more effective in resolving water-related conflicts?

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9. How do you see this dispute evolving in the future?

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Appendix III: Interview guide for the experts

SECTION A: PREVENTIVE MECHANISMS EMPLOYED BY THE ACTOR

1. Explain the Background of Nile basin water conflict?
2. How scarce is the Nile water?
3. What are the conflicting interest for each of the riparian states?
4. What contentious issues arise between the lower and upper riparian states?
5. What does preventive diplomacy entails, and do you think is the better mechanism for solving the conflict?
6. Do you know any mechanism used to solve the Nile River dispute? If YES explain how?
7. Which institution play the third-party role in the Nile Basin Initiatives and why?
8. How can mediation based on African approaches to conflict resolution help to resolve the Nile dispute?

SECTION B: EFFIVENTIVENESS OF PREVENTIVE MECHANISMS

1. Do you think the preventive measure applicable?
2. How are preventive mechanisms applied in conflict resolution, and do you believe they are effective in preventing and managing conflict?
3. Why was the Nile Basin Initiatives established?
4. What are the success and challenges of Nile Basin Initiative?
5. What were the reasons for the establishment of the Cooperation Framework Agreement? And success and pitfall.
6. What is the content of the Nile Basin treaty of 1929? And why it not sits well with upper riparian states?
7. What is the content of 2015 Nile Basin Agreement?

8. Do you think that the 2015 agreement will avert future disputes?
9. Is Egypt using power-based approach that seek win loose outcome in the Nile Basin Negotiation?
10. What other international agreements have been signed on Nile?
11. Do you believe transboundary basin management is a possible solution to the conflict? For all

SECTION C

ALTERNATIVE MECHANISMS FOR THE MANAGEMENT OF WATER SECURITY

1. In order to reach a successful agreement, do you think all riparian countries must participate (or be taken into account) in the negotiations?
2. What other forms of water diplomacy are used in averting crisis in the Nile Basin?
3. Which forms of public diplomacy have been carried to avert crisis in the Nile Basin?
4. Which alternative dispute resolution mechanisms are used in the Nile Basin Initiative?
5. What could riparian states do to end this conflict on good terms?
6. What management measures must be promoted by International Committee to help resolve the Nile water issues?
7. How diplomacy could be improved to be more efficient in solving water related conflicts?
8. Do you think that a comprehensive treaty that satisfies all Nile basin countries could be reached?

Appendix IV: Graduate School Research Approval



KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Website: www.ku.ac.ke

Internal Memo

FROM: Dean, Graduate School

DATE: 5th July, 2022

TO: Gloria Lebbi Changullah
C/o Inter. Rel. Conf. & Strg. Studies Dept

REF: S205EA/CTV/PT/27707/2019

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 20th June, 2022 approved your Research Project Proposal for the M.A Degree Entitled, "Preventive Diplomacy in Management of Water Security Disputes in the Nile River Basin."

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and Progress Report Forms per semester. The Forms are available at the University's Website under Graduate School webpage downloads.

Also, please ensure that you publish article(s) from your project before submitting it to Graduate School for examination as per the Commission for University Education and Kenyatta University guidelines.

Thank you.

JACKSON LUVUSI
FOR: DEAN, GRADUATE SCHOOL






c.c. Chairman, Inter. Rel. Conf. & Strg. Studies Department

Supervisors:

1. Dr. Xavier Ichani
Department of Int. Rel. Conf. & Strg. Studies
Kenyatta University
2. Dr. James Nyawo
Department of Int. Rel. Conf. & Strg. Studies
Kenyatta University

JL/mo

Appendix V: Research License

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| Ref No: 327396 | Date of Issue: 22/October/2022 |
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| <p>This is to Certify that Miss.. Gloria Lebba Changullah of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: PREVENTIVE DIPLOMACY IN THE MANAGEMENT OF WATER SECURITY DISPUTES IN THE NILE RIVER BASIN for the period ending : 22/October/2023.</p> | |
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