

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
INSTITUTE FOR PEACE AND SECURITY STUDIES**

**GRAND ETHIOPIAN RENAISSANCE DAM AND CHANGING POWER
RELATIONS IN THE EASTERN NILE BASIN**

BY: HENOK SEIFU MERID

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**A Thesis Submitted To the School of Graduate Studies of Addis Ababa
University in Partial Fulfillment of the Requirements for the Degree of Master
of Arts in Peace and Security Studies**

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Acronyms

AU- African Union

BCM- Billion Cubic Meters

CFA- Comprehensive Framework Agreement

CIDA- Canadian International Development Agency

DoP- Declaration of Principles

EAPP- East African Power Pool

ENSAP- Eastern Nile Subsidiary Action Program

EPSEMP- Ethiopian Power System Expansion Master Plan

ESIS- Egyptian State Information Service

FDI- Foreign Direct Investment

GDP- Gross Domestic Product

GTP- Growth and Transformation Plan

HAD- High Aswan Dam

IPoE - International Panel of Expert

MoFA- Ministry of Foreign Affairs

MoWI- Ministry of Water and Irrigation

NBC -Nile Basin Commission

NBI -The Nile Basin Initiative

NELSAP- Equatorial Lakes Subsidiary Action Program

PASDEP- Plan for Accelerated and Sustained Development to End Poverty

PIDA- Program for Infrastructure Development in Africa

PPP- Purchasing Power Parity

PREACT- Partnership for Regional East Africa Counter-Terrorism

SAPs- Subsidiary Action programs

SVPs -Shared Vision Programs

TNC- Tripartite National Committee

UNDP- United Nations Development Program

USBR -United States Bureau of Reclamation

Abstract

The Eastern Nile Basin is known for its power asymmetry and the existence of Egypt's hydro-hegemony in the Basin, Ethiopia has been contesting this hydro-hegemony, through various counter hydro-hegemonic mechanisms and strategies. This research takes the commencement of the Grand Ethiopian Renaissance Dam (GERD) as one of Ethiopia's counter-hydro hegemonic strategy. The thesis examined the change in the power relation among Eastern Nile Riparian states and the counter hydro-hegemonic mechanisms applied before and after the commencement of the GERD. The research applied qualitative research methods, using both primary and secondary sources. Interviews were conducted with experts, officials from relevant institutions and offices in Ethiopia; an attempt to interview officials of Sudan and Egypt Embassies in Addis Ababa has failed. The study reveals the power relation in the Eastern Nile Basin has started to change as Ethiopia started to show a relative increase of power that makes it capable of narrowing the power asymmetry in the Basin. Ethiopia has applied various counter hydro-hegemonic mechanisms before and after the commencement of the GERD against the hydro-hegemony of Egypt in order to bring about equitable and reasonable utilization of Nile waters in the Basin. Ethiopia's counter hydro-hegemony started to become more significant mostly after Ethiopia commenced a unilateral national hydroelectric dam projects, particularly the GERD with domestic funding. As a result, Ethiopia applied both leveraging and liberating counter hydro-hegemonic mechanisms simultaneously in the Basin. Ethiopia was successful in setting an agenda for the creation of the International Panel of Expert to build the confidence of the downstream states by urged them to accept the GERD as a fact on the ground. Ethiopia has also managed to draw Sudan's support concerning the construction of the GERD, and able to win their support apart from its (Sudan's) former stance as an ally of Egypt concerning any matters related to the Nile. And, Ethiopia was also able to sign the Declaration of Principles on the use of the GERD with Egypt and Sudan, where the downstream states had compromised from their former position of 'acquired' and 'historic right' concerning the usage of Nile waters. The thesis concludes by highlighting that the GERD is one component of Ethiopia's counter hydro-hegemony, with the potential to physically control water and assert greater power in the Basin when completed.

CHAPTER ONE

1. Introduction

1.1. Background

The Eastern Nile Basin including Egypt, Ethiopia and Sudan is characterized by the existence of power asymmetry and the Egyptian hydro-hegemony. Egypt has remained as the most powerful state in the Basin in terms material power, bargaining power, and ideational power (Cascão and Zeitoun, 2010a). Ethiopia in the past has been endowed only with the geographic power in the Basin (ibid), however, in recent years Ethiopia showed open contestation to the hegemonic order, which could partly be explained by the recorded economic growth.

In order to challenge and eventually change the existing status quo in the Eastern Nile Basin (which favors Egypt), Ethiopia and other upstream states (non hydro-hegemon states) applied various counter hydro-hegemonic mechanisms and strategies unilaterally as well as multilaterally (Cascão, 2009a; 2009b; 2008). By the same token, one of the leveraging counter hydro-hegemony strategies that Ethiopia adopted was the construction of unilateral national hydroelectric dam projects. One of such project is the Grand Ethiopian Renaissance Dam Project (GERDP), which was commenced in 2011 on the Blue Nile River in a place called Guba, 60 kilometres from Sudan. When completed and filled which hold the reservoir will have a 74 billion cubic meters (BCM) storage capacity will produce 6000 MW¹ electric power (Belachew, 2014).

Initially Egypt has responded to the project by sending its public diplomacy to Ethiopia almost a month after the project was launched publicly. The delegation while paying a visit has asked the Government of Ethiopia to delay the ratification of the CFA until Egypt came out of turmoil² and

¹ According to (Interview with Tagel, 13 April 2016), he said “there are some technical works underway to enhance the generating capacity of the GERD even more than 6000MW” and he said “more than 50% of the project is completed”.

² Egyptian Arab Spring that began in January, 2011

Ethiopia has accepted the request (Tawfik, 2015)³. And, Egypt has also continued to apply a perplexing course of actions towards the construction of the GERD⁴.

However, Sudan's response to the project was somehow filled with optimism; Sudan has showed its willingness and commitment for the realization of the project. This is by understanding the mutual benefit the GERD will bring; as a result the leaders have illustrated their keenness for the realization of the project. In general Sudan's response concerning the GERD can be seen as being reasonable and positive, and supposed to bridge the gap between Egypt and Ethiopia (Sudan Tribune, 2014; 2013; 2012).

In general Ethiopia by using the commencement of the Grand Ethiopian Renaissance Dam as one component of counter hydro-hegemonic strategy it started to challenge the hydro-hegemony of Egypt, and able to narrow the existing power asymmetry. And, this research focused on examining the changes observed in the power relations of the Eastern Nile Basin states mostly after the commencement of the Grand Ethiopian Renaissance Dam.

1.2. Statement of the Problem

The announcement and commencement of the construction of the hydraulic project (GERD) in an upstream Basin state Ethiopia in April 2011, came at a point Egypt's internal politics was at turmoil (i.e. the Arab Spring). This move captured the attentions on Ethiopia's bold move to undertake a unilateral mega hydraulic project, considered by many as altering the power relation of the hydro-political landscape of the Eastern Nile Basin states.

Adopting Zeitoun and Warner's (2006) Hydro-Hegemonic Framework and the existence of counter hydro-hegemony in the Basin (Cascão 2009b; 2009a; 2008) this research thesis examines the power relations in the Eastern Nile Riparian states. This examination is made following Gramscian notion of "hegemony" and "counter hegemony" and changing power relation in the

³ Ethiopia proposed for the formation of IPoE after the Interim Prime Minister of Egypt visited Ethiopia (see 2.7.)

⁴ . Egypt has requested the Gulf States (Saudi and UAE) to take part in mediating Egypt with Ethiopia concerning the dam. And Egypt has also proposed for joint administration and redesigning of the dam (Al-monitor, 2016; Agencies + DIPLOMAT.SO, 2016; Tesfalem, 2016; Aman, 2014; Tigray online, 2013).

Eastern Nile Basin (Cascão, 2008) due to the construction of the GERD. The thesis will particularly focus on developments in the hydro-politics in the Basin and counter-hegemonic practices of the upper riparian countries, particularly Ethiopia, after the announcement of the GERD.

1.3. Objective of the Study

1.3.1. General Objective

The main objective of the thesis is to examine the changing power relation in the Eastern Nile Basin and the influence of the commencement of the GERD project on the Basin's hydro-hegemonic order.

1.3.2. Specific Objectives

- To examine the change of power relation of the Eastern Nile Basin
- To examine the counter hydro-hegemonic mechanisms employed by Ethiopia between 2008 and 2011
- To investigate the counter hydro-hegemonic mechanisms employed by Ethiopia after the commencement of the GERD

1.4. Research Questions

- What changes were observed in the hydro-politics of the Eastern Nile Basin since 2008?
- What were the counter hegemonic strategies employed by Ethiopia between 2008 and 2011?
- What were the counter hegemonic strategies employed by Ethiopia after the commencement of the GERD?

1.5. Methodology and Research Design

In this research paper Qualitative methods were applied. Qualitative research is applied in order to fittingly reveal answers for the questions that were raised in the research, i.e. by creating a new knowledge about and giving meaning for certain phenomena or events. By application of qualitative research the researcher has a critical role by constructing concept, theories, and principles from the interviews made (Creswell, 1998).

Both descriptive and explanatory research techniques were applied. By application of descriptive techniques the researcher presents a descriptive theory which set up the overall framework to be followed throughout the study. By this descriptive approach the selection, arrangement and identification of a possible theoretical direction began to take place before attempting to answer the research questions. And, through explanatory research techniques the researcher applied pattern-matching as several pieces of information are being related to some theoretical proposition (Berg, 2001).

1.5.1. Selection of Research Participants

In-depth unstructured interviews were conducted among selected experts from relevant Ministries and offices in Ethiopia. These are Ministry of Water and Irrigation, Ministry of Foreign Affairs, Ethiopian International Institute for Peace and Development, Office of National Council for the Coordination of Public Participation on the Construction of the Grand Ethiopian Renaissance Dam, and the Eastern Nile Technical Regional Office. In-depth interviews were also conducted with two experts these are one prominent political analyst and one prominent academician concerning the change in the power relations in the Eastern Nile Basin states, and the implication of the GERD to the same.

1.5.2. Sampling Technique and Sampling Size

While undertaking this research, the researcher has applied non-probability, purposive sampling. In applying non-probability sampling the sample sizes are smaller but the data collected are more detailed. This non-probability sampling is also important for the researcher to justify the type of sample, the number of people in the sample and the process by which those people were selected. The researcher identified certain respondents as being potentially able to provide significant data

on the research subject (Oliver, 2008). In this thesis all interviewees were selected depending on their profile, expertise, and availability of data to their position.

As a result, the researcher has selected nine key informants who are believed to be knowledgeable over the research topic, and thereby could provide relevant information regarding the GERD and power relation in the Eastern Nile Basin. While selecting these nine key informants purposively, the researcher has taken their awareness; familiarity and position to the subject matter into consideration.

1.5.3. Sources of Data

For this research both primary data and secondary data were gathered and used. Primary data are direct sources including the oral or written testimony of eyewitnesses, which are original in nature. Primary data include audio recordings (in this thesis the primary sources are the informants from different institutions). Secondary sources involve secondhand or unconfirmed report accounts of some event. Secondary data may include textbooks, encyclopedias, oral histories of individuals or a group, journal articles, newspaper stories, and even obituary notices (Berg, 2001).

1.5.3.1. Primary Data

In this research the primary data was collected by using in-depth interviews with the experts from institutions and offices mentioned above.

1.5.3.1.1. Interview Method

This research conducted in-depth face-to-face interviews with the key informants that were mentioned above. The researcher has been using open-ended questions that permit respondents to freely offer information on various matters related to GERD and power relation in Eastern Nile Basin.

1.5.3.2. Secondary Data

The research also made use of secondary data. Under this research the researcher also applied an extensive reading of books, journals, articles, publications, academic literature, media reports (newspapers, online news, website blogs, etc), and historical documents (agreement, treaties, declarations, etc).

1.5.4. Ethical Considerations

This research paper has been taking into account some ethical issues that a researcher need to take into consideration. The researcher has been kindly asking for the interviewee's consent to be included in his research, and also vowed to protect the anonymity of some informants on the subject matter whom they considered sensitive for their position. Since some misleading practices are not conventional in undertaking a research, the researcher did not forge or invent findings to meet researcher's or some audience's wishes. The researcher also did not abuse results to the advantage of certain individuals, groups or another. The researcher protects the privacy of the participants and offered this protection to all individuals involved in a study.

1.6. Significance of the Study

The thesis has both academic and policy relevance. In the former conceptual framework of this research paper has been adopted from the work of Zeitoun and Warner (2006), and Cascão (2009b; 2009a; 2008). And, Cascão and Zeitoun (2010a; 2010b) used the notion of power to indicate the hydro-hegemony of Egypt and power asymmetry in the Eastern Nile Basin. However, this thesis has adopted the four pillars of power used by (Cascão and Zeitoun, 2010a) to explore and investigate the changes in power relation in the Eastern Nile Basin.

This research has significance in describing and explaining the changing dynamics of power relation of the Eastern Nile Basin, and the counter hydro-hegemony mechanisms adopted by Ethiopia. The thesis, by conceptualizing the GERD as one hydraulic structure influencing the current and future power relation in the Basin, maps out the leveraging power of the project and its influence in the regional power dynamics. As such, the paper will contribute to informing the actions of policy makers at national, regional, continental and international level.

1.7. Scope and Limitations of the Study

The scope of this research is limited only in explaining the GERD and power relation in the Eastern Nile Basin. It focuses on the change in power relation and adopted counter hegemonic strategies putting Ethiopia at the center of the investigation. The limitations of this study were the shortage of time (relative of the busy schedule of potential interviewees in key post), the difficulties faced to appropriate primary sources due the sensitivity of the topic and classification of most documents as secret. There were also difficulties in attaining Egyptian as well as Sudanese insights from their Embassies; as a result the researcher was forced to rely on media outlets from these downstream states.

1.8. Structure of the thesis

This thesis has six chapters. This chapter (Chapter One) introduces the objective and research question guiding the research and also describes the research process and also the method adopted to conduct the research. Chapter Two reviews the relevant literature, including books, academic journals and articles, reports, agreement, and treaties. This gives a wider understanding from hydrological features, historical as well as power relation of the Eastern Nile Basin till the commencement of the GERD. In Chapter Three, the conceptual framework guiding the analysis is developed, mainly relying on concepts of the four pillars of power (Cascão and Zeitoun, 2010a), hydro-hegemony (Zeitoun and Warner, 2006; Zeitoun and Alan, 2008), and counter hydro-hegemony (Cascão, 2009b; 2008). The following two chapters present in detail the findings of the thesis. Chapter Four on the changing power relation of the Basin and the increasing power of Ethiopia, while Chapter Five deals with counter hydro-hegemonic strategies undertaken by Ethiopia before (2008-2011) and after 2011. And, the last chapter concludes the thesis with a way forward.

CHAPTER TWO

2. Literature Review

2.1. The Eastern Nile Basin and Hydrological facts

The Eastern Nile Basin covers some 2,695,300 km², which in turn is sub divided into sub basins that include Main Nile (covering 44 %), the Baro-Akobo-Sobat and White Nile (26 %), the Abbay/Blue Nile (17 %), and the Tekeze-Atbara (13%). It is estimated that more than 156 million people live in the four sub Basins of Eastern Nile. The Abbay/Blue Nile and Main Nile are the most heavily populated, accounting 79 % of the total population (ENTRO-NBI- website, <http://entroportal.nilebasin.org/pages/easternNile.aspx>).

The Blue Nile River begins at Lake Tana in the northwestern Ethiopian highlands and is joined by many tributaries before reaching the Sudanese border. Precipitation in the highlands is concentrated in the northern hemispheric summer season, with nearly three-quarters of the annual average of approximately 1,300 mm typically falling between June and September (Conaway, 2000).

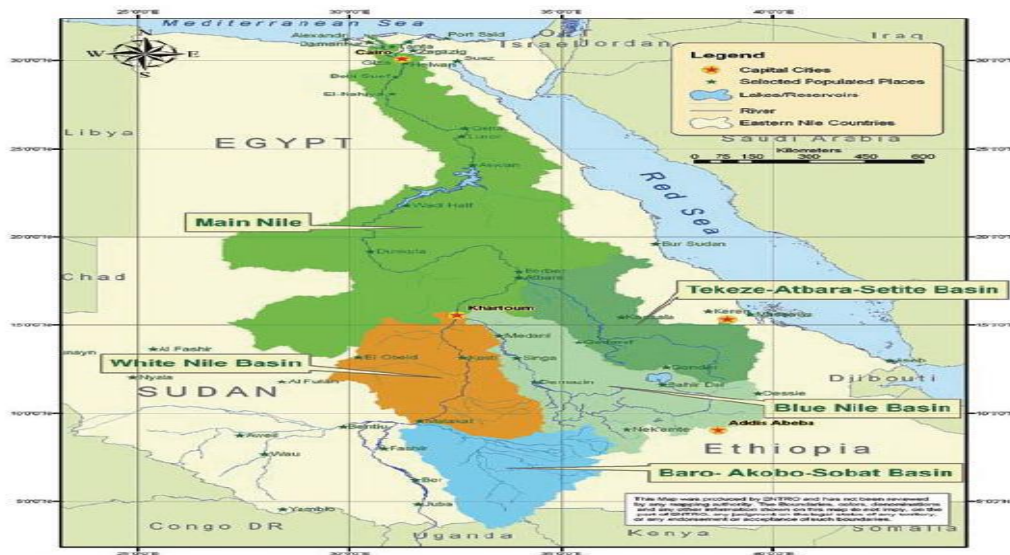


Figure1: The Eastern Nile River Basin and its sub-basin

Source (Cascão, 2009b, p. 18) Blackmore, Whittington 2008 p.4.

Table1: Geographic and Hydrological facts of the Eastern Nile Basin

Eastern Nile Basin	Geographical and hydrological facts	
Abbay-Blue Nile Sub Basin	Geography	Covers 311,548 km ² (35 and 65 percent of which is in Sudan and Ethiopia respectively).
	Hydrology	Rainfall in Abbay-Blue Nile Sub-Basin ranges from nearly 2,000 mm/yr in the Ethiopian Highlands to less than 200 mm/yr at the junction with the White Nile.
Main Nile Sub Basin	Geography	The Main Nile sub-basin covers 656,398 km ² , from the confluence of the Blue and White Niles in Khartoum to the Delta in Egypt in the North, covering over 14 degrees of latitude.
	Hydrology	The annual rainfall ranges from less than 25 mm in the north to 400 mm. In Egypt most rain falls along the coast but even the wettest area, around Alexandria, receives only about 200 mm of precipitation per year.
Tekeze-Setit-Atbara Sub-basin	Geography	The Tekeze-Atbara sub-basin covers an area of 227,128 km ² , including the Mereb-Gash basin. Sixty percent of the Sub-Basin falls in Sudan and 40 % in Ethiopia.
	Hydrology	Most of the Tekeze-Atbara water comes from Ethiopia, even though 50 % of the Sub-Basin is located in Sudan. Rainfall in the sub-basin ranges from about 2 120 mm/yr in the highlands of Ethiopia to less than 50 mm/yr at the junction with the Main Nile at Atbara.
The Baro-Akobo-Sobat- White Nile Sub-basin	Geography	The Baro-Akobo-Sobat-White Nile Sub-basin covers 468,215 km ² (84% is in Republic of South Sudan and 16 % in Ethiopia). The main tributaries of the Sobat are the Baro, Gilo and Akobo that rise on the Ethiopian Plateau at some 3,300 masl.
	Hydrology	Average annual precipitation ranges between 600 mm in the lowlands, and 3,000 mm in the highlands. Average rainfall greater than 100 mm occurs from May to October. Highest rainfall occurs June-September.

Source: NBI-ENTRO website, <http://entroportal.nilebasin.org/pages/easternNile.aspx>

Table 2: country profiles of the Eastern Nile Basin states

Countries of Eastern Nile Basin	Profiles
Egypt	About 96% of the population lives within the Nile basin. Egypt.
Ethiopia	The highlands of Ethiopia generate over 86% of the Nile waters. The Nile basin covers 32% of the national land area and 40% of the population resides with in the basin.
Sudan	It receives the flows of White Nile, Abbay/Blue Nile, Baro- Akobo-Sobat and Tekeze-Setit-Atabra tributaries. Khartoum is where the two Niles meet to form the Main Nile. About 74.9% of the country and 87% of the population resides with in the Nile Basin.
Republic of South Sudan	This area includes the extraordinary wetland, the Sudd, which controls the flow from the Equatorial Lakes region into the White Nile. About 97% of the country and 99% of the population falls within the Nile Basin.

Source: NBI-ENTRO website <http://entroportal.nilebasin.org/pages/easternNile.aspx>

Egypt’s annual water consumption depends on 86% of waters the Blue Nile produces, the rest coming from the White Nile. The Ethiopian highlands provide 86% of the Nile flow (comprised of Blue Nile: 59%; Baro-Akobo (Sobat): 14%; and Tekezze (Atbara): 13%), while the contribution from the Equatorial Lakes region is only 14% (Swain 2011, p.688). In which under this study we give much emphasis to the Blue Nile River sub-Basin.

According to Yacob & Imeru (2005) Ethiopia is the most upstream country in the Eastern Nile Basin since it is the source of 86% of the Nile flow, as measured at Aswan and currently developing its water resources for much needed economic development, both for hydro-electric power and irrigation. Egypt is the most downstream country in the Nile Basin with more than 96% of its freshwater inflow originating from outside its national boundaries. In which irrigated agriculture is, and has been for thousands of years, an integral part of Egypt’s economy and culture (Hefny and Amer, 2005).

As stated above in Table 2 the Eastern Nile Basin comprises Egypt, Ethiopia, Sudan and South Sudan. However, in this thesis it is much focused on the Blue Nile Basin where the GERD is located. By mainly focusing on the GERD and power relation in the Eastern Nile Basin, referring to Egypt, Ethiopia and Sudan.

2.2. The Historical Relations of Eastern Nile Riparian states: Egypt, Ethiopia and Sudan

Ethiopia is the provider of almost the entire of the fresh water resources on which Egypt solely depends (see table 2), and there has not been an agreed upon mechanism to regulate the use and management of the Nile waters (Yacob, 2007). Egypt and Ethiopia have no common border, but their histories have always remained interwoven. Their common story had been characterized by various conflicts. However, apart from this conflictual relationship the Ethiopian Orthodox Church has linked itself with the Egyptian Coptic Church of Alexandria. On which the Ethiopian Orthodox Tewahido Church was a bishopric of the Egyptian Church. And, major elements of the Ethiopian Orthodox church's canonical culture are still heavily influenced by Egyptian Coptic Orthodox Church (Erlich, 2002, P. 17).

According to one Arab historian known by the name al-Maqrizi, as the Mamluk sultan of Egypt, al-Nasir Muhammad Ibn Qala'un, was in clash with his Coptic subjects and destroyed several of their churches. And, Ethiopian monarch perhaps believed to be Amda Seyon (1312-1342), had reportedly dispatched an embassy to Egypt and threatened to divert the Nile. Emperor Sayfa Ar'ad son of Amda Seyon also assumed a role of protector of Patriarch of Alexandria. However, the first Ethiopian ruler who alleged to actually interfere with the Nile was Emperor Dawit, son of Sayfa Ar'ad, this was recorded in Ethiopian chronicles (Erlich & Gershoni, 2000 P. 29).

Before his crowning and restoring order and the state after 'Zemana Masafint', a.k.a. the Era of Princes, which stayed from 1769 to 1855, Kasa Hailu (to later be crowned as Emperor Tewodros II) fought with Egyptians at Dabarqe in 1848. At the battle Kasa's troops were defeated by the Egyptian artillery. Following this he developed a deep-seated suspicion against Egypt and Egyptians. This was evidenced as he arrested the Coptic Patriarch of Alexandria (then on a visit from Alexandria to Ethiopia) and Abuna Salama (an Egyptian head of the Ethiopian Orthodox

Church), after discovering that they sent a request for Egyptian military assistance on his behalf without his knowledge. He also tried to undermine Egyptian authority in the Sudan by using Sudanese refugees such as Wad Nimir, son of Makk Nimir, leader of Sudanese revolt against Egyptian rule in 1821, to make inroad into Sudan and even collect tax in Tewodros's name (Bahru, 2002).

Khedive Ismail came into power in 1863, with a notion of making Nile an Egyptian resource. Khedive Ismail to make his dream come true, strengthened his army by employing mercenaries, military advisors and commanders from Europe and other places, one of whom, the Swiss-born Werner Munzinger, emerged to be the architect of the Egyptian invasion of Ethiopia in 1870s (Teferi, 2004). In his famous remark Munzinger said the following about Ethiopia, "Abyssinia with a disciplined administration and army, and a friend of the European powers is a danger for Egypt; therefore she (Egypt) must either take Abyssinia and Islamize it or retain it in anarchy and misery" (Rubinson cited in Teferi, 2004, p.20).

Emperor Yohannes IV who came to power after the death of Emperor Tewodros II too had several encounters with Egyptians, including battlefields of Gundat , Gura and Tajura. In all encounters the Egyptian invading force faced a defeat. The Egyptian invading force led by a Danish commander, Colonel Arendrup faced a defeat in a place called Gundat on 16 November 1875. The Egyptian also faced a defeat in three days battle from 7 to 9 March 1876, led by Colonel Dye. The architect of Egypt's expansionism Muzenger and his armies were humiliatingly crashed by the Afar people on the sandy plains of Awsa too. The main ambitions of the invading Egyptian forces were to penetrate in African interior particularly to the Nile valley (Bahru, 2002).

The stalemate between Egypt and Ethiopia came to an end in 1884 when they signed the Adwa or the Hewett Treaty mediated by Great Britain. In which Ethiopia traded one weak enemy (Egypt) for two strong ones, the Mahdist and Italians. The Mahdist took revenge, resulting in the destruction of life and property, and even led to the death of Emperor Yohannes IV. The conflict with Italy also put the political sovereignty and territorial integrity of Ethiopia under risk, as Italians controlled Eretria. In that same year, Egypt's interest in the Upper Nile was further frustrated by the success of the Mahdists which led their forced withdrawal from the Sudan. As a

result, the Great Britain outdated Egypt as a dominant factor in the hydropolitics of the Blue Nile until the middle of the twentieth century, since the Brits had cotton plantation in Egypt and wanted to insure sustained water supply (Teferi, 2004).

As Egypt became a British protectorate in 1882, Sudan also fell under the Anglo-Egyptian Condominium in 1899. In which the British imperialism in Sudan were mainly for the irrigation scheme in Gezira. And, the Nile waters continued to be the sustenance of British colonial economic interest just as they had always been for Egypt. The Suez Canal and Egypt's economic and foreign affairs were controlled by the British. However, Egyptian nationalist forces were strongly opposed Britain's continual domination in their country. As result, Britain agreed to Egypt's "historical and natural rights" over the Nile waters in an exchange of Notes with the Egyptian Government in 1929. This agreement accorded to Egypt 48 BCM of the Nile waters annually, while Sudan was given 4 BCM annually. The rights and interests of all upstream countries, including those of Ethiopia, were totally ignored. Hence, the Nile waters were manipulated in order to soften the anti-colonial uprising in Egypt (Tevedt, 2010; Yacob, 2007).

At the end of the 2nd World War, Egypt heavily aspired to incorporate Sudan under the banner of the "unity of the Nile valley" upon the latter's independence. And, during the same period the future of Eritrea was under a discussion at the UN, following the defeat of the Italians in Ethiopia and as they were driven out of their colonial control of Eritrea. Following these incidences Egypt argued for an annexation of Eritrea to Sudan with the self-serving anticipation that an expanded Sudan would unite with Egypt. However, despite Egyptian leader's desire, the UN resolute to federate Eritrea with Ethiopia in 1952, and Sudan also explicitly decided not to unite with Egypt rather opted for its independence in 1956 (Yacob, 2007).

After Sudan gained its independence in 1956 the new leadership that controlled power expressed its disappointment with Sudan's allocation of Nile waters in the 1929 Agreements. Negotiations between Sudan and Egypt continued at irregular intervals all through the early 1950s and broke off completely in 1958, two years following Sudanese independence. The conflict threatened to escalate into military confrontation as Egyptian troops moved to the border of Sudan in response to a proposed dam project on Sudan's portion of the Blue Nile. That was when Sudan constructed the Sennar dam without Egyptian endorsement; an act considered as a direct

repudiation of the 1929 Agreements. The stress between Egypt and Sudan was calmed just after military regime friendly to Egyptian interests seized power in Sudan through coup in 1958. Negotiations resumed in early 1959, culminating in a new treaty that would update allocations but not entirely replace the obligations under the 1929 Agreements (Knobelsdorf, 2006).

Ethiopia in particular has raised protest against the 1959 Egypt-Sudan water agreements regarding the sharing of the waters of the Nile; it proposed that, as the Nile is an international river, it should be developed extensively through the joint authority of the Nile valley. Even before the enactment of the 1959 Agreement, Ethiopia was also one of the first upstream nations to express doubts about the binding force of such bilateral treaties on upper riparians. Beginning in 1956, Ethiopian authorities made statements in letter of protest, indicating that the nation no longer considered the previous Nile Waters Agreements as binding on itself. Ethiopia expressed its view that all the countries of the Basin should participate in development activities. As more of the upper riparians gained independence in the late-1950s and 1960s, increasing doubts were raised about the binding force of these treaties and more nations began to follow Ethiopia's lead and play the role of moderation in the basin (Yacob, 2007).

On 19 November 1956 the national security council of USA has taken planned steps concerning international development over the Nile. These include supporting Ethiopia's involvement on the Nile valley, and preparing conditions for the study of the sector of the Blue Nile found with in Ethiopia. As a result, the Ethio-American joint programme to examine and study the Blue Nile Basin from 1957 to 1962 was geared toward determining how much irrigation water Ethiopia would require from the Blue Nile Basin in order to develop its resource. Under this study four major places identified for the construction of major dams on the Blue Nile River were: Karadobi, Mobil, Mendiya, and Yewsen (Border) projects (Zewde, 2006).

In the late 1950s and the early 1960s some East African countries started to gain independence, these include, Congo Democratic Republic, Burundi and Rwanda gained independence from the Belgians in 1960. Tanzania, Uganda and Kenya attained independence from the British in 1961, 1962 and 1963, respectively. And, many of these African countries started to declare that they will not be bounded by treaties made by their former colonizers under what is known as the "Nyerere Doctrine" (Yacob, 2007; Owiro, 2004).

The “Nyerere Doctrine of Treaty Succession” has been highly dominant in the debates concerning the Nile, firstly it was asserted by Julius Nyerere (who was the first President of Tanganyika then became Tanzania), in 1961. According to this principle, Tanzania refused to be bound by colonial-era agreements “unless required by international law.” As a result, according to a note to the Egyptian Government in 1962, the government of Tanzania makes clear that, “an agreement that took place without the knowledge of upstream riparians to secure Egyptian consent before undertaking its own development programs based on its own resources was considered to be irreconcilable with Tanganyika’s status as a sovereign state”. The justification for this approach was that the Agreements could not bind an independent state because “the new states never took part in the negotiations creating the obligations under the treaties” (Knobelsdorf p.11).

2.3. Treaties over Eastern Nile Basin

2.3.1. Anglo-Italian Protocol (15 April 1891)

This was the first colonialist protocol over the Nile which was signed on 15 April, 1891 masked in the name of delineation of the colonial territorial claim and issues of sphere of influence between United Kingdom of Great Britain and Italy in Eastern Africa. Article 3 of this protocol restricts Italy, the colonial power in Eritrea from utilizing the Nile waters (Owiro, 2004). Ethiopia an independent state was not invited to sign this protocol. This indicates the initial practical move of the British to protect the Egyptian interests at any cost by guising it in territorial protocol concluded with another colonial power (Wuhebzeger, 2013).

2.3.2. Anglo-Ethiopian treaty (15 May, 1902)

On 15 May, 1902, the United Kingdom of Great Britain and Ethiopia, in which United Kingdom acting for Anglo-Egyptian Sudan, signed at Addis Ababa. The Treaty was mainly regarding the frontiers between the Anglo-Egyptian Sudan, Ethiopia. However, Article III of the Treaty was focused on the Nile waters rather than boundaries. It provided:

“His Majesty the Emperor Menelik II, King of kings of Ethiopia, engages himself towards the Government of His Britannic Majesty not to construct or allow to be constructed, any works across the Blue Nile, Lake Tsana or the Sobat, which would arrest the flow of their waters into the Nile except in agreement with his Britannic Majesty’s Government and the Government of the Sudan” (Owiro, 2004, p.70).

Daniel (1999), by questioning the legitimacy of the agreement has mentioned Ethiopia’s legitimate reasons to exploit the waters in its own territory for development purposes should be understandable. He believed that fact alone would provide sufficient grounds for some to annul the binding force of the agreement. By further referring that it was never ratified, either by the British Parliament or by the Ethiopian Crown Council.

2.3.3. The Tripartite Treaty (13 December, 1906)

Britain, France, and Italy have been floating around Ethiopia posing a serious threat for Ethiopian independence. On 13 December, 1906, they signed in London treaty which intended to include Ethiopia for their colonial scheme. The objective of the treaty was to set a legal framework and steps for the regulation of their sphere of influence following the anticipated succession problem as of Menilik II’s sickness, and the death of Ras Mekonnen Walda-Mikael (the man expected to succeed Menilik’s throne) (Bahru, 2002; Swain, 1997). In Article 4 (A) of this agreement, the three colonial powers agreed to act together to maintain the interests of Great Britain and Egypt in the Nile Basin in regards to the regulation of the Nile River and its tributaries (Owiro, 2004).

2.3.4. Anglo-Italian exchange of letters

The Anglo-Italian exchange of letters, which led to the secret agreement of the 1926, was at the expense of Ethiopia’s sovereign right. Britain has secured Italy’s support for its plan to construct a dam at Lake Tana. And in turn, Britain agreed to support Italy in its attempt to construct a railway connecting Eritrea with Italian Somali (Daniel, 1999). Ethiopia on its part has predestined this secret deal and brought the case to League of Nations. However, both the government of

Britain and Italy gave justifications for their actions denying claims of threat up on Ethiopia's sovereignty (Wuhebzeger, 2013).

2.3.5. The 1929 and 1959 Agreement

Egypt's complete dependence on the Nile waters has stimulated most of the country's leaders to actually control the Nile waters as a primary intent for their national security, and always been devoted to guarantee their utmost utilization (Yacob, 2007; p.86). Sudan a midstream state an upstream of Egypt and downstream of Ethiopia which acts as the path and drainage basin for the Nile (Hamad and El-Battahani, 2005), also maintained a close alliance with Egyptians in utilization of the Nile (both in 1929 and 1959).

The Blue Nile Basin geopolitically speaking has a significant importance to the hydropolitical configuration of the Nile catchment (Cascão, 2009). The basin has a great implication due to a range of reasons including its lion's share contribution to Lake Nasser (Cascão, 2009; Swain, 2011). Based on Ethiopia's huge water contribution and its suitable geography for hydropower production, the country could be a key player in the Nile's water management (Swain, 2011) (see table 1 and table 2). However, Ethiopia was not invited for both major treaties of 1929 and 1959, which were signed between Egypt and Sudan only.

A series of treaties signed (the 1929 and 1959 are the major ones) among downstream states have given Egypt, and to some extent for Sudan, a position hydro-hegemony in the Eastern Nile Basin (Zeitoun and Allan, 2008). The 1929 agreement between Egypt and the Great Britain allocated 48 BCM of the utilizable flow to Egypt and 4billion BCM to Sudan. The major purpose of the 1929 Nile Waters agreement was to guarantee and facilitate an increase in the volume of water reaching Egypt (Owiro, 2004, p.9).

In the 1929 treaty Great Britain and Egypt agreed to major issues, these are: Egypt would take all the waters of the Nile except the 4 BCM to be retained in the Sudan, Egypt would supervise all water-related activities in the entire basin from source to mouth, Britain recognized the "historical" and "natural" rights of Egypt with respect to the waters of the Nile (Yacob, 2007; p.99). This agreement has been rejected by upstream states, mainly Ethiopia. And, at independence, upstream Nile Basin countries whom Britain signed on their behalf have clearly

stated that the treaty by the colonial powers has no binding effect on them. The agreement was also later contested by independent Sudan, as the new Sudanese government declared non-adherence to the 1929 agreement while Egypt was initiating for the construction of the High Aswan Dam. This scenario led to the coming of pro-Egyptian military coup d'état led by General Ibrahim Aboud by overthrowing the civilian government, and which later signed the 1959 Agreement (Yacob, 2007, Knobelsdorf, 2006; Owiro, 2004, Swain, 1997).

in 1959, in groundwork for the construction of the High Aswan Dam (which became a resource capture mechanism for Egypt to secure its hydro-hegemonic position in the Basin) between Arab Republic of Egypt and an independent Sudan signed the Agreement for the Full Utilization of the Nile Waters, which allocated 55.5 and 18.5 BCM of the Nile waters to Egypt and Sudan, respectively, with 10 BCM of a total utilizable flow of 84 BCM lost to evaporation and seepage (Conway 2005). This agreement thus allocated all of the utilizable flow, as measured at the High Aswan Dam, to Egypt and Sudan exclusively. Egypt and Sudan alone established their exclusive “full utilization” rights. The upstream offer for cooperation was ignored; this was evidenced as Ethiopia’s offer for cooperation was turned down (Yacob, 2007, p.102).

2.4. The political features and power relation in the Eastern Nile Basin

The main hydraulic and political features of the Basin (Eastern Nile Basin) are characterized by the asymmetric use of water resources, level of economic development and diplomatic resources. The downstream riparians (Egypt and Sudan) have consolidated their control over water resources. Egypt has remained the powerful state in the basin; it has achieved a substantial degree of hydraulic (quota over the Nile waters), legal (the 1929 and 1959 agreements), and political control over the Nile waters. However, Ethiopia the most upstream state had been the ‘silent partner’ in the Nile Basin, marked by apparent consent, which has in practice been veiled contest in the Nile Basin hegemonic configuration. This was resulted from Ethiopia’s successive governments has not prioritized and did not develop a lucid Nile policy rather remained as a ‘silent partner’ in the Basin (Cascão, 2008).

Being the ‘silent partner’ does not mean that the previous Ethiopian governments accepted the status quo without any resistance at all (ibid). Various contesting mechanisms were applied by former Ethiopian governments against the downstream states agreements (the 1929 and 1959). On 6 February 1956, i.e., only one month following Sudanese independence, the Ethiopian government announced through a popular English newspaper Ethiopian Herald that, Ethiopia reserves her sovereign rights to put the Nile waters into use within the bounds of the nation’s territory (Yacob, 2007, p. 172).

Emperor HaileSelassie had also passed a strong word statement against the downstream states action to fully utilize the Nile excluding Ethiopia in the following manner:

“...Ethiopia may be prepared to share this tremendous God given wealth of hers with friendly nations neighboring upon her, for the life and welfare of their people, it is Ethiopia’s sacred duty to develop the great watershed which she possesses in the interests of her own rapidly expanding population and economy. To fulfill this task, we have arranged for the problem to be studied in all its aspects by experts in the field. Ethiopia has time and again set this forth as her position regarding the utilization of the Nile waters” (ibid, p.102).

This clearly indicates Ethiopia’s commitment to share the Nile resource with its downstream states in equal basis, despite their insistence to maintain their hydro-hegemony by excluding other upstream states particularly Ethiopia.

Similarly, the Derge government had contested against the downstream attempt to fully utilize the Nile, excluding upstream states particularly Ethiopia. In 1977 at the United Nations’ Water Conference in Mar Del Plata, Argentina, Ethiopia made it clear that “it is the sovereign right of any riparian state, in the absence of any international agreement, to proceed unilaterally with the development of water resources within its territory” (Cascão, 2008; Yacob, 2007, p.174). In 1980 at the Organization of African Unity Summit in Lagos Nigeria, Ethiopia applied the same reactive diplomacy by contesting against the hydro hegemony of Egypt in the Eastern Nile Basin. In both cases Ethiopia openly criticized Egypt’s hydro-imperialist position and projects in the basin (Cascão, 2008; p.21-22).

The incumbent government led by the Ethiopian People Revolutionary Front (EPRDF) had applied various mechanisms to engage with the downstream states. This was evidenced in 1991 as Ethiopia and Sudan signed a bilateral agreement over the use of the Blue Nile waters alongside a diplomatic, cultural, and social pact. Both nations signed a document to work together for sustainable and equitable usage of the Nile waters, and to share water flow information on the Blue Nile and Atbara River (Shinn, 2008). This was considered as a step forward for Ethiopia by engaging on such active diplomatic venue concerning Nile apart from the reactive diplomatic means mentioned above.

In 1993, Ethiopia and Egypt also signed a framework of cooperation in which the two parties committed to not to engaging in any activity related to the Nile waters that may cause appreciable harm to the interests of the other party. In parallel to the agreement Ethiopia has continued to call for a comprehensive agreement which include all Basin states to regulate the utilization of Nile water resources in an “equitable and reasonable” manner. However, Egypt the Basin’s hydro-hegemon was aspiring to monopolize the Nile waters. As a result, Egypt carried out hydraulic projects that would divert the Nile waters out of its natural flow for new resettlement and urbanization schemes, including Toshka in the Southwest and Sinai in the North East (Cascão, 2008, Yacob, 2007).

2.5. Cooperation in the Nile Basin

The Nile basin countries have attempted to establish cooperative initiatives since the late 1960s and these initiatives were the Hydro-Met (1967), the Undugu (1983) and the TECCONILE (1992) (Yacob, 2007, p.213-218). According to (Interview with Tefera, 4 March, 2016), “these co-operations in the Nile Basin were dominated by Egyptians. As a matter in fact Ethiopia has taken an observer role in those co-operations until the coming of the Nile Basin Initiative in 1999”. Most scholars of hydro-hegemony (Cascão, 2008; Zeitoun and Warner, 2006) agreed to the point that Egypt has been using some of the above mentioned cooperation (Hydro-Met, Undungu and TECCONILE) for the sake of maintaining their status quo, through hegemonic cooperation. However, as Ethiopia attained the full membership status of the Nile Basin Initiative in 1999 and it became able to challenge the hydro-hegemony of Egypt using the Basin’s cooperation (Cascão and Zeitoun, 2010b).

2.5.1. Hydro-Met (1967-1993)

The Hydro-Met was launched by Egypt, Kenya, Sudan, Tanzania and Uganda in 1967 with the support of the United Nations Development Program (UNDP) and the World Meteorological Organization with the objective to collect and analyze hydrological and meteorological data in the great lake catchments area, with a specific purpose of regulating the water level of Lake Victoria as well as the water flow of the Nile (Kebrom, 2011, P.32). Later Burundi and Rwanda joined the cooperation while Ethiopia took part by obtaining an observing status as of 1971. In spite of Hydro-Met's accomplishment in gathering some valuable meteorological data, it was criticized for failing to balance the upstream-downstream polarization of interests over the use of Nile waters (Yacob, 2007). Hydro-Met was served as an instrument for the maintenance of status quo for Egypt, to continue its hydro-hegemony. As a result Ethiopia opted to remain with an observer status rather than being a part of such hydro-hegemonic cooperation.

2.5.2. Undugu

The Undugu in kswahli means Brotherhood and it was seen in the region as a mechanism used by Egypt efforts to maintain and expand its control (hydro-hegemony) of the Nile waters, or "more of the same" (Cascão, 2008; Milas, 2013). It consisted of Burundi, the Central African Republic (CAR) (the CAR is not a Nile Basin country), Egypt, Rwanda, Sudan, and Zaire (later became the DRC) (Kibrom, 2011, p.47). Ethiopia and Kenya were participating having an observer status (Debay, 2008; p.17). Since the cooperation lacks active participation of riparian states and also lacks a focus on the fundamental question of water utilization and management, and the cooperation would not be able to stay for long (Yacob and Imiru, 2005, p.19).

2.5.3. TECCONILE (1993-1999)

In 1992 a new organization called TECCONILE came into being after the signing of an agreement at Kampala Uganda by the water resource ministers from Egypt, the Sudan, Rwanda, Tanzania, Uganda and Democratic Republic of Congo. TECCONILE came into being with funding support from the Canadian International Development Agency (CIDA). The remaining four riparian states of the Nile Basin, namely Burundi, Eritrea, Ethiopia and Kenya started to participate as observers. The merely significant achievement of the TECCONILE is its

unpretentious contribution towards the Nile Basin Action Plan activities (Dereje, 2010, p.12). The Cooperation was eventually unsuccessful since countries such as Ethiopia and Kenya participated by an observer status, since the cooperation was dominated by Egypt (Mason, 2004). As a result, TECCONILE was replaced by Nile Basin Initiative in 1999 and since then multilateral cooperation has changed dramatically because all of the Nile countries, including Ethiopia, became active members.

2.5.4. The Nile Basin Initiative (NBI) (since 1999)

The idea of establishing the NBI was put forward in 1997 following years of negotiation among the Nile Basin countries in the quest for cooperative Nile water regime. In 1999 the Nile Basin states launched a transitional institution called the NBI and they jointly established an inclusive transitional mechanism for cooperation until a permanent Cooperative Framework established (Milas, 2013; Debay, 2008). The Nile Basin Initiative (NBI) is a regional intergovernmental partnership that seeks to develop the River Nile in a cooperative manner, share substantial socio-economic benefits and promote regional peace and security. All Nile Basin states except Eritrea took part; the partnership is guided by a Shared Vision which is to achieve sustainable socio-economic development through equitable utilization of, and benefit from, the common Nile Basin Water resources. The World Bank sponsored the NBI, in collaboration with the Canadian International Development Agency (CIDA) and the United Nations Development Program (UNDP) (Yacob, 2007).

According to (Interview with Omar, 22 February, 2016), “the NBI has two tracks these are the technical tracks and the legal tracks. The technical aspect of the NBI deals with environmental, irrigation, watershed, flooding and hydropower projects under the Subsidiary Action programs (SAPs) and the Shared Vision Programs (SVPs). In which the legal track deals with the legal and institutional aspects of the NBI. It should also be noted that the NBI is a transitional mechanism until the CFA is going to be signed by all riparian states, which will lead to the formation of permanent Nile Basin Commission (NBC), and then the existing lifetime of NBI will come to an end”.

The SVP is a basin-wide program comprising some thematic/facilitative projects spread over all the basin countries to build capacity, trust, and confidence across the region. The SAP, on the other way, has a purpose of initiating joint investments at the sub-basin levels. This comprises of the Nile Equatorial Lakes Subsidiary Action Program (NELSAP), and the Eastern Nile Subsidiary Action Program (ENSAP). The countries grouped under the NELSAP are Burundi, DRC, Kenya, Rwanda, Tanzania and Uganda. Whereas, the countries grouped under the ENSAP are Egypt, Ethiopia, South Sudan and the Sudan (Petros, 2010; Wondwosen, 2008).

The Cooperative Framework Agreement (CFA) was prepared under NBI. Regardless of the strong resistance of Egypt and Sudan, claiming historic rights on the Nile waters, the Agreement was opened for signature on 14, May 2010, for a period of one year during a ceremony held at Entebbe, Uganda. Five states have already signed it: Ethiopia, Kenya, Rwanda, Tanzania, and Uganda signed in 2010, in which Burundi signed in 2011. The new Cooperative Framework Agreement is influenced by the UN Convention on the Law of Non-navigational Uses of International Watercourses. It establishes a framework for cooperation among the Nile River Basin states (Nicole and Cascão, 2011; Wondwosen, 2008).

The CFA includes some basic principles for the protection, use, conservation and development of the Nile Basin. The CFA set up the principles that each Nile Basin state has the right to use, within its territory, and principles of equitable and reasonable utilization. In addition to the factors enumerated in the United Nations Watercourses Convention, the CFA includes the contribution of each Nile Basin state to the waters of the Nile River System, and the extent and proportion of the drainage area in the territory of each basin state (Salman 2013, p. 21). These events reflect the increasing ability and desire of the upstream states to challenge Egypt's status as hydro-hegemon and the overall status quo.

Ethiopia's joining of the Nile Basin Initiative was predicated that a cooperative framework that is acceptable to all riparian states would be created, and that equitable and reasonable water use rights would be established for all basin countries. This due to fact that Ethiopia's ultimate goal is for establishment of a firm legal and institutional framework (Yacob, 2010). This clearly indicates Ethiopia's strong commitment to bring a Nile Basin regime with equitable and reasonable usage of Nile waters in cooperation.

It should also need to be taken under consideration that Ethiopia's engagement in the NBI did not mean that it ends the prospect and the right of Ethiopia to develop a unilateral national projects (Cascão, 2008). Here we can recall the construction of the Tekeze and Tana Beles hydroelectric dam projects were undertaken simultaneously while negotiating for the CFA and the commencement of the Grand Ethiopian Renaissance Dam after the signing of the CFA.

2.6. The Grand Ethiopian Renaissance Dam

2.6.1. Feasibility study for the Grand Ethiopian Renaissance Dam

The Ethio-American joint program which examine and study the Blue Nile from 1957 to 1962 identified the sites for the construction of water reservoirs for about twenty dams which could hold 100 BCM of water. The four major places identified for the construction of major dams on the Blue Nile were: Karadobi, Mobil, Mandaya, and Border (Yewesen) projects. Where the four dams were expected hold in total 51 BCM (Zewde, 2006). According to (Interview with Fekahmed, 9 March, 2016), “these project feasibility studies (Border, Mandeya, together with Beko Abo) was resurrected by ENTRO, having their contribution for the coming of the GERD”.

The Africa Development Bank in 2007 has also funded pre-feasibility study for power trade to be conducted by the Eastern Nile Technical Regional Office (ENTRO) for the Mandaya and Border (Yewesen) projects. The pre-feasibility study assessed the environmental, social and economic effectiveness of establishing an inter-connection power grid between the three Eastern Nile countries. The main conclusion of the study was to construct two hydropower projects in Ethiopia (Mandaya and Border) and one in Sudan (Dal), which was found to be the optimum solution to cover the energy demands of the three countries over the upcoming 25 years with no negative impacts on the downstream countries (NBIENTRO, 2007).

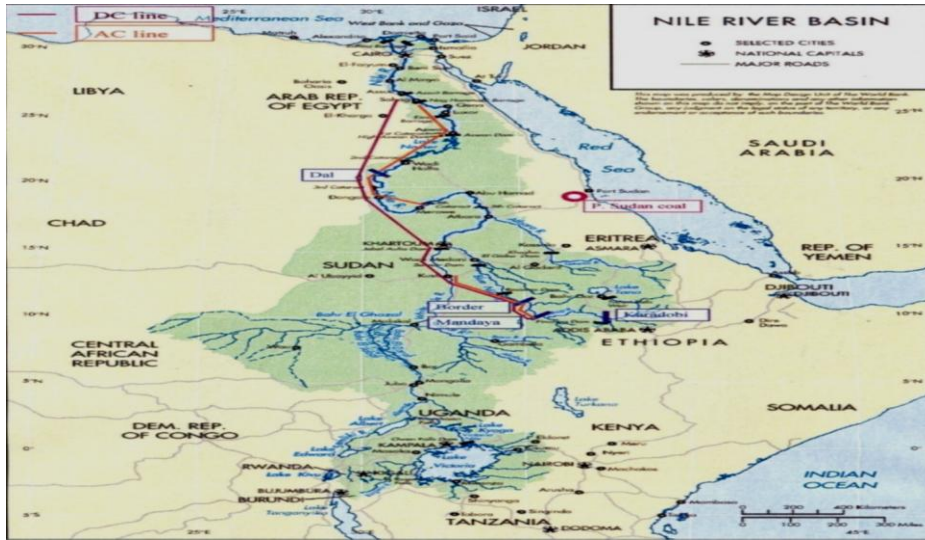


Figure 2: The location of proposed hydropower projects and power grid in Ethiopia and Sudan (NBIENTRO, 2007, p. Sec. II: 2).

According to (Interview with Fekahmed, 9 March 2016), “the pre feasibility study of the current project site of the GERDP was done by Ethiopia, Egypt and Sudan under the ENTRO. The three Eastern Nile Riparian states were agreed for Joint Multipurpose Project (JMP) which began in 2005, intended to benefit these three countries. The JMP had three projects these were the Beko Abo, Border, and Mandaya in which the purpose of these study was to construct water storage in Ethiopian highlands to reduce evaporation. In which Border dam location is similar to the current location of the GERD. However, Egypt and Sudan walked out of the JMP, and this scenario has led Ethiopia to look for other alternative i.e. for a national unilateral project”.

2.7. Commencement and developments in the construction of the GERD

On 2 April 2011, the late Prime Minister Meles Zenawi while celebrating the official commencement of the Millennium Hydroelectric Project delivered a speech acknowledging the Ethiopian people and clarifying the massive benefits of the dam for their countries and neighbors. He also stressed on the importance of the project in eradicating poverty by calling all Ethiopians, to provide sacrifices by domestically-funding the project. He even pointed out on the difficult choice to fund such mega project from a domestic source, was due to blocking international fund opportunities (Meles speech, 2011).

The GERD was initiated a year after six of Nile Basin countries signed the CFA, which Egypt regarded as a threat to its historical rights in the Nile waters. Egypt's subsequent withdrawal from the NBI and the freezing of plans for joint hydropower projects as mentioned above, are mentioned by Ethiopia as reasons for proceeding with the unilateral construction of the GERD. Ethiopia has been signaling its intent to begin a unilateral project on 19 July, 2010 the late Prime Minister of Ethiopia, Meles Zenawi, made one point very clearly to the Egyptian public in an interview on Egyptian television, that "Ethiopia has reached a stage where it can build its own dams with its own money". Over the past few years, Ethiopia has assertively pursued hydroelectric infrastructure projects, including the Tekeze (2009) and the Tana-Beles (2010). But the announcement of the GERD represented a step forward for Ethiopia (Tawfik, 2015; Whittington et.al, 2014).

Almost a month after the project was publicized, the Egyptian public diplomacy delegation paid their visit to Addis Ababa from 30 April – 3 May 2011, then followed by an official visit by Egypt's interim Prime Minister Essam Sharaf in 13 May 2011. In order to build the confidence of the downstream states Ethiopia invited Egypt and Sudan to form an international panel of experts to review the design documents for the dam. The Panel comprises 10 experts in which two from each of the three Eastern Nile Basin countries, and four high profiled international experts from France, Germany, South Africa and United Kingdom (IPoE, 2013; Tawfik, 2015).

Table 3: the basic steps considered as milestone in the construction of the GERD

The basic steps considered as a milestones in the construction of the GERD		
Major steps		Significance of the steps
1	Decision to commence the GERDP	The GERDP until the construction began remained confidential among the highest officials. The feasibility study of the project was developed in 2008, in October, 2009 first step survey was carried out to verify and developed topography, geology and environmental data. (Interview with Fekahmed, 9 March 2016). July-August, 2010 second site survey was carried out (Interview with Fekahmed, 9 March 2016). November, 2010 Basic design and feasibility study report (Interview with Fekahmed, 9 March 2016) December, 2010 updated project layout. (Interview with Fekahmed, 9 March 2016).
2	Contractual agreement for the GERDP	This includes decisions that were made by selecting Salini as main contractor of the project. And also a decision made to include METEC in the project to undertake the electro – and hydro- mechanical work to facilitate technological transfer (Hidase Magazine’s interview with Dr. Debretsion Gebremichel).
3	Revision of the design	METEC undertakes the revision over the design by increasing the generating capacity of the dam from 5250 MW to 6000 MW; this is by saving an extra 12 billion Ethiopian birr needed for the revision of the design (Interview with Tagel 13 April 2016).
4	Diversion of the Blue Nile from its original flow	The aim is to divert the river by a few meters and then allow it to flow on its natural course. This indicated that the realization of the project and despite the fear of some spectators, that the project would be halted . (Hidase Magazine’s interview with Dr. Debretsion Gebremichel).
5	Mass mobilization and employment opportunity	The project has managed to create a great mass mobilization and GERDP has also employed 10,672 employees where 317 are foreigners. About 2300 machineries are being used in the project. This will also provide an opportunity for Ethiopian hydraulic experts to gain technological transfer from the foreign experts.
6	Re-Diverting the Nile to run through the dam	This re-diversion of the Blue Nile’s water to run through the new Grand Ethiopian Renaissance Dam (GERD) for the first time by passing through the culvert valves. This scenario can be taken as first step of the beginning of the final stage of the construction of GERDP (Daily News Egypt, 26 December, 2015).
7	Installation of the Power grids	The two power grid lines are the 400 KV grids from Beles to the GERDP, and the 500 KV grids from GERDP to national grid, can be seen as a great success.

Sources: (Hidase Magazine’s interview with Dr. Debretsion Gebremichel) ; (Interview with Fekahmed, 9 March 2016); (Interview with Tagel, 13 April, 2016)

CHAPTER THREE

3. Conceptual Framework

3.1. Hegemony

The Easter Nile Basin is known by the existence of power asymmetry, in which Egypt has remained as the hydro-hegemon. And, Ethiopia has been applying various counter hydro-hegemonic mechanisms in order to challenge and further to change the existing status quo in the Basin (Zeitoun and Warner, 2006; Cascão, 2009a; 2009b). In order to examine the changing “power relation” in the Basin and the “counter hydro-hegemony” applied by Ethiopia, it is essential to explain the very concept of “hegemony.”

The concept of “hegemony” was brought to academic world by the famous Italian theoretician Antonio Gramsci during his imprisonment by the fascist Italian regime, even though he was not capable to thoroughly intricate the concept further due to his fading health. For Gramsci, hegemony is a political power that flows from intellectual and moral leadership, authority or consensus as distinguished from armed force (Bates cited in Dawit, 2013). Hegemony is attained through myriad ways mostly through the employment of institutions by ideological supremacy of the hegemon by gaining the consent of the weaker group. And, consent comes to be understood as a deliberate and voluntary act of the weaker individual or a group (Femia, 1981).

It should be noted that Gramsci did not develop this concept (hegemony) for analysis of inter-state or international relations, but rather for intra-state relations. He considers power and hegemony are relational, rather than unilateral impositions. Hegemony is different from domination which mainly focuses on use of force and coercion. Since hegemony uses leadership and legitimacy by application of coercion and consent. It is also primarily related to less visible means of power including ideational power (Cascão, 2009b, p.70). And, there are also Gramscian theories, and as well as by neo-Gramscian views which goes together with hegemony, these are “resistance” and “counter-hegemony”. Resistance is more reactive in motivation and refractory in consequence. While counter-hegemony on other had is more deliberate in action and comprehensive in transformative potential (ibid, p.74).

3.2. Framework of Hydro-Hegemony

A state is considered ‘hegemonic’, if it is able to assume a regional leadership position by means of its ‘authority’ rather than solely by force or intimidation (Zeitoun & Warner 2006, p.438). The degree of hegemony obtained depends on a dominant state’s capacity to legitimize its position by exploiting its existing material and non-material capabilities. For this reason, regional power relations cannot be considered ‘static’ (Cascão & Zeitoun 2010a, p. 30-31) since there exists resistances as well as counter hydro-hegemony. ‘Hydro-hegemony’ simply refers to ‘hegemony at the river basin level’ (Zeitoun & Warner 2006, P. 435). Egypt has been trying to preserve its hydro-hegemonic position in the Eastern Nile Basin; however, other riparians began to challenge Egypt’s hydro-hegemonic position (Cascão, 2008).

Hydro-hegemony mostly has either a positive or negative effect on the weaker riparian states in a basin. For example, by means of its governing capacity, a hydro-hegemon can provide ‘stability’, ‘order’ and ‘greater assurance of flow’ (Zeitoun & Warner 2006, p.439). However, in the Eastern Nile Basin, the hydro-hegemon (Egypt) had been suppressing upstream infrastructural development while it has improved its own hydraulic infrastructural development in the Basin by means of resource capture, reclamation, etc. (Zeitoun & Warner 2006, p. 435). As a result, the weaker riparians in the Basin (mostly Ethiopia) started to challenge Egypt’s hydro-hegemony to further bring more equitable and reasonable regime in the Basin.

3.2.1. Hydro-Hegemony and Four Dimensions of Power

Zeitoun and Warner (2006, P.435) have developed hydro-hegemony framework which helps to understand “who gets how much, how and why”, in the sharing of Transboundary waters. Here under the framework of hydro-hegemony power is a “prime determinant enabling the successful execution of the water resource control” (P.451). According to Cascão and Zeitoun (2010a, P.28), the framework refers to a notion that the more powerful basin state can exploit its advantage in a number of ways to ensure the power configuration is in its favor.

What should be noted in this regard is that the weaker riparians or the non-hegemons are not always as weak or optionless as they are alleged to be. Rather experiences indicate on counter hegemonic mechanisms applied by the non- hegemonic states, with the aim of changing water

control and allocation towards a more equitable configuration, through application of their bargaining power, in order to level the playing field, influence the regional agendas and negotiations, to contribute change in the hegemonic configuration in the basin. Hence it should also be noted that power relations are not an irrevocable or a static reality; since the status quo does not last forever, power, and power asymmetry, are constantly being contested, challenged and reconstituted (Cascão and Zeitoun 2010a; 2010b; Cascão,2009a; 2009b; 2008).

As a result, Cascão and Zeitoun (2010a) have offered a way for analyzing power according to four different pillars (geographic power, material power, bargaining power and ideational power) that are essential for measuring the hydro-hegemonic situation of riparian states. Zeitoun and Warner (2006), they have also come up with a model that comprises three pillars of power where the geographical power is grouped within material power. However, it seems more fitting to analyze the geographical power as a separate entity to see how it differs from the material power, and whether the geographical position alone has a great role to play. Afterward these four pillars of power and the sub-criteria have been used in the analytical framework of Chapter Four, to see the changing power relation within the Eastern Nile Basin as a result of the growing power of Ethiopia in the Basin.

Before undergoing the four pillars of power we need to make a clear understanding of the terms of overt power, covert power, and structural power from the work of (Cascão, 2009b). Overt power refers to the most clearly evident and visible resource such as military or economic power, which is “active power” or the “power over”. Realists and neo-realists tends to privilege overt power, and especially the mobilization and accumulation of material power and accordingly this represent merely a one dimensional power which is indicated above. It indicates the existence of asymmetric geographic, economic, and military assets of the Easter Nile riparian, and will be seen in combination with other three dimensions of power.

Covert power is less obvious and more subtle than overt power, more of organizational nature. It incorporates power relation and the question of control over the agenda of politics and the ways in which potential issues are kept out of the potential issues are kept out of the political process. It mainly related to a discursive and bargaining strategies and how different actors have varying, asymmetries capacities to influence agendas, discourses, negotiations and institutions (Cascão,

2009b; Luke 2005). In this regard in Eastern Nile Basin Egypt has been creating sanctioned discourses in the Basin. However, currently other riparians (mostly Ethiopia) began to influence the political agenda in unilateral, bilateral and multilateral relations (Cascão, 2008) and these scenarios has been assessed in the next two chapters (Chapter 4 and Chapter 5).

Structural power is a less evident form of power, since it mainly stresses on “power of ideas”. It is a dimension power that “prevents people, to whatever degree, from having grievance by shaping their perceptions, cognitions and preferences in such a way that they accept their role in existing order of things” (Cascão,2009b). It essential to understand the asymmetric power relation resulted from the influence of knowledge, perception, ideas and discourse, having capacities to emphasize and particular perspective.

3.2.1.1. Geographical power

The form of power considered to be one of the most influential types of overt power (Cascão and Zeitoun 2010a, p. 31), as it is clearly visible and gives the upstream country an advantage and a possibility to manipulate water flows (Frey 1993 p.61 quoted by Cascão 2009b p.75). However, Egypt is a unique case in this regard as it is the hegemonic country in the basin while being the most downstream and severely dependent country on the waters of the Basin. Thus, this indicates geographical determinism does not work and geography is not always the most important predictor of power (Cascão and Zeitoun 2010a).

This condition is only conventional by looking at the geographical location of riparian states for understanding which country is well-located (well-positioned) compared to other riparians. However, the location could only be measured only in terms of being upstream and downstream of the river basin, which could be of little use in analyzing the differences among the lower riparian states with equal powers.

3.2.1.2. Material power

It considers material capabilities, including economic power, military might, technological prowess, relative size and international political and financial support that are used in order to gain the compliance of other parties (Cascão and Zeitoun 2010a, p. 31; Zeitoun and Warner 2006). This criterion thus resembles the typical type of power analyzed often in the realist

perspective of the international relations. This forms of power dimension provides partial explanation of power asymmetry in power relation, however this material power is not enough alone to gain the compliance of the weaker riparians (Cascão 2009b, P.76). Material power can influence the control if it is combined with bargaining and ideational dimension of power this material power is measured in terms of economic power, military power, technological prowess, international support and amount of water resource of the riparians (Cascão and Zeitoun 2010a).

Economic power could be measured using, two criteria, i.e. the gross domestic product (GDP) at purchasing power parity (PPP) and GDP growth (Tellis et al, 2000). Military power also requires criteria that are readily available and easily comparable. Such measures could take the forms of the share of military expenditure as a percentage of GDP, the number of active military personnel or the size of the defense budget of the riparian states. These criteria are typical measurements for military might and demonstrate in a comparative manner the similarities and differences, and hence enable to rank the riparian states. Tellis et al. (2000, p. 137) have also proposed that the criteria of defenses budget and manpower as the two main indicators for measuring military might.

The existence of powerful friends and a good political position in the world can also give a stronger footing in the Basin (Zeitoun and Warner 2006, p. 449). Therefore, by looking at the financial and political support given to riparian states their power in the Basin can analyzed. As a result, Egypt is more advanced in material as well as political power in the Basin as well as in Africa. There exists also a change in power relation in the Basin as Ethiopia began to obtain considerable increase financial and political support from the superpowers mostly in the name of war-on-terror as mentioned in Chapter 4.

3.2.1.3. Bargaining power

Bargaining power is a form of power which considers the “capability of actors to control the rules of the game and set agendas”, and refers to the power of influencing the terms of agreements for getting desired results (Cascão and Zeitoun 2010a, p. 31). Some examples of the bargaining power are: finding official recognition through international treaty, claiming the moral high ground by linking the question with international water law, issue-linkage, influencing the negotiations by imposing the terms of bilateral agreements, refusing to negotiate

and cooperate, or agreeing to negotiate only on its own terms, promoting cooperative institutions and using trade-offs (Cascão and Zeitoun 2010; Zeitoun, 2008).

According to Cascão and Zeitoun (2010b, p.31), this type of power is strongly influenced by the relations between the countries, e.g. if each side has a legitimacy in the group, this form of power helps to compensate the lower level of material power. Bargaining power is one of the main tools for non-hegemonic states to compensate the asymmetric situation either from geographical or material power.

Egypt receives considerable international financial support in exchange for partnership. In addition to the military assistance, the country has received the second largest sum of American foreign aid annually since 1979⁵ as stated in Chapter 4, which has acted to support its economic position further. However, despite such Egyptian dominance in the fields of economic, military, technical and international diplomatic capacity in the Basin other riparians began to challenge the hydro-hegemony of Egypt. For example, Ethiopia had come up with various unilateral hydroelectric dam developments in the Basin, as well as leading other upstream states to sign and ratify the CFA.

3.2.1.4. Ideational power

This dimension of power stands for “the capacity of a riparian to impose and legitimize particular ideas and narratives” and is thus considered to be the less visible and the most abstract form of power (Cascão and Zeitoun 2010b, p. 32). The power over ideas thus enables the basin's hegemon to shape the course of actions, perceptions, cognitions and preferences; and manipulate the interaction with other riparian countries by using sanctioned discourse, i.e. delegitimizing other types of discourse with its own hegemonic rhetoric, and thereby hiding necessary information or data (using silence), sharing ambiguous information, having better knowledge about the situation, stalling deliberately (intentional use of time), trying to securitize the water issues by changing them to the matter of top national security and overemphasizing some minor issues, using issue-exclusion and co-opting (Cascão and Zeitoun 2010b; Warner and Zeitoun 2008; Zeitoun 2009; Zeitoun and Allan 2008). Egypt's ‘ideational power’ in sanction discourse is also strong by the constructing narratives regarding its ‘absolute dependency’ on the river's

⁵ Egypt receives the largest sum of American foreign aid next to Israel (see 4.2.2.1 and 4.2.2.2)

waters or as ‘being the driest’ state having no other source than the Nile. And, by emphasizing the idea of Nile water as an issue relating to ‘national security’, whilst promoting its ‘prior use’ claim (Zeitoun 2012, Cascão & Zeitoun 2010, Cascão 2009b, Carles 2006).

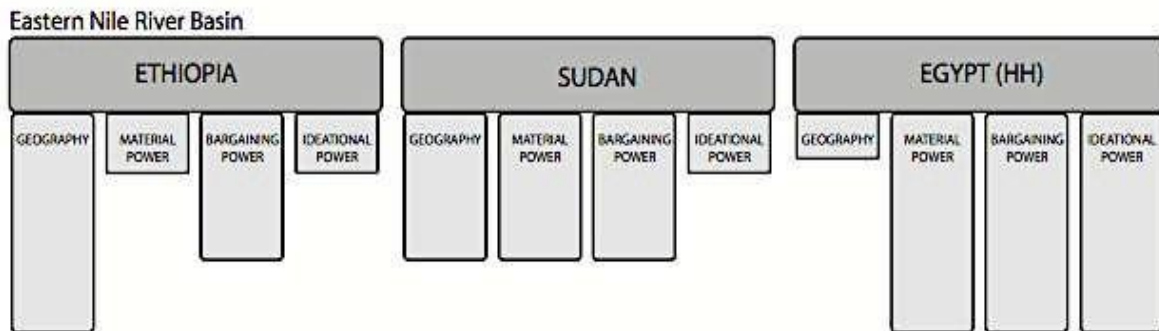


Figure 3: Suggested plot of hydro-hegemony configuration in the Eastern Nile Basin (Cascão and Zeitoun, 2010a, p.33)

3.3. The counter Hydro-Hegemonic strategies adopted by Ethiopia

Both ‘hegemony’ and ‘counter-hegemony’ are “dialectical pairs (Zeitoun et. al., 2014). There are various counter-hegemonic mechanism and strategies adopted by Ethiopia to contest against the hydro-hegemony of Egypt in the Eastern Nile Basin characterized by asymmetry of power relation. Cascão (2009b; 2008), argued that hydro-hegemony is not incontestable; by saying the established hegemonic order may often be challenged and resisted through variety of counter hegemonic strategies. According to Cascão (2009b) these counter hydro-hegemonic strategies adopted by Ethiopia are coercive, leveraging and liberating.

However, under this research the counter hydro-hegemony mechanisms considered to be applied by Ethiopia are leveraging and liberating mechanisms. In which the leveraging counter hydro hegemonic mechanisms refers to strategies developed by non hegemons in order to enhance political leverage and bargaining power in the Basin. These leverage mechanisms used by non hegemons include diplomatic (pro-active and reactive) strategies, use of international water laws, construction of unilateral hydraulic infrastructures, and use of bilateral and multilateral cooperation to level the hydropolitical ground (Cascão, 2009b; 2008).

The liberating counter hydro-hegemonic mechanisms used by non hegemon refer to the contestation strategies that aspire not only to confront the legitimacy of the hegemonic order, rather to weaken the ideological basis of the hydro-hegemonic order by bringing an alternative discourse. These liberating mechanisms include alternative discourse and knowledge, to deconstruct sanctioned discourses imposed by the hegemon. In which these liberating mechanisms are directly related to ideational powers (ibid).

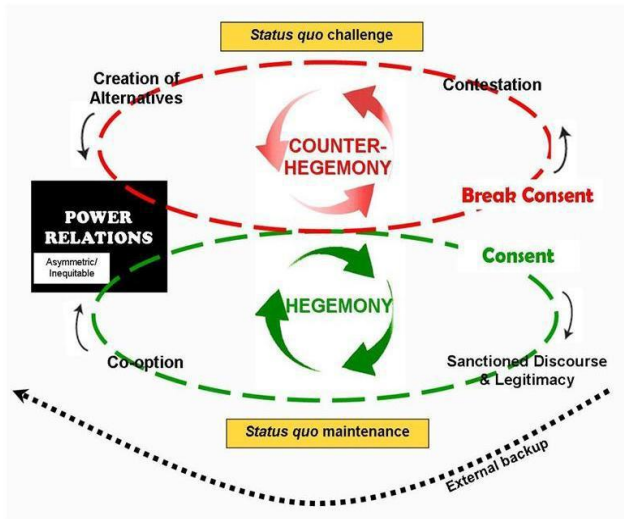


Figure 4: Abstract model of hegemony and counter-hegemony, (Cascão 2008, p:-16)

CHAPTER FOUR

4. Changing Power Relation in the Eastern Nile Basin

4.1. Background

In this chapter the researcher tried to analyze and discuss Ethiopia and the changing power relation in the Eastern Nile Basin in terms of the four pillars of power as stated by Cascão and Zeitoun (2010a). They have applied these four pillars of power to indicate the hydro-hegemony of Egypt in Basin. These four dimensions of power include geographical power, material power, bargaining power and ideational power. However, in this thesis these four pillars of power are used to analyzes and discuss Ethiopia's changing power relation in the Eastern Nile Basin.

4.2. Ethiopia's Role in the Changing Power Relations of the Eastern Nile Basin in terms of the four pillars of Power

The Eastern Nile Basin has been characterized by the existing power asymmetry among the riparian states. Egypt is the hydro-hegemon in the Basin by applying various mechanisms to preserve its status quo as stated by (Cascão and Zeitoun, 2010; Cascão, 2008; 2009b; Zeitoun and Warner, 2006). As clearly stated in the conceptual framework part hydro-hegemony and counter-hydro hegemony (resistance) are dialectical pairs (Zeitoun et.al, 2014), and Ethiopia has been applying various contestation mechanisms (counter hydro-hegemonic mechanisms) against the Egyptian hydro-hegemony (Cascão, 2009b; 2008). As a result, there has been a change in power relation among the Eastern Nile Basin states, as the most upstream state Ethiopia is becoming a challenge to Egypt's hydro-hegemony (Cascão and Zeitoun, 2010b; Cascão, 2009a; Cascão, 2009b; Cascão, 2008). Ethiopia's growing power in the Eastern Nile Basin under this topic is being discussed based on the four pillars of power stated by (Cascão and Zeitoun, 2010a, Cascão and Zeitoun, 2010b).

4.2.1. Geographic power

The centrality of Ethiopia to the Horn of Africa is certain giving the country a better significance than any other state in the region (Clapham, 2015). Ethiopia is by far one of the largest states in the region, in terms of territory, population, economy (as being one of the fastest growing states in the world) (World Bank 2015; 2013) and also in terms of military power (kidist, 2014). Ethiopia also shares a border with almost every state in the Horn of Africa, and considers its relation with every state in the region as vital to its development and stability (Ministry of Information, 2002). The country also enjoys a privileged position in mediating the regions relationships with the rest of the world, both in Africa and beyond (Clapham, 2015).

According to (Interview with Fekahmed, 9 March 2016) he said “generally speaking the upstream position of Ethiopia in the Eastern Nile Basin can be seen as a better advantage. In the past the geographic position of Ethiopia was believed to be the only power Ethiopia had in the Basin”. For him “Ethiopia was known for its poor economic performance causing a severe shortage in domestic funding to construct its own national hydroelectric dam projects. These were resulted from lack of internal stability, and continued civil war”. As a result, he said; “in the past Ethiopia was not even in a better position to fully utilize its geographic position in the Basin as the most upstream state”.

Geography can only be advantageous when an upstreamer primarily combined it (geographic power) with financial (economic) and military powers (Zeitoun and Cascão, 2010). Ethiopia in order to fully utilize its geographic power in the Basin, it had to deal with the above mentioned protracted problems. In support of this argument (Interview with Mehari, 26 February, 2016) said “in the past Ethiopia was not able to utilize its geographic position as an upstream state in the Eastern Nile Basin and its centrality in the Horn of Africa, due to the continual conflict, poverty and mistrust that had been taking place in the country. However, the recent change in the foreign policy to a more ‘inward’ looking has paved the way for the country to address its internal problems and began to utilize its geographical position”.

In Eastern Nile Basin the major hurdle for Ethiopia to assert its geographic power was a response from Egypt by increasing its political pressure (since it has good relations with the West and the Arab League, military threat, etc), which often exacerbates conflict rather than promotes cooperation (Kehil, 2011). As a result, Ethiopia has been wisely asserting its geographic power in the Basin until it becomes politically stable and brings sustainable and rapid economic growth.

Speaking of geographic power Ethiopia has the most convenient position as compared to Egypt and Sudan in the Eastern Nile Basin by generating almost 86% of the Nile waters as indicated in Table 1. The geographic power of Ethiopia in the Eastern Nile Basin is a static fact which always favors Ethiopia in the Basin. And, through time Ethiopia has been able to utilize its geographic power by entrenching it together with other pillars of power (material, bargaining, and ideational) stated by (Casção and Zeitoun, 2010a).

As a result, (Interview with Teshome, 8 March 2016) “Ethiopia has been able to come up with national projects by using its geographic position (as an upstream state) in the Basin and topographic endowment together with the rapid economic development. In doing so Ethiopia is aspiring to meet the domestic growing demand of electric power and further to integrate the region (the Basin) by electric power”.

4.2.2. Material power

According to (Casção and Zeitoun, 2010a) material power is measured in terms of economic power, military power, technological prowess, international support and amount of water resource of the riparians. Material power can influence the control of riparians when it is combined with bargaining and ideational dimension of power. However, this section managed to discuss only on the economic and military aspects of material power.

4.2.2.1. Economic power

According to World Bank reports (2013; 2015), Ethiopia is a non-oil dependent landlocked country with rapid and stable economic growth for the past decade. Based on the official data the Real GDP growth averaged 10.9 percent in 2004-2014. The country moved from being the 2nd poorest in the world by 2000 to the 11th poorest in 2014, according to GNI per capita, and came closer to its goal of reaching middle income status by 2025. Ethiopia is also one of the fastest growing

economy by exceeding what has achieved by low-income and Sub-Saharan African countries in that period. Recent growth was also noticeably stable, as the country avoided the volatility caused by civil war which had beset economic growth in the past.

The rapid economic development that was recorded in Ethiopia was achieved under the leadership of the late Prime minister Meles Zenawi, by his democratic developmental state policy. This democratic developmental state can be defined as something that has a capacity to deploy its authority, credibility and legitimacy in a binding manner to design and implement development policies and programs for promoting transformation and growth, as well as for expanding human capabilities. In which the state takes a mandate for overall socio-economic aspiration, the long-term growth and structural transformation of the economy, with equity. Under the democratic developmental state ideology state earns legitimacy and keeps its power for a long time through both economic performance and democratic procedure (Teshome, 2012, p.388).

The Foreign Affairs and National Security and Strategy document of Ethiopia also indicates, lack of democratization, poverty, and backwardness are threats to the national survival of Ethiopian statehood system. There can be no doubt that the attainment of speedy economic development, democratization, and peace is fundamental to the survival of the country, which finds itself in a state of abject poverty and backwardness (Ministry of Information, 2002). This indicates on how the developmental state gives top priority to the agenda of poverty eradication and sustainable economic development, which improving the well-being as well as the living standards of the nation. Then, the developmental state has declared poverty as its number one enemy and follows a strategy focusing on poverty reduction and eventually eradicates it from the nation.

The Government of Ethiopia thus has developed energy policy to increase and diversify the sources of energy supply in the country. Before 2002, the country was producing only 478 MW. Between 1991 and 2002 the national economy obtained only 226 MW. That means the annual production of the hydropower supply was only 19 MW. But after 2002, just within ten years the country managed to produce additional 1460 MW, due to the construction of hydropower plants, including Tekeze, Gibe I, Gibe II, and Tana Beles plants. And, the Ethiopian Electric Power Corporation (EPPCO) stretched transmission lines from 8,380 km (2004/5) to 12,147km

(2009/10) while power substation lines mushroomed from 25,000 km to 126,038 km (Teshome, 2012).

According to (Interview with Tefera, 4 March, 2016), “the major motive behind the Ethiopian government hydraulic infrastructural development is resulted from the rapid economic growth that has been taking place in the country for the last decade. And, this rapid economic growth has led to the increase in energy demand, as the life style of the people changes. As a result, Ethiopia is undertaking the construction of various hydroelectric dam projects in every corners of the country having a wider vision beyond satisfying the domestic demand, i.e. to further integrate the region thorough electric power. Here one of the major mega hydroelectric projects that need to be mentioned in this regard is the GERD”.

The GERD is an indicator of economic development of Ethiopia that aims to make the country a low carbon dependent and middle income economy (Maupin, 2016). With the completion of the GERD project Ethiopia aspires to integrate economically as well as politically with its neighboring countries. Such fact will give Ethiopia a political leverage in the Basin’s hydropolitics by becoming the power house of the region (Ezana, 2015). In support of this (Interview with Teshome, 8 March, 2016), said “the GERD is a result of the growing demand of power in Ethiopia. It will also allow Ethiopia to export cheap electricity to neighboring countries. This will have a positive effect on regional integration and development.”

According to (Interview with Mehari, 26 February, 2016), he stressed that “it is true that Ethiopia has been recoding rapid economic growth and such fact will assist Ethiopia to enhance its role in the Basin’s hydropolitics in a relative sense by constructing mammoth dams in every corners of the country. But it should be noted that this will not bring a change in the power relation of the Basin swiftly. This is due to the fact that Egypt still has a strong economy in the Basin together with the financial aid it receives from the US and Gulf states due to its geostrategic significance”.

Table 4: Economic indicators of the Eastern Nile Basin

Country	Economic indicator	2005	2010	2013	2014
Egypt	GDP \$ Million	89685.7	218888.3	271772.8	286538.0
	GDP growth %	4.5	5.1	2.1	2.2
	Inflation (CPI)	4.9	11.3	9.4	10.1
	Unemployment	11.2	9.0	12.7	-
	FDI % of GDP	6.0	2.9	1.5	1.7
	Military Expenditure % of the GDP	2.9	2.1	1.7	1.8
Ethiopia	GDP \$ Million	12401.1	29933.8	47524.7	54797.7
	GDP growth %	11.8	12.6	10.5	9.9
	Inflation (CPI)	12.9	8.1	8.1	7.4
	Unemployment	5.4	5.4	5.7	-
	FDI % of GDP	2.1	1.0	2.0	-
	Military Expenditure % of the GDP	2.8	1.1	0.8	0.7
Sudan	GDP \$ Million	26525.0	65634.1	66480.7	73815.4
	GDP growth %	7.5	3.5	3.3	3.1
	Inflation (CPI)	8.5	13.2	30.0	36.9
	Unemployment	14.8	14.8	15.2	-
	FDI % of GDP	5.9	3.1	2.5	1.7
	Military Expenditure % of the GDP	4.4	-	-	-

Source: BTI/Egypt, Ethiopia and Sudan (as of October 2015): The World Bank, World Development Indicators 2015 ; International Monetary Fund (IMF), World Economic Outlook, October 2015 ;Stockholm International Peace Research Institute (SIPRI), Military Expenditure Database 2015.

Egypt is by far greater than both Ethiopia and Sudan in terms of economy, it is also believed be one of the strongest economies in Africa as well (see the GDP \$ Million of the three countries from table 4). Egypt's economy mainly depends on volatile external sources of revenue such as tourism, Suez Canal and remittances from workers in Arab oil-producing countries. These revenues began to fluctuate after the Arab spring which mostly affects the tourism sector and the FDI. And, the global economic situation and labor politics in the oil-producing countries also have adverse effect on the Egyptian economy (BTI, 2016).

According to (Interview with Fekahmed, 9 March 2016) said, “Egypt has encountered various internal problems (including the Egyptian Uprising) causing a relative economic slowdown, while Ethiopia scores rapid economic development for the last decade. This rapid economic growth in Ethiopia has enables the country to come up with various unilateral national hydroelectric dam projects in the Eastern Nile Basin by generating domestic fund, despite Egyptian’s diplomatic success by blocking international funding as it used to do in the past”.

In the Eastern Nile Basin Sudan’s economy had been a better performing economy as compared to Ethiopia. However, Poverty becomes widespread due to the sharp decline in revenue from oil following the secession of South Sudan in 2011. This has also led to the loss of the optimism that has been taking place between 2000 – 2010, in which FDI has deteriorated, and inflation has risen rapidly to around 45% in 2014 (BTI, 2016). While such condition took place in Sudan, as Ethiopia scores rapid economic growth (World Bank, 2013; 2015), started to become a key regional player in the region (Kidist, 2014), and became able to commence the largest hydroelectric mega project in Africa (the GERD).

Ethiopia in the last decade has recorded a rapid annual economic growth rate as compared to that of Egypt and Sudan as indicated in see Table4. Egypt’s economy has been suffering mostly after the January 2011 Arab spring and continual political turmoil leading the tourism sector to face challenge. Sudan on other hand also faced major economic slowdown mostly after the independence of South Sudan (July 2011) as it loses its oil revenue. However, Ethiopia as indicated in Table 4 has been able to achieve a rapid economic growth for the last decade, giving the country a relative power to leverage on some transboundary water issues. Due to the continual economic growth the country became able to construct hydroelectric dam projects in the Nile Basin which were entirely funded by domestic sources like the Tekeze 2009, Tana Beles 2010 and the GERD 2011. In doing so, Ethiopia has been able to narrow a highly polarized power asymmetry in the Basin.

4.2.2.2. Military power

For a state to be a key player over regional security matters or to influence decision over the shared transboundary water resources it needs to have sufficient military and economic power. However, states with only military predominance may create a temporary zone of influence and control which will not last long. Combining a state's military and economic power with demographic size and diplomatic effectiveness further strengthens the countries regional influence. It should be noted that Ethiopia is an ancient state having a long tradition of independent statehood and statecraft. Ethiopia has never been colonized, as a result it was active in the delimitation of its own borders and its successive and remodeled state institutions were and are still relatively strong (Kidist, 2014; Zeitoun and Cascão, 2010). According to (Interview with Mehari, 26 February, 2016), "Ethiopia is ancient state in Africa with strong military culture which is still evident in the present time, as it becomes a key player on War-on-Terror terrorism in Somalia and peacekeeping missions in various parts of Africa".

Ethiopia is building one of the prominent military forces in the Horn of Africa. It is widely assumed that regardless of changes of governments and ideologies in Ethiopia have always put in place a high regard to their military institutions (African globe, 8 April 2014). Here it should also be noted that currently Ethiopia has managed to attain better military position while spending least on its military in proportion to its GDP (Cillers et.al, 2015). Such condition has raised Ethiopia's bargaining power in the region, as it becomes a key player in the global War-on-Terror and peacekeeping role.

In terms of military Egypt is by far in a superior position in the Eastern Nile Basin as well as in Africa (Cascão and Zeitoun, 2010a). It is widely believed that the US has provided Egypt with a total of USD 64 billion in economic and military aid since 1979, or nearly USD 2 billion per annum, of which USD 1.3 billion has tended to be in military grants. US military grants to Egypt followed on from the signing of the Camp David Accords, when military and economic grants were paid to Israel and Egypt to facilitate the cessation of hostilities and the return to Egypt of the Sinai Peninsula (Eriksson, 2012). This situation assisted Egypt to have the most advanced military power in the Basin as well as in Africa, giving it a greater leverage over the Nile related issues.

Currently Ethiopia is also become a key regional player in terms of its good relation with regional states, as well as the superpowers, since it has a greater role for stability of the Horn of Africa and the Global War-on-Terror. And Ethiopia has managed to utilize this fact to modernizing its military power as it receives military assistance from superpowers. By the same token, Ethiopia and the U.S. have partnered in training Ethiopian defense forces in counterterrorism strategies and have collaborated on intelligence, security, and military initiatives. Ethiopia is a crucial player in the Partnership for Regional East Africa Counterterrorism (PREACT), an American-funded program focusing on developing counterterrorism capacity in the region through military training and improved governance programs. This program focuses on enhancing states' abilities to address both regional and domestic threats by increasing security sector capacity (Matfess, 2015).

The military power of Egypt and Ethiopia is incomparable; however, seemingly Ethiopia's stability and good relation with the regional states as well as superpowers helped the country to become a kingpin on the issues of "war on terror". And, this scenario helped Ethiopia to gain some military support from superpowers as mentioned above. As a result, such conditions also assisted Ethiopia to modernize and enhance its military power. Ethiopia's military (METEC) is taking part in mega projects like the GERD together with other globally renown multinational contractor Salini. This will lead to a technological transfer that will enable Ethiopia to undertake unilateral hydroelectric dam projects using its own experts in the near future.

4.2.3. Bargaining power

Bargaining power refers to the ability of actors to set agendas and control the rule of the game, and their ability to define the political bound of an agenda. However, bargaining power is not always an exclusive possession of the hegemon; rather it is a dimension of power that makes the weaker (non hegemon) actor in a given basin not as weak as they may be supposed. It is through bargaining power that non-hegemons can advance their negotiation position vis-à-vis the hegemon; these will further counterbalance the weakness of the non-hegemons (Cascão and Zeitoun, 2010b, p.189).

In the Nile Basin Egypt was successful in establishing the parameters of regional agenda and negotiation in its own favor. In support of this (Interview with Fekahmed, 9 March 2016) said, "there had been power asymmetry in the Nile Basin, in which Egypt had remained powerful state

in the region and it has been setting an agenda and control the rule of the game. Egypt had been using various cooperation (Hydro-Met, Undungu, TECCONILE), and agreements (the 1929 and 1959) that would support their status quo in the Basin. In which Ethiopia had been refusing to take the membership status, and by openly rejecting and objecting the agreements that excludes the upstream states”.

Egypt was strictly refusing to negotiate with upstream riparians until 1980s; but, in the mid 1990s Egypt has agreed to negotiate for multilateral and all-inclusive cooperative framework agreement. In the Nile Basin upstream states were lacking internal capacity to establish rational water, discourses and agendas which makes them weaker in bargaining power as compared to downstream states. Before mid 1990s upstream’s contestations were in separated nationalist type of discourses about water rights aiming to bring territorial sovereignty and reactive diplomacy. Here we can mention Ethiopia’s continual effort by letter of protest against the 1959 agreement as well as reactive diplomacies in 1970s and 1980s (Casção, 2009b; 2008).

According to (Interview with Teshome, 8 March 2016), “Ethiopia was struggling to bring a more equitable and reasonable water regime in the Basin. And, as a matter in fact Ethiopia has refused to take part in the Egyptian dominated cooperation over the Nile. However, in the mid 1990s Ethiopia had gained a momentum to bring an agenda for the upstream states to negotiate with the downstream states concerning equitable usage of the Nile waters, in the presence of the third parties, that led to the coming of all inclusive cooperative institution i.e. the NBI”.

Table 5 Factors and evidences for the increase of Ethiopia’s Bargaining Power

Year	Factors and evidences for the increase of Ethiopia’s Bargaining Power
2005	East African Power Pool (EAPP) among Burundi, DRC, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda began
	The Joint Multilateral Project (JMP) was signed between Egypt, Ethiopia and Sudan
	Ethiopian Power System Expansion Master Plan (EPSEMP) came into being
2007	MoU Ethiopia and Sudan export deal
2010	The CFA was signed by Ethiopia, Uganda, Rwanda ,Tanzania and Kenya
	The signing for the construction of the GERDP (Grand Millennium Dam)
2011	Ethiopia announce it began the construction of the GERDP
	Formation of the International Panel of Experts (IPoE)
	Burundi joined the CFA
	Ethiopia-Djibouti and Ethiopia-Kenya electric power export deal
	The Republic of South Sudan gained independence
2012	Ethiopia-Kenya-South Sudan LAPSSET
	MoU Ethiopia-South Sudan Joint Strategic Partnership
	Eastern Electricity Highway Project Launched (Ethiopia, Kenya, Burundi, Tanzania, Uganda, Rwanda ; World Bank funded and US backed
2013	South Sudan rejects the 1959 agreement, Ethiopia and Rwanda ratifies the CFA
	Ethiopia- South Sudan peace and security agreement
	Ethiopia starts diverting the Nile, and rejects Egypt’s proposal to halt the GERDP
	Sudan’s President Basher states his support to GERD; Ethiopia-Sudan signed 13 agreement
	The IPoE submitted its report
2014	Ethiopia rejects Egypt’s offer to co-finance the dam
	Ethiopia-Sudan security agreement
	The Malabo declaration
	Ethiopia and Rwanda signed 400 MW energy deals
	Tripartite National Committee (TNC) formed and it prepares its Rule of procedure selecting two consultancy firms the BRL and Deltares (later replaced by Artelia)
2015	The Declaration of Principle over the GERDP was signed between Egypt, Ethiopia and Sudan
	Ethiopia diverts the Nile to its original course over the dam culvert valve

Source: Ethiopia’s Hydraulic Mission: consolidating National Hegemony for an Outward Expanaion of Power in the Eastern Nile River Basin?, from the presentation given on seventh

International Workshop on hydro-hegemony London Water Research Group and the University of Angla 10-14 May 2014, by Grandi Mattia, PhD Student Santa Anna School Pisa Italy

The Ethiopian Power System Expansion Master Plan (EPSEMP) 2006-2030 specified two principal objectives: expanding the accessibility of electricity, and overcoming electricity shortage by generating a massive surplus of cheap electricity that was also suitable for export. The master plan has intended to raise the access to increase to 75 per cent by 2016, domestic demand to double in five years and nine countries to become potential buyer of electricity generated in Ethiopia: Djibouti, Egypt, Eritrea, Kenya, Somalia, Somaliland, South Sudan, Sudan and Yemen. The EPSEMP 2006-2030 even mentioned the prospect of making exports to Europe, either through Morocco or Turkey (EPSEMP as cited by Cuesta-Fernandez, 2014; p. 96).

According to (Interview with Tefera, 4 March, 2016), “the GERD is a central part of Ethiopia’s wider energy policy, to build a carbon free sustainable economy, and to integrate the Nile Basin through electric power. Since the demand for energy in the country is rising due to the rapid economic growth for a decade. The government has constructed hydroelectric dams and put them in place within consecutive years, for example Tekeze (2009), Gilgel Gibe (2010), Tana Beles (2010), and the commencement of the GERD in 2010/11”. This indicates the commitment on the part of the government to mitigate the rising domestic demand for electric power and to integrate the region through electric power.

Ethiopia’s hydroelectric dam projects with the aim making Ethiopia energy hub has received support from African Development Bank and the World Bank. Before Ethiopia launches the GERDP in 2011 (the Millennium Dam) the project was included under the AU’s Program for Infrastructure Development in Africa (PIDA). PIDA represent the AU’s vision to link African power pools by integrating major hydropower projects. And, by considering Ethiopia’s plan to sell electric price with low cost, would make Ethiopia a strategic nerve centre for the EAPP grid (Maupin, 2016).

The Eastern Africa Power Pool (EAPP) was established in 2005 in Addis Ababa. The mission of the EAPP is to facilitate power resources development in economically and environmentally sustainable manner, to ensure adequate and secure power in cheaper price. It also focuses to integrate and interconnect power transmission grids. This power pooling through regional electric

market integration system will advance the reliability of electric supply and political security. In which the EAPP is funded by the World Bank, African Development Bank and the US government (Araka, 2015). And, on 8 February 2016 the councils of Ministers from the ten Nile Basin states has officially signed the 25 year EAPP master plan despite Egypt's boycott and withdrawal (Peppeh,2016).

(Interview with Zerubabel, April 2016), "Ethiopia's involvement in the EAPP will facilitate a chance to sell its hydroelectric power in a reasonable price to further integrate the region through electric power". He believed that "this energy integration will enhance Ethiopia's bargaining role in the region". And, for (Interview with Tefera, 4 March 2016), He said "Ethiopia would play a significant role in the EAPP as it serves electric power with lower cost to its neighboring states, especially after the completion of the GERD and connect the Eastern Nile region by electric power". He also affirmed that the GERD is instated by taking the current and future regional market under consideration.

Ethiopia has been exercising a considerable bargaining power in the Eastern Nile Basin despite its weaker position in the Basin (Cascão and Zeitoun, 2010b). Ethiopia has been putting its position i.e. "equitable and reasonable" (Yacob, 2007) usage of Nile waters with both upstream and downstream states. Ethiopia's bargaining power was clearly observed as Ethiopia brought legal issue in the Basin's hydropolitical agenda to establish all inclusive cooperative agreement (Cascão and Zeitoun, 2010b; Dereje, 2010). Such conditions have assisted Ethiopia in narrowing the power asymmetry in the Basin.

4.2.4. Ideational power

Ideational power is vital in explaining asymmetric power relation in the Nile Basin. Ideational powers include ability to influence perception, the agenda, the discourse, or the timing of negotiation and projects. Ideational power applies various strategies like stalling, issue exclusion, and securitization (see 3.1.). In the Eastern Nile Basin Egypt has been able to build image as the most downstream and driest (arid) state, as result Egypt wants to have a 'lion's share' in the Basin. Egypt had also been trying to divert the attention from a controversial "water sharing" to a consensual 'benefit sharing'. However, upstream riparians came up with an alternative discourse of 'equitable and reasonable utilization of water resource' (Zeitoun and Cascão, 2010a).

Ethiopia has been applying both bargaining power and ideational power by putting the argument of “equitable and reasonable” usage of Nile waters within the CFA. This was opposed by downstream states (Egypt and Sudan) by considering such act as threat to their status quo. As stated in Table 7 Ethiopia and four other upstream states (Kenya, Rwanda, Tanzania and Uganda) have managed to sign the CFA in 2010 (see 5.3.1.). In which despite Egypt’s effort to convince Burundi not to sign the CFA, Burundi became the 6th signatory of the CFA on 22 February 2011 just one month after a Egypt Arab spring began (Nicole and Cascão, 2011), and the newest state in Africa South Sudan had also openly declared its opposition to the colonial era agreement in 2013 (Aljazeera, 20 June, 2013). And, even after Ethiopia’s ratified the CFA (2013), it was followed by Rwanda (2013) and Tanzania (2015) (see 5.5.2.). Ethiopia has also been showing a considerable increase in terms of the hydraulic related experts, this situation can assist Ethiopia to come up with an alternative knowledge and discourse, to counter Egypt’s sanctioned discourses.

According to (Interview with Yacob, 4 May 2016), he agreed that “Ethiopia has been able to raise both the quality and the quantity of hydraulic related experts. In the past hydraulic experts had been enrolling either in Arba-Minch Water Technology Institute or in Addis Ababa University. And, many students were also given a scholarship to study different hydraulic related fields abroad. Currently there are enormous hydraulic experts enrolling in different newly established universities in Ethiopia. Such conditions has raised the number of hydraulic related experts to take part in the national hydroelectric dam projects the country aspiring to undertake”.

(Interview with Yacob, 4 May, 2016) he also said “there have been some hydroelectric dam projects that are under construction in Ethiopia”. And he said that “in one way or another, these Ethiopian experts working in these mega hydroelectric projects will be able to gather a very rich experience and knowledge from the foreign contractors undertaking the projects”. (Interview with Teshome, 8 March, 2016), on his part said “Ethiopian experts are currently involving in the mega hydroelectric dam projects which are under construction like the GERD and Gibe III acquiring a good knowledge and experience. The technological transfer and knowledge these experts acquire will benefit the country to undertake more hydroelectric projects in the future”.

It was certain that Egypt has the upper hand in creating sanctioned discourses by securitizing issues related to water security. Egyptian officials used to argue that the Nile as the only source of water for Egypt. The idea behind this discourse is to maintain the existing status quo, granted to Egypt by the 1929 and 1959 agreements⁶. However, currently some reports indicate that Egypt has discovered a groundwater which is expected to last for centuries (Egyptian Street, 2016). These can be used by Ethiopia to counter the long held Egyptian sanctioned discourse and ideational power of considering Nile as the only source of water for Egypt.

Finally Ethiopia has been changing in terms of ideational power as it challenges the long held Egyptian status quo in various aspects. These include in bringing the agenda of equitable and reasonable usage of Nile waters within the legal framework despite downstream opposition. And, further Ethiopia has managed to ratify the CFA (see 5.3.1. and 5.5.2). Ethiopia has also raised the number and the capacity of hydraulic related experts that would enable the country liberated from the long held belief that, it is found on the “beginning of Nile learning curve” (Waterbury, 2002 as quoted by Cascão, 2008). Many Ethiopian experts are currently working on the mega hydroelectric projects that are underway that would assist them in gaining experience and knowledge from the foreign contractors undertaking those project. And, this would assist Ethiopia in narrowing the gap on the asymmetry observed in hydraulic expertise based knowledge.

4.3. Conclusion

The Eastern Nile Basin is known for the existing power asymmetry, with Egypt being the hydro-hegemon. Egypt mastered mechanisms to preserve the status quo and to remain as the sole power holder and maker over the Basin’s hydropolitics. Counter hydro-hegemonic exercise exists within a hegemonic hydropower relationship. Particularly Ethiopia has been employing different counter-hegemonic efforts to challenge the Basins power relation to its favor (3.3.).

⁶ Art 44 of the constitution of Arab Republic of Egypt states: - The State shall protect the River Nile, preserve Egypt's historical rights thereto, rationalize and maximize its use, and refrain from wasting or polluting its water. The State shall also protect groundwater; adopt necessary means for ensuring water security; and support scientific research in that regard. Every citizen is guaranteed the right to enjoy the River Nile. It is prohibited to trespass the riverbank reserve or harm the river environment. The State shall guarantee eliminating any trespass against the River Nile as regulated by Law.

Being an upper riparian state and contributing the majority of water to the Eastern Nile Basin, Ethiopia has the highest geographic power. Continued conflict and abject poverty restricted Ethiopia from fully utilizing the affordance of geography. Ethiopia restricted its bargaining actions to minor actions, such as apparent consent, apparent silence, letter of protest etc, and by putting certain agenda in the Basin's hydropolitics as mentioned in the literature review and conceptual framework parts see (4.2.1.).

Ethiopia requires both material powers, in addition to bargaining and ideational power in order to fully utilize its geographic power in the Basin. The recorded rapid economic growth in Ethiopia for the last decade enables the country to exert a relative power in the Basin as stated in (4.2.2.1.). This rapid economic growth of Ethiopia has coincided as the Basin hydro-hegemon Egypt and the mid stream state Sudan entered into what seems like economic slowdown. These were due to the turmoil after the Egyptian uprising in 2011 which left a considerable adverse effect on the country's tourism sector as mentioned in (4.2.2.1.). And, as South Sudan seceded from Sudan in July 2011, Sudan lost most of its oil fields and the Sudanese economy started to suffer. In which the economic gap between Ethiopia and Egypt started to narrow in a relatively sense, although the difference remains immense.

Rapid economic growth has also made the idea of engaging in self financed unilateral national hydroelectric dam projects in Ethiopia convincing. Sustenance of the rate of growth by itself brings huge pressure to increase power generation simultaneously. As a result, Ethiopia constructed the Tekeze in (2009), Tana Beles (2010) and commenced the GERD in 2011 (5.2.1.).

In terms of military power Egypt is by far the utmost powerful state in the Basin as well as in Africa, and this power asymmetry in the Basin will continue for a quite protracted period as stated in (4.2.2.2). However, Ethiopia's military power is showing a considerable development in the Horn of African region, as it receives a military assistance from the superpowers as a part of global "War on Terror". Ethiopia also plays a significant role in peacekeeping in the Horn of Africa, and in some parts of Africa. This situation plays a significant role in enhancing Ethiopia's military power in relative sense.

As stated by Cascão and Zeitoun (2010b), non-hegemon states are not weak as they seem to appear, as they have significant bargaining power in the Basin. Ethiopia has brought the argument of “equitable and reasonable” usage of Nile waters at the center of the Nile politics see (4.3), (5.3.1) and (5.5.2). Ethiopia has also played a significant role bringing the upstream states into a united front to challenge Egyptian status quo, by signing the CFA, where Ethiopia (2013), Rwanda (2013), and Tanzania (2015) ratified the document. Ethiopia’s engagement in peacekeeping missions and the War-on-Terror in the Horn appear to have increased the political support that it gets from global powers, in turn increasing its bargaining power.

Mostly after the commencement of the GERD, Ethiopia has started to set the agenda for discussion concerning the dam. In this regard we can mention the formation of the IPoE and the signing of the DoP. The idea of forming the IPoE was proposed by the late Prime Minister Meles to build confidence of the downstream states concerning the construction of the dam as stated in (5.4.1). In the signing of the DoP one can observe that for the first time in history Egypt and Sudan has signed a principles that compromises their former stance of “acquired and historic” right in the Basin for a “equitable and reasonable” usage as stated in (5.4.2.).

Ethiopia’s commitment having a wider vision to integrate the entire Basin through electric power with fair price has also raised the country’s bargaining power. This rhetoric and the practice of connecting the country’s electric gridline with the region’s has been enhancing the image of the country as having a greater potential of being the energy hub for the Basin, and to further integrate the region in hydroelectric power. As a result, Ethiopia has been undertaking feasibility studies for various hydroelectric dam projects including the GERD through the NBI-ENTRO as stated in (2.6.1). Ethiopia has also been using AU’s vision to integrate African power pools with mega hydroelectric dam projects under the PIDA. The feasibility studies and continual assessments helped in the making of the blue prints for the coming unilateral national projects like the GERD see Table 3.

In terms of ideational power Egypt is powerful in the Basin, as Egypt produced and controlled the sanctioned discourses for the Basin⁷. However, the upstream states were able to come up with an alternative discourses against the sanctioned discourses. Egypt constructed the image that Nile is its only source of water and as such securitized it. To counter this socio-political construction, non-hegemonic states highlighted that Egypt is endowed with abundant groundwater resources which could last for centuries. This situation become as a means of challenging Egypt's sanctioned discourses concerning securitizing the issue of water in the Basin as stated (4.2.4.).

Ethiopia has also shown a considerable increase both in quality and quantity of hydraulic related experts. This is resulted from the continual hydroelectric dam projects that have been undertaken in Ethiopia. The hydroelectric dam projects have paved an opportunity for Ethiopian experts to garner experience and gain technological transfer from the foreign contractors which have been undertaking in the construction. This opportunity would be an asset for Ethiopia in raising the capacity of domestic hydraulic experts to undertake hydroelectric dam projects fully by Ethiopian experts in the near future (see interviews in 4.2.4.)

⁷ Egypt's long held rhetoric prior usage and historic right (Carles,2006)

CHAPTER FIVE

5. Ethiopia’s Counter Hydro-Hegemony Mechanisms and Strategies applied before and after the commencement of the GERD

5.1. Background

In this chapter of the research tried to examine the counter hydro-hegemony mechanisms and strategies employed between 2008 and 2011, and counter hydro hegemony mechanisms and strategies employed by Ethiopia post 2011 (mainly after the commencement of the GERD). In which the counter hydro hegemonic mechanisms were divided into leveraging and liberating mechanisms as described in the conceptual framework part and presented in Table 6. It should be noted that this counter hydro hegemonic mechanisms were adopted from (Cascão, 2009b). Cascão (2009b) did not include counter hydro hegemonic scenarios that has been taking place in the Eastern Nile Basin between the period of 2009-2011, and post 2011.

Table 6: The counter hydro-hegemony mechanisms and strategies employed by Ethiopia before and after the commencement of the GERD

period	Counter hydro hegemony mechanisms	Strategies
2008-2011	Leveraging	Unilateral national projects Feasibility studies by NBI-ENTRO
	Liberating	The signing of the CFA
Post 2011 (after the commencement of the GERD)	Leveraging	Formation of the IPoE
		Ethiopia’s attempt to secure Sudan’s support
		Signing of the DoP
	Liberating	Ethiopia use of public diplomacy
		GERD as unilateral national project Ratification of the CFA

Source: Cascão, 2009b; Tawfik, 2015

5.2. Leveraging counter Hydro-Hegemonic mechanisms (2008-2011)

According to (Cascão, 2009b) the counter hydro hegemony mechanisms applied by Ethiopia were mainly focus on the on the period prior to 2008. As a result, here in this section (6.2.) the researcher tried to deal with the leveraging counter hydro hegemonic mechanisms employed by Ethiopia between 2008 and 2011 which were not addressed by (Cascão, 2009b) and these mechanisms and strategies are clearly indicated in Table6. As stated in Table 6 the leveraging counter hydro-hegemonic strategies applied by Ethiopia includes unilateral construction of hydroelectric dam projects and feasibility studies for hydroelectric dams through NBI-ENTRO. By applying this leveraging counter hydro-hegemonic strategies Ethiopia has managed to enhance its bargaining power despite Egypt's diplomatic attempt to block international funding for the construction of national hydroelectric dam projects even before the commencement of the GERD (Cascão, 2009b; 2009a; 2008; Carles, 2006).

5.2.1. Unilateral National construction of hydroelectric dam projects (2008-2010)

Since the mid-1950s Ethiopia has been eloquently rejecting the historical agreements of Egypt and Sudan, by arguing for its right to develop water resources within its jurisdiction (national project). In 1958, during the negotiations between Egypt and Sudan on the Nile water agreement, Emperor Haile Selassie protested against his country's exclusion from the negotiations, stressing Ethiopia has a right to utilize the Nile water for the interest of the nation and its economy (Yacob, 2007). The United States Bureau of Reclamation (USBR) on its part also conducted a study between 1958 and 1964 which remained as the baseline for almost all succeeding studies over the Blue Nile. USBR recommended for the construction of four major hydroelectric dams on the Blue Nile, in addition to a number of irrigation schemes and multipurpose projects. The four dams proposed by the USBR were Karadobi, Mabil, Mendaia, and Border (Zewde. 2006; Guariso & Whittington, 1987).

One element of continually linking the successive regimes of Ethiopia (the imperial, the Derge and the incumbent EPRDF), mostly among has been their interest to construct big national hydroelectric dam projects. However, unlike China, Egypt, Brazil, or Turkey, countries with huge potential for hydraulic missions, Ethiopia has remained poor and unstable to do much about its interest for unilateral national projects (Waterbury, 2002).

Egypt was in a position to take advantage of regional Banks (AfDB) as well as international Banks (World Bank) to block international fund for upstream hydroelectric projects. Egypt was blocking a loan from African Development Bank (AfDB) for Tana-Beles project fearing that it will consume too much water from the Blue Nile (Daniel, 1999). However, the previous government the Derge despite the lack of foreign funding it has started some hydraulic projects in which most of these projects were finalized during the incumbent regime. In this regard Finchaa and Tana-Beles were receiving downstream attention since they involve medium and large-irrigation (Cascão 2009b). Significantly, Egypt has been using its international position and the presence of Egyptian officials employed in various international institutions to block loan support for upstream projects, especially in Ethiopia (Carles, 2006).

The late Prime Minister Meles Zenawi in his interview with British Broadcasting Corporation (BBC) has stressed to the point that Ethiopia was preparing to develop a unilateral project over its water resources (referring to Nile). He said Egypt must stop its attempt of suppressing upstream projects by recalling that Egypt had built, and also continues to build, projects without any discussion with upstream states. He also mentioned that Ethiopia the source of about 85% of the Nile must not be denied the right to utilize its water to feed its citizens (BBC, 3 February 2005 cited in Tawfik, 2015). From this speech we can see the real commitment on the part of the leadership to come up with a national project despite long held Egyptian threat to use force.

According to (Interview with Teshome, 8 March, 2016), “while Egypt was undertaking a hydraulic project which took Nile out of its original Basin to Sinai through Salam Canal and by reclaiming the Nile water to Toshka valley. Ethiopia was not able to construct its own national hydraulic project in the Nile basin due to a successful diplomatic effort of Egypt by blocking any financial means. However, with rapid economic growth Ethiopia becomes able to carry out its own national hydroelectric projects. In this regard the Tekeze and Tana Beles can be mentioned”.

The Government of Ethiopia has mobilized resources for implementing hydroelectric projects; namely: Tekeze (300 MW), commissioned in June 2009; and Tana Beles (460 MW), which was commissioned in May 2010. These projects were entirely funded by the Government of Ethiopia (GoE). The Tekeze Dam was completed and started to operate in 2009, costing the Government

of Ethiopia 350 million USD. And, on 15 December 2010 Tekeze Hydroelectric dam was even named as the Hydropower project of the year (MWH, 15 December 2010).

According to some sources the Government of Ethiopia has managed to get 50 million USD in allowance financing for the Tekeze hydroelectric dam project from the China's state-owned Export-Import (Exim) Bank. While other sources claim that the Chinese National Water Resources and Hydropower Engineering Corporation that built the dam have financed the entire project (Yauch, 2009). They stressed to the point that the Chinese financial aid in the Eastern Nile Basin has helped Ethiopia to come up with a unilateral projects, and further change the Basin's power relation.

Verhoeven on his part also stressed on the role of China in the hydropolitics of the Nile Basin as bringing a significant change in many ways. These include availability of Chinese technical skills, political support and capital has given African countries options that simply did not exist prior to the 1990s. While the World Bank has still remained reluctant to fund major hydro-infrastructure in the developing world, Chinese companies and banks, sensing profitable business opportunities, by helping countries like Ethiopia with no strings attached (Verhoeven, 2013).

However, according to (Interview with Fekahmed, 9 March, 2016), he disagreed with the above mentioned report that states Ethiopia has managed to get financial aid from China to construct the Tekeze Hydro Electric Dam Project. He said "Tekeze was the first national project that Ethiopia undertakes entirely financed by the Government of Ethiopia, showing the world that Ethiopia became capable in financing its own national project". However, he acknowledged that "during the construction of the project Ethiopian hydraulic experts were able to gain technological transfer from the Chinese experts, having its own positive impact in raising the quality of experts".

Another unilateral national hydroelectric dam project undertaken by Ethiopia over the Nile Basin prior to 2011 was the Tana Beles Hydroelectric Dam inaugurated in 2010, entirely funded by the Government of Ethiopia and implemented by the Italian company Salini Impregilo ⁸(Tawfik, 2015). The Tana Beles project also has 140,000 hectare land for irrigation. Concerning the

⁸ Salini Impregilo's Group is Italian giant present in Ethiopia since 1957, and the Company has already developed 20 projects in the African (Salini Impregilo, 2015).

construction of Tana Beles hydroelectric dam project (Interview with Tefera, 8 March 2016) recall on how the former Egyptian president went to Rome to lobby Italian government to give an order to Salini Impregilo to halt the project. However, he said “the Italian Government has told the president that the project (Tana Beles) is undertaken by a private company, and it has no any jurisdiction to stop the project” (see 5.3.1.).

Ethiopia has managed to construct unilateral national hydroelectric projects in Eastern Nile Basin between the periods of 2009-2010 in the Eastern Nile Basin Tekeze (2009) and Tana Beles (2010) which were entirely funded by the government of Ethiopia. These unilateral hydroelectric projects enhance Ethiopia’s bargaining power in the Basin by putting fact on the ground, despite Egypt’s success in blocking international funding. And, the knowledge obtained from these national projects became an experience and a lesson to commencement of the GERD.

5.2.2. Feasibility Studies for Hydroelectric Dams through ENTRO-NBI

As mentioned in the literature part the Africa Development Bank in 2007 has funded for the pre-feasibility study to be conducted by the Eastern Nile Technical Regional Office (ENTRO) for the Mandaia and Border projects (see 2.6.1.). The study also assessed the environmental, social and economic effectiveness of establishing an inter-connection power grid between the three Eastern Nile countries. The main conclusion of the study was to construct two hydropower projects in Ethiopia (Mandaya and Border) (NBIENTRO, 2007).

In 2007, the ENTRO approved for the feasibility studies of (Megech, Ribb, Gumera and Gilgel Abay) irrigation projects to be undertaken (Cascão, 2009b). According to (Interview with Fekahmed, 9 March, 2016) “through funding from the AfDB and ENTRO Ethiopia also managed to get a pre-feasibility study for three hydroelectric dam projects in Ethiopia these are the Beko Abo, Mendaya and Border dam under the program called Joint Multipurpose Project (JMP). These dams were proposed for joint ownership (by Ethiopia, Egypt and Sudan), however, Egypt and Sudan has walked out of these projects. Such situation has forced Ethiopia to look for unilateral projects”.

As mentioned in Chapter four (section 4.2.3) Ethiopia has undertaken the pre feasibility study for the GERD under the ENTRO before the GERDP was officially inaugurated in April, 2011(see table 3). And, the AU also on its part played a significant role by including through the use of PIDA to integrating major African power pools. As a result, the GERD (Great Millennium Renaissance Dam as it was known by then) was one of highly prioritized PIDA projects to be completed by 2020 to facilitate electricity export within EAPP market (Maupin, 2016). Here we can see on how ENRO and AU played a significant role in undertaking a feasibility studies which later lead to the coming of unilateral mega hydroelectric project in Ethiopia.

According to (Interview with Tefera, 4 March, 2016), “NBI-ENTRO undertakes feasibility studies in the Eastern Nile Basin to construct jointly administered hydroelectric dam projects. This is due to the fact that Ethiopia is endowed with a greater potential for hydroelectric power, due to its geographic position as an upstream state in the Basin and topographic endowment that makes it an ideal place for hydroelectric project in the Basin”. This is due to the fact that constructing reservoirs in Ethiopian highlands would reduce much water from evaporation (Whittington, 2003). As a result, according to (Interview with Fekahmed, 9 March, 2016) said “these prefeasibility studies and project proposals has in long run assisted Ethiopia to come up with a new mega hydroelectric dam project in 2011 (the GERD),which is entirely funded by the government and people of Ethiopia” see (5.5.1.).

5.3. Liberating Counter Hydro-Hegemonic mechanisms

As stated in Table 6 the liberating counter hydro-hegemony mechanisms applied by Ethiopia between 2008 and 2010 mainly focuses on the signing of the CFA. By applying this liberating counter hydro-hegemonic mechanism and strategies Ethiopia has been trying to weaken the ideological basis of the hydro-hegemonic order by bringing an alternative discourse to the existing status quo and its sanctioned discourses (Cascão, 2009b; 2008).

5.3.1. The Signing of the CFA

Ethiopia's decision to take part in the NBI was envisaged to bring multilateral cooperative legal framework in parallel in the Basin, i.e. Ethiopia became able to bring its long held stance of "equitable and reasonable" usage of Nile waters. Such condition had brought one great opportunity for Ethiopia to bargain, this was as Egypt and Sudan agreed to negotiate with some conditionality, for the formation of a new legal and institutional framework which was initiated in 1997. This scenario had created new circumstances in the Nile Basin as riparians began to negotiate in equal footing. As a result, Ethiopia and other upstream states also began putting legal issues back in the center of the Basin hydropolitical agenda (Zeitoun and Cascão, 2010b). In June 2007 the Nile riparians had all but concluded negotiation with exception of one article, which were considered by Egypt and Sudan as threat to their status quo. In which the upstream riparians in May 2009 decided to proceed for ratification, regardless of downstream riparians concord (Dereje, 2010).⁹

The major intention of the downstream states was to include the 1929 and 1959 status quo in the Article 14(b). However it was not accepted by upstream states, such action can be seen as one step by non-hegemony to liberating themselves from the hydro-hegemony of Egypt. That was by opting for the coming of new regime in the Basin apart from the existing status quo that favors Egypt.

⁹ Article 14 of the CFA

Water Security

Having due regard to the provisions of Articles 4 and 5, Nile Basin States recognize the vital importance of water security to each of them. The States also recognize that the cooperation management and development of waters of the Nile River System will facilitate achievement of water security and other benefits. Nile Basin States therefore agree, in a spirit of cooperation:

- (a) To work together to ensure that all states achieve and sustain water security.

At the end of the negotiations, no consensus was reached on Article

14(b) which reads as follows: *not to significantly affect the water security of any other Nile Basin State*, all countries agreed to this proposal except Egypt and Sudan.

Egypt then proposed that Article 14(b) should be replaced by the following wording:

(b) *not to adversely affect the water security and current uses and rights of any other Nile Basin State*

Table 7: The Evolution of the CFA

Timeline	Stage	Brief Description
Jan 1997 – March 2000	Panel of Experts	Text, or working document of principles, rights and obligations, and institutions, prepared
Aug 2000- Aug 2001	Transitional Committee	Text converted into draft Agreement
Mar 2006 – June 2007		Draft Agreement advanced, with all but one reservation removed (Article 14, Water Security). Final reservation referred to Heads of State.
August 2008	Nile-COM	Reengagement, reopening of the file at the Ministerial level.
Kinshasa Meeting May 22, 2009	Nile-COM	7 member countries agree to annex Article 14b for later resolution by NRBC; reservation by Egypt; Sudan not present at time of decision, but subsequently expressed its reservation
Nairobi 3, July 2009	Meeting Negotiation	7 countries agree on a cleaned text; strong reservations by Egypt and Sudan
Alexandria meeting 27-28, July, 2009	Nile-COM	Joint decision to allow for more time to seek joint agreement
14 May 2010	CFA open for signature	4 countries (Ethiopia, Rwanda, Tanzania and Uganda) signed
19 May, 2010	Signature	Kenya signs the CFA in Nairobi, Kenya
28 February 2011	Signature	Burundi signed the document in Bujumbura
13 June, 2013	Ratification	Ethiopia ratifies the CFA
28 August, 2013	Ratification	Rwanda ratifies the CFA
26, March 2015	Ratification	Tanzania

Source: The CFA for the River Nile Basin: An Overview <http://harvardpolitics.com/hprgument-posts/dam-ed-dont-egypt-grand-ethiopian-renaissance-dam-project/>

The Basin Cooperative Framework Agreement (CFA) would have entered into force as a permanent institution called the Nile River Basin Commission (NRBC), if six Basin countries would have ratified the agreement. The CFA was opened for signature in 2010 and was signed only by Ethiopia, Kenya, Rwanda, Tanzania and Uganda in 2010 and by Burundi in 2011

(Nicole and Cascão, 2011). These upstream states signed of the CFA not only for its legal value rather for its counter hydro-hegemonic purpose to end long held Egypt hegemony over the Basin. And, this Scenario shows the real commitment on the part of upstream states to bring new legal framework despite downstream states opposition (Abadir, 2012).

According, to (Interview with Tefera, 4 March, 2016) he said “Ethiopia has played a leading role in the signing of the CFA, starting from bringing the issue of legal framework at the center of the NBI for the coming of equitable and reasonable utilization of Nile waters. And, it has also continued its effort for the whole basin countries to come under permanent, multilateral and sustainable cooperative river basin organization. This was evidenced as Ethiopia became the first Nile Basin state by ratifying the CFA by incorporating it with its domestic laws”.

Ethiopia has been bargaining for the coming of comprehensive legal framework by playing a leading role to bring the upstream states into a united front. This is to counter Egypt’s hydro-hegemony in multilateral level. What was so unique about the signing of the CFA on 14 May 2010 (see table 7) was its coincidence with the inauguration of the Tana Beles hydroelectric dam project in Ethiopia (Ethiopian News, 2010; see 5.2.1.). This might be deliberate counter hydro-hegemonic strategies adopted by Ethiopia to show that it has a capacity to counter Egyptian hydro-hegemony both unilaterally (by inaugurating a unilateral hydroelectric dam project) as well as multilaterally (by signing the CFA together with other upstream states) simultaneously. However, according to (Interview with Teshome, 8 March, 2016), he said “this was just a coincidence not an intentional move in countering ‘hydro-hegemony’ of Egypt”.

5.4. Leverage Counter Hydro-Hegemonic mechanisms after the commencement of the GERD

As stated in Table 6 the leverage counter hydro-hegemony mechanisms applied by Ethiopia after the commencement of the GERD mainly focuses on active diplomatic efforts undertaken by Ethiopia. These active diplomatic efforts undertaken by Ethiopia includes the formation of the IPoE, the signing of the Declaration of Principle, Ethiopia using of the public diplomacy and Ethiopia’s attempt to secure Sudan’s support. By applying this leveraging counter hydro-hegemonic mechanism and strategies Ethiopia has managed to enhance its bargaining power in

the Basin. In doing so Ethiopia also builds the confidence of the downstream states and able to gain a reasonable support from Sudan concerning the GERD (Tawfik, 2015).

5.4.1. Formation of the International Panel of Experts (IPoE)

Followed after the official visit by Egypt's interim Prime Minister Essam Sharaf in May 2011, Ethiopia invited Egypt and Sudan to form an IPoE to review the design documents for the dam (Tawfik, 2015). For Zerubabel (Interview, 16 March, 2016), said "the intention to of this IPoE was to ease some fear and anxieties on the part of the downstream states concerning the project". However, he said "due to the diplomatic efforts made by Ethiopia by inviting downstream states to take part in the study over the dam has a considerable role in confidence building". He believes "the two principles, which the panel was built on, were that its recommendations are consolatory, not mandatory and its (IPoE's) work would not stop the construction progress but to be held in parallel".

The IPoE composed of 10 experts has conducted 49 meetings in six rounds in Ethiopia, Egypt and Sudan as well as field visit to the project site. The panel has submitted its final report in May 2013. The IPoE recommended on the technical measures that need to be taken concerning the GERD. And, also suggested on matters related to filling of the reservoir i.e. in order not to "significantly impact on water supply to downstream states" (IPoE, 2013).

Following the IPoE report Egypt, Ethiopia and Sudan has responded concerning the report. Ethiopia responded the report showed that the GERD is constructed according to international standard and will not cause a negative harm to downstream states. And, Ethiopia decided to continue the construction work after diverting the Blue Nile, and in parallel updating the required studies that are not vital but complementary in its own point of view (MoFA, 2013). Egyptian Ministry of Foreign Affairs stated that the summarized recommendations of the IPoE's final report are leaning to Ethiopia in order to update the dam's structural and hydrological studies, by saying the documents sent to the panel were partial (ESIS, 2013). And, Sudan Tribune (2013) has wrote concerning the IPoE report on how the GERD will bring a benefit to Sudan as it reduces sedimentation on the hydroelectric dams and assists the irrigation system by providing all season water flow.

In May 2013, a few days before the IPoE submitted its report, the Ethiopian government diverted the Blue Nile to start the construction of the dam's main body (Tawfik, 2015). Concerning this coincidence, (Interview with Fekahmed, 9 March 2016) "the first diversion of the Blue Nile in May, 2013, was not to maneuver the IPoE's report". He said that "even the members of the IPoE have gone to the dam site on Monday 27 May 2013, and observed that the river was already diverted. And, on Tuesday when last meeting of the IPoE started, the ceremony for the diversion was celebrated in the project site. The major reason behind celebrating the diversion on that specific day was because the government wants to commemorate Ginbot 20/ ግንቦት 20 (28 May 2013) the day EPRDF overthrown the Derge".

The former CEO of EEPSCO Mihret Debebe, in describing why the river was diverted to the BBC said, the dam is being built in the middle of the river so to carry out the construction the river flow must be diverted. And, that would permit the civil engineers to carry out their work without any difficulties. The river was diverted only a few meters away from its natural course (BBC, 28 May 2013). This clearly indicates that the diversion of the Nile was for a technical matter and has nothing to do in manipulating the IPoE's report. The diversion is only few meters from the natural flow. And, on 26 December 2015 the Nile water is reverted to its normal course to run through the dam (Daily News Egypt, 2015).

In order to conduct studies recommended by the IPoE, the water affair ministers and experts of the three countries have conducted four discussions in Khartoum (November and December, 2013 and January and August, 2014). However, it took a little longer to reach to a consensus on how to conduct the recommended studies. The Khartoum discussion was halted for the almost eight months (January to August 2014) following the unrest in Egypt. Subsequently after the sideline meeting of African Union Summit in Malabo between Prime Minister Hailemariam Desalegne and Egyptian president Abdel Fatah El Sisi on June 2014, decided to resume Khartoum meeting. And, the three countries decided to establish a 12 member Tripartite National Committee (TNC), to follow and conduct the IPoE's recommendations (MoFA, 2016).

The TNC is mandated to follow up the two IPoE recommended studies on the water resource hydropower system simulation model and downstream socio-economic impact assessment study. As a result, TNC hired the French BRL and the Dutch Deltares. However, in September 2015, the Dutch Deltares consultancy firm withdrew its participation from the assessment process. As a result, in a six-party meeting held in Khartoum 29 December 2015, the foreign affairs and water resources ministers of the three countries also reached an agreement to replace the withdrawn Dutch Deltares with French Artelia company to study the technical and environmental impacts of the dam (Ahram Online, 29 December 2015).

Ethiopia by forming the IPoE has managed to leverage on the Basin's hydropolitics by setting agenda to involve downstream states in the studies over the GERD. In this regard Ethiopia has been able to show on how the GERD will not affect the water security of Egypt despite the existing sanctioned discourses, by signifying the benefits the dam carries. Even Sudan by becoming aware of the benefit the dam will bring (by reducing sedimentation on Sudan's hydroelectric dams and giving a continual flow of Nile water for large irrigational schemes) began to give their full support to the project.

5.4.2. The Signing of Declaration of Principles

Declaration of Principles (DoP) is a signed document between Egypt, Ethiopia and the Sudan on the 23 March 2015 for the first time in the history of Eastern Nile Basin, and seen as a step forward in enhancing cooperation in the Basin. The DoP also consists of Ethiopia's policy on transboundary water courses namely "equitable and reasonable utilization", "no significant harm" and "win-win". (DoP document)¹⁰.

The Declaration of Principles also signifies a compromise on the parts of Eastern Nile Basin states. Because in reality no country got all what it demands, or agreed with an absolute loss. As a result, the DoP contains some principles that balance the rights and interests of the signatories. Therefore, a significant part of the declaration addresses issues relating to cooperation, confidence building, exchange of information and data, as well as peaceful settlement of

¹⁰ The ten principles of DoP are cooperation, development, regional integration and sustainably, equitable and reasonable utilization, no significant harm, to cooperate on the first filling and operation of the dam, dam safety, confidence, building, exchange of data and information, of sovereignty and territorial integrity, and peaceful settlement of dispute

disputes. The signing of the DoP can be viewed as a development having a potential to transform the strain challenging regional relations in the Eastern Nile Basin. And as a matter in fact the DoP should however be treated as manifesting political as opposed to a legal commitment of the signatories (Solomon, 2015). Due to this Ethiopia has managed in bringing its long held principle of “equitable and reasonable” utilization of its Transboundary Waters to be signed by downstream states. This indicates on the how Ethiopia began to leverage on Basin’s issues after commencing the GERD.

The DoP also managed to include some important articles that would enhance the cooperation among the Eastern Nile Basin states by reducing the tension, and build confidence of downstream riparians. These includes the guideline and rules for the first filling as well as creating a coordination of the GERD and downstream (HAD) reservoirs. And, the DoP also gives a priority for downstream states to purchase electric power when the project finalized and begins to generate power (Tawfik, 2015).

However, some Ethiopian scholars argued that the DoP reaffirms some articles of the 1993 agreement (Article 5) ¹¹which favored Egypt, since it includes terms about compensation for damages which restricts the scope of the dam project, and put Ethiopia at a disadvantage. They also assert that Egypt is given likelihood to divide and maintain its status quo by undermining the regional cooperation framework (the CFA) that is already in motion. In addition they criticize the document as denying Ethiopia’s right to utilize the water from the reservoir for irrigation purposes (Minga et.al, 2015).

For (Tecola, 2015) his criticism over the DoP is that Ethiopian negotiators as well as the leadership of Ethiopia failed to recognize the value of having at least one other Partner (from the upstream state) in the negotiation as well as in the sharing of responsibilities. He also recalls on how being only a three member to a certain Group has inherent weakness to be destabilized. He said it seems like the Ethiopian Government has abandoned long standing supporters (upstream riparians) in challenging Egypt and Sudan’s status quo. This situation might refers that Ethiopia has opened another solitary contestation mechanism apart from a unified front, i.e. using of the

¹¹ Article 5 of the 1993 Framework for General Co-operation between Arab Republic of Egypt and Ethiopia: *Each party shall refrain from engaging in any activity related to the Nile waters that may cause appreciable harm to the interest of other party.*

CFA to bring about a Nile Basin regime based on “equitable and reasonable” usage of water. Ethiopia would be much benefited if it has managed to bring an agenda for the inclusion of longstanding upstream allies to this principle.

However, despite its criticisms DoP has assisted Ethiopia to leverage on the Basin’s hydropolitics by bringing the principles it uphold, these are “equitable and reasonable” usage, causing “no significant harm”, and “win-win” approach. This also has a greater significance as Egypt the Basin’s hydro-hegemon agreed to sign on the principles that gives recognition to the GERD as a fact on the ground, and accepting those principles Ethiopia upholds in the Basin’s hydropolitics at least in principle. Here the DoP can be used as a springboard for the coming of the Basin wide framework agreement as those downstream states agreed to sign on the principles by compromising from their former stance.

5.4.3. Ethiopia using Public Diplomacy

Tuch (1990 cited in Tadesse, 2015) defines public diplomacy as “a government’s process of communicating with foreign publics in an attempt to bring about understanding for its nation’s ideas and ideals, its institutions and culture, as well as its national goals and current policies”. The objective of public diplomacy in the Eastern Nile Basin is to build trust and fraternal relations between the peoples of Ethiopia, Egypt and Sudan.

The first public diplomatic mission concerning the GERD was carried out by Egyptians. This was when Egypt’s public diplomacy delegation paid a visit to Ethiopia from 30 April, 2011-3 May, 2011 which was the first of its kind. The Egyptian public delegation met with top government officials, including the late Prime Minister Meles Zenawi and religious leaders. In which the delegation has asked the government of Ethiopia to delay the ratification process of the Cooperative Framework Agreement (CFA), until Egypt come out of the turmoil (Tawfik, 2015). This become a turning point to the Basin’ s public diplomatic mission, as Egypt known for securitization of the Nile issues, and use of hostile words concerning any upstream activities over the Nile, opting to employ public diplomacy as a tool. This scenario marked the beginning of application of soft power relation between Egypt and Ethiopia concerning the Nile.

The Ethiopian public diplomacy delegation, led by Speaker of the House of Peoples' Representative Abadulla Gameda, including prominent academicians, former Ambassadors, religious leaders, artists and other prominent personalities drawn from various sectors has paid a visit to Cairo (MoFA, December, 2014). Ethiopia's public diplomacy has mission to support the GERD project as a central part of the government's strategy to eradicate poverty and to create regional integration based on a win-win approach. It also put an effort that the GERDP encourages equitable and reasonable utilization of water resources and causes no significant harm to downstream states (Nurye, 2014). The public diplomacy has also tried to convince that Ethiopia would use the GERD only to generate electric power, and the priority to purchase this power will be given for the downstream states as stated in the DoP.

According to (Interview with Zerubabel, 16 March, 2016), "the Public diplomacy of Ethiopia focuses mainly on captivating the psyche of downstream public through different mechanisms like people to people relation, cultural diplomacy, academic symposiums, etc. Approaches applied in public diplomacy must focus on correcting and erecting the suctioned discourses and beliefs over the Nile for Egypt's public. These could be achieved in the form of exchanges of scholarships, effective usage of media outlets, and visits of religious leaders, artists, scholars, writers and celebrities, Civil Society Organizations etc. And, it is mainly focused in reducing any possibility of variance and creates conducive environment for the future relation of the two countries."

Both Ethiopian Orthodox Tewahedo and Egyptian Coptic Orthodox Churches have a long historical relation as mentioned in the literature review part (see 2.2.), and using both churches for public diplomacy has its own vital role. As a result, in January 2015, Abune Mathias, Patriarch of Ethiopian Orthodox Tewahedo Church has paid a visit to Egypt. During his stay he met with the Egyptian President, Abdel-Fattah El-Sisi, and discussed issues on ways to intensify the historical, cultural and religious relations of the two countries. And, later by accepting Abune Mathias's invitation, Pope Tawadros II head of Egyptian Coptic Orthodox church also visited Ethiopia in September 2015. The pope stressed that Ethiopia and Egypt have been tied by God's given Nile River for centuries and eternally by promising Egyptian Coptic Church supports Ethiopia's efforts to eradicate poverty and thereby realize development (Zekarias, 2015).

On 8 May, 2015 the Ethiopian public diplomacy delegation headed by the Speaker of the House of Peoples' Representative, Abadulla Gameda, paid a visit to Sudan (Muluken, 2015). According to Zerubael, (Interview with Zerubabel, 16 March, 2016) "the aim of the public diplomacy between Ethiopia and Sudan is to enhance economic integration of the two countries in terms of trade, investment, infrastructure to the public and to create awareness on the contribution of the GERD to the region further to the continent". He also stressed on the reasonable stance that Sudan has maintained concerning the dam.

Ethiopia's Public diplomacy has played a leveraging counter hydro-hegemonic mechanism role by promoting Ethiopia's rhetoric about the GERD these are, no harm, and win-win, equitable and reasonable utilization of Nile waters. The public diplomacy of Ethiopia must not be a sporadic practice within the Eastern Nile Basin; rather it is something needs to be undertaken in a continual basis. Since public diplomacy has a capacity to change distorted perceptions and sanctioned discourses if it is handled in an appropriate manner.

5.4.4. Ethiopia's attempt to Secure Sudan's Support

According (Interview with Mehari, 26 February, 2016) "Ethiopia and Sudan share largest border and having strong people-to-people relationship. Over the years, the two countries had both harmonious and hostile relationships amidst themselves. The history of these two neighboring countries is coupled with internal dynamics and external pressures. During the Derge regime due to the ideological differences between the then rulings elites of the two countries there were a wider involvement in each other's internal affairs most notably in the form of assisting opposition groups".

After the down fall of the Derge regime in Ethiopia, the relations between the two countries changed for the better, through steps taken by both sides. In 1991 Ethiopia and Sudan signed a cooperative pact, along with cooperation concerning the Blue Nile and Atbara Rivers (Sheen, 2007). However, for Abebe (Interview with Abebe, 15 March, 2016) this "good relation between Ethiopia and Sudan began to deteriorate after a failed assassination attempt against the Egyptian president Hosni Mubarak in Addis Ababa in 1995 by terrorists believed to be supported by Sudan".

For Fekahmed, (Interview with Fekahmed, 9 March, 2016) “Sudan had always been against upstream unilateral projects due to pressure from Egypt resulting from the 1959 agreement. According to the agreement there had been a long held belief that any demand for utilization of water by upstream countries will be responded jointly. As a result, for any negotiation or any demand the two countries consolidate their position and respond jointly and, it’s Sudan which is mostly responding to an issue. For example, it was Sudan which first freezes cooperation to the CFA and walked out of the NBI¹², then followed by Egypt”. However, he said “Sudan seems to have changed its former stance i.e. opposing any hydraulic projects in upstream states after Ethiopia commenced the GERDP in April, 2011”.

According to a leaked Wikileaks document the Sudanese government was willing to give a military air base to Egypt, in a place called Kursi located in southern Darfur in 2010. This base would be used to launch an Egyptian assault on the Ethiopian dam, if diplomatic efforts fail (Collins, 2012). However, for Teshome, (Interview with Teshome, 8 March, 2016), “Sudan’s stance concerning upstream hydraulic projects seems to have changed mostly after the commencement of the GRERD in 2011. This was after Sudan became aware of the benefit it would gain from the dam and began to endorse the project publicly apart from their former position”.

Ethiopia seems to have exerted a considerable leverage over Egypt by gaining Sudanese support over the GRED this was evidenced as Sudan’s top government officials began to show a reasonable stance concerning the GERD. This was evidenced when President Omar Al- Bashir announced that his government understood the mutual benefits that the GERD could offer to Ethiopia and Sudan while receiving representatives from Ethiopia. And, mentioned his commitment and readiness to extend the necessary support for the completion of the GERD (Sudan Tribune, 2012). This indicates on how the Sudan became aware of the benefit it will get from the GERD and how it is committed for the realization of the dam.

By the same token, President Al-Bashir, said that Sudan’s support for GERD is due to economic not political reasons. He clarified that Sudan will benefit directly from the electricity generated by the Ethiopian dams. (Sudan Tribune, 2013). According to Abebe (Interview with Abebe, 15

¹² According to Interview with Fekahmed 9 March 2016 Sudan returned to the NIB in 2012

March, 2016) this “indicates on how Sudan has a growing attitude to economically integrate with Ethiopia which is the second most populous state in Africa with a rapid economic growth for the last decade. And infrastructural development between the two countries would most likely enhance the regional integration”.

Ethiopia is gaining Sudan’s support concerning the construction of the GERD this indicates that a new political thinking began to take root in Sudan. In which Sudan started to play a reasonable diplomatic role in the Basin concerning the construction of the GERD. By narrowing the issue of indifference, Sudan started to look economic as well as political integration with Ethiopia, having multitude of advantage to Sudan. And, it seems that Ethiopia is successful in drawing Sudanese support towards regional development apart from their former departure over the issue of Nile.

In terms of military both Ethiopia and Sudanese reached an agreement to establishing joint military force. This joint force will be deployed on eight fronts along the two countries’ common border with the aim of ensuring border security, boosting economic cooperation and allowing the two countries to carry out joint development activities. It is extensively believed by both sides that the formation of the joint force would further reinforce the existing security cooperation between the two countries (Tesfalem, 2014). This situation marks a new phase in the relation between the nations who used to be hostile to one another by hosting opponents from each side to destabilize the regimes on each side. Under this situation Ethiopia could use such opportunity to gain Sudan’s support to counter Egyptian hydro-hegemony in the Basin by coming up with an alternative cooperation for Sudan.

In terms of trade Sudan and Ethiopia had also reached an agreement to establishing free trade zone to facilitate money transfer that would increase trade exchange and investment between the two nations. Under this free trade zone, all currencies recognized by the two countries will be functional. This also gives Ethiopian banks to get an access working in Sudan. Such development could be seen as a part of economic integration between Sudan and Ethiopia, which is vital for the political relation between these neighboring Eastern Nile Basin states. This was affirmed by Sudanese vice President Hassabo by saying “any political relation without economic cooperation would be meaningless,” (EBC, 24 November 2015). This refers to the fact that both

nations are laying a foundation for the coming of integrated Nile Basin, as being good role models to the rest.

According to, (Interview with Abebe, 15 March, 2016), “its rapid economic growth and apparent political stability has allowed Ethiopia to undertake huge infrastructure projects such as the GERD. Such conditions will lead the future of these Eastern Nile Basin countries to be interwoven as they economically as well as politically integrated with one another. This situation will also reduce possibilities of conflict as countries become interdependent on one another; simultaneously this will also enhance Ethiopia’s leveraging power in the Nile Basin”.

Finally Sudan has accepted the GERD as a fact on the ground and strongly believes and upholds its reasonable position for the realization of the project. By affirming this position, President Omar Al-Basher with his interview with Al-Arabiya News Channel said that the “Ethiopian Renaissance dam has become a reality” and that it requires the cooperation of all parties to "ensure its success"(Ahram online, 2015). This situation with the above mentioned scenarios marked the success of Ethiopia in drawing Sudanese support concerning the GERD, as Sudan became aware of the benefit it could earn as the project became finalized. As a result, as stated in the DoP and (Interview with Fekahmed, 9 March, 2016) “Sudan will get the priority for electric power that will be generated when the dam is completed, as well as the reduction of sedimentation on their reservoirs together with a regulated all year flow of Nile waters. Additionally, it will also assist in reducing the cost of removing mud from the irrigation channel of the Gezira Scheme”

5.5. Liberating Counter Hydro-Hegemonic mechanism

As stated in Table 6 the liberating counter hydro-hegemony mechanisms applied by Ethiopia after the commencement of the GERD is mainly focusing on the ratification of the CFA and using of the GERD as unilateral national project (Tawfik, 2015). By applying this liberating counter hydro-hegemonic mechanism and strategies Ethiopia has been trying to weaken the ideological basis of the hydro-hegemonic order by bringing an alternative discourse to the existing status quo and its sanctioned discourses (Cascão, 2009b; 2008).

5.5.1. GERD a Unilateral National Project

As mentioned in the literature part section (2.3.5) the successive treaties have given Egypt a hydro-hegemonic position. A treaty made in 1929 between Egypt and the United Kingdom (for Anglo-Egyptian) allocated 48 BCM of the utilizable flow to Egypt and 4 BCM to the Sudan. This treaty gives Egypt the right to veto any construction projects in upstream nations that would harm its interests. In 1959, in preparation for the construction of the High Aswan Dam, Egypt and an independent Sudan signed the Agreement for the full utilization of the Nile Waters, which allocated 55.5 and 18.5 BCM to Egypt and Sudan, respectively, with 10 BCM of a total utilizable flow of 84 BCM lost as evaporation and seepage (Conway 2005; Owiro, 2004). As mentioned in the literature review part (2.4.) Ethiopia has been protesting against that hegemonic agreement.

Egypt has applied various the hydro-hegemon compliance such as resource capture mechanism which mostly carried out by establishing a ‘facts on the ground’ (mammoth dams with huge reservoirs) (Zeitoun and Warner, 2006, Whittington, 2003). As a result, Egypt has constructed the High Aswan Dam (HAD) without consulting any upstream state. The construction of the dam has been a hybrid of colonial time aspiration for century storage and the cold war era enthusiasm for large scale investment on infrastructures by the loan provided by the USSR. The HAD has the capacity to carry 162 BCM per year (Salman, 2016; Yacob, 2007; Zeitoun and Warner, 2006; Whittington, 2003, Waterbury, 2002).

And, in response to the USSR involvement of Nile hydropolitics the US has supported Ethiopia on the feasibility studies it undertakes along the Blue Nile through the USBR (Yacob, 2007; Zewde, 2006; Waterbury, 2002). In which the project sites which were selected by the USBR became a blueprint for most hydroelectric dam projects Ethiopia is undertaking in the Blue Nile including the GERD. The GERD will supposedly have a reservoir capacity of 74 BCM; and when fully operational, it will have a power capacity of 6,000 MW, according to (Interview with Tagel, 13 April, 2016), “there are some modification works that are underway to enhance the power capacity of the GERD which are carried out by the METEC”. In which the Construction began in 2011, and it is due to be commissioned in 2017 (EEPCCO, 2013). As a result, the GERD become a unilateral project challenging the hydro-hegemony of Egypt.

The GERD will predictably adjust the hydrology of the Nile Basin; this is mostly during the reservoir filling stage that would compromise Egyptian status quo. The reservoir filling rate policy, climate variability, and climate change all represent important drivers in the GERD's performance (Zhang et.al, 2015). This situation gives Ethiopia a new position it had never exercise prior to the commencement of the GERD. Such condition offers Ethiopia both leveraging as well as liberating counter hydro-hegemonic impetus in the Basin.

According to (interview with Teshome, 8 March 2016), "both the people and the Government Ethiopian considers that the GERD is an image of national pride and a symbol of the recent development. Ethiopia has also managed to gain the support of some upstream riparians like South Sudan and Uganda as they openly urge Egypt not to undermine Ethiopia's right to utilize Nile waters".

In which Sudan's support is driven by the economic considerations rather than political reasons as it has called upon Egypt to utilize the shared benefits (Ahram Online, 2015; Sudan Tribune, 2013; 2012). Ethiopia has also promised the priority of power purchase to Sudan and Egypt with a reasonable price (DoP, 2015). Thus, Sudan has supported the GERD and suggested for the establishment of a coordinated mechanisms with Ethiopia to efficiently regulate river water flow (Salman, 2014). This indicates on how the GERD assisted Ethiopia to gain Sudanese support apart from its long time ally Egypt concerning the unilateral hydraulic projects in upstream states.

According to (Interview with Tefera, 4 March, 2016), "the commencement of the GERD is a part of continual development in the energy sector. The GERD is not just for the sake of contesting or countering Egypt's hydro-hegemony rather it is a part of Ethiopia's right to develop its water resources in its fight against poverty and aspiration for prosperity". He also stressed that "the project is the part and parcel of Ethiopia's rhetoric to integrate the Basin through hydroelectric power after the project will be completed. Constructing the GERD is also a major leap for Ethiopia in countering Egyptians blockage of international funding, showing that Ethiopia has the ability to construct such mega projects in its own capacity."

The situation after the announcement of the commencement of the GERD started to change in the Basin. The Eastern Nile Basin states has formed a panel that would undertake a study over the impact of the GERD, which was launched by Ethiopia as a confidence building mechanism. And, above all the Declaration of Principles over the GERD has been signed among the Eastern Nile Basin states; in which each compromise their former stance towards the use of the Nile. And, through the GERD project Ethiopia has come up with a very creative and innovative way to liberate from the hydro-hegemonic order, to bring about a Nile Basin regime with “equitable and reasonable” usage of water.

5.5.2. Ratification of the CFA

For Abadulla spokesperson of House of Peoples’ Representative stated that, Ethiopia did not agree to the 1959 Treaty signed between Egypt and Sudan on the Nile River as it excluded Ethiopia, which contributes 86 per cent of the water in the Nile River. As result, and Ethiopia does not consider this treaty as legitimate. He stressed that Nile River Basin Cooperative Framework Agreement (CFA) between the Nile Basin riparian countries is more valuable than the 1959 agreement by saying the Nile River should be used in a win-win manner without ignoring the benefit other riparians (Sewailam, 2015). In this regard Ethiopia has a strong commitment to bring a Nile Basin regime with equitable and reasonable, win-win, and non-harm utilization with non-adherence to the 1959 agreement.

The ousted Egyptian President Mohamed Morsi has invited senior Egyptian politicians and political parties for a consultation on what kind of coercive mechanism must be taken to incapacitate the construction of the GERDP on 3 June 2013. The conversation was wrongly filmed and broadcasted as participants were discussing on how to apply destructive measures against the GERD. Some of the delegates suggested for the use Egyptian intelligence forces to destroy the dam. Other suggested measures including various containment strategies like supporting the Ethiopian opposition, striking new arms deals to deter Ethiopia, and sabotaging the dam. As a result, following the event Ethiopia summoned the Egyptian ambassador in Addis Ababa to clarify over the circumstances. The meeting rejuvenated the reminiscences of former Mubarak era to use the same tactics against Ethiopia (Safadi, 2013).

Following this incidence Egypt and Ethiopia were entered into what it seems like hostilities of words which some spectators feared that it would escalate into full scale conflict. On 11 June 2013, Morsi made a speech urging Egyptians to unite against the GERD as it began to challenge Egypt's policy to monopolizing the Basin. Morsi also stressed over the issue (the GERD), by saying all options on the table can be applied to secure Egypt's interest. He avowed that Egypt's share of the Nile water will not be diminished even by one drop, by guaranteeing to employ every means possible to avoid that from happening (Dawit, 2013).

While Cairo raises hostilities of words against the GERDP on 11 June, 2013 by securitizing the Nile issue, the Government of Ethiopia has responded the same day (11 June 2013), by disregarding Egyptian intimidation as "psychological warfare". The Ethiopian Government on its part affirmed that it would not be threatened from undertaking the dam's construction, even for seconds. As response to Cairo's escalation of war of words the Ethiopian parliament ratifies the CFA on 13 June 2013 (Tawfik, 2015). Here we can see Ethiopia has applied the ratification of the CFA as a response to Egypt's threat, what is termed by the Government of Ethiopia as a psychological warfare. As discussed above as requested by Egyptian public diplomacy Ethiopia has delayed the ratification of the CFA see section (5.4.3.). However, after the continual "war of words" from Egypt, the Ethiopian Parliament ratified the CFA on 13 June 2013 see Table 7.

(Interview with Fekahmed, 9 March, 2016), "Ethiopia had been playing a leading role for upstream states to come to negotiation and for the signing of CFA". He said "this was evidenced, as Ethiopia suspends the ratification of the CFA until a stable government come to Egypt, other upstream states have followed Ethiopia's footsteps. And, following Ethiopia's ratification of the CFA, it was followed by Rwanda in 2013 and Tanzania in 2015".

5.5.2.1. Ethiopia and Egypt Struggle in the Basin over the Signing and Ratification of the CFA

In January 2012 the former Egyptian Foreign Minister Mohamed Kamel Amr had an official state visit to South Sudan, Kenya, Rwanda, Tanzania and the DRC. The South Sudanese President Silva Kiir has affirmed that his country (South Sudan) considers the significance of the Nile to Egypt by assuring that Egypt's quota of Nile water would not be affected. The DRC President, Joseph Kabila, confirmed that his country would not sign the CFA. On the same tour,

Egypt sought to boost its relations with Kenya in the fields of agriculture and energy (Tawfik, 2015).

On 4 June 2014, the former Tanzanian Foreign Minister Bernard Kamillius Membe has called for a review of the CFA by considering Egypt's water needs as it is a desert country whose lifeline is the Nile. And, this was heavily opposed by Uganda and South Sudan. This remark made by Tanzanian Foreign Minister was surprising as it comes from Tanzania, a country known for its strong and firm stance for the coming equitable and reasonable utilization in the Nile Basin (World Bulletin, 2014). This might be resulted from Egypt's diplomatic effort to gain Tanzania's support; however, this situation didn't last long as Tanzania ratified the CFA in 2015 see Table 7.

According to (Interview with Zerubabel 16 March 2016) Tanzania ratified the CFA apart from June 2014 comments made by the former Tanzanian Foreign Minister Membe, for the amendment of the CFA in favor of Egypt. The ratification had take place just after the former President of Tanzania Jakaya Kikwete's cabinet, the most senior executive branch of Tanzania, approved and forwarded the CFA to the country's parliament. Tanzania's ratification of the CFA was very much cherished by Ethiopia, because Tanzania gives an end to the 1959 agreement".

Paul Mayom Akec South Sudan's Minister of Irrigation and Water Resources decided to sign an agreement that would replace a colonial era law that gave most of the River Nile's waters to Egypt and Sudan. The process of joining the CFA has started at all levels of the state apparatus in South Sudan; to be implemented by the parliament (Aljazeera, 20 June, 2013). However south Sudan was not able to sign the CFA as it entered into turmoil in December 2013 and it require much time to recover from internal unrest and reconsider this issue.

The Prime Minister of DRC Augustin Matata Ponyo has announced DRC's support for Egypt's position in the ongoing dispute over Ethiopia's Grand Renaissance Dam, which Ethiopia is building on Eastern Nile Basin. According to DRC concerning the Grand Ethiopian Renaissance Dam will always bear with Egypt. The Congolese Minister also said DRC will not sign any agreements that harm Egyptian interests. He said the CFA holds articles that gives upstream countries the right to exploit the Nile resources without being bound by the obligations not to harm water interests or historical quotas (Allafrica, 2016). Here it should be noted that DRC has

only one percent of the national land area drains into the Nile, however, having a population concentration in the Nile Basin is approximately 5 times higher than the average density in the rest of the country (Petros, 2010).

5.6. Conclusion

The Eastern Nile Basin is characterized by the existence power asymmetry, with Egypt being the longstanding hydro-hegemon. As mentioned in the conceptual framework part both hydro-hegemony and counter-hydro-hegemony are dialectical pairs (Zeitoun et.al, 2014), in which they exist simultaneously in the Basin. Upstream countries Ethiopia included have been applying various counter hegemonic mechanisms and strategies to counter Egyptian hydro-hegemonic position.

Ethiopia between the periods of 2008 and 2011 applied various counter hydro-hegemony mechanisms and strategies. The main counter hegemonic strategies employed by Ethiopia were the unilateral constructions of self-financed hydroelectric dam projects like the Tekeze (2009), Tana Beles (2010), in the Basin see (5.2.1.). The rapid economic growth in Ethiopia has also enabled the country to consider the construction of unilateral projects to be commenced. The feasibility studies undertaken by the ENTRO to construct hydroelectric dams in Ethiopia (Mendeya, Border, Beko Abo and Karadobi) also served as an input for Ethiopia to undertake unilateral hydroelectric dam projects in progress. As a result, the project site of the Border dam became the project site of the GERD (see 5.2.2.).

Ethiopia has also countered Egyptian hydro-hegemony by playing a leading role in the Basin's hydropolitics by bringing the legal issues of "equitable and reasonable" into the hydropolitics of the Basin. Ethiopia has been leading the upstream states to a united front for the signing of the CFA. Through united front upstream states has pushed Egypt and Sudan to negotiate for the coming of a legal framework in the Basin even if having their own reservations (Cascão and Zeitoun, 2010b). As a result, these downstream states have withdrawn from the negotiation see (5.3.1.). And, six upstream states signed the CFA, while three out of these signatories has ratified it. This has been used as a step forward to change the Nile Basin to a more equitable and reasonable regime as the upstream states stood in a more united front see (5.5.2.).

Ethiopia has been able to come up with a confidence building mechanism to downstream concerns, and proposed the formation of and took an active role in the agenda setting of the IPoE. Through the IPoE, Ethiopia has allowed Egyptian and Sudanese experts to take part in the study over the dam. This situation has been used by Ethiopia as mechanism of confidence building to ease the fear and anxiety on the part of downstream states as the construction of the dam began. The IPoE report has given Ethiopia an advice on technical issues of engineering, procurement and construction. In general the IPoE report recommended that for the three countries to conduct additional studies on water resource hydropower system simulation model and downstream socio-economic impact assessment study. This creates room for Ethiopia to challenge the Egyptian sanctioned discourse by sharing hydraulic data and information which are securitized and labeled as a state secret (mostly in Egypt) (see 5.4.1.).

In the signing of the DoP Ethiopia had been able to bring some international laws and norms to be included as principles. Three of the ten principles included in the DoP are the major principles Ethiopia has been upholding in the basin. Egypt for the first time in history agreed to sign a document that compromises its policy (acquired and historic right) in the Basin at least in principle. Ethiopia has also been leveraging its power over Egypt by drawing Sudan's support over the GERD (see 5.4.2.).

Ethiopia further made clear its contest to the Egyptian hydro-hegemonic order by ratifying the CFA, by being a pioneer in the basin then followed by Rwanda and Tanzania respectively. In doing so Ethiopia, Rwanda and Tanzania have come up with an alternative discourse against the long held Egyptian hydro-hegemony, by seeking a Nile Basin regime with equitable and reasonable use of Nile waters. This indicates on how the upstream states began enhancing their ideational power by challenging and even changing Egyptian sanctioned discourse in the Basin (5.5.2.)

CHAPTER SIX

6. Conclusion and a way forward

6.1. Conclusion

The Eastern Nile Basin characterized by power asymmetry and the hydro-hegemony of Egypt, together with the counter-hegemony of Ethiopia. The hydro-hegemony of Egypt has been challenged by Ethiopia in various ways, with the intention of replacing it with a more equitable and upstream-friendly regime. In this regard the commencement of the construction GERD can be mentioned as one turning point. The GERD is a part of the long held Ethiopian counter hegemony in an effort to change power asymmetry that has been taking place in the Basin.

As stated by (Cascão and Zeitoun, 2010a; 2010b) the four pillars of power were used to indicate the hydro-hegemony of Egypt in the Basin. In this study the four pillars of power are used to show the change in power relation in the Basin as Ethiopia's counter hydro-hegemony aimed at significantly change the Basin's hydropolitics and power relation. Endowed a significant geographic position in the Basin as an upstream state and as a contributor of the lion's share of the river's annual flow volume, Ethiopia is the most powerful state in the Basin so far in terms of geographic power. Its topography also offers Ethiopia with a greater potential for hydroelectric power generation. As a result, currently Ethiopia is undertaking mega hydroelectric dam projects; one of the prominent projects that can be mentioned in this regard is the GERD. By commencing the construction of such mega hydroelectric dam project, the Government of Ethiopia has a broader picture beyond satisfying the domestic demand, i.e. to further integrate the region by hydroelectric power see (4.2.1).

The increase in material power in terms economic and military power enhanced the counter hegemony mechanisms applied by Ethiopia's in the Basin. The rapid economic growth that has been taking place for the last decade see (4.2.2.1) has enabled Ethiopia to come up with its own unilateral national hydroelectric dam projects in the Basin. The rapid economic growth has also leads to an increase in demand for electric power. Despite Egypt's successful diplomatic effort by blocking any financial fund for hydroelectric dam projects in upstream states, Ethiopia has been undertaking several projects. Ethiopia become capable of financing its own hydroelectric dam

projects from domestic source, such conditions indicates on how Ethiopia started to change the power relation in the Basin. These national projects have increased Ethiopia's leveraging power see (5.2.1.).

Ethiopia while constructing some of the hydroelectric dam projects it has also been undertaking various feasibility studies for the future envisaged projects. As mentioned in (5.2.2.), the origins of the feasibility study project sites in the Eastern Nile Basin dates back to the study undertaken by the USBR, where the project site of the GERD was also studied by USBR as a Border dam project. ENTRO has also undertaken various feasibility studies for hydroelectric dam projects in Ethiopia, to be jointly administered by the Eastern Nile Basin states (Egypt, Ethiopia and Sudan). However, these failed as Egypt and Sudan withdrew from the project. The major contribution of these feasibility studies to Ethiopia's counter hegemony is by elevating Ethiopia with hydraulic related data to be used as an input for the future hydroelectric dam projects which is envisaged to construct in the Basin.

As stated in (4.2.1.) the centrality of Ethiopia in the Horn of Africa's politics resulted from its geographic position sharing boundaries with almost all the states in the region. This also makes it prone to be affected by any spillover problems including terrorism and eases the possibility of intervention to quell such threats, mostly originating from Somalia. The Ethiopian government has also been more than willing to intervene in conflict situation in all neighboring countries. As a result, western superpowers view Ethiopia as anchor state in the region in the fight against terrorism, and assisted it with all militarily. Due to such facts Ethiopia has been able to build a strong military power which will elevate its leveraging power in the region. Ethiopia has also been able to involve its military, through the Metal and Energy Corporation, in the construction of mega projects like the GERD, which enable the country and military more specifically to gain technological transfer from internationally renowned contractors like Salini.

Ethiopia has been upholding three major internationally recognized principles concerning shared transboundary waters these are "equitable and reasonable", "no harm" and "win-win" allocation waters. As a result, Ethiopia has brought these principles at the center of the Basin's hydropolitics under the negotiation for the CFA by playing a leading role in upstream states. Ethiopia has been able to bargain the allegiance of most upstream states in the signing of the CFA, where six states

have signed the document between 2010 and 2011. And, by taking the lead of Ethiopia two of the six signatories have ratified the CFA between 2013 and 2015. This shows how Ethiopia's bargaining power in the region has been increasing in countering Egypt's hydro-hegemony in the Basin. In this regard we can see how Ethiopia challenge to Egypt's long held sanctioned discourse by bringing an alternative discourse through the CFA.

After the commencement of the GERD as a fact on the ground Ethiopia has also been able to enhance its active diplomatic counter hydro-hegemonic mechanisms against Egypt's hydro-hegemony in a more coordinated manner. As a result, just after the commencement of the project Ethiopia has proposed for the formation of the IPoE as a confidence building mechanism to ease the fear that arose by the downstream states at the beginning of the construction of the dam. Above all Ethiopia has managed to draw Sudan into a more reasonable diplomacy as Sudan became aware of the benefit it will gain from the GERD after the IPoE report apart from its allegiance to Egypt concerning Nile related issues.

Ethiopia has also applied its enhanced active diplomacy in countering Egyptian hydro-hegemony by signing of the DoP which is first of its kind to be signed by Ethiopia, Egypt and Sudan. It incorporated Ethiopia's long held principles together with other principles that would guarantee downstream states not to be significantly harmed. This further enhances Ethiopia's position in the Basin as Egypt recognizes the dam as reality on the ground by signing principles concerning the usage.

Ethiopia's diplomatic attempt to secure Sudan's support can also be seen as a successful active diplomacy which enables Ethiopia to enhance its power to counter Egyptian hydro-hegemony. The diplomatic relation that has been taking place in both economic and political tracks have been enhancing the two countries interdependence. Sudan has been applying a reasonable diplomatic relation by overseeing the benefit it could get from the dam. As a result, higher officials of Sudan have reflected their neutrality and the coming of the GERD as reality in the Basin, urged for cooperation. And on Ethiopia's side winning Sudanese support is believed to be vital and managed to strength the relation through economic and military integration for a common cause.

Ethiopia by application of its public diplomacy (5.4.2.) in the hydropolitics of the GERD has promoted both leveraging and librating power of Ethiopia in countering hydro-hegemony of

Egypt. By the use of its public diplomacy made up of different community sectors, Ethiopia attempted to win the heart and mind of the public of Egypt's and Sudan's public. The Ethiopian public diplomacy has been stressing to a point that the GERD has been constructed to alleviate poverty and ensures development.

Finally Ethiopia by using the GERD as one component of counter hydro-hegemony, with the potential to physically control water and assert greater power in the Basin when completed. This fact on the ground enables Ethiopia to leverage on the hydropolitics of the Basin, and further to narrow the existing power asymmetry that will lead to a change in power relation.

6.2. Way Forward

The research indicates that Ethiopia has been able to challenge the hydro-hegemony of Egypt in the Eastern Nile Basin by applying various counter hydro-hegemonic mechanisms and strategies. One of these strategies includes the commencement of the Grand Ethiopian Renaissance Dam. By constructing this hydroelectric dam Ethiopia become able to bring various agendas (including proposing for the formation of the IPoE) in the hydropolitical agenda of the Basin. As a result, Egypt began to negotiate with Ethiopia concerning issues related to the construction of the dam. And, further by compromising from its former stance as a sole player in the Basin it has signed the DoP concerning the GERD with Ethiopia and Sudan.

This trend shows that a significant challenge to the established and stable Egyptian hydro-hegemony by upper riparian states is leading to better cooperation record, at least seen in historical context. Although not binding and far from very successful, the works of the IPoE and the signing of the DoP show the recognition of the changing power dynamics by the Egyptian side and the intention to re-negotiate a new order which is acceptable to all. That Sudan started to act more independently despite historical trend of following Egypt; also reduces the hydro-hegemony of the lower riparian states.

What this tells is that the GERD, by becoming a physical marker of the contestation of Egyptian hydro-hegemony, is creating a more favorable context for a cooperative interaction, rather than conflictual. It is understandable that in a stable hegemonic order with no significant counter-

hegemony and alternatives coming from the other side there is no incentive for the hegemon to come to the negotiation power.

The unfolding realities in the Basin now imply that there is more room for various actors, external to the Basin, to favor the re-negotiation of a water-sharing agreement which could benefit all. This assistance could come mainly in the technical and financial arena, as siding with either side of the power equation could lead to further contestation.

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Appendix 1: Lists of key Informants

Abebe Ayenete: Public Relation officer and Researcher in Ethiopian International Institute of Peace and Development: Interviewed at Ethiopian International Institute of Peace and Development on 16 March 2016.

Fekahmed Negash: Executive Director in the Eastern Nile Technical Regional Office (ENTRO): Interviewed at Eastern Nile Technical Regional Office (ENTRO) on 9 March 2016

Mehari Tadele Maru Political Analyst and migration consultant for AU and IGAD: interviewed at a restaurant around 22 Mazoria Addis Ababa, 26 February 2016

Omar Mohamed Ahmed: senior Regional Project Coordinator in Eastern Nile Technical Regional Office (ENTRO): Interviewed at Eastern Nile Technical Regional Office (ENTRO) on 21 January 2016

Tagel Kenubeh: Deputy Director at the Office of National Council for the Coordination of Public Participation on the Construction of Grand Ethiopian Renaissance Dam: Interviewed at the Office of National Council for the Coordination of Public Participation on the Construction of Grand Ethiopian Renaissance Dam, on 13 April 2016

Tefera Beyene: Advisor to the Minister in the Ethiopian Ministry of Water and Irrigation: Interviewed at Minister in the Ministry of Water and Irrigation, on 4 March 2016

Teshome Atnafu: Director of Boundary and Trans-Boundary water affairs Directorate at Ethiopian Ministry of Water and Irrigation: Interviewed at Ethiopian Ministry of Water and Irrigation, on 8 March 2016

Yacob Arsano: Professor and prominent scholar in Addis Ababa University, Department of Political science and International Relations: Interviewed at AAU press office on 4 May 29, 2016

Zerubabel Getachew: Expert of Boundary and Trans-Boundary Resource Affairs Directorate General in Ethiopian Ministry of Foreign Affairs: Interviewed at Ghion Hotel, on 16 March 2016

Appendix 2: Lists of Interview Questions

1. Can we take geography as one dimension of power in the case of Eastern Nile Basin?
 - What were the factors which hinders Ethiopia not to utilize its geographic power in the Eastern Nile Basin?
 - In what way do you think Egypt has managed to compensate its weakness in terms of geographical location in the Eastern Nile Basin?
2. What is the implication of the rapid economic development of Ethiopia on the development of the hydroelectric power sector?
 - Is there any relation between Ethiopia's rapid economic development and the commencement of the GERD? And its implication on the bargaining power of Ethiopia in the Eastern Nile Basin?
 - How do you describe the economic disparity in the Eastern Nile Basin? What implication does it have on the power asymmetry of the Basin?
 - How do you explain the military power in the Eastern Nile Basin? What implication does it have on the power asymmetry of the Basin?
3. How can do you explain the bargaining power of Ethiopia in the Eastern Nile Basin?
 - Does it have any implication on the power asymmetry of the Basin?
 - How do you explain the growing bargaining power of Ethiopia in the Eastern Nile Basin and in the construction and commencement of unilateral national hydroelectric dam projects?
 - What is the significance of Ethiopia's involvement in the EAPP?
4. How do you explain the Ethiopia's growing ideational power in the Eastern Nile Basin?
 - In terms of raising the quality and quantity of hydraulic related experts

- And in terms of bringing an alternative discourse against Egyptian sanctioned discourse?
5. What do you think the major factors that hinder Ethiopia to undertake unilateral hydraulic projects?
 6. What kind of mechanisms Ethiopia has followed in order to finance its unilateral hydroelectric dam projects?
 - How do you see Chinese involvement in the unilateral hydroelectric dam projects in the Eastern Nile Basin in both Ethiopia and Sudan? As mentioned in several article journals (Cascão, 2009a), (Verhoeven, 2013)?
 7. What do you think the significance of the USBR feasibility studies for the current unilateral projects Ethiopia undertaking?
 8. How do you explain the assistance of the GERD as a unilateral project to counter Egyptian hegemony in the Basin?
 9. What do think the significance of Ethiopia in the signing and ratification of the CFA?
 10. How do you explain Ethiopia's effort in the formation of the IPoE? And what benefit Ethiopia has archived?
 11. What do you think the implication of the signing of the DoP in enhancing Ethiopia's power in the Basin? Does the signing of the DoP have a negative effect on the CFA?
 12. What do you think about the implication of public diplomacy in the Easter Nile Basin concerning the GERD? What do think the main purpose of the Ethiopian public diplomacy concerning the GERD should be?
 13. How do you explain the relationship between Ethiopia and Sudan?
 - How do you explain the effort made by Ethiopia to secure Sudan's support concerning the construction of the GERD?

Appendix 3: Declaration of Principles

**Agreement on Declaration of Principles between
The Arab Republic of Egypt,
The Federal Democratic Republic of Ethiopia
And
The Republic of the Sudan
On The Grand Ethiopian Renaissance Dam Project (GERDP)**

Preamble

Mindful of the rising demand of the Arab Republic of Egypt, the Federal Democratic Republic of Ethiopia and the Republic of Sudan on their transboundary water resources, and cognizant of the significance of the River Nile as the source of livelihood and the significant resource to the development of the people of Egypt, Ethiopia and Sudan, the three countries have committed to the following principles on the GERD:

I. Principle of Cooperation

- To cooperate based on common understanding, mutual benefit, good faith, win-win, and principles of international law.
- To cooperate in understanding upstream and downstream water needs in its various aspects.

**II. Principle of Development, Regional Integration
and Sustainability**

The purpose of GERD is for power generation, to contribute to economic development, promotion of transboundary cooperation and regional integration through generation of sustainable and reliable clean energy supply.

III. Principle Not to Cause Significant Harm

- The three countries shall take all appropriate measures to prevent the causing of significant harm in utilizing the Blue/Main Nile.
- Where significant harm nevertheless is caused to one of the countries, the state whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures in consultations with the affected state to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.

IV. Principle of Equitable and Reasonable Utilization

- The three countries shall utilize their shared water resources in their respective territories in an equitable and reasonable manner.
- In ensuring their equitable and reasonable utilization, the three countries will take into account all the relevant guiding factors listed below, but not limited to the following outlined:
 - a. Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;



- b. The social and economic needs of the Basin States concerned;
- c. The population dependent on the water resources in each Basin State;
- d. The effects of the use or uses of the water resources in one Basin State on other Basin States;
- e. Existing and potential uses of the water resources;
- f. Conservation, protection, development and economy of use of the water resources and the costs of measures taken to that effect;
- g. The availability of alternatives, of comparable value, to a particular planned or existing use;
- h. The contribution of each Basin State to the waters of the Nile River system;
- i. The extent and proportion of the drainage area in the territory of each Basin State.

V. Principle to Cooperate on the First Filling and Operation of the Dam

- To implement the recommendations of the International Panel of Experts (IPOE), respect the final outcomes of the Tripartite National Committee (TNC) Final Report on the joint studies recommended in the IPOE Final Report throughout the different phases of the project.
- The three countries, in the spirit of cooperation, will utilize the final outcomes of the joint studies, to be conducted as per the recommendations of the IPoE Report and agreed upon by the TNC, to:-
 - a) Agree on guidelines and rules on the first filling of GERD which shall cover all different scenarios, in parallel with the construction of GERD.

- b) Agree on guidelines and rules for the annual operation of GERD, which the owner of the dam may adjust from time to time.
- c) Inform the downstream countries of any unforeseen or urgent circumstances requiring adjustments in the operation of GERD.
- To sustain cooperation and coordination on the annual operation of GERD with downstream reservoirs, the three countries, through the line ministries responsible for water, shall set up an appropriate coordination mechanism among them.
- The time line for conducting the above mentioned process shall be 15 months from the inception of the two studies recommended by the IPoE.

VI. Principle of Confidence Building

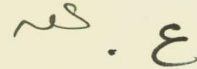
- Priority will be given to downstream countries to purchase power generated from GERD.

VII. Principle of Exchange of Information and Data

Egypt, Ethiopia, and Sudan shall provide data and information needed for the conduct of the TNC joint studies in good faith and in a timely manner.

VIII. Principle of Dam Safety

- The three countries appreciate the efforts undertaken thus far by Ethiopia in implementing the IPoE recommendations pertinent to the GERD safety.
- Ethiopia shall in good faith continue the full implementation of the Dam safety recommendations as per the IPoE report.



IX. Principle of Sovereignty and Territorial Integrity

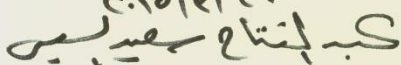
The three countries shall cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilization and adequate protection of the River.

X. Principle of Peaceful Settlement of Disputes

- The Three countries will settle disputes, arising out of the interpretation or implementation of this agreement, amicably through consultation or negotiation in accordance with the principle of good faith. If the Parties are unable to resolve the dispute through consultation or negotiation, they may jointly request for conciliation, mediation or refer the matter for the consideration of the Heads of State/Head of Government.

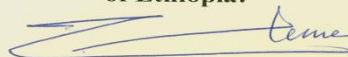
This agreement on Declaration of Principles is signed in Khartoum, Sudan, on Monday the 23rd of March 2015, by the Arab Republic of Egypt, The Federal Democratic Republic of Ethiopia, and the Republic of Sudan.

**For the
Arab Republic of Egypt:**

٢٠١٥/٣/٢٣


**Abdel Fattah El Sisi
President of the Republic.**

**For the
Federal Democratic Republic
of Ethiopia:**



**Hailemariam Desalegn
Prime Minister of the Republic.**

**For the
Republic of the Sudan:**



**Omer Hassan A. Elbashir
President of the Republic.**

Appendix 4: Framework for General Co-Operation between Egypt and Ethiopia

Annexe III

Accord-cadre égypto-éthiopien du 1er juillet 1993 portant sur la coopération

FRAMEWORK FOR GENERAL CO-OPERATION
BETWEEN
THE ARAB REPUBLIC OF EGYPT
AND
ETHIOPIA

THE ARAB REPUBLIC OF EGYPT AND ETHIOPIA,

DETERMINED TO CONSOLIDATE THE TIES OF FRIENDSHIP, TO
ENHANCE COOPERATION BETWEEN THE TWO COUNTRIES AND TO
ESTABLISH A BROAD BASE OF COMMON INTERESTS,

DESIROUS OF THE REALIZATION OF THEIR FULL ECONOMIC AND
RESOURCE POTENTIALS,

RECOGNIZING THE IMPORTANCE OF THE TRADITIONAL TIES
EXISTING BETWEEN THE TWO COUNTRIES THAT HAVE BEEN
CONSOLIDATED DURING THEIR LONG HISTORY OF CLOSE RELATIONS
AND LINKED BY THE NILE RIVER WITH ITS BASIN AS A CENTER OF
MUTUAL INTEREST,

REAFFIRMING THEIR COMMITMENT TO THE UN AND OAU
CHARTERS, PRINCIPLES OF INTERNATIONAL LAW, AS WELL AS THE
LAGOS PLAN OF ACTION,

HEREBY AGREE ON THE FOLLOWING FRAMEWORK FOR
COOPERATION:

ARTICLE 1

THE TWO PARTIES REAFFIRM THEIR COMMITMENT TO THE PRINCIPLES OF GOOD NEIGHBOURLINESS, PEACEFUL SETTLEMENT OF DISPUTES, AND NON-INTERFERENCE IN THE INTERNAL AFFAIRS OF STATES.

ARTICLE 2

THE TWO PARTIES ARE COMMITTED TO THE CONSOLIDATION OF MUTUAL TRUST AND UNDERSTANDING BETWEEN THE TWO COUNTRIES.

ARTICLE 3

THE TWO PARTIES RECOGNIZE THE IMPORTANCE OF THEIR COOPERATION AS AN ESSENTIAL MEANS TO PROMOTE THEIR ECONOMIC AND POLITICAL INTERESTS AS WELL AS STABILITY OF THE REGION.

ARTICLE 4

THE TWO PARTIES AGREE THAT THE ISSUE OF THE USE OF THE NILE WATERS SHALL BE WORKED OUT IN DETAIL THROUGH DISCUSSIONS BY EXPERTS FROM BOTH SIDES, ON THE BASIS OF THE RULES AND PRINCIPLES OF INTERNATIONAL LAW.

ARTICLE 5

EACH PARTY SHALL REFRAIN FROM ENGAGING IN ANY ACTIVITY RELATED TO THE NILE WATERS THAT MAY CAUSE APPRECIABLE HARM TO THE INTERESTS OF THE OTHER PARTY.

ARTICLE 6

THE TWO PARTIES AGREE ON THE NECESSITY OF THE CONSERVATION AND PROTECTION OF THE NILE WATERS. IN THIS REGARD, THEY UNDERTAKE TO CONSULT AND COOPERATE IN PROJECTS THAT ARE MUTUALLY ADVANTAGEOUS, SUCH AS PROJECTS THAT WOULD ENHANCE THE VOLUME OF FLOW AND REDUCE THE LOSS OF NILE WATERS THROUGH COMPREHENSIVE AND INTEGRATED DEVELOPMENT SCHEMES.

ARTICLE 7

THE TWO PARTIES WILL CREATE APPROPRIATE MECHANISM FOR PERIODIC CONSULTATIONS ON MATTERS OF MUTUAL CONCERN, INCLUDING THE NILE WATERS, IN A MANNER THAT WOULD ENABLE THEM TO WORK TOGETHER FOR PEACE AND STABILITY IN THE REGION.

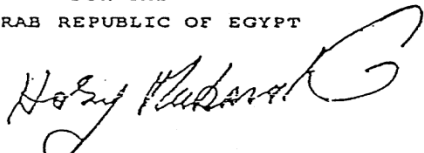
ARTICLE 8

THE TWO PARTIES SHALL ENDEAVOUR TOWARDS A FRAMEWORK FOR EFFECTIVE COOPERATION AMONG COUNTRIES OF THE NILE BASIN FOR THE PROMOTION OF COMMON INTEREST IN THE DEVELOPMENT OF THE BASIN.

THIS FRAMEWORK FOR COOPERATION IS MADE IN TWO ORIGINALS
IN THE ARABIC AND ENGLISH LANGUAGES, BOTH TEXTS BEING
EQUALLY AUTHENTIC.

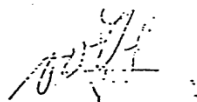
DONE AT CAIRO THIS 1st DAY OF THE MONTH OF JULY 1993.

FOR THE
ARAB REPUBLIC OF EGYPT



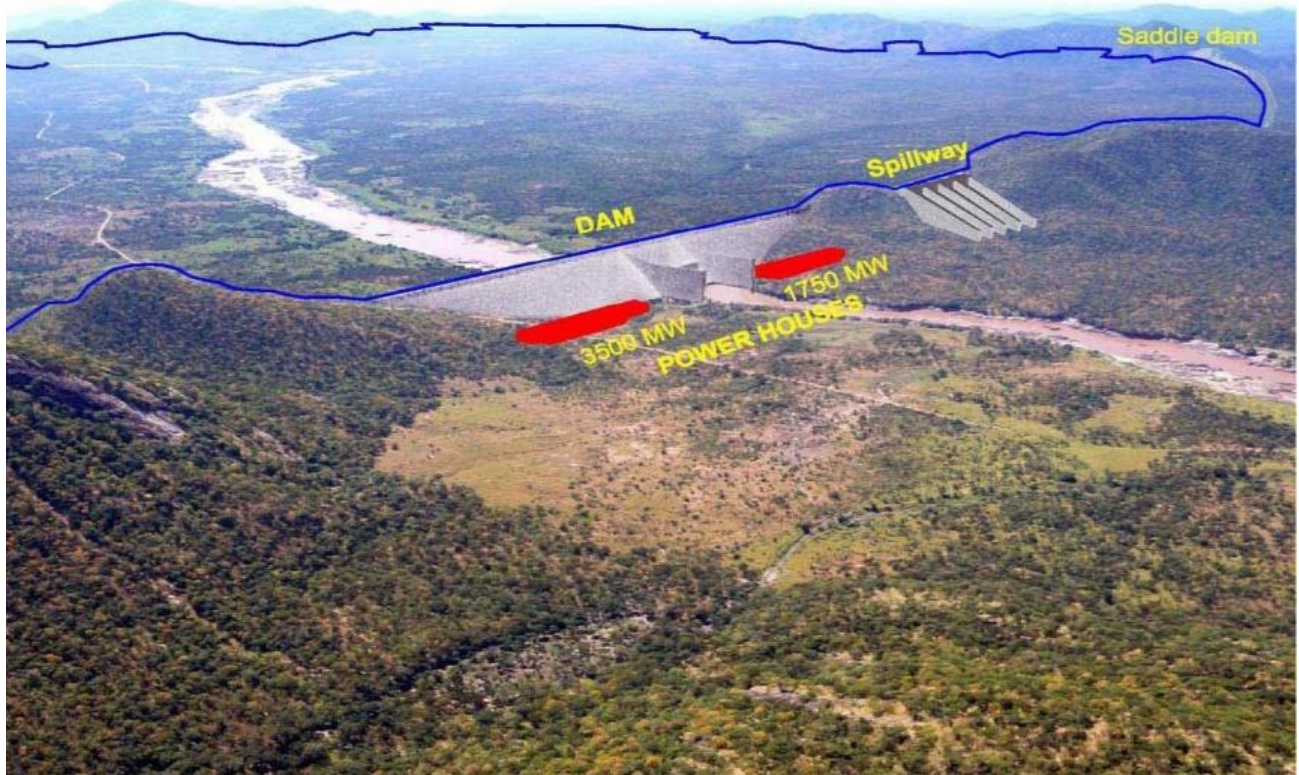
HOSNI MUBARAK
PRESIDENT OF THE
REPUBLIC

FOR
ETHIOPIA



MELES ZENAWI
PRESIDENT OF THE
TRANSITIONAL GOVERNMENT

Appendix 4: Aerial Photograph of the GERD Project Area



Source: <http://www.internationalrivers.org/resources/the-grand-ethiopian-renaissance-dam-fact-sheet-8213>

DECLARATION

I, the undersigned, declare that the thesis is my original work that has not been presented for a degree in any other university and that all sources of materials used for the thesis have been duly acknowledged.

Name _____

Signature _____

Date _____

Confirmed by

Name _____

Signature _____

Date _____