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**COMPARATIVE STUDY OF THE ROLE OF TRANS-BOUNDARY  
RIVERS IN RELATIONS OF COUNTRIES: THE CASE OF NILE  
AND EUPHRATES**

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RELATIONS OF COUNTRIES: THE CASE OF NILE AND EUPHRATES

Seulaiman Aragaw Hussen

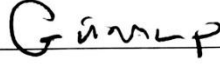
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Institute of Social Sciences  
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## KABUL VE ONAY

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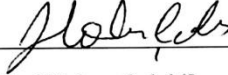
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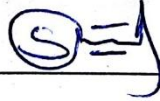
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## ABSTRACT

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Nile and Euphrates rivers have significant importance in the history of mankind. Both rivers have seen the rise of ancient civilizations and the early development of irrigation practices. This research presents a comparative analysis of the role of trans-boundary rivers in the countries' relations taking the cases of growing conflicts between Egypt and Ethiopia over the Nile River, and Turkey and Syria over the Euphrates. The study aimed to learn the positions, agreements, challenges and diplomatic breakthroughs on the Nile between Ethiopia and Egypt; and to look into the role of Nile and Euphrates rivers from a comparative perspective and how they affected the Ethio-Egypt and Turko-Syria relations respectively. It also aimed at predicting the likely outcomes and geopolitical repercussions that could emerge from the current impasse over the Nile and draw lessons that could contribute the understanding and peaceful settlement of the dispute between Ethiopia and Egypt. This study assesses the experiences of Turkey and Syria, and it finds helpful that water scarcity could be addressed in cooperation than competition. It also claims that water-based conflicts can be managed through institutional framework, democratic engagement among the conflicting nations, a well-managed regional power struggle, and avoided diplomatic challenges associated with historical misperceptions.

**Keywords:** *Trans-boundary Rivers, Riparian Countries, Water allocations, Comparative Perspective, Diplomatic Breakthrough.*

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## **LIST OF ACRONYMS AND ABBREVIATION**

AU - Africa Union

CPJ - Committee to Protect Journalists

EPRDF - Ethiopian People's Revolutionary Democratic Front

ENDF - Ethiopian National Defence Forces

EU - European Union  
FAO - Food and Agriculture Organization  
GERD - Grand Ethiopian Renaissance Dam  
GAP - Güneydogu Anadolu Projesi (Southeastern Anatolia Project)  
GFP - Global Fire Power  
HEPP - Hydroelectric Power Plants  
IMF - International Monetary Fund  
MENA -Middle East and North Africa  
NATO - North Atlantic Treaty Organization  
NBE - National Bank of Egypt  
NBI - Nile Basin Initiative  
OLF– Oromo Liberation Movement  
ONLF – Ogaden National liberation Movement  
PKK - Kurdistan Workers Party  
TBMM- *Türkiye Büyük Millet Meclisi* (Turkey Grand National Assembly)  
UN - United Nation  
UNDP - United Nations Development Program  
UNEP - United Nation Environmental Program  
UNFAO - Food and Agriculture Organization of the United Nations  
US - United State  
WB - World Bank  
WMO - World Meteorological Organization

## **1. INTRODUCTION**

Ethiopia and Egypt have a long relationship dating back several thousand years. Apart from the cultural and historical ties that have bound them together for centuries, both countries have been closely involved in African unity over the last five decades. Central to any relationship, however, the river Nile has been the strong bond tying the two countries and their peoples together for millennia. The Nile can and indeed should be a source of cooperation and mutually beneficial relations between Ethiopia and Egypt. This has not, however, always been the case. Indeed, the issue of the use of the Nile water has often been a major sticking point in the relationship, a major stumbling block to any sort of robust bilateral link that might have enhanced the interests of both countries.

In a similar fashion, Turkey and Syria have historical, cultural and economic relations dating back hundreds of years. The two countries were part of what was known as the Ottoman Empire and became only separate entities after WWI. Unlike Ethiopia and Egypt, they share physical boundaries and are part of the complex Middle East geopolitics. Cooperation and improved relations between these countries are very crucial. Although water politics has the weight in Ethio-Egyptian relations, it has nonetheless contributed to the drying up of relations and diplomatic standoff between the two countries. Reaching mutual understanding on the issue of water utilization will undoubtedly contribute to improved relations.

The main aim of this study is to analyse the problem between the two most populated countries in the Nile basin and forecasting the direction of the conflict, whether it will end by peaceful negotiation or will grow to military conflict. And it tries to analyse what the two countries have a lecture from the dispute between Syria and Turkey that erupted because of Euphrates river water usage and ended in a peaceful way.

### **1.1. Organization of the Study**

The paper is organized into seven chapters. The first chapter is introductory and covers the research framework and methodology of the paper. In the second chapter, relevant theoretical bases and works relevant to the study are surveyed. The third chapter deals with the background of the countries and sets context of the problem of the study. The

fourth and fifth chapters are dedicated to discussions on the Nile and Euphrates geopolitics respectively. Analysis and discussions of the study and information presented in the paper are handled in chapter six. Finally, the study ends up in chapter seven as conclusions and recommendations.

### **1.2.Main Objectives of the Study**

1. To examine the positions, agreements, challenges and diplomatic breakthroughs on the Nile between Ethiopia and Egypt.
2. To look into the role of Nile and Euphrates Rivers from a comparative perspective and how they affected the Ethio-Egypt and Turko-Syria relations respectively.
3. To predict the likely outcomes and geopolitical repercussions that could emerge from the current impasse over Nile and draw lessons that could contribute to the understanding and peaceful settlement of the dispute between Ethiopia and Egypt.

### **1.3.Research Questions**

1. What roles do trans-boundary Rivers play in the relations of countries?
2. What are the similarities and differences of Turko-Syria disputes over the Euphrates and that of Ethio-Egypt over Nile?
3. What are the likely outcomes of Ethio-Egypt disputes over Nile and the implications of the relations of two countries?
4. What lessons could be drawn from comparative analyses of the two rivers and the relations of the respective countries?

### **1.4.Hypothesis**

1. States under unfavorable economic conditions and domestic political instability will try to avoid direct militarized conflict and are more likely to engage non-violent dispute settlements.
2. Trans-boundary rivers conflicts are like an umbilical cord that can neither be severed politically nor removed surgically through military means but can only be sustainably settled through peaceful means.

3. Interstate cooperation on trans-boundary Rivers is more effective to address water scarcity and will lead to more efficient and sustainable utilizations.

### **1.5.Parameters**

1. Scarcity
2. Institutions
3. Asymmetric Power
4. Level of democracy<sup>1</sup> and good governance
5. Historical relations and Perception
6. Economic interdependence

### **1.6.Methodology**

Because of the nature of the study, a qualitative research method is employed. For the purpose of the research both primary and secondary sources are consulted. As much as they are available, experts, academicians and policy makers are consulted and interviewed. Further, relevant books, articles, journals, reports, policy and strategy papers are consulted. More importantly, agreements and international protocols and conventions relating to the topic are considered.

### **1.7.Scope of the Study**

This study tries to comparatively assess the role of two important trans-boundary rivers to compare the role they play in the relations of the respective countries. More specifically, it tries to see how the rivers of Nile and Euphrates affect the relations of Ethio-Egypt and Turko-Syria relations respectively.

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<sup>1</sup> According to the democracy index compiled by the Economist Intelligence Unit, level of democracy measured the maturity of democracy in a country by analyzing a number of different indicators in the following five groups: electoral process and pluralism, civil liberties, functioning of government, political participation, and political culture. And countries can be categorized as one of four regime types: *full democracies, flawed democracies, hybrid regimes and authoritarian regimes*.



### **1.8. Significance of the Study**

The amalgam of the factors that reinforce water disputes has never been higher than the recent tensions over the Nile. In 2011, Ethiopia has announced its plans for the construction of huge, Great Ethiopian Renaissance Dam (GERD), designed to generate a staggering 6,000 megawatts of electricity on the blue Nile. This created the expected diplomatic fury from Egypt, a downstream country that counts lion's share of the annual water flow of the river, and the already uneasy relations have blown into a full diplomatic scuffle. Against this backdrop, this study seeks to look into the issue from a comparative perspective by considering another important trans-boundary river, Euphrates, and the situation in that river seems to have subsided. The study will seek to contribute the available body of knowledge on the topic and will indicate areas for research works. Academicians, experts and policy makers will make use for their analysis and further the knowledge relating to the topic.

## 2. LITERATURE REVIEW

### 2.1.Introduction

In the world, availability of freshwater resources is becoming increasingly degraded and scarce. This scarcity is aggravated by a rapid population growth, global warming and other various factors throughout the world. Due to this, disputes between competing users are likely to continue and escalate in the future. The main and cheapest source of fresh water is rivers. 85% of Africa's water resources are comprised of large river basins that are shared between several countries(Ashton P. J., 2002) and more than 200 river systems are shared by two or more countries in the world(Petter H., 2000).

Nile River is one of the most important trans-boundary rivers that shred more than 10 countries and served as the main source of fresh water for those riparian countries especially the lower basins, Egypt and Sudan. Nile river is the longest trans-boundary river which covers 1/10 of Africa's land area and 1/3 of its population, has only 1/16 of its water (Varis, 2000). The riparian countries use almost more than 90% of the Nile's water, dominantly the downstream countries, Sudan and Egypt (Varis, 2000). The basin countries face increasing challenges in terms of water sharing problem, environmental degradation, food security, and socioeconomic development. The Nile basin is among the most critical regions of the world in terms of water resources development. The geopolitical situation blocks integration for development of water resources in the basin scale, the political environment nowadays became as critical as before.

The upper stream Ethiopia has been criticizing Egypt and Sudan due to their long time monopoly claim of the Nile water, despite of 85% of the Nile water originate from her sovereign territorial land. Still the right of Ethiopia over the water is overlooked by the lower riparian countries, especially Egypt. Egypt and Sudan's reluctance to share the Nile waters with the remaining riparian states has soured relations between them. The downstream countries base their claims on historical, legal rights embodied in the 1929 and 1959 Nile Waters Agreements (Gupta, 2001).

Since the introduction of Ethiopian's Grand Ethiopian Renaissance Dam across the Blue Nile River, Egypt and Ethiopia have been engaged in a war of words over its potential impacts. Ethiopia believes that the massive dam will not have any effect on the flow of

the Nile water to the lower basins; it will only use for hydroelectric power generation and will back to the river system. On the other side, Egypt's main concern is water security, as the country faces a future of increasing scarcity. Nearly all of Egypt's water comes from the Nile.

The study examines whether Egypt and Ethiopia will engage (direct or indirect) military conflict or will choose peaceful settlement to give end of their dispute. It also examines the similarities and differences between the Nile and Euphrates politics and their impact on the riparian countries' relations. To examine these, the paper focuses on two dependent variables: militarized conflict to prevent the statuesque of Egypt and peaceful settlement (whether bilateral negotiations or with third party participation) and by examining the independent variables like scarcity of water, the level of democracy in the two countries and others. And it also tries to point out some positive and negative impact of the output of the two way settlements.

### **2.2.A Theory of Riparian Conflict Management**

Many authors have suggested that because of the importance of water and its increasing scarcity around the world, disagreements over shared water resources will be a leading source of conflict in the twenty-first century(Hensel P., 2006) (Ashton, 2002). They often said that “future wars will be fought over water, not oil”. These indicate that the future war over natural resource sharing are predicted to take place over the sharing of trans-boundary rivers unlike as past over the sharing of oil. On the contrary, others believed that trans-boundary rivers have been a source of cooperation between people, states and they mentioned many examples of that.(Swain, Water war fact or fiction, 2001). There are two schools of thought with regard to the increasing conflict over the shared water resources, the first stresses the competitive aspect of shared water resources, and the second gives its attention to the cooperative dimension in dealing with shared water resources(Arsano Y. , 2007). To state in the other way, In the face of mutual dependence on the same fresh water resource, the withdrawal or pollution of one riparian state can potentially not only lead to conflict but also bring cooperation in the basin. (Swain, 2001).

The first thought emphasizes that, the increased competition over fresh water resources certainly leads to conflict between riparian states. The three prominent Egyptian politicians and high posted diplomats predicted water security issue will lead to war. In 1979, Anwar el-Sadat said that water was "the only matter that could take Egypt to war again."(Kameri-Mbote, 2007),(Al-Arian, 2013),(Starr, 1991). In 1988 Egyptian diplomat Boutros Boutros-Ghali said, "The next war in our region will be over the waters of the Nile, not politics."(Degefu, 2003),(Anthony T., 2002). In 1995 Egyptian World Bank official, Ismail Serageldin said "Many of the wars this century were about oil, but those of the next century will be over water."(Swain, Water war fact or fiction, 2001),(Edward K., 1997) U.S. Secretary of State Hillary Clinton also make her statement in the World Water Day On March 22, 2011 "Water security for us is a matter of economic security, human security, and national security, because we see potential for increasing unrest, conflicts, and instability over water."(Degefu, 2003). Potential 'water wars' in the Middle East are now regularly mentioned in the media: Israel Vs Jordan and Palestinians, Turkey Vs Syria and Iraq, or Egypt Vs Sudan and Ethiopia(Darwish, 1993). All these scenarios have brought the issue of water to the 'high politics'.

Typical grounds for disagreement over a cross-border river include a downstream state's objection to pollution, excessive irrigation, or the construction of dams by an upstream state, which will decrease or degrade the quantity or quality of water available to the downstream state. In general, Disputes over trans-boundary river water sharing usually come up among the riparian states on three grounds: quantity, quality and control. The incompatibilities on the last two issues (quality and control) are relatively easier to address with some financial and technical support (Swain, 2001). The quantity factor in many cases threatens to destroy existing cooperative arrangements and forces the parties to take conflicting positions. The quantity issue of river water has brought many riparian states into disputes in the arid regions of Asia and Africa (Swain, 2001). Nile River is one of the trans-boundary rivers that cause currently great dispute between the riparian countries, especially Egypt and Ethiopia, because of the disagreement on water sharing over "quantity".

The second thought emphasizes that water resources as an arena for cooperation rather than competition and conflict. They forward their arguments as; recently the world has witnessed several trans-boundary rivers disputes, but most of these river disputes are being settled through peaceful, cooperative arrangements (Swain, 2001). As Dolatyar and Gary stated; ‘In the world there are some 240 river basins that are shared by two or more countries. About 40 per cent of the world’s population and 50 per cent of its land resources are found in these shared river basins’ (Dolatyar, 2000). Out of these, most of the rivers served as sources of cooperation rather than conflict. According to the UN Food and Agricultural Organization (FAO), more than 3,600 treaties related to international water resources have been drawn up since 805 AD. The focus of negotiation and treaty-making in the last century has been the use, development, protection and conservation of water resources (UNDESA, 2014). The computer database currently includes 140 treaties, which are listed by basin; countries involved, date signed, treaty topic, allocations measure, and non-water linkages (Swain, 2001). To sum up, despite the complexity of the problems, most of the water disputes can be handled diplomatically.

According to Ashok Swain, a Professor of Peace and Conflict Research, demonstrate as: “Transboundary water is helpful to integrate the social and political groups. Treaties and agreements among the European countries over the Rhine and Danube Rivers laid the foundation of the present European Union. Water in general and rivers in particular, have been seen as the source for nations and state building in the past. Scarcity of water, need to control water, is an important input in joint human construction. Dynamic cultures and great civilizations have grown across river resources, many of which are now the potential hot spots. Thus, water also brings people together” (Swain, 2001). In order to analyse this, the paper tries to concentrate and examine the following parameters:

### **2.3.Determinants of Water Conflict (Independent Variables)**

Most of the recent studies and reports indicate that there is a significant risk of conflict over water sharing between Ethiopia and Egypt since the introduction of the Ethiopian Grand Renaissance Dam in April 2011. On the other side, others argued that the two countries can manage the dispute without any further conflict like many countries did.

To analyse the arguments and to forecast and draw the path of the two countries' choice of dispute management; the paper will concentrate and analyse the following six independent variables: Scarcity of water in the region, Strength of Institutions to solve the dispute, the level of democracy and good governance in both countries, Asymmetric power between the countries and their economic interdependence.

### **2.3.1. Scarcity**

If certain areas experience acute resource shortages, then they will experience direct conflict over such resources more often, indirect conflict as well (Hensel P., 2006). High level of water scarcity depresses the usage and effectiveness of peaceful conflict management and it inflames the riparian states to engage highly salient competitions over scarce water resources. At the same time it became cause to decrease the willingness of states to submit their claims to peaceful conflict management. (Most and Starr, 1989) High scarcity levels should increase not only the opportunity for river conflicts (in terms of the number of competing claims to cross-border rivers), but they should also increase the willingness of states to resort to militarized conflict to pursue their water-related interests (Hensel P., 2006).

This scarcity of water exacerbates due to population growth, agricultural production, economic development and many other factors. Population growth results in a declining supply of fresh water per person. The World Watch Institute estimates that due to population growth alone, the amount per capita water availability from the hydrological cycle will fall by 73% between 1950 and 2050 (Swain, 2001). Present population trends and patterns of water use suggest that more African countries will exceed the limits of their economically usable, land-based water resources before 2025 (Ashton P. J., 2002). Critchley and Terriff (1993) also argued that “Intensifying population growth, agricultural production, and economic development will place ever more pressure on current water supplies in the coming years, increasing the prospects for conflict and violence.”(Hensel P., 2006). Moreover, the developing countries are primarily agricultural economies. To provide food to the growing population and also to achieve food security, these countries use proportionately more water in the agricultural sector than in the industrial sector. The need of water differs considerably from agricultural production to industrial production; according to FAO, the total amount of fresh water

used for agriculture consumption is 70%, while the share of the industry is 19% and remaining amount which for municipal uses, that is 11% (FAO, Food and Agriculture Organization of the United Nations (FAO), 2014). Much of the water withdrawn for industrial is purposes returns to the natural water systems for the use of other consumers unlike the used for agriculture.

All of these studies explained the relationship between water resource scarcity and the eruption or escalation of conflict. For Many countries in the eastern and northern part of the Middle East and Africa, their water demand exceeds their supply and the effectiveness of peaceful conflict management activities will be much lower.

### **2.3.2. Institutions**

Because of the lack of a central authority internationally, states are forced to find other mechanisms to enforce their agreements. One of the options available for states is to create institutions. Institutions offer a potential solution to the problem of managing common water resources (Swain, 2001). Both, general and specific, regional and international institutions can serve as an outlet for conflict management by providing an arena for riparian states to resolve their differences, by providing neutral information, reducing uncertainty, and minimizing transaction costs (Swain, 2001). The development of regional and international institutions is one of the most splendid efforts for the achievement of world peace that the world has ever seen. Institutions, of any type, promote security and international order (Mearsheimer, 2007). It is important to note significant institutions that assist in making the world more peaceful by providing economic stability, cooperation and growth in the globe such as UN, the International Monetary Fund (IMF), World Bank, EU, AU and others regional and specific institutions.

Institutions served as peacemaker and helping useful purposes in situations of interdependence, allowing states to benefit from common rules and procedures and also institutions promote dialogue and learning among states allowing them to rethink their security priorities and behaviour and embark upon collaborative ventures (Deutsch, 1957). Robert Keohane and Joseph Nye argue that states relation are illustrated by 'complex interdependence' and when there is a high degree of interdependence, states

require international institutions to be setup and resolve issues between states. This means such institutions ‘promote cooperation’ by delivering information and lowering costs (Jackson, 2007).

Institutions serve as useful purposes in situations of interdependence, allowing states to benefit from common rules and procedures. The various benefits of membership in alliances – a vast umbrella of security, increased international standing, reductions in regional tensions – are immediately recognizable and explain the eagerness with which states pursue inclusion (Dobrosielski, 2012). Institutions help the promotion of peace by creating regular forums that facilitate bilateral negotiations between members and encouraging norms of peaceful conflict resolution (Russett & Oneal, 2001). It is also limiting potential aggression and possibly even helping to bring together alienated nations by providing them with common cause. Turkey and Greece are one example out of many states; they have forced historic enemies to scale back hostilities as a necessary requisite to be EU membership; such alliances have become an indispensable aspect of international relations and act as powerful deterrents to hostilities.

Regions that have strong and many in number institutions, there is less conflict between states because of common norms that have created by those institutions, like EU zone, and if it happened once, it can be easy to settle either bilaterally or with third party negotiation. On the opposite, regions that have weak and less number of institutions, like Asia and Africa, it has lower possibility of solving a dispute through peaceful way and easy to aggravate direct or proxy military conflict.

### **2.3.3. Democracy**

The democratic peace proposition is the most widely accepted notion among international relations theorists today. The primary claim of democratic peace proponents is that democratic states do not wage war against each other, although a number of scholars have used the same claim in different phraseology. “Democracies are less likely to fight wars with each other.”(Evans, 2001)(Ostrowski, 2002). “Democracy does not fight each other, because they perceive each other as friendly rather than hostile”(Dunne, 2007). The main factors for that is the structure of



democracy and democratic institutions, which limit the ability of leaders to fight other democracies, or simply make them reluctant to choose war.

The second argument of democratic peace theory is that democracies rarely and only in especial cases may go to war, but still the damage of the war will not be serious and can settle easily. Spencer R. Weart alleges that democracies rarely if ever go to war with each other (Ostrowski, 2002). “Democracies rarely go to war against each other; an institution of free and fair elections prevents democratic governments from going to war against other democracies” “Democratic norms facilitate peaceful conflict resolution in the domestic realm” (Dunne, 2007). Thus, democracy may have a double effect in preventing armed conflict over the environment: it generates fewer serious problems and it provides other means of conflict resolution once these problems have arisen (Daoudy, 2008). In wars they initiate, democracies suffer fewer casualties and fight shorter wars than nondemocratic states (Siverson, 1995). In other words, democratic states should be more willing to employ non-violent means of dispute resolution. This includes creating institutions, direct negotiations, and seeking the involvement of third parties to resolve the disputes. In sum, democracies are less likely to use militarized means to reconcile the disagreement, but more likely to pursue agreements through peaceful negotiations.

#### **2.3.4. Asymmetric Power**

One of the key elements of trans-boundary water conflict is the impact of asymmetry of power. Power asymmetry is being a fundamental aspect of hydro-politics (Daoudy, 2008). Power is the capacity to set and control the negotiation agenda, to avoid taking decisions or to affect outcomes through the creation or reinforcement of institutional frameworks and values (Daoudy, 2008). Lukes (1991) defined power as “the ability to avoid or resist negative actions against the state from others and performing positive actions for itself” (Daoudy, 2008).

Upstream positions, military and economic resources and bargaining power are not the only elements of power, but also foreign alliance can determine the dynamics between riparian states. Strategic alliances usually make sense when the parties involved have complementary strengths. In addition to military and economic resources, asymmetry in

power, includes external alliances (Daoudy, 2005). To be aligned with the super power or other strong powers could be a vital dimension of source of power, means of getting a comparative advantage and security increases as a result of the partner's commitment. Turkey could be a sound example for this, by allying with NATO when a conflict happened with Syria in the 1980s and 1990s. Power includes riparian positions and the control exercised over military, economic resources and water, or the capacity to "turn the tap," as sources of structural power in trans-boundary river basins (Daoudy, 2008). To give a sound example, Turkey had a better power position due to its geographic upstream position, military and economic resources. It can apply unilateral measures in order to maximize her interests.

Asymmetry of powers can be cause for direct or proxy military conflict and it decreases the possibility of going riparian states to peaceful negotiation. Homer-Dixon (1991) points out that the relative imbalance of military capabilities between upstream and downstream states in a river basin influences the potential for militarized conflict, especially if the downstream state is more powerful (Hensel P., 2006). (Frey and Naff 1985; Naff 1994) They also repeat the Homer-Dixon claim as; there is also a greater risk of conflict when downstream riparians are more powerful and suffer from upstream development (Daoudy, 2008). This power asymmetry affects the bargaining process and the powerful states need more than the eligible. A conflict occurs among riparians only if in the interest of the most powerful riparian (Daoudy, 2008). Egypt is an excellent example of a powerful riparian that would appear more likely to choose a military force rather than negotiation if Ethiopia and other upper stream states were to threaten their access to the Nile. The military and nuclear competition between India and Pakistan in the 1970s to dominate one another over Indus River and Israel's military intervention to stop the diversion of the Jordan River is another excellent example.

### **2.3.5. Historical Relation and Perception**

Present relations and cooperation between states significantly influenced by their historical relations and their perception. The country's historical trained of settling disputes, shape the other country's perception and image either positively or negatively. Bell's assert that history now occupies a 'centre-stage' role in international relations (Vaughan-Williams, 2005). It means that the past and recent militarized conflict over

various issues and failures in attempts to settle issues peacefully may generate a negative image. Bad experience prejudices and images increasingly exert their influence in international politics and transnational relations.

*Myths, stereotypes, prejudices and images increasingly exert their influence in international politics and transnational relations. Socially and politically constructed myths and stereotypes about the “others” are being re-produced and re-circulated by the forces of globalization and used to legitimize policy options more than ever. In this context, increasing role of the public opinion and popular choices are being paid a special attention as “images” become invisible actors in the international environment and in the making of alliances based on social, political and cultural approximation among the nation states. Growing use of myths, stereotypes, prejudices and images, whether historically rooted or recently constructed, in political and popular discourse, which is facilitated by the media and educational material, requires a closer attention (Küçükcan, 2010).*

To improve and build better relations, cooperation, agreements and strategic alliances between states a lot has to be done to eliminate prejudices, ill-informed images and monolithic perceptions produced and propagated by nation state of the past.

### **2.3.6. Economic Interdependence**

Economic markets and exchanges will gradually create interdependence of states by economic means such as trade. This economy interdependence doesn't mean only the exchange of large volumes of products, but also a large amount of assets. To give a sound example of this, the multinational corporations (MNC) or multinational enterprises (MNE) such as Microsoft war company with manufacturing plants in the whole world. The company is largely successful. As of 2013, Microsoft has global annual revenue of US\$ 77.85 billion and nearly 110,000 employees in 105 countries (MS, 2007). When those countries enter into an economic relationship, this leads the people of the countries for more interaction and the two countries characterized by interdependence.

Economic interdependence has a supportive advantage of peace and integration among different states and makes the war unlike among them. Immanuel Kant argued that free trade between nations as one of the key ingredients for a peaceful world. He added that interdependence strengthens the peaceful ties between states by creating incentives to

maintain a cooperative, lucrative environment for trade (Crescenzi, 2002). When the economic exchange grows horizontally across the states, it could be the incentives to maintain a peaceful and a cooperative international environment. Rosecrance (1986) provides a similar argument, associating increased trade with increased costs of fighting wars. As wars become more costly, alternative paths to pursuing political objectives become more appealing, but the mechanism by which trade alters state goals such that conflict becomes an outmoded and inefficient political tool remains unclear (Crescenzi, 2002). As such, these incentives decrease the risk of international conflict. Solomon Polachek (1978) argues, "Countries involved in more trade have on balance higher costs of conflict, and hence *ceteris paribus* are hypothesized to engage in *less* conflict"(Crescenzi, 2002). Domke (1988) and Edward Mansfield (1994) forward their argument as that greater level of international trade for a state decreases the likelihood that the state will engage in war (Crescenzi, 2002). All these results indicate that strong support for the negative relationship between trade and conflict.

**Table 1. Summary of Conflict Management**

Independent variables	Dependent variable	
	Militarized conflict	Peaceful settlement
Water scarcity	P	N
Weak and few Institutions	p	N
Low level of democracy	P	N
Power asymmetry	P	N
Bad historical relation and negative perception	P	N
Economic interdependence	N	P

\*P- Stands for Positive

\*N- Stands for Negative

### 3. GENERAL BACKGROUND

#### 3.1.Introduction

The Horn and North East of Africa has always been one of the most strategically hunted regions in the world. The Red Sea area is the most strategic midpoint by facilitating the socio-political and economic exchanges among Africa, the Middle East, Europe and Asia. The region is also an area of potential natural resources, and emerging social developments. There are countries with current petroleum advantages. And there are many others with future potentials. The region is also thought to have accumulated minerals of various kinds, such as gold and diamond. And most importantly the region is one of the most naturally provided regions with relatively chain of great drainage systems. And here, the Nile River becomes at the centre of emphasis. Unquestionably, the river has doubled the value of the region.



Figure 1. Africa and the Middle East (Worldatlas, 2014)

The Nile River covers more than six thousand kilometres across ten countries in the horn of Africa. It flows through Rwanda, Burundi, Congo, Tanzania, Kenya, Uganda, Eritrea, Ethiopia, Sudan, Egypt, and it finally reaches the Mediterranean. It is the longest trans-boundary river system in the world. It has two main tributaries - the White Nile, which originates from Burundi and the Blue Nile which originates from the Ethiopian highlands. The two tributaries, which provide 86 % of the waters of the Nile, join at Khartoum. Here the Blue Nile covers 59 % and the White Nile covers only 14 %. The rest is contributed by Baro Akobo-14 % and Tekeze-13 % (Swain, 1997).

But at the same time the Nile river system has been a point of continuing tensions among the consuming nations and others of indirect benefit. There have been tensions over time. And there have been agreement efforts. However, no time has been as tough as the current tension from the time Ethiopia introduced the plan for a grand Renaissance dam. The Ethiopian Grand Renaissance Dam is one of the giant projects in the history of the region. It's become a cause for the tension in the region, especially between the 2nd and 3rd most populated countries in the continent; Ethiopia and Egypt.

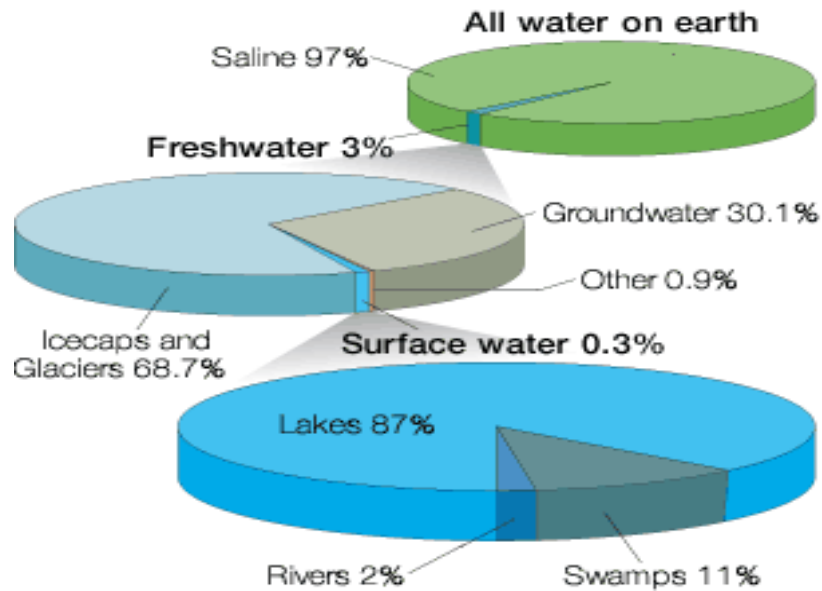
However, such a tension in trans-boundary water is not the first, other countries like Turkey and Syria had such a problem since 1980s, Because of Turkey's introduction of Ataturk dam and GAP project on the Euphrates river. By the time the two countries reached their maximum to open fire on each other. Lastly, they find themselves to settle the problem.

### **3.2.Scarcity of Water**

Water is a key element of life for everyone on Earth. As the world's population growth, climate change and extra energy needs; increases the demand for water mounts and pressure on finite water resources intensifies. Stress on freshwater resources due to rising demand is already leading to water scarcity in many places.

Clean, safe drinking water is scarce. Today, nearly 1 billion people in the developing world don't have access to it. Of all water on earth, only 3% of water on the surface is fresh; the remaining 97% resides in the ocean (saline water). Of freshwater, 69% reside in glaciers, 30% underground, and less than 1% is located in lakes, rivers and swamps.

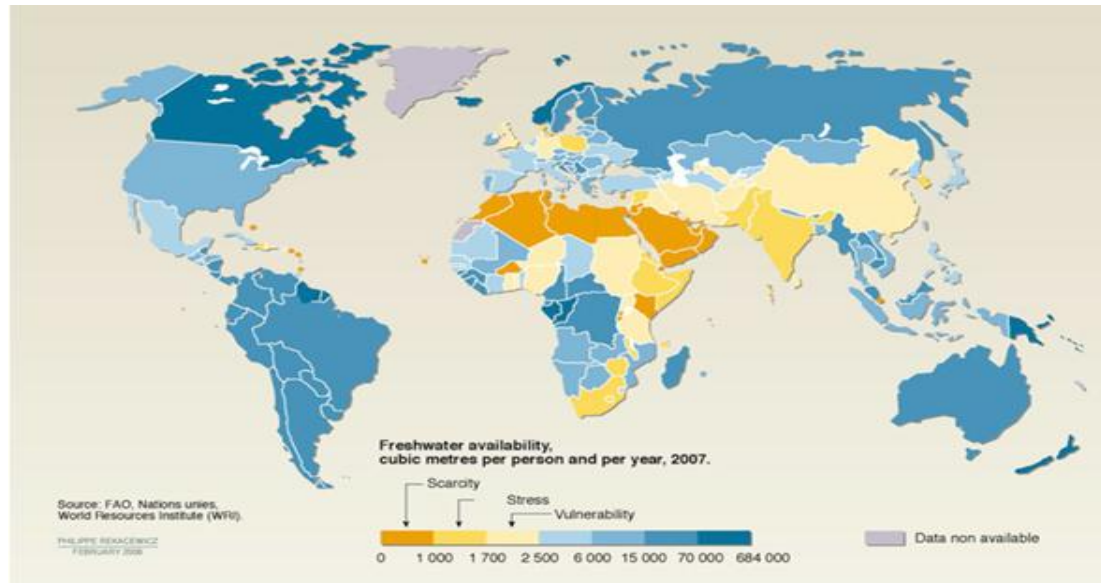
This means that, only one percent of the water on the Earth's surface is usable by humans, and 99% of the usable quantity situated underground (W.J.Cosgrove, 2012).



**Figure 2. Global water distribution (Source: SOPAC Water, Sanitation and Hygiene: Water Distribution)(SOPAC, 2014).**

The distribution thus 3% of freshwater of water on the Earth's surface is extremely uneven; some places have water rich climates, while many others do not. Roughly 40% of the land on Earth is arid or semiarid, which means it receives little or almost no rainfall (Action, 2012). For instance, most of the countries in the Middle East and North Africa (MENA) region cannot meet their current water demand. Countries are classified based on their amount of water available in their territories as: **Water scarce** countries are countries that have the amount of annual renewable water supply per person less than 1000 cubic meters or less per person. The population faces water scarcity, and below 500 cubic meters "absolute scarcity". **Water stress** countries are the annual availability of internal renewable fresh water is greater than 1,000 and less than 1,700 cubic meters per person in the population. **Water abundant** countries are their annual renewable fresh water is more than 1,700 cubic meters per person. (Falkenmark, 1992)





**Figure 3. Water-scarce and water-stressed countries, 2007 (Source: Population Institute) (PI, 2010).**

This water scarcity has two types: physical and economic. Physical scarcity describes a situation where there is a lack of adequate amount of water resources within a territory, country or region, so that the resources which are available are unable to meet the demands of the population and prevent self-sufficient food production. Arid regions are most associated with physical water scarcity. And the economic water scarcity is a result of poor management of the sufficient available water resources. According to the United Nations Development Program, the economic one is found more often in developing regions to be the cause of experiencing water scarcity, as most countries or regions have enough water to meet household, industrial, agricultural, and environmental needs, but lack the infrastructure, institutions and the means to provide to make use of it (Charlotte, 2010).

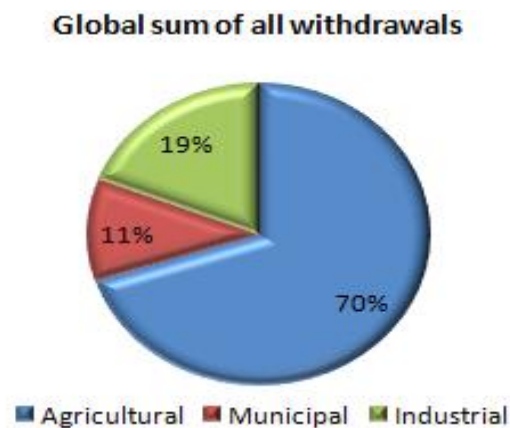
Population growth is a major contributor to water scarcity. Growth in populations means the mounting demand of water for domestic, agriculture, industrial, and municipal uses. The most water scarce or stressed areas are typically those with few water resources, high population densities, and high population growth rates (PA, 2012). The global population is expanding by 80 million people annually, increasing the demand for fresh water by about 64 billion m<sup>3</sup> a year (WWDR3, 2009). In fact, water withdrawals tripled over the last 50 years due to population growth. This rapid growth



rate also caused the potential global availability of water to decline from 12,900 m<sup>3</sup> capita per year in 1970, to 9,000 m<sup>3</sup> in 1990, to about 7,000 m<sup>3</sup> in 2000(PI, 2010). In 2030, 47% of world population will be living in areas of high water stress (OECD, 2008). Most population growth will occur in developing countries, mainly in regions that are already experiencing water stress and in areas with limited access to safe drinking water and adequate sanitation facilities.

The scarcity of water in the Middle East and Africa is a deeply rooted security issue, given the rapid growth of population in the region and global climatic changes. High rates of population growth accompanied by continued increases in the demand for water have resulted in several countries passing the point where the scarcity of water supplies effectively limits further development. Present population trends and patterns of water use suggest that more African countries will exceed the limits of their economically usable, land-based water resources before 2025(Ashton P. J., 2002). Egypt and Ethiopia can be sound example countries that have high water stressed and at the same time they have also high population growth.

According to FAO, the global water withdraws manly for three purposes: for agriculture, municipal (including domestic) and industrial uses. Agriculture accounts about 70 % of global water use, and for as much as 95% of the total amount of fresh water used in agriculture in developing countries. Agriculture not only necessitates a large amount of water, but it is also one of the most inefficient ways of using this scarcity of water. 19% used for industry and the remaining amount is for municipal uses, that is 11%.



**Figure 4. Global water withdrawal (Source: FAO, 2014)**

### 3.2.1. Ethiopia

Ethiopia, with a total area of 1.1 million km<sup>2</sup>,(FAO, Report) lies in the northeast of Africa, with especial name Horn of Africa. It is a landlocked, sharing border with Eritrea to the north and northeast, Djibouti to the east, Sudan and the new born South Sudan to the east, Somalia to the east and southeast and Kenya to the south. Ethiopia is the second-most populous country in Sub-Saharan Africa with a population of about 96.6 million and ranked 13<sup>th</sup> from the world (USCB, 2013). Contrastingly, it is one of the world's oldest civilizations and at the same time one of the world's poorest countries.



**Figure 5. Ethiopia's Strategic Location (Horntel, 2014)**

### 3.2.2. Population

As the UN, Department of Economic and Social Affairs; Population Division, Population Estimates and Projection Section report showed the Ethiopian population growth from the year 1950 to 2050 as:

**Table 2. Ethiopian population growth from the year 1950 to 2050 (UNDESA)**

<b>Year</b>	<b>Population</b>	<b>Year</b>	<b>Population</b>
1950	18 128	2005	76 167
1955	19 947	2010	87 095
1960	22 151	2015	98 942
1965	25 014	2020	111 521
1970	28 415	2025	124 537
1975	32 570	2030	137 670
1980	35 241	2035	150 731
1985	40 777	2040	163 553
1990	48 043	2045	175 896
1995	57 024	2050	187 573
2000	66 024		

### **Population Growth Rate of Ethiopia**

As the UN, Department Of Economic and Social Affairs; Population Division, Population Estimates And Projection Section report showed the population growth rate of Ethiopia has been increase by the period 1950-1975, where it reached at 2.73 per cent by the year 1975. Because of famine catastrophe of 1973-80 the population growth halted for a short period and also started to increase again after 1985 and it reached its max 3.43 in 1995. After this year the population growth started declining straightly and it has expected to reach 1.29 in 2050, as it is demonstrated in the following table:

**Table 3. Population growth rate of Ethiopia from 1950- 2050 (UNDESA)**

<b>Period</b>	<b>Population growth rate</b>	<b>Period</b>	<b>Population growth rate</b>
1950-1955	1.91	2000-2005	2.86
1955-1960	2.10	2005-2010	2.68
1960-1965	2.43	2010-2015	2.55
1965-1970	2.55	2015-2020	2.39
1970-1975	2.73	2020-2025	2.21
1975-1980	1.58	2025-2030	2.01
1980-1985	2.92	2030-2035	1.81
1985-1990	3.28	2035-2040	1.63
1990-1995	3.43	2040-2045	1.46
1995-2000	2.93	2045-2050	1.29

### 3.2.3. Economy

According to World Bank, the economy of Ethiopia is largely based on agriculture, which accounts for 46.6% of the gross domestic product (GDP) and 85% of total employment by the year 2012. It has been described as the fourth largest and second fastest growing economy in Sub Saharan Africa with nominal GDP estimated at US \$ 46.87 billion in 2013. The economy has experienced strong and broad based growth over the past decade, averaging 10.6% per year in 2004/05 - 2011/12 compared to the regional average of 4.9%. Expansion of the services and agricultural sectors account for most of this growth, while manufacturing sector performance was relatively modest. Private consumption and public investment explain demand side growth with the latter assuming an increasingly important role in recent years (World Bank).

Economic growth brought with it positive trends in reducing poverty, in both urban and rural areas. While 38.7% of Ethiopians lived in extreme poverty in 2004-2005, five years later, this was 29.6%, which is a decrease of 9.1 percentage points as measured by the national poverty line, of less than \$0.6 per day. Using the Growth and Transformation Plan (GTP), the target is to reduce this further to 22.2% by 2014-2015. However, the country's per capita income of \$410 is substantially lower than the regional average (Gross National Income, Atlas Method). The government aspires to reach a middle income status over the next decade (World Bank).

The economic condition in the country is far from being sufficient. Inflation has been punishingly high and corruption is pervasive at all levels. Even middle income in segments that would have normally benefitted from economic growth were hit hard and left deeply disadvantaged. Favoritism and nepotism remained high and only those who have necessarily links benefitted. These factors installed discontent and highly antagonized the society against the government.

Africa as a whole counts only 20,000 scientists (3.6% of world total) and its share in the world scientific output has fallen from 0.5% to 0.3% as it continues to suffer the brain-drain of scientists, engineers and technologists. The problem of brain-drain has reached quite disturbing proportions in a certain African countries, with Ethiopia ranked first in the continent in terms of rate of loss of human capital, followed by Nigeria and Ghana.

Over the past 10-15 years about 50% of Ethiopians who went abroad for training did not return after completing their studies (Ulf, 2007).

#### 3.2.4. Water Resource

The surface water resource potential of Ethiopia is very remarkable, but little developed. Ethiopia has 12 major basins, 11 lakes, 9 saline lakes, 4 crater lakes and over 12 major swamps or wetland. The total mean annual flow (MAF) from all the 12 river basins is estimated to be 123.25 billion cubic meters. A reasonable use of the water resources of the country is an essential prerequisite for the development of the country's agriculture, hydroelectric and industrial sectors. Out of the total annual renewable fresh water about 70% less in the Ethiopian portion of the Nile sub-basin catchment and only 3% remain in the country, the remaining 97% is lost as run-off to the lowlands of neighbouring countries (Degefu, 2003). According to FAO the twelve major river basins, which form four major drainage systems:

- **The Nile Basin** (including Abbay or Blue Nile, Baro-Akobo, Setit-Tekeze/Atbara and Mereb) covers 33 percent of the country and drains the northern and central parts westwards and flow to Sudan and Egypt.
- **The Rift Valley** (including Awash, Denakil, Omo-Gibe and Central Lakes) covers 28 percent of the country;
- **The Shebelle-Juba Basin** (including Wabi-Shebelle and Genale-Dawa) covers 33 percent of the country and drains the southeastern mountains towards Somalia and the Indian Ocean;
- **The North-East Coast** (including) covers 6 percent of the country. Integrated (Aquastat, 2014).

**Table 4. Ethiopian water resource in the year 2012(FAO , 2014)**

<b>Water resource</b>	<b>2012 (10<sup>9</sup> m3/yr)</b>
Surface water: total entering and bordering the country	0
Surface water: total external renewable (actual)	0
Groundwater: entering the country (actual)	0
Groundwater: leaving the country (actual)	--
Water resources: total external renewable (actual)	0
Total renewable surface water (actual)	120

Total renewable groundwater (actual)	20
Overlap between surface water and groundwater	18
Total renewable water resources (actual)	122
Dependency ratio (%)	0
Total renewable water resources per capita (actual)	1330



**Figure 6. River Basins of Ethiopia (AWMISSET, 2014)**

### 3.2.5. Drought and Famine in Ethiopia

Ethiopia has suffered from chronic famines. In total, 39 periods of food shortage and excess mortality or both have been recorded (Webb, 1992). According to a 1974 UN FAO report more than 300,000 people, predominantly the northern rural poor, died during the 1973-1974 Ethiopian famine. Before the total recovery from this catastrophe, the country subjected to the horrors of famine one again in 1984/85 a famine began in Ethiopia's Northern provinces that would affect millions of people. As the African watch report (Sep. 1991) showed more than 400,000 people died, this number not

included those who died by settlement. The main reason for these disasters is the shortage of rain and poor tradition of water resource management in the country. The late Ethiopian water expert, Zewdie Abate stated that, “water is one of the least developed natural resources of Ethiopia.” Although Ethiopia is endowed with many rivers, lakes and plenty of rainfall, there is no culture of conservation what nature has given her so abundantly (Degefu, 2003).

**Table 5. UNEP: United Nation Environmental Program report of Global environment outlook: Some of the worst disasters in Africa, 1972-2000(UNEP).**

Year	Type of disaster	Country	<i>Number died</i>	<i>Number affected</i>
1972	Famine	Ethiopia	600 000	no data
1973	drought	Ethiopia	100 000	no data
1974	drought	Ethiopia	200 000	no data
1980	drought	Mozambique	no data	6 000 000
1982	famine	Ghana	no data	12 500 000
1983	drought	Ethiopia	no data	7 000 000
1984	drought	Ethiopia	300 000	7 750 000
1984	drought	Sudan	150 000	8 400 000
1985	drought	Mozambique	100 000	2 466 000
1987	drought	Ethiopia	no data	7 000 000
1990	drought	Ethiopia	no data	6 500 000
1991	drought	Ethiopia	no data	6 160 000
1991	drought	Sudan	no data	8 600 000
1993	drought	Malawi	no data	7 000 000
1993	famine	Ethiopia	no data	6 700 000
1999	famine	Ethiopia	no data	7 767 594
2000	drought	Ethiopia	no data	10 500 000

### 3.2.6. Governance and State Institutions

Ethiopia is an ancient as well as new a country. Its history of statehood dates back more than two millenniums. However, the modern nation state of Ethiopia emerged in the last decade of the 19th century. Emperor Menilik II (1889 - 1913) is regarded to have established many of the present day physical boundaries of the country. After effectively incorporating northern and central principalities to his authority, he enlarged his domains with further conquests and agreements with European colonial powers. His successors maintained the independence and territorial unity of the current with the exception of brief Italian conquest. Haile Selassie I (1930 - 1974) introduced modern

administration and further extended state control over the country, though much of it was feudal structure. After long reign, he was overthrown by the military. The military Junta, led by Mengistu Haile Mariam (1987 - 1991), tightened its hold on power and oriented the current toward the socialist block. Political unrests in the form of ideological and ethnic struggles finally brought to an end the rule of Military dictatorship in 1991. The country underwent political restructuring and adopted a federal system of administration.

Ethiopia has a federal system with a multi-party democracy. The Ethiopian constitution was adopted in 1995. The constitution provides for a federal system, which is structurally based on the federal government with nine autonomous regional states and two chartered city administrations. The Ethiopian government is a federal republic with a two-tier parliament made up of the House of People's Representatives and the House of Federation. There have been key changes in Ethiopian leadership in recent years. Current Prime Minister, Hailemariam Desalegn took office in September 2012, a month after the death of long-time ruler Meles Zenawi who had been prime minister since 1995. Following the opening of the new parliament, a joint session of the House of Representatives and House of Federation elected Ambassador Dr. Mulatu Teshome as the President of Ethiopia. He replaces 88-year old Girma Wolde Giorgis, who first took the post in 2001 and was re-elected in 2007. The Ethiopian constitution is seen as the supreme law, which overrides all other legislation in the country. The commercial code of 1960 provides the legal framework for undertaking business activities in Ethiopia.

Despite some marked improvement from the past regimes, the country achieved low democratic political culture and institutional transitions. The monarchical system absolutist domination, dictatorial of military and often divisive and the authoritarian current regime did not allow any room for democratization of the country. Many institutions that would otherwise have been necessary for democratic governance exist in theory but don't function practically. Separation of powers is also superficial. The ruling party has an absolute majority in the parliament, which could be equated as that the Chinese Community Party (99.6% of the 2010 general election produced MEPs for the ruling) and Judiciary branch functions effectively under the influence of the executive. Any dissenting voices are not tolerated and ruthlessly suppressed. After a



brief experiment for the competitive multipart system, the ruling party took U-turn and effectively wiped out political opponents. It liquidated any force that could challenge the hitherto and closed the political space for other to emerge and fairly compete. Press freedom has been stamped out and any the only the media outlets in the country are in the hands of the government. The government also maintains a monopoly on telecommunications and is the only providers of the internet.

Denied for any room to engage political activism, some groups resorted to violence and underground activities to challenge the government. The traditional ethnic based political groups also continued their opposition, pointing that nothing substantial has changed from the country. After the election of the 2005, unfortunately the level of human rights violations, imprisonment of political opponents, journalist and religious leaders (especially Muslims- the same as in the past Christian monarchs) intensified. Even the government stepped into control the religious institutions, including Mosques and Church to pre-empt any would challenge from the society. These all shattered any hope of democratic changes and sovereignty of the people to decide the future of the country. Some part of the society is already convinced that this government displayed all the ingredients of dictatorship and left no room except armed revolts.

### **3.2.7. Military Strength**

According to the Global Firepower, Ethiopia is ranked 40th from a total 106 countries. The Ethiopian National Defence Forces (ENDF) numbered about 182,500 personnel as of November 2014 (Global firepower, 2014) which made it the second largest militaries in Africa. During the 1998-2000 border war with Eritrea, the ENDF mobilized strength reached approximately 350,000. Since the end of the war, some 150,000 soldiers have been demobilized. As Global Fire Power mentioned, Ethiopia has 182,500 active Frontline personnel, 650 Tanks, 780 armoured fighting vehicles, 195 Self-propelled guns, 183 multiple launch rocket system and total 81 aircraft and 24 interceptors (GFP, 2014).

The ENDF continued a transition from its roots as a guerrilla army to an all-volunteer professional military organization with the aid of the U.S. and other countries. Training in peacekeeping operations, professional military education, military training

management, counterterrorism operations, and military medicine are among the major programs sponsored by the United States (GFP, 2014). The table below summarizes the main parameters of ENDF based on the global firepower indicators.

**Table 6. The Ethiopian National Defence Forces 2014 (GFP, 2014)**

<b>Ethiopian Military Power Resource (Global Firepower)</b>	
<b>Resource Type</b>	<b>Amount</b>
Reaching military age	84,734,262
Active Frontline personnel	182,500
Active reserve personnel	0
<i>Land system</i>	
Tanks	560
Armoured Fighting Vehicles (AFVs)	780
Self-Propelled Guns (SPGs)	195
Towed Artillery	1170
Multi-Launch Rocket System	183
<i>Air Power</i>	
Total Aircraft	149
Helicopter	47
<i>No Naval Power</i>	
<i>Resource</i>	
Oil production (bl/day)	100
Oil consumption (bl/day)	50,000
Proven Oil reserve (bl/day)	430,000
<i>Financial Strength</i>	
Defence Budget	\$340,000,000
External Debt	\$10,030,000,000
Reserve foreign exchange and Gold	\$3,272,000,000
Purchasing power	\$109,000,000,000

### **3.2.8. Separatist Movement in Ethiopia**

After the fall of the communist, military “Dergue” regime ruled until 1991, “Ethiopia has enjoyed an ethnic based federal system with a multi-party system”. The Ethiopian constitution, adopted in 1995, provides for a federal system, which is

structurally based on ethnicity; the federal government with nine autonomous regional states and two chartered city administrations (ETGov, 2014).



**Figure 7. Administrative Subdivisions of Federal Democratic Republic of Ethiopia (Kotra, 2014)**

ONLF and OLF are the two main separatist rebel groups operates in Somalia region and Oromiya region, respectively, that the Ethiopian government at war with since the group's foundation. Both parties accused the EPRDF, ruling party, since the beginning of its rule, as its government has been characterized by a domination of a single ethno-nation using the powers of state to subjugate and exploit all the other ethnic nations within that artificial system and its narrow ethnic based rule.

#### **A. Ogaden National Liberation Front (ONLF)**

Founded in the early 1980s, the ONLF aims to create an independent state in Ethiopia's South -Eastern Ogden territory, which is mainly inhabited by ethnic Somalis. The Ogaden territory is located now in the Somali regional state, one of nine ethnically based administrative regions in the country. Inadequately developed, with relative to other regional states in the country, due to neglect from the central government for decades.

According to IRIN Africa, the territory has enjoyed relative stability and development under the current Ethiopian Peoples' Revolutionary Democratic Front (EPRDF), which has governed the country since 1991. The party's regional affiliate, the Ethiopian Somali People's Democratic Party, says significant advances have been seen in the expansion of education, health, potable water, roads, and electricity and telecommunication facilities (IRIN, 2012). However, the region still termed as poor and less developed regional state in the country context.

The ONLF insurgency began in 1984, furthering earlier attempts either to separate the region or join it to neighbouring Somalia. The group partnered with the EPRDF in the 1991 removal of the military junta government leader Mengistu Haile Mariam, after which the two groups effectively governed the Somali region as part of a transitional government. In 1994, following disagreements over the country's transition, the ONLF re-started its insurgency, demanding the right to self-determination. The group has used any means necessary, including violence, to dethrone the central government. Since the foundation of the organization, it causes many small and large scale country's costs of the military and civilians' material and psychological damages including life loss.

Though the ONLF fighters had, over the years, mounted a number of attacks, including assassinating and injuring regional government leaders, tourists and foreign and domestic workers, it remained a low-level insurgency for years. However, during the April 2007 attack on a Chinese-run oil field, at least 65 Ethiopians and nine Chinese oil workers and more than 20 Ethiopian troops were killed; and seven Chinese nationals were taken captive in the incident (IRIN, 2012). ONLF had accused the government of forcibly relocating the local people to allow for oil and gas exploration.

### **B. Oromo Liberation Front (OLF)**

The Oromo Liberation Front (OLF) was found in 1973 by Oromo nationalists to lead the national liberation struggle of the Oromo people against the Ethiopian government, claiming that "Abyssinian (Amhara and Tigrean) colonial rule for the last 140 years has begun with the conquest of the Ethiopian south by Menelik II."(TSA, 2012).

As stated on its official web site(OLF, 2005); the fundamental objective of the Oromo liberation movement is: "to exercise the Oromo peoples' absolute right to national self-

determination terminating a century of oppression and exploitation; and to form, where possible, a political union with other ethnic nations on the basis of equality, respect for mutual interests and the principle of voluntary associations.” And “OLF's commitment to this objective is based on a democratic principle, that the Oromo people are endowed with the right to decide the type of sovereignty they want to live under and the type of political union they want to form with other peoples.”

After the fall of the Dergue regime, OLF played a major role in the creation of a Transitional government in 1991. The leaders left the transitional government alleging that they didn't have fair representation in the government proportional to their highest share of the country's population (around 34.5%, according to 2007 Ethiopian census) and its members were being killed, arrested and jailed. OLF has since been engaged in a low-intensity armed struggle against the Ethiopia government. The group has started its promotion of independent and self-determination for the Oromo people as the only way to bring an end to centuries of oppression and exploitation of the Oromo people.

Ethiopian government classified the group as: “an ethnic separatist and terrorist rebel group operating in the horn of Africa and their goal is to carve out a separate state within the current borders of Ethiopia as a homeland of the Oromo people. The "homeland" presently claimed by the OLF would occupy more than half of Ethiopia's current territory, including the capital, Addis Ababa. The government accused of the group commitment of terrorizing and killing civilians, government officers and foreign workers and tourists.”

### **C. ONLF and OLF as Terrorist Organizations**

In 2009, the Ethiopian parliament passed an anti-terrorism law that has been much-criticized by rights groups. The anti- terrorism law is being used to crack down and oppress opposition political parties, journalists and any other groups or individuals critical to the EPRDF government. According to the New York based Committee to Protect Journalists (CPJ) and Ethiopian government owned ETV,(ETV, 2011) In June 14, 2011, the Ethiopian House of Peoples' Representatives (where the ruling EPRDF controls 99.6 percent of the seats) formally designated five groups as terrorist entities by the anti-terrorism law. The list comprised three domestic opposition groups - the two

Ethiopian separatist groups ONLF and the Oromo Liberation Front (OLF) and Ginbot 7, a banned political party started by US based oppositions, alongside international groups like Al-Qaeda and the hard-line Somali Islamist militant Al-Shabaab. The most prominent allies (EU and US) of the EPRDF government in the war against terrorism failed to acknowledge its claim. At the 2011 UN General Assembly, then-Deputy Prime Minister Hailemariam Desalegn, now Ethiopia's prime minister, criticized Western countries, particularly the US, for having double standards in their categorization of terrorist groups; due to that all the three groups operate freely in European countries and the US, where they have offices and representatives (IRIN, 2012).

#### **D. Agreement Initiatives**

Most of the leaders of both OLF and ONLF exhausted from the extended military fighting and life in exile. The previous prominent leader of OLF, like Lencho Letta and Dr Dima Negawo finally turned their views from the independence of Oromia (the Oromo homeland) toward democratizing Ethiopia, and back to home after a long time. They have already started talks with the EPRDF government and establishing a new political party, Oromo Democratic Front (ODF), to work at home. It has many differences from the main stream OLF but still struggle to halt oppressing Oromo people and to liberate Oromiya in a democratic way. Others like Ali Birraa; He is also one of the most significant and influential activist and popular singer on the struggle of Oromo people – within OLF. Mohammed Hassan, one of the Oromo scholars, describes Ali as “a great gift to the Oromo people and to the world of music.” Mohammed Ademo, one of the young and emerging as a prominent activist of OLF, added that Ali Birraa (Ali Mohammed Musa) as: “He is a national icon, a pioneer, a legend, a hero, a doctor, and even the undisputed king of Oromo music.” And he also acknowledged his great works for his people as “His work and life reflect his pride in, and devotion to, the empowerment of the Oromo people.” (Ademo, 2013) Ali back to home for the Ethiopia millennium, in 2007, in agreement with the EPRDF government. He made a public speech that acknowledged better progress and improvements in the right of Oromo people in the EPRDF period.

On the side of ONLF, in September, 2012; negotiations initiated between the Ethiopian government and ONLF by a broker of Kenya's government in Nairobi; the two sides

agreed on the modalities of the negotiation process, the general principles that would form the basis of resolving the conflict and the initial agenda. Regardless of the hopefulness of both the parties, nothing achieved from the talks; because the Ethiopian government put a precondition that the rebel's acceptance of the country's constitution (Ademo, 2013). The government persists describing its precondition and ONLF denounced any peace deals and declared the continuation of fighting.

### **E. Inefficiency of the Parties**

Since its foundation, OLF has achieved a significant number of its objectives but over the past two decades OLF has been in a downward spiral after terminating its cooperation with TPLF, today's core centre of EPRDF. Among different Oromo nationalists the diverse views regarding the type of Oromian sovereignty want to realize is 'union of autonomous nations in Ethiopia/Great Oromia' or 'independent Gadaa republic of Golden Oromia' or 'union of independent nations in the Horn.' Yet, these three types of sovereignty are not exclusive to each other, but achieving the first is a good prelude to come to the second, and then to move further to the third (OLFist, 2013).

Unfortunately, such a stepwise progress of the OLF to the main goal is now becoming less likely to achieve anymore. Because of the real lack of cooperation and coordination among and between the different Oromo political groups (OLFist, 2013), growth of regionalist sentiment within the prominent leaders and their supporters and distrust among different religions, (Mohammed, 2009) especially process of marginalization of the majority Muslims and substitution of Islamic identity of the majority Oromo people with Gadaa. In addition to all these, most of the senior leaders of the movement have been exhausted from the extended military fighting and life in exile.

The national liberation front has already lost its unifying force and divided into different factions based on the stressing tendency of the factions towards their chosen single type of Oromian sovereignty over the others, despite their common denominator of liberated Oromiya. These different factions and groups are wasting most of the talent, resource and time fighting against each other, instead of solving the conflict within. Of course,

such discord among the Oromo national liberation camp weakens the necessary strength needed for the struggle. Additionally, Oromo's archenemy, the EPRDF, also works persistently that Oromo nationalist liberators be so divided, and the Oromo national liberation bloc stays as weak as possible. The sum of all thus, results retardation of the movement.

In the same Fashion, The leaders of ONLF have been tired and partitioned across religion, communist and Islamists, across a tribe and clan as well as difference of ideology and object to be achieved. Some leaders and their fellow groups joined Al-Ittihad al Islamiya (*The Islamic Union*), is an Islamist militant group in Somalia that was added to the U.S. list of terrorist organizations on September 24, 2001,(AR, 2005) to achieve the great Islamic Somalia in horn of Africa and others needs the independent Ogaden. These and other reasons results to vanish the unity among the leaders and their supporters.

### **3.3.Egypt**

Egypt lies in the north-eastern corner of the African continent and has a total area of about 1 million km<sup>2</sup>. It is bordered in the north by the Mediterranean Sea, in the east the Gaza Strip, Israel and the Red Sea, in the south by Sudan and in the west by Libya. Its north-south extent is about 1 080 km, and its maximum east-west extent about 1 100 km(WFB, CIA world fact book, 2014). The Egyptian terrain consists of a vast desert plateau interrupted by the Nile Valley and Delta, which occupy about 4 per cent of the total country area. The land surface rises on both sides of the valley reaching about 1 000 m above sea level in the east and about 800 m above sea level in the west. The highest point of the country, at Mount Catherine in Sinai, is 2 629 m above sea level and the lowest point, at the Qattara Depression in the northwest, is 133 m below mean sea level(MALR, 2003).

The majority of the country area is desert land. Most of the cultivated land is located close to the banks of the Nile River, its main branches and canals, and in the Nile Delta. Rangeland is restricted to a narrow strip, only a few kilometers wide, along the Mediterranean coast and its bearing capacity is quite low. There is no forest land. The total cultivated area (arable land plus permanent crops) is 3.4 million ha (2002), or



about 3 per cent of the total area of the country. Arable land is about 2.9 million ha, or 85 per cent of the total cultivated area, and permanent crops occupy the remaining 0.5 million ha.(MALR, 2003).



**Figure 8 Egypt’s Strategic Location and its Neighbours (CSS, 2011)**

With a recorded history of at least 5,000 years, Egypt is one of the oldest countries in the world. The country is centrally located in relation to other concentrated population centers in Europe, Asia, and Africa. For most of its recorded past, at present, and probably well into the future we may view Egypt as being set in the middle of commercial, migration, and invasion routes that matter to Egyptians and foreigners(Goldschmidt Jr, 2009). Located at a strategic trade location, Egypt is both a major North African economic power and the cultural leader of the Arab world.

### 3.3.1. Population of Egypt

With an estimated 86 million people, Egypt is the most populous Arab country in the world and the third in Africa after Nigeria and Ethiopia (CAPMAS, 2014). According to UN’s Population Division of the Department of Economic and Social Affairs, the

population size of Egypt has increased from 21.5 million in 1950 to 66.2 million in 2000 and projected to reach 120 million in 2050 (WFB, 2013).

**Table 7. Population of Egypt the year between 1950- 2050 (UNDESA, 2014)**

Year	Population	Year	Population
1950	21 514	2005	71 778
1955	24 387	2010	78 076
1960	27 998	2015	84 706
1965	32 084	2020	91 062
1970	36 342	2025	96 989
1975	40 359	2030	102 553
1980	44 932	2035	107 900
1985	50 347	2040	113 001
1990	56 337	2045	117 689
1995	61 168	2050	121 798
2000	66 137		

The majority of the population in Egypt is concentrated on the fertile banks of river Nile, especially in Alexandria and Cairo, within the Delta and the Suez Canal. Thus, there is unequal distribution of population in the various parts of the country. Cairo, the capital of Egypt has the highest population density (2136.1 people per sq km against 63.7 people per sq km)(CAPMAS, 2014).

The country has been described as the ‘’ a melting’’ for various races and ethnicities. Because of its central location on routes of trade, conquest, and migration, through the centuries of its recorded history, Egypt has become home to many temporary residents and permanent immigrants. With the passage of time, each wave of new immigrants has assimilated into the local mix of peoples, making modern Egypt a combination of Libyans, Nubians, Syrians, Persians, Macedonians, Romans, Arabs, Turks, Circassia’s, Greeks, Italians, and Armenians, along with the descendants of the people of ancient Egypt(Goldschmidt Jr, 2009).

### **Population Growth Rate of Egypt**

The growth rate of the population of Egypt has significant increase between the year 1950-1965 and it has started to decrease since the period 1965-1970. It reached 1.56 per

cent in the period 1995-2000 and slightly increased afterwards to 1.68 per cent in the period 2005-2050. The population growth rate is expected to continue declining and will reach 0.69 per cent in the period 2045-2050, as it is demonstrated in the following table:

**Table 8. Population Growth (%) of Egypt the year between 1950- 2050 (UNDESA, 2014)**

<b>Period</b>	<b>Population growth rate</b>	<b>Period</b>	<b>Population growth rate</b>
1950-1955	2.51	2000-2005	1.64
1955-1960	2.76	2005-2010	1.68
1960-1965	2.73	2010-2015	1.63
1965-1970	2.49	2015-2020	1.45
1970-1975	2.10	2020-2025	1.26
1975-1980	2.15	2025-2030	1.12
1980-1985	2.28	2030-2035	1.02
1985-1990	2.25	2035-2040	0.92
1990-1995	1.65	2040-2045	0.81
1995-2000	1.56	2045-2050	0.69

### **3.3.2. Economy**

For most of Egypt's history the mainstay of the economy was agriculture, especially growing and exporting cereal grains around the Mediterranean basin. Egypt made the transition from a subsistence based economy to a cash crop economy long before most other Middle Eastern countries. By the late 19th century long-staple (Egyptian) cotton had become its leading export, followed by tobacco, indigo, and sugar. Due to the rising use of synthetic fibers worldwide, cotton exports dwindled in the late 20th century. As Egypt's arable land has decreased in relation to its total population, other crops have overtaken cotton, notably maize, rice, vegetables, and fruit (Goldschmidt Jr, 2009).

More recently, the Egyptian economy has shifted away from agriculture toward industry and services. The Egyptian government has tried to promote manufacturing. However, industries such as construction, transportation, and extraction of oil, natural gas, and minerals currently add more to the gross domestic product. International tourism is a service industry that employs millions of Egyptians, as is fitting in a culture that places great value on hospitality. But it is often disrupted by political instability and terrorism. The country remains a leader in education, finance, and culture in the Arab world.

According to World Bank report, Egypt is a lower middle-income economy and in 2013, its GDP stood at US \$ 272 billion making it the 40th biggest economy in the world. The economy maintained 2% growth rate despite the political turmoil of the past three years. Thanks to centralization and endemic corruption, Egypt is a poor country. GDP Per Capita is US\$ 3,314 making Egypt 121rd in personal income rankings in 2013. It is estimated that 40 million Egyptians or 51% of the population lives below the poverty line of \$2 a day. The official unemployment rate is 13%, but the real figure, including under unemployment, is quite possibly 2-3 times that (World Bank).

### **3.3.3. Natural Resources**

Although ancient Egyptians made copious use of copper, silver, and gold, the country today has few mineral resources that can be easily developed. Limestone and sand are abundant and vital to construction throughout Egypt's history. Some iron deposits are found near Aswan, and a large coal deposit has been found in northern Sinai. Phosphates, salt, and gypsum exist. The main natural resources, as in many other Middle Eastern countries, are petroleum and natural gas. Egypt's main oil fields are in the Western Desert and lands surrounding the Gulf of Suez. Egypt is currently a net exporter of oil, but it is likely to become a net importer by 2010 unless new fields are discovered. Natural gas, found near Suez, has become Egypt's major earner of foreign exchange. Egyptians hope further exploration will uncover other sources of mineral wealth (Goldschmidt Jr, 2009).

### **3.3.4. Water Resources**

According to the (MWRI, 2014), the Egyptian territory comprises the following river basins:

- The Northern Interior Basin, covering 520 881 km<sup>2</sup> or 52 percent of the total area of the country in the east and southeast of the country. A sub-basin of the Northern Interior Basin is the Qattara Depression.
- The Nile Basin, covering 326 751 km<sup>2</sup> (33 percent) in the central part of the country in the form of a broad north-south strip.
- The Mediterranean Coast Basin, covering 65 568 km<sup>2</sup> (6 percent).

- The Northeast Coast Basin, a narrow strip of 88 250 km<sup>2</sup> along the coast of the Red Sea (8 percent).

The River Nile is the main source of water for Egypt, with an annual allocated flow of 55.5km<sup>3</sup>/yr., under the Nile Waters Agreement of 1959. Internal renewable surface water resources are estimated at 0.5km<sup>3</sup>/yr. This brings total actual renewable surface water resources to 56km<sup>3</sup>/year. Internal renewable groundwater resources are estimated at 1.3km<sup>3</sup>/yr. (Ibid).

**Table 9. Water resource of Egypt in the year 2012(FAO, Food and Agriculture Organization of the United Nations (FAO), 2014)**

<i>Water resource</i>	<i>In the year 2012(10<sup>9</sup> m<sup>3</sup>/yr)</i>
Surface water: total entering and bordering the country (actual)	55.5
Surface water: leaving the country (actual)	0
Surface water: total external renewable (actual)	55.5
Surface water produced internally	0.5
Water resources: total external renewable (actual)	56
Total renewable groundwater (actual)	2.3
Total renewable water resources (actual)	58.3
Dependency ratio (%)	96.91
Total renewable water resources per capita (actual) (m <sup>3</sup> /person/yr)	722.2 (m <sup>3</sup> /person/yr)

The overlap between surface water and groundwater being considered negligible, the total actual renewable water resources of the country are thus 58.3 km<sup>3</sup>/yr. The Nubian Sandstone aquifer located under the Western Desert is considered an important groundwater source, but this is fossil groundwater. The main source of internal recharge is percolation from irrigation water in the Valley and the Delta(GWRI, 2001). The River Nile is the lifeline of the country as it services the country's industrial and agricultural demand and is the primary source of drinking water for the population. Without that Nile, there would have been no food, no people, no state, and no monuments.

### **3.3.5. Military Strength**

Egypt's military strength is ranked 13<sup>th</sup> in the world and first in Africa. The Egyptian armed forces have combined troop strength of around 468,500 active personnel in

addition 1,000,000 reservists for a total of 1,468,500 strong (GFP, 2014). According to the former chair of Israel's Knesset Foreign Affairs and Defense Committee, Yuval Steinitz, the Egyptian Air Force has roughly the same number of modern warplanes as the Israeli Air Force and far more Western tanks, artillery, anti-aircraft batteries and warships than the IDF(Steinitz, 2006). Egypt is speculated by Israel to be the second country in the region with a spy satellite, Egypt Sat1 in addition to Egypt Sat 2 launched on 16 April 2014(Clark, 2014).

The Egyptian military has dozens of factories manufacturing weapons as well as consumer goods. The Armed Force's inventory includes equipment from different countries around the world. Equipment from the former Soviet Union is being progressively replaced by more modern U.S., French, and British equipment, a significant portion of which is built under license in Egypt, such as the M1 Abrams tank. The Global Firepower (2014) places the Egyptian Navy to be the largest navy in Africa and Middle East and the Arab World, and is the seventh largest in the world measured by the number of vessels.

The United States of America provides Egypt with annual military assistance, which in 2009 amounted to US\$ 1.3 billion (US State Department, 2009). The military has to other sectors. It also enjoys considerable power, prestige and independence within the state and has been widely considered part of the Egyptian "deep state". A lot of influence in the political life of Egypt as well as the economy and it exempts itself from laws that apply.

**Table 10. Egypt's Military Capacity (GFP, 2014)**

<b>Egypt's Military Power Resources (Global firepower)</b>	
<b>Resource Type</b>	<b>Amount</b>
Reaching military age	1,532,052
Active Frontline personnel	468,500
Active reserve personnel	800,000
<b>Land System</b>	
Tanks	4767
Armoured Fighting Vehicles(AFVs)	18986
Self-Propelled Guns(SPGs)	889

Towed Artillery	2240
Rocket projectors	1469
Portable mortar system	10334
Portable AT weapons	2360
<b>Air Power</b>	
Total Aircrafts	863
Helicopter	200
<b>Resource</b>	
Oil Production (bl/day)	680500
Oil Consumption (bl/day)	750,000
Proven Oil Reserve (bl/day)	4,400,000,000
<b>Financial Strength</b>	
Defence Budget	\$4107000000
External Debt	\$33750000000
Reserve foreign exchange and Gold	\$17600000000
Purchasing power Parity (PPP)	\$534,100,000,000

### 3.4.Ethio-Egypt Relations: Historical Perspective

Egypt and Ethiopia have no common border, but their histories have always remained interwoven. Their common story has culminated in various conflicts and crises, but beyond the dramas of strategic and political interests, there lay deeper dimensions of culture and identity (Erlich, 2002). The relations of the two countries can be approached from two main historical eras. These are the medieval and modern eras. In more recent, regional hegemony and influence were added to the list of the relations of the two counties.

#### 3.4.1. Medieval Era Relations

Two factors, the water of Nile and religious connections, have kept the relation of the two countries alive in much medieval period. For the Egyptians Ethiopia has always meant the source of their Nile. Historically, the river produced an ever-developing

world of anxieties and myths that, in themselves, went to the core of the Egyptian soul. In his epic book, *the river and the Cross*, Haggai (2002) says:

*If the waters of the Nile have meant life for Egypt, they have meant something different for the Ethiopians. The part of the river in their own territory gave no life, at least not in the material sense. The huge gorge of the Abbai did not act as a bridge between people, as did the Nile in Egypt, but divided them. The energetic, dramatic flow in the depths of the gorge did not bring the water to the fields, but rather stole the precious liquid away. It also caused other damage, eroding the soil, killing man and cattle. Yet the river was of great importance. For the Ethiopians the Nile was primarily a major historical asset, their best card in their desire to retain their most important connection with the Middle East (Erlich, 2002).*

On the other hand, Egypt has important religious significance for Ethiopians. Ethiopia's royal dynasty adopted Christianity in the fourth century. Acquiring unique local features, Ethiopian Christianity became the main source of political legitimacy as well as a main reservoir of popular beliefs, traditions, and customs. Simultaneously, from the very outset, the Ethiopian Church linked itself to the Egyptian Church of Alexandria and went on to rely on Christian Egypt as the main external factor in building state and culture. The role of the bishop goes beyond conducting a church service to significantly influencing the country's political discourse. Important political decisions, including anointing Ethiopian Kings were at the stake of the bishop. At times, the relation along this line was the source of serious political and diplomatic tensions.

Haggai Erlich (2002) points out that as Egypt became the centre of Islam, there followed another formative period of the Egyptian-Ethiopian dialogue. Accordingly, when medieval Egypt reached its historic peak during the time of the Mamluks (1250–1517), Ethiopia enjoyed its “golden era” under the new “Solomonic” dynasty (1270–1529). In that same period, Christian-highlander's conflict with other principalities in what is present day Ethiopia complicated the relations. In 1270, Yikuno Amlak of Abyssinia made a notorious conquest to Muslim Sultanates in the South. In retaliation, the Egyptian Sultan refused to send bishops to Ethiopia (Erlich, 2002). Though the confrontation was resolved before further escalation, a rather significant strain in their relationship was to follow during the reign of Amdetsion who made a bloody expedition to Muslim dominated area of the country. Amdetsion had even threatened to divert the course of Nile. With the freezing of importing an Egyptian bishop to the politically



prominent Ethiopian Orthodox Church, the tie between the two countries now squarely concentrate on the management of the Nile river flow (Zewde, 2002) (Erlich, 2002).

### **3.4.2. Modern Era Relations**

The first modern era's encounters happened during the reign of Ismail Khadeive Pasha of Egypt in the last half of the 19<sup>th</sup> century (Zewde, 2002). Ismail wanted a total domination of sources of Nile and embark policy of expansion. He envisioned building an empire that encompasses all the Nile riparian countries though Ethiopia was not high on his potential expansion areas (Zewde, 2002). This era coincides with a time when Ethiopia was weak and internally disorganized during. The country has yet to recover from riles of internal power struggle between various princes and regional lords. An effective central authority was only exercised after Menelik II consolidated and the country gained much of its modern borders (Zewde, 2002). Defeating the Egyptian army in 1876, the Ethiopians foiled the plan to connect the Red Sea coast with Khartoum and undermined the Egyptian chance to control the Sudan. This, in turn, began the countdown toward the fall of Egypt itself to British occupation (Erlich, 1982).

Throughout the 20<sup>th</sup> century, different local and regional dynamics influenced the bilateral relationship of the two countries, especially in respect to the Nile River. Continental issues like decolonization process, regional agendas like Arab Nationalism, and local government changes were at times escalating and loosening the Nile issue. It was during that period of active interrelations that the Egyptian version of the Islamic concepts of Ethiopia, less abstract and much more practical was reshaped. In time, with the birth of modern Egyptian nationalism, much of the Islamic and Islamic-Egyptian dichotomy over Ethiopia was transmitted into the new, modern set of self-definitions. In the last quarter of the nineteenth century, when Egyptian history began revolving around new ideas of representative politics, as well as around a territorial concept of the Nile Valley as an historic entity, Ethiopia again became centrally relevant (Erlich, 2002).

Ethiopia was the only African state to escape colonization in the late quarters of the 19<sup>th</sup> century (Erlich, 1982). Emperor Haile Sellase's vigorous political engagements of African cause gave him and the country as the political powerhouse of the continent.

While Egypt under Nassir courted many African revolutionaries and provided various kinds of support, it was overshadowed by Emperor Haile Sellase's manoeuvres and engagements with nascent African states. Egypt's foreign relation has been dictated by the transcontinental nature of location, between its location of the African continent and its close approximate of the Middle East. Much of its political and relational strength is directed towards the Middle East. The Arab-Israel conflict has claimed much of its engagement.

The Ethio-Egyptian relation during this time was dominated by the decolonization and pan-African movements in the country. As a nation that joined the League of Nation and with a reasonably independence from colonial hands, Ethiopia and Egypt, especially during the Gemal Abdulnasir era, were closely cooperating in supporting and championing decolonization struggles in Africa. In the past two decades, however, it can be said that the Ethiopian government has made a historic shift in its approach with a strong visible assertiveness towards the use and ownership of the River. The latest ongoing construction of one of the biggest dams in Africa on the River has heightened the political and diplomatic tension to an ever higher level.

### **3.4.3. Economic Relation of Egypt and Ethiopia**

The Egyptian-Ethiopian relations are of the oldest relations in the history of Africa. The two countries relation dates back to the Pharaonic era through the trade trips between the two countries. In the modern era of the two country's trade relation starts by the National Bank of Egypt (NBE) assisted to set up Ethiopia's first bank, "The Bank of Abyssinia" in 1905, which operated under the control of the NBE. It served as the Ethiopian government's fiscal agent as well as the sole issuer of notes and was responsible for collecting deposits and granting loans as well as trading in gold and silver, stockpiling staple commodities and investments (Arnaldo, 2003). It operated as both a central and a commercial bank, until it was handed over to the Ethiopian government, Haile Selassie, in 1930, due to his refusal of the country's central bank was owned by foreigners (Ibid).

Due to many reasons the two country's trade relation has diminished in the last decades. In recent years, it showed a bit progress, but still not satisfactory. The current disputes

between the two countries over 'Renaissance' Dam project, Cairo adopt a new multidimensional approach to rebuilding relations with Ethiopia based on principle of partnership in development. The strategic vision of Egyptian foreign policy gives priority to the African dimension; Egyptian-Ethiopian relations are at the heart of this dimension. Egyptian acknowledged that Ethiopia is an important and influential country in the African continent and due its political role and emerging economies. It is also an essential actor in the Horn of Africa region, which continues to witness political, economic and social dynamics that indirectly influence Egypt's national security.

An Egyptian business delegation led by Ahmed Hendi, who is also executive director of Egypt's Chemical and Fertilizer Export Council after the visit of Ethiopia (May, 2013) at a press conference, said that Egyptian investors and businessmen are eager to engage in various investment sectors in Ethiopia. Despite their longstanding relations, the business and investment relations between both countries have not grown to the required level, he said, commenting the need to reinforce the relations in the two areas. And he added that, the trade volume between Egypt and Ethiopia stands at 150 million US dollars, while investment by Egyptian investors has reached 1 billion US dollars (Walta, 2013). On the other hand the data from the Ethiopian Investment Agency showed that Egyptians are currently executing more than 400 projects worth over 1 billion USD in Ethiopia. The trade volume during the past two years is only between 130 and 250 million USD.

**Table 11. Export, Import, Trade Balance, Total Trade Turnover and Annual Growth Rate between Ethiopia and Egypt from 2004 to 2011 GC(ECCSA).**

Year	Export (USD)	Export Growth Rate (%)	Import (USD)	Import Growth Rate (%)	Trade Balance (USD)	Total Trade Turnover (USD)	Growth Rate of Total Trade Turnover (%)
2004	2,533,423	-	34,879,903	-	-32,346,479.85	37,413,326	-
2005	15,895,516	527	49,468,682	42	-33,573,165.77	65,364,198	75
2006	8,824,798	-44	61,169,759	24	-52,344,960.35	69,994,557	7
2007	7,291,933	-17	88,808,826	45	-81,516,892.56	96,100,758	37
2008	13,167,497	81	86,507,605	-3	-73,340,108.12	99,675,102	4
2009	14,411,051	9	62,804,326	-27	-48,393,275.41	77,215,377	-23
2010	44,243,269	207	91,906,052	46	-47,662,782.85	136,149,320	76

2011	45,449,613	3	76,193,676	-17	-30,744,062.79	121,643,289	-11
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According to the trade data, Ethiopia's export to Egypt has been increased from around 2.5 million US dollars in 2004 to 45.5 million in 2011. This shows a significant rate of growth. On the other hand, the import from Egypt also scored an immense increase from its 34.8 million USD figures in the year 2004 to its peak being 91.9 million in 2010, though showed a reduction of 16 million USD in the next year, i.e. amounting to 76 million in 2011; thus showed a growth rate of 54% in the 2004 – 2011 period.

The total trade turnover has increased from around 37.5 million USD in 2004 to 136 million in 2010 showing a significant rate of growth, even if interrupted in 2009, while it declined into 121 million in 2011 where the rate of growth was negative, - 23 percent and -11% respectively.

Since the Ethiopian Economy is an agrarian economy, most of the exported items are agricultural and semi processed commodities majorly including: sesame, camels, oxen, lives bovine animals other than pure breeding and Kidney Beans. Whereas, the major imported commodities from Egypt mainly consisted: petroleum oil and oils obtained from bituminous min; edible soya bean oil, edible palm oil, white Portland cement, electricity meters, primary cells and primary batteries, parts of industrial machinery for food and beverage manufactories, and Desktop Computers.

It is also clear from the data that the balance of trade has remained to be in favour of Egypt; because Ethiopia's import is manufactured goods while it exported primary products. The trade balance was all negative on the Ethiopian side across the whole period specified in the table. It was -32.3 million and -30.7 million USD in 2004 and 2011 respectively. However, the imbalance increased highly to -81.5 and 73.3 million USD in the consecutive years of 2007 and 2008.

## 4. THE NILE GEOPOLITICS

### 4.1. Geographical Coverage

The area of the Nile Basin is 3.35 million km<sup>2</sup>, and it is almost one tenth of the area of the African continent. The principal occupation of its people is agriculture (Abraham, 2004). River Nile flows 6,700 kilometres across eleven countries in North - Eastern Africa. It is the longest trans-boundary river system in the world. The upper riparian countries are: Ethiopia, South Sudan (new born), Eritrea, Kenya, Uganda, Tanzania, Rwanda, Burundi, and the Democratic republic of Congo (DRC). The lower riparian countries are Egypt and Sudan (Egypt more so), have exploited the water resources of the Nile extensively both for irrigation and hydropower generation. It finally reaches the Mediterranean. Its two main tributaries converge at Khartoum: the White Nile, which originates from Burundi and flows through the Equatorial Lakes, provides a small but steady flow that is fed by the

eternal snows of the Ruwenzori (the “rain giver”) mountains, while the Blue Nile, which suffers from high seasonal fluctuations, descends from the lofty Ethiopian “water tower” highlands. They provide 86 per cent of the waters of the Nile - Blue Nile 59 per cent, Baro - Akobo (Sobat) 14 per cent, Tekeze (Atbara) 13 per cent - while the contribution from the Equatorial Lakes region is only 14 percent (Swain, 1997).



**Figure 9. The Nile Basin (ertagov.com)(ERTA, 2014)**

## 4.2.The Nile Dependence

As many as 372 million people were thought to be living in the Nilotic countries in 2005, and expected to reach 654 million in 2030, according to the FAO and UNDP report (FAO, 2005), which are among the poorest in the world, with an average gross national product (GNP) US\$282 per capita in 1994 and the average GDP per capita is 1820 in 2012(NM, 2014). About half the total population was estimated to be dependent on the Nile. In addition, the flow from the Ethiopian tributaries fluctuates greatly between the wet and dry seasons, which would mean that the water reaching Egypt also varies considerably: from 104 billion cubic meters (example in 1946) to only 45 billion (in 1913). Moreover, the average annual flow of the Nile has declined at Aswan in Egypt: from 110 billion cubic meters during 1870-99, down to 84 billion during 1899-1954 and to 81 billion during 1954-96 (Ashok Swain: 1997). So Nile has been feeding millions either directly as drinking water, irrigation, and fishing or largely for electricity power facilitated usually by government led mega projects.

**Table 12. 2005-2030 Nile Basin Countries' Population Prospects: UNDP Medium Variant(NM, 2014)**

Country	Total population in 2005 ('000)	Nile Basin 2005 ('000)	Total population in 2030 medium variant ('000)	Nile Basin 2030 ('000)
Burundi	7,859	4,615	17,232	9,911
DRC	58,741	1,851	122,734	4,117
Egypt	72,850	72,617	104,070	101,465
Eritrea	4,527	1,721	8,433	3,489
Ethiopia	78,986	31,044	137,052	50,345
Kenya	35,599	13,359	62,762	25,411
Rwanda	9,234	7,685	16,646	14,066
Sudan	36,900	32,406	58,446	53,664
Tanzania	38,478	7,933	65,516	13,194
Uganda	28,947	28,477	61,548	60,418
<b>Sum</b>	<b>372,121</b>	<b>201,708</b>	<b>654,439</b>	<b>336,080</b>

### 4.3. Nile as the Heart of Ancient Civilization

In its lower reaches in Egypt, the Nile enabled ancient civilizations to flourish. For the inhabitants in its upper and middle reaches at Meroe and Axum Nile was a holy river, revered as the God Hapi. The Blue Nile nourished the desert along its banks with decomposed basalt, rich alluvial soil and silts for millennia converting it into rich farming ribbons. The Nile is the mainstay and basis of the existence of Egypt that is why the renowned Greek historian Herodotus wrote “Egypt is the gift of the Nile” (Abraham, 2004) (Abraham, 2004). So since time immemorial Egyptians have made most use of the waters of the Nile.

### 4.4. The Irrigation Potentials of the Nile Basin Countries

Almost all of the upper basin countries’ economy depends on the rain-fed traditional and small scale agriculture. It needs to be improved and enhanced to increase its share and importance. The upper stream countries have the potential to work on irrigation. On the other side, the lower basin countries rely on irrigated agriculture than rain-fed agriculture. The following table shows the area already under irrigation the potential land for irrigation of the basin countries.

**Table 13. Irrigated and Potential Land for Irrigation of the Basin Countries (FAO, 1997)**

Country	Irrigation potential (ha)	Area under irrigation (ha)	% under irrigation
Burundi	80,000	0	0
Egypt	4,420,000	3,078,000	69.64
Eritrea	150,000	15,124	10.08
Ethiopia	2,220,000	23,160	1.04
Kenya	180,000	6,000	3.33
Rwanda	150,000	2,000	1.33
Sudan	2,750,000	1,935,200	70.37
Tanzania	30,000	10,000	3.33
Uganda	202,000	9,120	4.51
Zaire	10,000	0	0
<b>Total</b>	<b>10,192,000</b>	<b>5,078,604</b>	<b>49.83</b>

#### 4.5. The Nile Geopolitics

It is often said that future wars will be over water, not oil. These water wars are predicted to take place over the sharing of trans-boundary rivers. Recently, the world has witnessed several interstate river-sharing disputes, but almost all of them have not crossed the critical threshold of becoming violent. Rather, most of these river disputes are being addressed through bilateral and cooperative arrangements. These agreements are primarily coming up on the rivers, which have potential for further water exploitation (Swain, 2001).



**Figure 10. The Nile Basin Countries (IWLBPB, 2012)**

Historically, the Nile region had been a point of concern. In 1898 military conflict nearly ensues between Britain and France when a French expedition attempts to gain control of the headwaters of the White Nile. While the parties ultimately negotiate a settlement of the dispute, the incident is characterized as having “dramatized Egypt’s vulnerable dependence on the Nile, and fixed the attitude of Egyptian policy-makers



ever since (Gleick, *Water Conflict Chronology*, 2003). And in 1958 Egypt sends an unsuccessful military expedition into disputed territory amidst pending negotiations over the Nile waters, Sudanese general elections, and an Egyptian vote on Sudan-Egypt unification. The Nile Water Treaty is signed when pro-Egyptian government elected in Sudan (Gleick, 2009).

A long-standing tension over the Nile arose in 1978 when Ethiopia proposed construction of dams on the headwaters of the Blue Nile. This led Egypt to repeatedly declare the vital importance of water. In 1979, Egyptian president Anwar Sadat said: “the only matter that could take Egypt to war again is water.” In 1988 then- Egyptian Foreign Minister Boutros Boutros- Ghali, who later became the United Nations’ secretary general, predicted that the next war in the Middle East would be fought over the water of the Nile, not politics (Kameri-Mbote, 2007).

And recently again the Nile remained a major socio-political concern among the sharing countries and also other countries for their own interest. Tensions erupted between the two countries immediately after the fall of Mubarek from his presidency in 11 Feb, 2011; when Ethiopia announced the construction of a large dam on the Blue Nile, by the end of April 2011, called “Grand Ethiopian Renaissance Dam” (GERD) (Hammond, 2013) . It (the conflict) peaked in May 2013 when Ethiopia began diverting the Blue Nile. Former Egyptian President Mohamed Morsi told a national conference: "We will defend each drop of Nile water with our blood if necessary."(AlJazeera, 2014). There have been complaints that Egypt and Sudan have exclusively exploited the Nile.

#### **4.6.Ethiopia: The “Great Unknown”**

However, Ethiopia, which is the origin of 85% of the Nile water is not bound by any agreement with either Egypt and/or the Sudan over sharing the waters of their great river. There are eight treaties and agreements signed over the Nile river in a span of about 70 years between 1891 to 1959, all of them were intended to assert the Egyptian control of the river (Gebeto, 2010). There are several treaties and agreements on the Blue Nile: multilateral, bilateral, protocols and exchange of diplomatic notes. All these agreements, except for the 1902 and the Framework for general Co-operation between

Ethiopia and the Arab Republic of Egypt on July 1, 1993 were signed by other states but not Ethiopia (Degefu, 2003).

**Table 14. Treaties, Agreements and Protocols signed and exchanged in the Nile Basin (Degefu, 2003)**

	<b>Name of Documents</b>	<b>Date</b>	<b>Parties</b>	<b>Subject Matter</b>
1	Protocol	15/ 4/ 1891	UK and Italy	Demarcation of sphere of influence
2	Treaty	15/ 5/ 1902	UK and Ethiopia	Frontier Treaty
3	Treaty	9/ 5/ 1906	UK and Leopold II (the independent state of Congo)	Frontier Treaty
4	Treaty	13/12 /1906	UK, France and Italy	Definition of interest of the parties
5	Exchange of Notes	14-20/ 12/ 1925	UK and Italy	Lake Tana and its Surrounding
6	Exchange of Notes	7/ 5/ 1929	Anglo Egyptian Sudan (UK) and Egypt	Division of Nile water
7	Agreement	8/11/ 1959	Egypt and Sudan	Division of Nile water
8	Framework of cooperation	1/7/ 1993	Ethiopia and Egypt	General cooperation

Almost all of these colonial era treaties were designed to ensure the resources of the Nile Basin by the lower riparian states. The most destructive and contentious among all agreements and treaties are the 1902, 1929 and 1959. These the three treaties effectively repudiate the right of Ethiopia (mother land of Blue Nile, which is about 85% of the whole Nile water) and other upper stream countries. The nature of these three treaties has been briefly presented below.

#### **4.6.1. The 1902 Treaty between the Emperor of Ethiopia and UK**

On May 15, 1902, Ethiopia and Great Britain, acting for Egypt and the Sudan, signed this Treaty for a delimitation of the Frontier between the Sudan and Ethiopia in Addis

Ababa. In addition to the boundary issues, Article III of the treaty provided that: “His Majesty the Emperor Menelik II, Kings of King of Ethiopia, engages himself towards the Government of His Britannic Majesty not to construct or allow to be constructed, any work 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 Sudan.”(Degefu, 2003).

The treaty was prepared in two origins, Amharic and English, both being official and equally authenticated. The Amharic version, unlike the English did not oblige Ethiopia not to construct any work across the Blue Nile, Lake Tana, or the Sobat, which would arrest the flow of their waters into the Nile. The English version but not the Amharic version required Ethiopia to seek clearance not only from the colonizing power, but also from the local Sudanese authorities whenever Ethiopia planned to use the Blue Nile water (Degefu, 2003, p. 96). This is the source of the Sudanese and Egyptian argument to have the monopoly right on the Blue Nile in addition to the historical right claim. This and their historical right over the Nile water resulted Khartoum and Cairo continue to refer their legitimate and monopoly right over the Blue Nile.

#### **4.6.2. The 1929 Treaty on the Use of the Nile Water**

This agreement was in the form of an exchange of Notes between the United Kingdom (on behalf of the Sudan) and the government of Egypt dated on May 7, 1929, concerning the sharing of the Nile water. The 1929 agreement was essentially conceived to coordinate the irrigation arrangements in Egypt and Sudan its unilateral characteristic were apparent (Degefu, 2003). The treaty was guided by the British colonial influence and directive with the following important article attached to the treaty:

- 1- Egypt and Sudan will utilize 48  $\text{bm}^3$  and 4 $\text{bm}^3$  of the Nile flow per year, respectively
- 2- The flow of Nile during January 20 to July (dry season) would be reserved for Egypt
- 3- Egypt reserves the right to monitor the Nile flow in upper stream countries
- 4- Egypt assumed the right to undertake projects related to the Nile River without the consent of upper riparian states, and

- 5- Egypt assumed the right to veto any construction projects that would affect her interest adversely.

The five articles of the 1929 treaty represented an unreasonable and a one-sided protocol that could act as a time bomb in the future regional partnership relation (Gebeto, 2010). In effect, the agreement gave a veto right to Egypt for any upstream development, including hydroelectric as well as irrigation works. The Egyptian governments recorded their pleasure and satisfaction of the agreement as “the Egyptian government is willing to agree with His Majesty’s Government. Upon such an increase of this quantity as does not infringe Egypt’s natural and Historical rights in the waters of the Nile and its requirements of agricultural extension, subject to satisfactory assurances as to the safeguarding of Egyptian interests.”(Degefu, 2003).

#### **4.6.3. The 1959 Treaty on the Use of Nile Water**

The 1959 treaty between Egypt and Sudan signed in Cairo on November 8, 1959; for the full utilization of the Nile water. This agreement was one of the most daring agreements signed at the time when most of the upper riparian states were struggling to gain their political independence. Immediately after the Sudan achieved its independence on January 1, 1956 she formally declared that she did not consider herself bound by any treaty entered into on her behalf by the British government (Degefu, 2003). The objective of this treaty was primarily to settle the dispute between the two countries and to make provision in the 1929 agreement. The second objective was to get legal experience that could allow for a pre-emptive political move and usurp optimum annual flow of the waters before many of the Nile states become viable states to claim an equitable share of the water. The most daring agreement of all is the 1959 treaty which was strategically signed between the two lower riparian states.

The two countries agreed that the average annual Nile flow  $84 \text{ km}^3$ . The annual loss due to evaporation and other factors were to be about  $10 \text{ km}^3$  and they agreed to share:  $18.5 \text{ km}^3$  (25%) for Sudan and  $55.5 \text{ km}^3$  (75%) to Egypt. The agreement granted Egypt the right to construct the Aswan High Dam that can store the entire annual Nile River flow and it granted the Sudan to construct the Rosaries Dam on the Blue Nile and to develop irrigation and hydroelectric power generation until it fully utilizes its share. A

permanent joint Technical Commission to be established to secure the technical cooperation between them. (Gebeto, 2010). The treaty allowed and ratified the construction of both Aswan High Dam in Egypt and Rosaries Dam in Sudan.

#### **4.7. Efforts towards Achieving Cooperation over Nile**

Unsatisfactory utilization of the Nile River by the upper basin countries, most of the lower basin countries had sought for the promotion of common understanding of the water politics to come to round table dialogue on issues concerning fair and equitable usage of the Nile water since their independence. Bearing in mind the existence of only a few fragile bilateral agreements, particularly between Egypt and the Sudan, some attempts have been made to achieve wider co-operation on the Nile river system, notably by the Equatorial Lakes basin countries (Swain, 1997). During the second half of the 20<sup>th</sup> century, most of the basin countries started openly discussing about the issues and they reached an agreement to find a minor coordination office. Initially, a HYDROMET project was established by the communities of Equatorial lakes to gather hydro- meteorological data on the Nile Rivers and associated lakes and it becomes operational from 1962 to 1992 (Gebeto, 2010).

As early as 1967, Egypt, Kenya, the Sudan, Tanzania, and Uganda, together with the United Nations Development Program (UNDP) and the World Meteorological Organization (WMO), decided to evaluate the levels of water in the Lake Victoria catchment areas in order to assist in their control and regulation, as well as the ensuing flows down the Nile (Abraham, 2004). Later, Rwanda and Burundi joined this hydro-meteorological project, but the major contributor of the Nile waters, Ethiopia, was not bound. For many years the director of Hydromet was a Sudanese and his deputy an Egyptian, and given the limited scope of its functions, the project was able to continue until 1992.

Following a UNDP initiative, the water resource ministers from Egypt, the Sudan, Tanzania, Uganda, and Congo/Zaire participated in a meeting held in 1986 in Bangkok. Ethiopia was represented by its ambassador to France, and those present decided on behalf of their governments to promote and establish effective cooperation among the Nile riparian countries at the earliest possible opportunity. But although the UNDP

provided financial assistance to support a fact-finding mission, and also organized a second meeting of the ministers in Addis Ababa in January 1989, efforts to achieve basin-based co-operation on an equal basis were unsuccessful (Swain, 1997). HYDROMET was not successful that much to produce more valuable projects towards the fair and equitable usage of the Nile water, despite certain benefits from conducting symposium and valuable Trainings.

In the course of time the HYDROMET project gave the birth to Tecconile (Technical committee for the promotion of Development and Environmental Protection of the Nile Basin) which came into being in December 1992 with six member states: Egypt, the Sudan, Rwanda, Uganda, Tanzania and Zaire. Ethiopia, Kenya, Eritrea and Burundi were then observers (Gebeto, 2010). The meetings of Tecconile held in Entebbe in July 1993, in Cairo in January 1994, in the Nile river dispute 691 Entebbe in June 1994, in Cairo in November 1994, and in Arusha in February 1995 resulted in an agreement being reached on the Nile River Basin Action Plan in May 1995. Concurrently, yearly conferences known as the Nile 2002 series have brought together technical experts from each Nile basin country in order to exchange views and foster cooperation. They met in Aswan in 1993, in Khartoum in 1994, in Arusha in 1995, in Kampala in 1996, and in Addis Ababa in February 1997. Ethiopia participates in these “talking shop” conferences only as an observer - along with Eritrea, Burundi, and Kenya - and does not consider that all the governments in the region should have an equally important ‘say’ in the decisions that have to be taken about the Nile. Apart from the fact that the riparian countries of the White Nile do not contribute nearly as much water as flows into the Blue Nile from Ethiopia (especially) and the Sudan, they do not have such great water scarcity problems because of their equatorial location. Moreover, due to Egyptian domination in Tecconile, Ethiopia prefers to retain its status in that technical committee as an observer only, without having the commitment of being a full-fledged member.

Some of the basin countries proposed to found a new institution in all basin countries as equal members to succeed Tecconile and legal framework of cooperation is formed. After a discourse considerable progress was achieved and came to being the Nile Basin Initiative. The Nile Basin Initiative (NBI), in which 9 of the 10 Nile riparian countries

are active members and Eritrea has an observer status, which created in 1999 (Gebeto, 2010).

#### **4.8.The Grand Millennium Dam and Conflicting Issues**

Ethiopia emerging as-the great unknown in the region, has begun to ask for equitable use of the Nile and it has recently initiated the multi-billion dollars electricity project called ‘The Grand Ethiopian Renaissance Dam’.

The Grand Ethiopian Renaissance Dam, formerly known as the Millennium Dam and sometimes referred to as Hidase Dam, is introduced in 2011 and it is under construction gravity dam on the Blue Nile River about 40 km (25 mi) east of Sudan in the Benishangul-Gumuz Region of Ethiopia. At 6,000 MW, the dam will be the largest hydroelectric power plant in Africa when completed, as well as the seventh largest in the world sharing the spot with Krasnoyarskaya. The reservoir at 63 billion cubic meters will be one of the continent’s largest(Hammond, 2013).



**Figure 11.The plan of Grand Ethiopian Renaissance Dam(ERTA, 2014)**

#### **4.9.The Egyptian and Sudan’s Reactions to the Ethiopian dams Projects**

The preceding Egyptian governments had been virulently opposing to give up any of Egypt's long-held riparian rights. Leaving 26 % with Sudan, Egypt aimed 74 percent of the Nile's flow. That was enshrined in the 1929 agreement with the British who then

ruled the region. It gave Cairo veto power over any upstream project that could interrupt the Nile's flow. They insisted that the Nile is Egypt's lifeline and that the country cannot afford to relinquish its rights. Some 95 % of Egypt's population of 80 million lives within 12 miles of the river basin. And the Aswan High Dam, built by the Soviets and inaugurated in 1970, provides most of Egypt's power supplies. If any dispute happened with related to the use of Nile they have been intending to use both diplomacy and military solutions. According to Wikileaks, "if it comes to a crisis, we will send a jet to bomb the dam and come back in one day, simple as that. Or we can send our special forces in to block/sabotage the dam"(Johnson, 2012). And then, the Egyptian authorities fearful of a monopoly on the Nile waters received agreement from Khartoum to build an airbase in Sudan, to launch attacks on Ethiopian damming facilities.

In the last two or three years, however, things have been incidentally changed. In 2010 Egyptian people went out to the street for the historic protest against the Mubarak regime. And in February 2011, after a year-long strong public protest the Mubarak regime was successfully eliminated. This led to the Egyptian election, which allowed the Muslim brotherhood to control the political power (30 June 2012 – 3 July 2013). A year rule of the president Mursi followed by a military coup on 3 July 2013 and general Sisi come to power. Unfortunately, still the Egyptian internal political instability has not been achieved yet. Because of the unrest, Egypt had no adequate time and adequate concentration against the Ethiopian dam project.

Sudan has also gone through a difficult political crisis in the past two three years. Although the issue of the separation of the South Sudan has been a long time issue, the Sudanese government had been reluctant. So, years before the tensions and pressures to the division of South Sudan rose. The republic of south Sudan was officially recognized following a public referendum on the division. And also Sudan, because of this internal conflict, has been silent about the construction of the dam. On the Ethiopian side, the death of Meles, who was the instigator of the project, was the third major reason that has reduced the construction of the dam and so the pace of the tensions in the region. Because of these reasons the project is not going as it planned and the tension has not been solved.



#### **4.10. Finance of the Dam**

The Ethiopian government has stated that it intends to fund the entire cost of the dam by itself. It has issued a bond targeted at Ethiopians in the country and abroad to that end. The estimated US\$ 4.8 billion construction cost, apparently excluding the cost of power transmission lines, which is reportedly \$1.5 billion guaranteed from the Chinese bank. The cost of the dam corresponds to more than 15% of Ethiopia's Gross Domestic Product of US\$42 billion in 2012 and about 60% of the annual budget of \$8 billion.(SIS, 2014)

However, many people, domestic and international organizations contend that the project is beyond the current capacity of the country. And in this regard, the IMF has pointed Ethiopia to slow down the construction.

## 5. THE EUPHRATES GEOPOLITICS

### 5.1.Introduction

The longest river in the Middle East, the Euphrates originates in the eastern highlands of Turkey, between Lake Van and the Black Sea, and travels a distance of 2,700 kilometres before flowing into the Persian Gulf. Some 40 percent of the river lies within Turkey, while the rest is divided among the two downstream riparian countries, 25 percent in Syria and 35 percent in Iraq. The Euphrates produces a mean annual flow of approximately 30 billion cubic meters (bm<sup>3</sup>) at its entrance to Syria, which rises to around 32 bm<sup>3</sup> at the Syrian- Iraqi border after gaining the inputs from two Syrian tributaries, the Balikh and the Khabur (Ali, 2007).



Figure 12 The Euphrates Geo-politics(ARGIL KASABAS, 2009)

The flow of the Euphrates is highly seasonal. The stream flow variations naturally prevent utilization of the river's full water potential. Unfortunately, the seasonal distribution of the availability of water does not coincide with the irrigation requirements of the basin. In an average year, the river reaches its peak flow in April and May as the winter mountain precipitation melts. The typical low water season occurs from July to December, reaching its lowest point in August and September when water is most needed to irrigate the region's winter crops. The average monthly hydrography of the Euphrates shows a variation between 33 percent and 275 percent of the annual average, evidence of the extent of its seasonal fluctuations (Arnon, 2005).

Centuries of water use along these rivers have given rise to the Mesopotamian culture, cities, and peoples. To date, the remains of ancient irrigation networks can be found in the desert plains of Syria and Iraq, many of which are still in use. For centuries, Iraqis and Syrians have used the Euphrates and the Tigris for drinking water as well as irrigation, and thus claim to have "acquired" rights to uninhibited use of the river, regardless of the changed hydro-political scenario upstream (Ali, 2007).

The water question emerged on the regional agenda when the three riparians initiated major development projects. It is only since the 1960s that Turkey and Syria have put forward ambitious plans to develop the waters of the Euphrates-Tigris river system for energy and irrigation purposes. At the same time, Iraq also announced new schemes for an extension of its irrigated area. The largest effort to date is Turkey's South-Eastern Anatolia Project, or *Güneydogu Anadolu Projesi* (GAP), which once completed, may divert up to 30 percent of the average annual water flow of the Euphrates. The uncoordinated nature of these supply-led developments as well as inefficient and ineffective demand management practices within the framework of national water policy and management of the co-riparians continue to be the principal causes of water imbalance in the Euphrates-Tigris river basin (Bagis, 1989). Hence, the river is the main source of political tension, as Turkey, Syria and Iraq all compete for its water for irrigation and generation of hydroelectric power.

As a matter of fact, water combined with border and other security issues made Turkey and Syria relations full of ups and downs in their modern history relations. Turkey shares its longest common border with Syria; various geographic and historical links bind the two neighbouring states together. This friction has been due to disputes including the self-annexation of the Hatay Province to Turkey in 1939, water disputes resulting from the South-eastern Anatolia Project, and Syria's support for the Kurdistan Workers Party (PKK). Relations improved greatly after October 1998, when PKK leader Abdullah Öcalan was expelled by Syrian authorities and Adana agreement signed between the two countries. However, the Syrian civil war once again strained relations between the two countries.

### **5.1.1. Historical Relation of the Countries**

Syrians and Turks lived together and respected each other since the Abbasid caliphate till the fall of the Ottoman Empire (Çufali, 2010). After the collapse of the Ottoman Empire, Turkish-Syrian relations went from entrenched hostility to a burgeoning strategic partnership and back to the brink of war. In this section, we will consider the first two phases- from entrenched hostility to a burgeoning strategic partnership. We will first take a glimpse at the historical and geopolitical developments that contributed to the fluctuations of their relations with particular focus on the role trans-boundary water sources.

### **5.1.2. Collapse of Ottoman Empire and State Formations**

In the nineteenth century, the Ottoman Empire began facing a triple threat: European imperial designs on its territory; uprisings and rebellions among Christian populations of the Balkans who had been infected with ideas of European ethno-nationalism and who were often provoked by Europe; and internal reformist ideas and demand to make the empire more efficient, more capable of resisting threats, and equitable and representatives(Çufali, 2010).Turkey's trajectory starts not with the formation of the new Turkish Republic but rather with a much longer reform process that began with the Tanzimat (administrative reforms) of 1839..... Proceeded with fits and start through the nineteenth century and into the Young Turk period (1908-1918), World War I, and the early modern Turkish Republic (Ibid. P.16). On the other side by the end of 19<sup>th</sup> century

Syrian (Arab) intellectuals, many of them graduated at the European and European-run universities focused on the Arab history, literature, and language. Additionally, some Syrian groups publicly demanded decentralization of the Ottoman administration and administrative reforms (Çufali, 2010).

The collapse of the Ottoman Empire had paved the way for the ramification of the new political era in the international politics of the Middle East. The Ottoman Empire for several centuries served as the most essential unifying force among the Islamic world. Turkey, under Ottoman control, was more symbolic of a centralized leadership or base of power that governed the greater Islamic world, including the Arab nations. Such leadership served as a vessel to manage relations with foreign superpowers like Britain and France, who had a strong vested interest in the Middle East, especially Britain, which by 1914 had the concerns of the "protection of the Suez Canal and protection of the Gulf. These were vital due to their link to India and the Abadan region of modern day Iran, containing "key oil installations"(Ibid).

The Ottomans were oppressed by such foreign powers as symbolizing legitimate power for Muslims over the Islamic world, while Britain indirectly exerted power over Egypt and Palestine and France has started her influence over the areas of Syria and Lebanon. The collapse Ottoman and the abolishment of the Caliphate in 1926 a single unifying force in the Islamic world lost for once and for all. This gave the chance to intensify the sense of strong nationalist sentiment among both post Ottoman Turkey and various Arab Nations. The post-Ottoman Turks and Arab nationalists worked a lot to get public support in their way. The resulting effect of such events was a sense of strong nationalist sentiment emerged among both in Turkey and various Arab Nations forming the nationalist wave sweeping through the Middle East. Another effect resulting from Ottoman collapse, signalling the end of the last Islamic empire was that it gave a free opportunity for the foreign powers such as Britain and France could now directly exercise power over the region without working through the Ottomans.

Thus, the creation of each state was in some ways defined in opposition to the other. The Republic of Turkey founded by Ataturk out of the remnants of the Ottoman Empire in 1923 was culturally and politically oriented towards Europe rather than its former territory, with Arabic script rejected for Latin and Arabic words removed from the

Turkish language. Adamant followers of Atatürk, the Kemalists, carried this European approach into their foreign policy for years. Syria also defined itself against Turkey on gaining independence from France in 1946 (Phillips, 2011).

### 5.1.3. Border Disputes and Hatay Problem

Hatay is a province on the border of Syria and in southern Turkey, on the Mediterranean coast. The border disputes between Syria and Turkey have their origins in the collapse of the Ottoman Empire and the development of dissimilar land policies in the two countries. Turks acquired and farmed land in what is today Syria primarily in the period 1870-1916 and some members of the Syrian aristocracy acquired land in today's Turkey. After World War I, with the formation of the Turkish Republic and the French mandate over Syria, the two sides developed, with considerable difficulty, special arrangements to allow farmers on both sides to tend their fields. These arrangements had to be renegotiated after Syrian independence in 1946, with difficulty again, and with only partial success.



**Figure 13. Hatay Province (DCSTAMPS, 2013)**

The rise of radical Arab nationalism in Syria during the mid-1950s led to further troubles. The problems worsened after 1963, when the Ba'th Party came to power in Syria and executed land reforms which upset reciprocal extraterritoriality dispensations

for private owners. Most Turkish landowners in Syria preferred to unload their holdings rather than contend with Ba'th radicalism, raising the issue of compensation for expropriated lands and whole new range of unsolved disputes which lasted until Hafiz al-Asad took power. He reached a series of compromises to defuse most, though not all, of these issues. Land questions remain a source of ill feelings, especially in Turks living near the Syrian border.

#### **5.1.4. The Turk-Arab Misperceptions**

The socio-political divergences between Turk and Arab nationalists have captured the attention of many authors. One of those who tried to understand the root causes of the problem is Graham E. Fuller. In his book, *The New Turkish Republic*, he illustrates the origins of Turk-Arab Misperceptions. It is cliché to say Turks do not like Arabs. In popular parlance, Arabs are variously described as lazy, dishonest, backward, treacherous and fanatic. For their part, Arabs describe Turks as slow-witted, harsh, imperious, stubborn, fawning toward the West and confused about their identity (Fuller, 2008). Interestingly, serious enmity between Turks and Arabs has not been a historical constant, was not foreordained, and only began to emerge in the last days of the Ottoman Empire, when the multinational state gave away to a collection of ethnicity base, nationalistic and rival nation states (Ibid).

Arabs were acted and showed nationalist tendencies against the Empire. Certain important figures in the Arab world, like Sharif Hussein of Mecca, sided with the Western powers against the Ottoman Empire during World War I. This has left a deep scar in the Turkish psyche as they remember as “Arab’s stabbing of our back” (Ibid). This resentment would later serve the founders of the republic to cut off the historical relations with the Arab world. Arab nationalists on their part fed their respective populations the wrong legacies of the Ottoman Empire, which they attributed to the Turks. These historical mis-perceptions have produced a mutually suspicious generations and political elite who only associate each other negatively.

#### **5.1.5. Cold War and Regional Alliances**

Right from the foundation of the Turkish Republic to the end of World War II, Turkey’s relations with the Middle East was the policy of non-interference. After the declaration

of the Truman Doctrine in 1947, Turkey closely aligned itself with the West and devised its foreign policy accordingly. The first major event that required Turkey to involve in Middle Eastern affairs was the UN resolution on the partition of Palestine in 1947 (Bozdaglioglu, 2003). As Aras notes, identity plays a significant role in the construction and application of foreign policy (Aras B. , 2004). Turkey's foreign policy has started to seem a "zero sum relation" between the West and the Arab and Turkey's foreign relation tendencies in the west were at the cost of the Middle Eastern relation.

Turkey started to show her commitment to the West by recognizing the state of Israel. Turkey recognized Israel on March 29, 1949. The recognition of Israel by Turkey was regarded by the Arabs as a further proof of Turkey's drift away from the Islamic world and became a major point of controversy between Arab states and Turkey. "Arab states considered a Turkish recognition of Israel as an act of 'treason'. They perceived this act as a Turkish retaliation against the Arab Revolt of 1916." (Bozdaglioglu, 2003). From the Turkish perspective, "the decision was made to emphasize Turkey's Westernness and objective attitude in the Middle East." For the Turkish political elite, the recognition of Israel was a pragmatic decision that arose from her ties with the Western powers (Ibid, 2003).

On the other hand, Damascus as the center of Arab nationalism in the years before and after World War I, the creation of a new Arab national identity required rejection of the subordinate role Syria had played within the old Turkish (Fuller, 2008). With the rising Arab nationalism influence, the Arabs perceived the creation of Israel and the support of Turkey as an act of Western imperialists and Turkey as the satellite of Western imperialism in the region.

Aside from the regional dimension of Turkish - Syrian (Arab) conflict, there has been a superpower dimension too. Turkish-Syrian relations have represented a confrontation at the margins between two alliance systems, the Syrian-Soviet and the Turkish-American. Turkey's strong support of the western alliance and Syria's orientation towards the USSR in the cold war was a key source of ideological tension between them until the collapse of communism. Threats and military tensions were common on both sides (Ibid). Turkey's membership of NATO, helped Turkey to be loyal with the US and military cooperation with Israel. On the other side, it made a natural foe with Arabs and



the closest Arab ally of Soviet Union and Muslim world. During the cold war period, Turkey has been a trustworthy and important partner of NATO, while Syria has been closely aligned with the Soviet Union. Although small and junior members sometimes endeavour a lot for being a good partner and to show themselves as worth of their main sponsor by making life difficult for the ally of the opposite great power patron. This latter motive seems to have played some part in the Syrian animus toward Turkey.

## **5.2. Water Disputes**

### **5.2.1. Turkey as Upper Stream Country**

Through its huge Euphrates river basin, Turkey contributes 98 per cent of the water potentially carried by the river. According to the official estimates, Syria contributes around 12 per cent of the total, however, as Kolars noted, 10 percent of that 12 percent originates from the northern tributaries, the Khabur and the Balikh, and both have their catchments in Turkey (Kibaroglu, 2001). The observed average annual flow across the Turkish-Syrian border is 29.8  $\text{bm}^3$ . The natural flow of the river can be given as 33.4  $\text{bm}^3$  annually (Scheumann, 2003). No other tributaries flow into the Euphrates after the Khabur, except in Iraq.

### **5.2.2. The South Eastern Anatolia Project (GAP)**

The last 50 years have seen a dramatic increase in the power of human societies - and in particular nation states - to control and manage rivers. Advances in structural engineering and concrete technology have made it possible to build dams and water transfer schemes of a size and magnitude that would have been impossible in previous generations (McCully, 1996). The South eastern Anatolia Development Project (GAP in its Turkish acronym) is one of the world's largest and most ambitious regional development projects, which includes not only a giant water resources development plan, but also large-scale investment in a wide range of development-related sectors such as agriculture, energy, transportation, telecommunications, health care, education as well as urban and rural infrastructure. It plans to utilize the waters of the Euphrates and the Tigris rivers with the construction of 22 dams and 19 Hydroelectric Power Plants (HEPP). It also plans to divert the waters of the basin, with immense tunnels into the Harran field, where 1.7 million hectares of land are waiting to be irrigated The GAP was

created to develop South Eastern Turkey, a region long ignored by the Turkish government. The total cost of the GAP is estimated as 32 billion US dollars, which makes it the largest regional development effort ever launched in Turkey.

The project has consequences for neighbouring Syria and Iraq, which are dependent from the water of the Tigris and Euphrates. The two rivers have their sources in Turkey. The Euphrates makes the border between Turkey and Syria before entering Iraq while the Tigris flows directly from Turkey into Iraq, where the two rivers join and form the 200 km long Shatt Al Arab waterway that flows into the Gulf. The project creates a great deal of resentment from Syria and Iraq, the other riparians of the basin. The tensions over the waters of the basin have reached internationally acknowledged levels, and a lack of cooperation among the riparians confronted the world with a new potential conflict area. This situation threatens the delicate political stability in the Middle East, and further polarization in the region continues with Turkey and Israel's alliance against Syria, Iran, and Iraq. The basin is one of the most unstable political areas in the region, and water plays an important role. This is a classic case of water quantity issue, and use of the available water in the basin. Therefore, a much needed understanding of the developments in the basin has been researched by the author to provide insight into the situation. In addition, past and current standings of the three riparians are presented to establish an objective evaluation of the conflict, and suggestions for preventing a major conflict in the area are explored for future use (Yesiltas, 2006).

A solution was proposed by the Turkish government as the ‘Peace pipeline’. The idea is to tap water of two rivers which flow into Mediterranean near the Syrian border and to divert them through a huge pipeline system to the south. One of these pipelines would cross Syria and take water down to eastern Saudi Arabia and the Gulf states, including Bahrain, Qatar and the UAE while the second would go southwards through Syria and Jordan along the coast to the red Sea in Saudi Arabia (MEDEA, 2014).

The water projects have major political implications. First, they give the Turks control over the waters of the Euphrates, making it possible to deprive Syria at will of much, if not most, of its water. Particularly during times of relative drought, such as that afflicting the region in the spring and summer of 1989, this capacity has literally a life

and death dimension. (Pipes, 1989). Some observers viewed this as a Turkish countermeasure, or better, perhaps, preliminary muscle-flexing, for the general Syrian support given to Armenian terrorism directed against Turkey. Syrian authorities cannot but understand the power these dams imply, in part because it provides a formidable instrument in Turkish hands, in part because they too have plans for agricultural expansion, and Syrian electrical power needs are growing (Ibid).

Moreover, many Turks do not understand the logic wherein they must pay heavily for Arab oil, but the Arabs need not pay anything for "Turkish water." The Syrians are surely aware of this attitude. President, Süleyman Demirel's words: 'Turkey's resources are Turkey's. The oil resources are theirs (Arabs'). We do not say we share their oil resources; and they cannot say they share our water resources' (Dolatyar, 2000) (Bishku, 2012). Another source of friction which makes reaching a consensus difficult is that three sides have not even been able to agree on the very definition of the river system. Turkey claimed the Euphrates and Tigris as 'trans-boundary' rivers, whereas Syria and Iraq considered them to be international. 'Adopting the legal doctrine of absolute territorial sovereignty, Turkish sources argued that the Euphrates and Tigris both originate on Turkish soil and are Turkish rivers while they flow over Turkish territory, concluding that Turkey is no obliged to share its waters with its neighbours (Ibid). Syria adhered to the doctrine of limited territorial sovereignty and suggested that the Euphrates must be shared according to a formula computed by the riparians' declarations of water demands and the river's capacity. Iraq held to the doctrine of absolute territorial integrity, insisting on its ancient or prior rights of use of water from the Euphrates and Tigris rivers. In January 1989, eleven members of the PKK organization were captured trying to infiltrate from Syria in the Sunruc district—significantly, at a location near the construction site of the Atatürk Dam (Eder, 2001). Circumstantial evidence suggests that they were planning an attack on the dam. The dams are both a cause In the case of the Tigris and Euphrates basins, the role that dams have played in exacerbating conflict between the major riparian States - Turkey, Syria and Iraq - is clear. All three countries rely on the waters of the Euphrates and Tigris for their agriculture and future development. Unsurprisingly, the development of engineering projects on the two rivers, notably large dams and irrigation works, has been a source of growing tension between the riparian states. Syria has complained that

Turkey's massive development program for the border region, which included dams, power plants and irrigation systems, robbed Syrian agriculture of precious water resources.

Although outright violence has been avoided, hostilities have mounted each time that a new dam has been built or proposed. On at least three occasions, such hostilities have brought the various parties to the brink of war, with troops being mobilized and threats made to bomb existing dams.

### **5.2.3. The Proxy War and PKK Factor**

The Kurdish separatists were the biggest domestic security problem of Turkey since the early 1980s, tying up the Turkish army in the region and imposing much more pressure on the already drained national budget and costing to the lives of 30,000 people who died in the fight. Having realized what its downstream neighbour could do to affect the situation inside Turkey by giving support for the Kurdish rebels; Ankara felt the necessity of solving the problem by means of negotiations.

Turkey has a military advantage over Syria and has strong alliance, NATO. But Syrian, being aware that it has a potentially strong security card to play, waged an undeclared war against Turkey and assisted the Kurdish separatists as leverage to induce her to solve the water problem. These issues mainly created a confrontational basis in Turkey-Syria relations which caused Syria's support to the Turkish Kurds in their anti-Turkish struggle. Syria provided training facilities to the PKK in Lebanon's Biqa valley and gave shelter for, prominent leader of PKK, Ocalan in Damascus (Fuller, 2008).

President Ozal travelled to Damascus in 1987 to try to work out an agreement in which Ankara would guarantee a stipulated flow of Euphrates ( $500\text{m}^3/\text{s}$ ) water to Syria in return for mutual cessation of support to elements hostile to the other – a clear reference to Syrian support for the PKK. Despite the agreement, Syria did not end its support for the PKK, calming that the water flow Turkey had offered was unacceptable small over the long term (Hale, 2009).

Turkish upset on Damascus persistent of PKK support and growing over the year as the scope of PKK guerrilla and terrorist operations inside Turkey reached serious levels in

the 1990s. In October 1998 Turkey concentrated armed forces of approximately 80,000 men on the Syrian border, threatening a war unless Syria extradited Öcalan and closed PKK camps on its territory. The Syrian then-president Hafez al-Assad, who was trying to avoid a large-scale war against Turkey (*i.e.* against NATO), deported Öcalan from the country, however, without extraditing him to Turkey (Elbakyan, 2012/13). Since then, the bilateral relations have undergone a thawing period. The Adana Agreement signed on 20 October, 1998 was a substantial turning point in the bilateral relations. Under the first article of the agreement, Syria was obliged to prevent any kind of activity from its territory that could harm the Turkish security (Ibid). The agreement stipulated a joint campaign against the PKK activities, thus creating favourable conditions for the further development of the bilateral relations in different fields. Meanwhile, it is worth mentioning that under the provision of the second article of the agreement, Syria recognized PKK as a terrorist organization.

#### **5.2.4. The Economic Cost of Fighting the PKK**

Policymakers and experts agreed on the decades of terrorism have taken their toll on the Turkish economy, slowing down its pace of development and preventing its potential from being fully realized. Terrorism has four major economic repercussions all of which have the ability to reduce economic welfare: Terrorist attacks reduce the human and physical capital stock; introduce higher levels of uncertainty; increase military expenditures and shift resources from productive sectors to the defence industry and adversely affect specific industries such as airline or tourism (Abadie, 2007). According to the studies of Bilgel and Karahansan, the war highly affected the GDP of the country; the real per capita GDP in Eastern and South-eastern Anatolia declined by 6.6 percent relative to a comparable synthetic Eastern and South-eastern Anatolia without terrorism. (Bilgel F., 2014). As they reported, the human life lost is between 1984 and 2008, 32,000 militants, about 6,500 security force members and about 5,700 civilians were killed in PKK terrorist activities (Ibid). It may be difficult to put an exact price tag on losses stemming from the terror campaign waged by the outlawed Kurdistan Workers' Party (PKK) since 1984. But still different governmental and non-governmental organization reported that the damage has estimated about 400 billion dollars. As the European report of 2012, the conflict has particularly affected Turkey's tourism industry

and has cost the Economy of Turkey an estimated 300 to 450 billion dollars (EuropeRepor, 2012). One of the famous newspapers in Turkey “Hurriyet daily News” in April 30, 2014 reported that PKK terrorism in the past 25 years cost Turkey over \$300 billion, Head of TBMM Cemil Cicek said at a press briefing following the Council of Ministers meeting, and added the "cost of South-East Anatolia Project (GAP) was \$32 billion, it would have been able to create 10 GAPs," (Hurriyet, 2014).

#### **5.2.5. Progress in the Relation of Syria – Turkey and End of Conflict**

Turkey’s relation to Damascus began to undergo a dramatic shift in the 1998, leading to the opening of an historic new era between the two countries and to the creation of a new, positive atmosphere conducive to the settlement of the most outstanding issues between them (Fuller, 2008). Hafez’s willingness to abandon all support for the PKK in 1998 after the Adana accords, Turko- Syria relation showed a dramatic shift from war porn to kin friends.

A decade later, any thought of conflict is far removed and replaced with cooperation and coexistence. In September 2009, Turkey’s foreign minister Ahmet Davutoglu and his Syrian counterpart Walid al-Mouallim signed an agreement that ended visa requirements between the two states. This, along with an earlier agreement to allow free trade, ensured that people and goods could pass freely over the same borders that had been peppered with barbed wire and landmines barely eleven years earlier. In what marks a significant turnaround in relations Damascus and Ankara have found themselves increasingly closely integrated over the past decade. In what has become a close personal relationship, Syria’s president, Hafez’s son Bashar al Assad, now describes Turkey as Syria’s best friend, while Recep Tayyip Erdogan, Turkey’s prime minister, publicly calls Syrians his brothers (Philips, 2011).

#### **5.2.6. Backfire of the Two Countries’ Relations**

Since the Arab revolution, Syria going downwards day by day into the throes of civil war, the decade-long honeymoon between Turkey's ruling Justice and Development Party and Bashar al-Assad's regime has all but ended. Fearing the possible spread of the upheaval to Turkish territory, Prime Minister Recep Tayyip Erdoğan and Foreign

Minister Ahmet Davutoğlu cold shouldered their hitherto feted ally, openly siding with the rebels. They sheltered thousands of refugees fleeing government repression, including scores of military defectors, conferred with opposition leaders, and even threatened military intervention should the regime continue its brutal crackdown. (Aras D. , 2012)

## 6. ANALYSIS AND DISCUSSION

### 6.1.Scarcity

As discussed in the theoretical part of the paper, high level of water scarcity diminishes the willingness and effectiveness of peaceful conflict management among the states. High scarcity levels increase not only the opportunity for river conflicts (in terms of the number of competing claims to cross-border Rivers) but it also increases the willingness of states to resort to militarized conflict to pursue their water-related interests(Hensel P., 2006).

The scarcity of water in the Middle East and Africa presents a serious security issue given the rapid growth of population in the region and global climatic changes. High rates of population growth accompanied by continued increases in the demand for water have resulted in several countries passing the point where the scarcity of water supplies effectively limits further development. Present population trends and patterns of water use suggest that more African countries will exceed the limits of their economically usable, land-based water resources before 2025(Ashton P. J., 2002).

#### **Egypt**

Egypt is the most populous country in the Middle East and North Africa (MENA) region and the third in Africa next to Nigeria and Ethiopia, (84 million in 2013 estimation) (UNDESA, 2014). The country is one of the most water deficit countries and exclusively depends on Nile as a source of water, 97 % of Egypt's water source originates from this river. According to the 1959 Nile water agreement, Egypt has claimed 75% of the annual water flow, 55.5  $km^3/yr$ . Aside from this, it has internal renewable surface water resources estimated at 0.5  $km^3/yr$  and the internal renewable ground water resources at 2.3  $km^3/y$  in her own territory, making the total actual renewable water resources of the country are thus 58.3  $km^3/yr$  (FAO, 2014). This is illustrated in the table 9.



However, putting other factors aside, the water requirement for its exploding population growth will lead scarcity in its own time. Moreover, global warming and other factors could affect the availability of the volume of water on the Nile; 10 km<sup>3</sup> of the Nile water lost due to evaporation (According to the 1959 agreement signed between Egypt and Sudan)(Degefu, 2003). As the earth warms up, regions that currently receive an adequate supply of rain may shift and may decrease the volume of Nile water due to the increment of evaporation. Regions of the earth that normally are low pressure areas may become areas where high pressure dominates. That would completely change the types of plants and animals that can live successfully in that region.

Egypt is facing water crisis because almost the whole its water source is from the Nile River and the quota has been almost fixed since 1959, while its water needs have multiplied due to its soaring population (28 million in 1959 to 85 million person today), its agricultural area has expanded from under 26000 Km<sup>2</sup> (2600000ha) in 1959 to 36650 Km<sup>2</sup> (3665000ha) in 2012, while its industry has also grown and naturally all this has increased its demand for water (UNDESA, 2014).

### **Ethiopia**

Ethiopia's population is surpassing 99 million in 2015 (UNDESA, 2014) with 85 percent being rural and dependent on agriculture with a low level of productivity (FAO, 2014). Ethiopia has constantly hit by drought induced famines (see Table 5). Since 1970 more than 11 huge drought and famines are recorded and more than 59 million of people affected, millions of people died and millions of people internally displaced. According to World Bank, Ethiopia still has a high rank in the list of countries who have the least shares of population with access to improved drinking water the share of population which has the access to improved water between the years 2004-2008 is 48% and between the years 2009-2013 is 52% only(WorldBank, 2014).

Ethiopia faces a range of challenges in water management, with levels of service provision for water supply and sanitation that are amongst the lowest in the world, very low levels of irrigation development and challenges in areas such as hydropower development, disaster mitigation and ecosystem management. As Kinfu Abraham argues in his book titled "the Nile opportunities", it is necessary for Ethiopia to utilize

the water of the Blue Nile for irrigation and hydroelectric power generation to solve once and for all the drought and famine as well as the problem of supply of potable water.” (Abraham, 2004). Another well-known writer on the issue of Nile, Arsano, also forwarded strong argument as “Ethiopia has no option but to harness its water resource for consumptive and non-consumptive purposes. There is no legal or institutional obligation which limits Ethiopian policy makers as well as planners from fulfilling this duty in the best interest of the Ethiopian people.” (Arsano, 1997). Moreover, the Ethiopian Nile basin is suitable for irrigation and generation of hydroelectric power.

In the 1970s, there were plans for irrigated agriculture in the Blue Nile basin. Regarding the irrigation of the Ethiopian Nile Basin, Arsano notes that 1,600,000 hectares of land, including 115,000 hectares around the Baro or Sobat River and 400,000 hectares of land around Abbay (Blue Nile) was planned to be under irrigation for agriculture (Abraham, 2004). The river also has a potential to produce 56,000 million KWH of hydroelectric power. Therefore, it is immensely beneficial for Ethiopia to harness its hydropower potential to conserve the meager foreign exchange which it spends on imported oil (Ibid.).

The Government of Ethiopia (GOE) declared in February 2011 its intention to construct a huge dam on the Blue Nile named “*Grand Ethiopian Renaissance Dam (GERD)*”. By the end of April 2011, it announced unilaterally the construction of GERD and its details with a height of 145m, storage capacity of 74  $\text{km}^3$ , installing capacity of 6000 MW and a total cost of US\$ 4.78 billion, 45km east of its border with Sudan; it needs 6 years to fill the Dam(SIS, 2014)(Hammond, 2013). Ethiopian officials also confirmed that the GERD will not have a negative impact on the flow of water to the downstream countries (Egypt and Sudan), rather it would generate surplus energy for exporting to neighbouring countries, benefitting the wider region (Ibid.).

### **Conflict Due to Scarcity**

It is important to note that Egypt objected immediately to the unilateral declaration of the huge project by the Ethiopian government and expressed its fear that it will cause significant harm and decreases the runoff of the Blue Nile to the downstream countries. Also, it could cause damage in the form of material, environmental and socioeconomic

dimensions. At the beginning, both sides expressed their willingness and commitment to dialogue and negotiation over the dam. As Mahmud Dirir, the Ambassador of Egypt and the previous Culture and Tourism minister, states, the two countries can solve the dispute through negotiation (JP, 2013). In the Egyptian side, the same claim came several times from different officials of the country. As the Egyptian State Information Service wrote in his official page:

*“Egypt has never denied the right of Ethiopia and/or any other Nile Basin country to develop and utilize its water resources for developmental needs. On the contrary, Egypt has always supported and participated in such programs for the benefit of its brotherly riparian countries and continues to be ready to do so.”* and continued as, *“It is important to note as well, that Egypt stands ready to engage in a transparent and serious negotiations process with the governments of Ethiopia and Sudan to ensure the agreement on a win-win scenario that would ensure the fulfilment of Ethiopia's developmental needs, as well as the interests of Sudan”*(SIS, 2014). But still the two countries remained at far.

At the passage of a single day their relations became deteriorated and the tension peaked in May 2013 when Ethiopia began diverting the Blue Nile. Former Egyptian President Mohammed Morsi told a national conference: "We will defend each drop of Nile water with our blood if necessary."(MEMRI-TV, 2013). Badr Abdelatty spokesperson of the Egyptian Foreign Ministry said that “The Ethiopian dam is an issue that can bear no compromises.” (AJE, 2014).

The tension between the countries grows up and they engaged in a war of words, diplomacy and all possible ways except direct war. Egypt is quietly lobbying the international community for support against Ethiopia’s “violation of international law”. Abdelatty coated Ethiopia’s violation as: “widely respected rules and principles of the equitable and reasonable utilization of the river, the ‘no harm’ rule, and the prior notification rule.”(SIS, 2014). According to the Aljazeera article of “Egypt to 'escalate' Ethiopian dam dispute”(AlJazeera, 2014):

*“Egypt has been petitioning countries to get the support of the international community by referring Ethiopia’s breaches of international law. Foreign Minister Nabil Fahmy has toured Africa and Europe for the same purpose and during a trip to Italy, Fahmy asked the Italian company contracted to build the dam to halt construction and he also demands from the government of Italy, to invite Salini Construction Company to suspend construction works at the GERDP until the recommendations of the IPOE*

*Report are implemented. And also the government of Egypt calls upon the EU Commission and the European governments, to give due consideration to the accountability of business enterprise of European nationality for their conduct in supporting Ethiopia's projects affecting the Nile river downstream states. Egypt has also lobbied the US, China, Saudi Arabia, the UAE and Japan, as well as international organizations such as the World Bank. Spokespeople for all of these governments and organizations declined to comment, with the exception of the Japanese embassy in Cairo, which denied being approached by Egypt on the issue”.*

On the other hand, Ethiopian government and officials were responded to their Egyptian counterparty. Dina Mufti, Ethiopia's foreign ministry spokesman, responded the next day of a speech by Egypt's x-President Mohamed Morsi, he called the speech as "psychological warfare" and his country was "not intimidated by Egypt's psychological warfare and won't halt the dam's construction, even for seconds." And he added that "No country operates without precautions, let alone Ethiopia, which has a track record of defending its independence from all forces of evil."(Reuters, 2013). Foreign Minister Tedros Adhanom said in a statement. "It must utilize its resources to lift its people out of poverty; Ethiopia cannot remain poor” (Ibid.). Ethiopia insists it can fund the project itself without help from international lenders wary of the diplomatic dispute.

Despite all challenges posed by scarcity of resources explained above, it is also equally arguable that the same situation can possibly lead to serious decisions and engagements of contending countries. The issue of scarcity can be addressed more effectively and efficiently in cooperation than competition. An example could be that Turkey and Syria when the former suggested series of measures aimed such tunnelling the river to reduce water lost through drainage to swamps and evaporation and hence increase the water flow going to downstream countries. More water is lost to evaporation and swamps in Nile than Euphrates, because the length of the river and nature of the topography it passes through. It is noted that the Nile basin suffers poor watershed management and agricultural practices. For instance, drainage irrigation is widely practiced and high water demanding crops are cultivated, chiefly in Egypt. Finally, significant (15-20%) water ends up into the sea. These conditions underscore the need for more cooperation to overcome the waste of water resource in the basin. Therefore, the presence of the condition of scarcity can serve both countries, Ethiopia and Egypt, to reconsider their respective positions and reach peaceful solutions

## **6.2. Institutions**

The importance of institutional framework to solve conflicts arising among states has been discussed extensively in literature. In a myriad of structures and purposes, institutions have been utilized to bridge differences and resolve conflicts peacefully. The development of regional and international institutions has been credited to have contributed significantly in the efforts for the achievement of world peace for the past half century. (Mearsheimer, 1994/95). The UN system, with its numerous affiliated institutions, has played important role in resolving conflicts and helped global security and stability (Mearsheimer, 2007).

Institutions offer a potential solution to the problem of managing common water resources (Swain, 2001). Specific, regional and international institutions serve as outlets for conflict management by providing an arena for riparian states to resolve their differences, by providing neutral information, reducing uncertainty, and minimizing transaction costs (Ibid.). One of the key challenges in finding sustainable solutions to water-related disputes in the contemporary world is the ineffectiveness or the non-existence of an institutional framework to address these types of conflicts. This has resulted in reduced prospect of negotiated settlements.

The Turkey-Syria water disputes and the subsequent thorn relations would have assumed a much different form had there been an institutional mechanism to handle such problems. Despite the many shared commonalities, the two countries had no credible institutions to address issues of concern. Instead of cooperating each other, they remained sealed-off from each other as though they were in different continents. This paved the way to win/lose game in which each country worked hard to impose the other its own will. The outcome was loss of balance of actions and each country paid dearly. The final settlement could have been achieved at much lower cost.

The situation in the Nile basin is not that much different. The African Union (AU) and Nile Basin Initiative (NBI) were two main institutions with the potential to solve the issue of water dispute in the Nile basin countries. As the most important international organization in the African continent, the African Union provided a crucial platform to

address issues arising among member states. However, the organization is not well suited for handling such issues. Moreover, the Nile basin includes some of the most visible actors in the African politics. Hence, it will be a paramount challenge for the AU to handle disputes that pits each other some of the heavyweight countries like Ethiopia and Egypt.

The Nile Basin Initiative (NBI) is a regional intergovernmental partnership that seeks to develop the River Nile in a cooperative manner, share substantial socioeconomic benefits and promote regional peace and security. Its main objective is to achieve sustainable socioeconomic development through the equitable utilization of, and benefit from, the common Nile Basin water resources. The NBI was launched on 22nd February 1999 by Ministers in charge of Water Affairs in the riparian countries, namely Burundi, DR Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, The Sudan, Tanzania, and Uganda. Eritrea participates as an observer. NBI provides riparian countries with the first and only all-inclusive regional platform for multi stakeholder dialogue, information sharing as well as joint planning and management of water and related resources in the Nile Basin.

For the first time in history, all of the Nile riparian states were brought under the umbrella of one institution designed to address the issue of the basin collectively and solve longstanding water disputes cooperatively. The NBI facilitated member states to engage serious discussions and deliberate solving the problem in the basin. However, not all member countries were embraced by the NBI as a genuine effort to solve the basin issues. Egypt and Sudan were particularly suspicious about it and indicated their positions as contrary to the very objective established for the institution. The fact that Ethiopia, a major source of the water in the Nile, undertook actively in the establishment of the institution and its traditional uneasy relations with downstream countries, Egypt and Sudan, has shaded Egypt and Sudan's attitude toward the initiative. The outcome was an atmosphere of mistrust and lack of cooperation.

In addition to the options available as in the case of regional and basin specific organizations like AU and NBI, in smoothing relations of the member and enhance trust and cooperation, other international institutions like UN, IMF and World Bank can play a constructive role. The success of the international institutions in resolving the Hindus

River between Pakistan and India is worth noting. Given their vast experience and influence of the countries will be an important leverage in resolving the dispute. Donor organizations have also a role to play by using their influencing on the countries, especially Ethiopia and Egypt who are heavily dependent on foreign aid. Some strategic partners like US and the EU can use their influence to convince the countries to engage and resolve the water issue.

### **6.3. Democracy**

Democratic peace theorists hold that democracies are hesitant to engage in armed conflict with other identified democracies by dissuades state-sponsored violence. In some cases, it is termed as ‘mutual democratic pacifism’ or inter-democracy non-aggression hypothesis. Four main points are explained in the logic behind this theory. First, it is argued that democratic leaders are forced to accept culpability for war-losses to a voting public, therefore will careful not step in any actions that may threaten their political fortunes. Second, publicly accountable statesmen are more inclined to establish diplomatic institutions for resolving international tensions. Third, democracies are less inclined to view countries with adjacent policy and governing doctrine as hostile. Finally, democracies tend to possess greater public wealth than other states, and therefore avoid war to preserve infrastructure and resources.

The levels of democracy of the countries in the study were not impressive, though found in varying degree of democratization. Turkey fared better than Syria in the level of democracy. Much of its existence as an independent nation, Syria has been ruled by Ba’athist-military regime under the Al-asad family. No civilian political culture existed as dissidents were systemically wiped out or prevented for coming into being. The prevailing atmosphere was one that will not offer the checks mentioned in democracies. On the other hand, Turkey has relatively mature civilian political culture and democratic representations. Although not identified as a democratic country, it has a competitive political culture in which the votes of the citizens matter to politicians. However, the country’s elite adopted more of nationalistic rhetoric and thereby diverted the sentiments of the public. The final result was a showdown between political leaders who represent the public and state simultaneously. The countries in the Nile fared worse

than the level of democracy in Turkey and Syria. Specially, the two main countries in the dispute, Ethiopia and Egypt, have little democratic experience.

Ethiopia was established under absolute feudal monarch in the last quarter of the 19<sup>th</sup> century and remained under the same system of governance for more than a half century. In the last quarter of the 20<sup>th</sup> century, a military junta overthrew the monarch and the country entered 17 years of bloody rule. Finally, the military in their turn was toppled by ethnic-based insurgency in 1991 (Zewde, 2002). The country's political and administrative structure were redesigned and moved in ethnic-based federal system of governance. The coalition of ethnic-based parties that managed to wrestle power from the former regime stayed in power ever since and monopolized politics in the country. Hence, the country retained all the characteristics of undemocratic state.

The Egyptian democratic qualifications are not better than that of the Ethiopians. Since the Free Officers overthrew of King Faruk in 1952, the country was ruled by military strongmen. Political parties nominally existed, but they remained largely symbolic. The political climate was marred by oppression and muzzling of civil political movements. In 2011, spontaneous popular uprising forced a long time ruler, Mohammed Husni Mubarak, to step down from power. For the first time in its recent history, Egypt experienced genuine multiparty elections in which a religious leaning conservative party, the Muslim Brotherhood, won the election. Less than a year in power, the first democratically elected president of Egypt, Mohammed Morsi, was ousted by a mix of protests and security-military sabotages engineered by the old political establishment. The military established transitional government and stepped in intensive crackdown of the supporters of the ousted president. After shambolic election, the general who overthrew Morsi, Abdelfatah Al-sisi, became a president. Thus, Egypt's political climate returned to its pre-revolution climate.

Although general theories of peace and democracy assert that low level of democracy is the anti-thesis of stability, empirical studies indicate that many authoritarian regimes equally avoid war like democratic ones. This is clear in the example of Turkey during the early republican period. Turkey was regarded as undemocratic country yet; the country's chief political attitude to its neighbours was one of non-interference. The



famous line of Mustafa Kemal Atatürk, “ peace at home, peace in the world” was guiding principle.

In similar fashion, Egypt undemocratic track record and the recent turbulent transition of power is not an indication that things will go awry in the relations of the countries. After all, it’s well mentioned in the paper that both countries didn’t have a good democratic record, but never drew daggers at each other before.

Moreover, the conditions seem not favourable for military actions taking place between the two countries. For one, Egypt, does not share a physical border with Ethiopia and can only reach it if allowed by other countries like Sudan. This is unlikely as Sudan is forging close relations with Ethiopia and would not risk the consequence turbulence with its neighbour. On a diplomatic level, Ethiopia wields considerable influence in the region and has already lined many of the riparian countries to side. This makes less likely for Egypt to escalate into conflict as it cannot alienate the whole region. Therefore, it is possible to think to expect de-escalation of conflict and rapprochements between the countries.

#### **6.4. Asymmetry of Power**

As discussed in the theoretical part of the paper, the existence of asymmetries of power among the states decreases the possibility of having peaceful settlements and could be a cause for direct or indirect conflicts. In trans-boundary water related disputes, it becomes an obstacle for riparian states to engage and settle their differences. The asymmetry of power is one of the key causes for making more difficult the settlement of trans-boundary water sharing in equitable and reasonable method. As Bachrach and Baratz (1962: 948) define: Power is the capacity to set and control the negotiation agenda, to avoid taking decisions or to affect outcomes through the creation or reinforcement of institutional frameworks and values. This happens when one party involved in the dispute includes its relative superiority of power in the equation and tries to demand more concessions from the other. Many examples in this regard abound in the world. In our case, the Turkey- Syria and Egypt- Ethiopia relations on the Euphrates and Nile respectively could be taken as good examples. The asymmetry of power is the main reason behind the Egyptian hegemony over the Nile water and denied

the right of Ethiopia and/or any other Nile Basin country to develop and utilize its water resources for developmental needs over centuries and decades.

Five main elements of traditional power mentioned in this paper are: military, economic, upstream position, bargaining power and foreign alliance were thought to play important role in the outcome of any settlement. In this regard, a country which is in favourable position could tilt the outcome in its way. An example could be that of Turkey and Syria, where the former enjoyed the first three elements. However, the bargaining power also proved to be a potent obstacle and complicated the outcome. Syria's use of the PKK as bargaining power to pressure on Turkey illustrates this point. However, the situation could be much more complicated in the current dispute between Egypt and Ethiopia, where Ethiopia has only the upstream position and Egypt have the other three advantages over Ethiopia; Military, economic and the bargaining powers.

#### **6.4.1. Military Power**

Egypt has a military advantage over Ethiopia before and after her independence. The main reason for submission of Emperor Menelik II to Great Britain and signed the 1902 treaty for the purpose of a delimitation of the frontier between the Sudan and Ethiopia. In case Menelik II was not in a position to sign the agreement, it may cause to lose his country or Ethiopia may have different border with Sudan. In his book, "The Nile; History, Legal and developmental perspectives", Degefu (2004) explains the 1902 treaty between Ethiopia and Britain. Since 1902 till the day of the Arab revolution started in Egypt, Egypt has claimed her monopoly over the Nile and secured her position by claiming the same agreement and backed by her military advantage over Ethiopia.

By the end of April 2011, Ethiopian government took dramatic steps and declared its intention of constructing a large dam on the Blue Nile, Grand Ethiopian Renaissance Dam (GERD). The Ethiopian government was determined and stated its sovereign right to use any natural resource under its own territory as stipulated in the international law. Further, it questioned the validity of colonial water treaties and expressed it as non-binding to it. Immediately, the Ethiopian government started the construction of the largest dam in the continent, Africa.

Egypt's reactions were also on the high frequency. A conference was organized by several political parties, including the ruling party and the president of the country to discuss the dam project and its effects on Egypt's share of Nile water. The previous Egyptian president and all the parties agreed to use every option to defend the Egypt interest and the Nile water. The president said in his statement: "*all options are open* in dealing with its construction of a Nile dam that threatens to leave Egypt with a dangerous water shortage." And he added: "We will defend each drop of Nile water with our blood if necessary."(MEMRI-TV, 2013). Badr Abdelatty spokesperson of the Egyptian Foreign Ministry said that "The Ethiopian dam is an issue that can bear no compromises."(SudanTribune, 2014). It's known that Egypt has the military advantage over Ethiopia and the relative positions are summarized in the following table.

**Table 15. Summary of the Asymmetry of Military Power between Ethiopia and Egypt (GFP, 2014)**

<b>Difference of Military Power Resources between Egypt and Ethiopia (Global Firepower)</b>			
<b>Resource Type</b>	<b>Amount</b>		
	<b>Egypt</b>	<b>Ethiopia</b>	<b>Difference</b>
Active Frontline personnel	468,500	182,500	286,000
Active reserve personnel	800,000	0	800,000
<b><i>Land system</i></b>			
Tanks	4,767	560	4,207
Armoured Fighting Vehicles	18,986	780	18,206
Self Propelled Guns (SPGs)	889	195	694
Towed Artillery	2,240	1,170	1,070
Multi-Launch Rocket System	1,469	183	1,286
<b><i>Air Power</i></b>			
Total AirCRAFT	2,440	149	2,091
Helicopter	281	47	234
<b><i>Naval power</i></b>			
Total Naval Strength	237	-	237
Frigates	9	-	9
Corvettes	2	-	2
Submarines	4	-	4
Coastal Defence Craft	152	-	152
Mine Warfare	28	-	28
<b><i>Resource</i></b>			
Oil production (bl/day)	680,500	100	680,400
Oil consumption (bl/day)	750,000	50,000	700,000
Proven Oil reserve (bl/day)	4,400,000,000	430,000	4,399,570,000
<b><i>Financial strength</i></b>			
Defence Budget (in USD)	4,400,000,000	340,000,000	4,060,000,000
External Debt (in USD)	38,690,000,00	10,030,000,000	28,660,000,00
Reserve foreign exchange and Gold (in USD)	14,930,000,00 0	3,272,000,000	11,658,000,00 0
Purchasing power (in USD)	534,100,000,0 00	109,000,000,000	425,100,000,0 00

### **6.4.2. Economic Power**

Since the Arab spring turmoil in 2011, Egypt has experienced a drastic fall in both foreign investment and tourism revenues, followed by a 60% drop in foreign exchange reserves, a 3% drop in growth, and a rapid devaluation of the Egyptian pound. The state's 2013-2014 draft general budget noted a number of economic problems, most important among them state budget deficit's rise to \$23.9 billion, equivalent of 11% of the GDP. Despite of all these, Egypt has still the third biggest economy in Africa next to Nigeria and South Africa (Almonitor, 2014).

The leading Gulf monarchies (Saudi Arabia, the UAE and Bahrain) are steadfastly backing Abdel Fatah al-Sisi, Egypt's presidential frontrunner, in the hope that their generous financial help will bolster his campaign to crush the Muslim Brotherhood and indirectly secure their own regimes. Immediately after Morsi's ouster, the UAE, Saudi Arabia and Kuwait pledged a combined \$12 billion in aid to Egypt's faltering economy. The UAE later pledged a further \$3.9 billion and its Arabtec construction company signed a memorandum of understanding to develop a \$40 billion project for one million housing units in the North African country. In an interview broadcast earlier this month, Sisi said aid from the Gulf has amounted to \$20 billion. Speaking at a forum in Dubai, Egypt's interim Prime Minister Ibrahim Mahlab said "we will not forget the friendly hands that have extended in support for us."(AFP, 2014).

Ethiopia has an economy which is one of the fastest growing in the world. According to the International Monetary Fund in 2013, Ethiopian economy (GDP) is one fifth of the Egyptian one. Mean that still Egypt have an economical advantage over Ethiopia to go to direct and indirect dispute to secure her statuesque of the Nile water share.

### **6.4.3. Upstream Position**

By the end of April 2011, Ethiopian government took dramatic steps and declared its intention of constructing a large dam on the Blue Nile, Grand Ethiopian Renaissance Dam (GERD). The Ethiopian government was determined and stated its sovereignty right to use any natural resource under its own territory as stipulated in the international law. Further, it questioned the validity of colonial water treaties and expressed it as non-

binding to it. Immediately, the Ethiopian government started the construction of the largest dam in the continent, Africa.

Ethiopia's actions were grounded on the international law as claimed by Getachew Aberra other prominent scholars. Getachew was quoted as saying "there is neither customary international law nor a treaty that entitles Egypt to Nile waters within Ethiopian territory" he further said "Every state has a right to exploit its water resources for the well-being of its people subject to accepted international rules." The main arguments in these statements are based on the principle of absolute territorial sovereignty which is outlined only favours the upper riparian states and the lower riparian right will fail in the hands of upstream kindness(Abera, 2013). This was also underscored by Ethiopia's foreign minister, Tedros Adhanom. He said "It must utilize its resources to lift its people out of poverty; Ethiopia cannot remain poor."

The other argument of Ethiopian government is: the 1929 Nile water allocation agreement that was signed by Egypt and the United Kingdom (which excluded Ethiopia and nearly all other upper basin countries) allocated 48 billion (65%) cubic meters of water per year to Egypt and 4 billion to the Sudan as well as the 1959 agreement between Egypt and the Sudan, the share to 55.5 (75%) billion and 18.5 billion cubic meters to Egypt and the Sudan, respectively; Never acknowledged by any one of Ethiopian government; neither the past nor the present.

Still Egypt wants to keep the colonial-era agreements and the 1959 accord; as argued by Badr Abdelatty, a spokesman for Egypt's Foreign Ministry, Egypt wants to keep the status quo because it needs all the "assigned 55 billion cubic meters a year for vital use such as drinking, washing and sanitation needs" by 2020. It's worth mentioning as well, that the conduct of the Ethiopian government is inconsistent with its obligations according to the 1902 Treaty between Great Britain and Ethiopia (Degfu G., 2003)

Ethiopian government accused of Egypt as: this clearly indicates Egypt's desire to secure its own Nile water-related benefits intact while at the same time denying other (Sub-Saharan) Nile riparian countries from using their own waters for alleviating poverty and enhancing sustainable development.

#### 6.4.4. Bargaining Power

Turkey has a better power position due to its geographic upstream position as well as military and economic resources. It can apply unilateral measures in order to maximize its interests by multiplying storage infrastructures and delivery systems. Downstream Syria perceived upstream (Turkey's) water projects as a threat to their access to water. Thus, it moved to use PKK as a bargaining chip over water and security issues. Syria backed the a terrorist Kurdish organization PKK, aiming to get more flow of water (700 m<sup>3</sup>/s) from the Euphrates river by refusing the proposed water flow by Turkey in the boarder of Turkey-Syria as a fixed quota 500 cubic meters of water per second (m<sup>3</sup>/s). It causes a cost of lives of many people (40,000) and around 300- 400 billion dollars (Bilgel, 2013/14). This amount of money may be equal to 40- 50 years Ethiopian annual budget; which is 8 billion dollars in 2012, and it may also cover 8-9 year annual budget of Egypt. But nothing changed in Syria rather than creating historical and permanent hostile neighboring state and the country money invested on null for the people of Syria.

In the above mentioned conference of Egyptian political parties; by the time a party leader who had the second majority in the Egyptian parliament, Al-Nur (Selefi's party) proposed to ply Egypt the same game against Ethiopia what Syria used in Turkey. He proposed, Egypt to back some ethnic separatist movement in Ethiopia like OLF (Oromo liberation Front) and ONLF (Ogaden National Liberation Front) to create pressure on Ethiopia and to give up the dam construction. Such opportunities and proxy war used by downstream countries seemed at the beginning better than to go to direct negotiation and peaceful settlement.

The above analysis shows us the existence of unequal distribution of the factors of asymmetric of in the countries under discussion. However, no country has all factors under its control. For example, Turkey has military, economic and upstream advantages over Syria. On the other hand, Syria exploited Kurdish insurgency against Turkey and leveraged as bargaining power. Likewise, Egypt has relatively better military and economic power and could possibly wage proxy war by supporting ethnic insurgencies inside Ethiopia. Ethiopia occupies an upstream position and contributes a significant amount of the annual water flow of Nile.

Turkey and Syria case demonstrates that even though the former has more military, economic and upstream advantages, the latter's mere use of insurgence as bargaining was enough obstacle for the one-sided outcome. Despite all the stated advantages, Turkey has to fight long and cost proxy war.

Egypt's military strength surpasses that of Ethiopia both quality and quantity significantly and has GPD times more. However, all differences cannot be directly accounted as an advantage for Egypt. First, Egypt military might is largely focused on the Middle East conflict, especially with Israel, and could not deal another war theatre in its backyard. Although Egypt's economy is far better than that of Ethiopia, it does not mean it is in good condition. The country is facing formidable economic challenges and can hardly afford to divert resources for war. Even, the petrodollars that Egypt gets from Gulf States cannot meet its own needs. It is well agreed that the last thing that Egyptians will waiver for their leaders is economic costs of war. As for the bargaining power, Ethiopia's insurgence, mainly ONLF and OLF, cannot offer the same level of effectiveness as they have been fighting for quite a long period of time and exhausted the momentum.

In addition to this, Syria shared direct border with Turkey and could provide training and logistic support to the PKK easily than will otherwise be in Egypt. Similarly, Ethiopia's position as an upstream power is not sufficient to ignore the other factors in the equation. The aggregation of the two cases gives us a broad view in which no country has total asymmetric power. The fact that no country enjoyed all underlying factors underscore the importance of however, no country has all factors under its control. Therefore, the most feasible venue for the countries to solve the dispute is through a negotiated settlement.

#### **6.4.5. The Role of Foreign Powers**

##### **A. Super Powers**

The role of foreign power in the analysis of the Nile basin dispute is also one of the most important dimensions in our study. Strategic alliances usually make sense when the parties involved have complementary strengths. As discussed in the literature part external alliances are means of getting a comparative advantage and security increases



as a result of the partner's commitment. As Daoudy (2005) stated alliance could be sources of power besides with military and economic resources. To be aligned with the super power or other strong powers could be a vital dimension of source of power.

For decades, despite being downstream, Egypt has been the "hydro-Hegemon" because of its better economy, larger population, the strongest military forces, the most international prestige and the closest partnerships with global superpowers. Egypt is a country that has been close relations with a succession of major powers, the UK (until the 1950s), the Soviet Union (until the mid-1970s) and the US till today, provided the political and financial backing to establish Cairo's better position in the basin through political and legal treaties.

Its close alliance with the super power is one of the important reasons behind its influence in the region and the actual construction of infrastructure for power generation, storage and irrigation in the basin. The largest Aswan Dam was built after the 1959 Nile water agreement guaranteed the highest share (66%) of the river's flow for Egypt. UK was the main source of Egyptian power to secure this large volume of water and Soviet Union was behind the construction of the dam. The Camp David agreement, between Egypt and Israel, and its strategic topography has also significantly increased Egypt's support from US and other western powers, even though it has made Egypt the most hated Arab country in the Muslim world. The continual strategic importance of the Suez Canal could also enhance Egypt's influence in international politics. For the last 100 years controlling the Suez Canal has become one indicator of exhibiting world power and currently the US has full control of it.

On the other hand, Ethiopia has been a historical alliance of the Western powers, especially US since the Second World War even though there was 17 years interruption in between during the military regime in Ethiopia which controlled power in Ethiopia from 1974-1991. During the military communist regime, Ethiopia's strategy was the then Soviet Union. The western powers considered Ethiopia as a strong shield to deter the expansion of Islam and Arabic ideology for centuries. As a result of this the western powers were used to support the Christian Ethiopian Highlanders when they fought with the Muslim lowlanders.

Recently, in the same fashion, Ethiopia has become a strong ally of the western powers in “war on terror” in the horn of Africa since 9/11. Consequently, using the full support of the US and EU, Ethiopia invaded and destroyed the Islamic government in Somalia in 2007. Still now Ethiopia is a king maker in Somalia and repeatedly weakening the movement of the Islamic militant group called Al-Shebab with the full support of western powers.

Addis Ababa, Capital of Ethiopia, is a seat of Africa Union (AU) and its last three leaders who ruled the country for more than 80 years (1930-2012) were popular safeguard of Africa in the international stages. The three leaders (Haile Silase, Mengstu and Meles) even though they were considered as dictators and authoritarians in their homeland, their contribution to African Union were immense and unforgettable. These gave a superior prestige and a strong voice in the Union. Hence, having a good alliance with Ethiopia is crucial to the superpower to penetrate the Africa market and convincing African leaders on certain political or economic agenda.

Turkey is a strategic alliance of the western power since the foundation of the republic due to various reasons. Its membership of NATO and close relation to Israel gave strategic advantage to the west over Syria during the dispute period. Neither Egypt nor Ethiopia has the same advantage of Turkey. Having in mind the above discussions on the alliance between western powers with Egypt and Ethiopia, it is plausible to argue that both Ethiopia and Egypt are equally important for the western powers who can decide the fate of future relations between the two riparian countries. It is claimed that western powers usually evaluate the costs and benefits while supporting any nation over the other and passing decisions in favour of their strong ally. As a result, since both Egypt and Ethiopia are historical allies of western powers, the western powers will more likely to present a negotiation solution which will bring a win-win solution for the current Nile dispute rather than leading them to confrontations by siding with one of the two riparian states.

## **B. Israel**

Menelik I, who is claimed to be the first Solomonic Emperor of Ethiopia, is traditionally believed to be the son of King Solomon of ancient Israel. Emperor Menilik II, the

founder of modern Ethiopia, and his successor Emperor Haileselassie were also among the rulers that claim the Solomonic descendant. Hence, this legend of connecting the roots of Ethiopian Solomonic dynasty kings with prophet and King Solomon, Muslims called Suleyman, is contributing a lot in Ethio-Israel relation. Moreover, there is a specific region in Ethiopia where people who claimed Jewish origin who came and started to live in Ethiopia centuries ago. The people are called Fellasha or Ethiopian Jews and have started to return back to Israel in mass since 1970s.

However, though not with the claim of the Solomonic root, the current Ethiopian government has also established strong relation with Israel. A good example of this could be the friendly relationship between the previous Prime Minister of Ethiopia, Meles Zenawi, and Hagai Erlich,<sup>2</sup> an Israeli professor and advisor to Prime Minister Meles Zenawi over the Middle East.

On the other hand, Egypt and Israel fought a war per decade since the foundation of a new born Israel till the 1979 agreement: 1948, 1956, 1967, and 1973. However, President Anwar Sadat's historic decision of 1977 to achieve peace with Israel broke the cycle. He believed Egypt could achieve its strategic goals by means other than war (Dan, 2003). But generally speaking, calling the relationship between Egypt and Israel one of allies would be somewhat of a loose term, despite the Camp David peace treaty in effect between the two nations since 1979 (Ibid). The treaty could do nothing to integrate the two country's people rather than halting the war. The continued discontents and disappointments between Egypt and Israel at different times could be sited as evidences.

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<sup>2</sup> Erlich's studies focus on Ethiopia and the modern Middle East, and on the connections and the relations between these histories. His studies on Ethiopia deal mainly with the internal ethnic dynamism between Tigreans and Amhara and the country's political culture as a factor in Ethiopia's survival in facing European imperialism. His studies on the relations between Ethiopia and the Middle East reconstruct the history of major strategic meeting points and focus mainly on the conceptual Islamic-Christian dimensions and the religious historical legacies which inspired and continue to influence those relations. He served in the Nahal para-troops battalion and as a reservist fought in the battle on Jerusalem in 1967 Six-Day War. He was a best friend of the previous prime minister of Ethiopia 'Meles Zenawi' and he was the advisor of him in "Ethiopian relation to the Middle East". He published more than 18 books and article related to the same issue. *Ethiopia and the Middle East, The Nile – Histories, Cultures, Myths and Alliance and Alienation – Ethiopia and Israel in the Days of Haile Selassie* among his important publications on the issue.

For almost half of its existence as a state, of all its neighbours, Israel has enjoyed its most cordial relations with Egypt, particularly under the presidency of Hosni Mubarak. President Mubarak has remained Israel's closest ally in its relationship with Egypt and in the most recent years enjoyed peaceful relations, specifically due to his role in enforcing Israeli policy in the Gaza Strip. In general looking, Mubarak was the safeguard of the state of Israel and he had little role in negotiations between Israel and the Palestinian Authority. His presidency hadn't the intention to facilitate any negotiations between Israel and Hamas; in addition to that, he didn't support reconciliation talks between the latter and Fatah(MEMO, 2011).

The Egyptian revolution is only the latest demonstration of the change in Israel's strategic environment. Defense of the peace treaty entered between Egypt and Israel remains the prevailing wisdom in Washington. US seems to have agreed with Egypt's Supreme Military Council that Egypt will honour to the existing treaties. For that reason, the Egyptian army granted \$1.3 billion annual subsidy from U.S. to keep it in peace with Israel (Patrick, 2011).

The 1979 treaty has been increasingly put in question since the 2011 revolution which toppled former President Hosni Mubarak and his military safeguards. The Muslim Brotherhood's intention over years and decades of seeking to overthrow existing authoritarians and dictators, Arab regimes, replacing them with a democrat and unified Arab state seems close to exist. The Arab Spring has provided new opportunities for the movement to realize its long-term goals.

So after the Egyptian revolution broke out at once, the vast majority of Israeli officials have been overcome by the fear that this revolution could lead to the establishment of a democratic political system in Egypt and the rest Muslim world. This is due to the fact that Zionist and Israeli leaders have believed-and continue to believe-that democracy and Arab unity reinforce Arab power and increase the potential - in the medium and long term - for resistance to Israel and the possibility of a resultant Arab victory(Mahmoud, 2011). So the coming of Muslim Brotherhood through gaining the support of a majority of the public vote and winning of the election in 2012, that gave popularity to the group and on the contrary disappointing to Israel.

Mohammed Morsi, a Muslim Brotherhood member and Hamas sympathizer, generated alarm in Israel following his presidential victory, for obvious reasons. Israel feared that, he would put the treaty to a referendum, knowing full well that Egyptians would seek modifications and perhaps a downgrade of diplomatic ties. The Israeli government also believes Morsi and the Islamist-dominated Egyptian parliament will seek to elevate and legitimize Hamas's rule in Gaza (Michael, 2013). Despite these fears, Morsi maintained the peace treaty, though at one he rejected an Israeli request to upgrade the relations between the countries and also recalled the Egyptian ambassador to Israel in protest of Israel's "counterterrorism" operation of defence in Gaza in late 2012.

The Egyptian people need a real Islamic revolution to create genuine protection of Gaza and Muslims in the rest of the world, such as Syria. However, the overthrow of democratically elected Muslim Brotherhood, and the coming of Sisi to power shows that obviously the Zionist-influenced West will not seem to allow Muslims to have relatively honest and Democrat leaders through free elections. Instead, they will use deception and violence to pursue their schemes for regional and global domination.

In spite of more than three decades of diplomatic relations between Egypt and Israel, both the Egypt and Israeli public view the peace treaty as a cold peace. Most of the citizens of Egypt saw the treaty as a protection of the Jewish state and demands its amendment. Regardless of the fact that both sides have adhered to their peace treaty, still it is surrounded by the cloud of uncertainty its continuity as it is. In order to get the assurance from the Egyptian side, who ever come to power not to revise and amend the agreement, Israel has looked the options that she had.

Nile water is related to the life of Egyptians for centuries and it is the only source of water for them (97% of the country water source). Israel thought that and they considered to play Nile as a card to take control of Egypt's politic through getting ways to Nile. Since the peace treaty signed, the two countries relation developed and Egypt was considered during Mubarak's regime one of the most strategical alliance of Israel in Middle East, but on the matter of water the two states have incompatible goals and Israel is trying to control the Egyptian percent of the Nile in order to have more control over the Egyptian policy in a future resolution of the Arabic – Israeli conflict (Hamze, 2011). This is evidenced by Israel continued effort of developing its relationship with

the upper basin states and in particular with the most important nation in the Nile Basin, “Ethiopia”. Actually, there are much news written on the Israeli’s assistance of Ethiopia to build dams on the Nile on the Egyptian side, and in the last years the relationship between Israel and Ethiopia has improved especially after the Ethiopian Prime Minister Zinawi visit of Tel Aviv in July 2004(Ibid).

The Nile Basin is known by the insecurity in economic and social problems. Recently it also failed in a quick increasing water demand and scarcity due to the blast population growth and environmental change in the region. In spite of all this, Israel, beyond the political interest in the Nile, they also considered as an option to address its high water scarcity in the future. In general, for any interest of Israel in the Nile, it has to be alliance and close friend with the upstream countries, in particular with Ethiopia, is strategically.

On the other side, the upstream countries, in particular Ethiopia’s hope and needs of using the Nile river is for the real purpose of energy production and development purpose. To achieve these objectives, engaging in a direct negotiation and working in cooperation with Egypt is more advantageous and profitable than confrontation and war. That is why the Ethiopian government persistently expresses his commitment to work in a win – win approach with his counter party in Egypt without their party intervention, including Israel. To be friend with Israel at the cost of Egypt is more costly to Ethiopia and it may be cause for war between the two Nile basin countries.

Therefore, for Egypt not to fall under the influence of 3<sup>rd</sup> party, Israel and other super power countries, that has either a political or economic need in the region; direct negotiation and peaceful settlement with the upstream country, Ethiopia, could be a short cut and the cheapest way to Egypt too. Sisi also expressed his government will not permit to deteriorate his country relation with Ethiopia in any reason during his government inauguration.

To sum up, the two most populous and under developed Nile basin countries, Egypt and Ethiopia, piloted to solve their disagreement through bilateral negotiation and peaceful settlement without allowing any third party intervention, Israel and super power countries, due to the reasons and facts discussed in the above and to maximize their

interest and facilitate the development activity without engaging any unnecessary conflict.

### **6.5. Historical Relation and Perception**

It is argued that past relations and perceptions influence present and future cooperation among states. In this sense, countries which have positive relations and perceptions tend to have good chances of settling their differences in a peaceful manner. However, those who have rough past experiences are more likely to find in difficult course. This is explained by the notion that history is found in the 'center-stage' role in international relations (Vaughan-Williams, 2005). It means that the past and recent militarized conflict over various issues and failures in attempts to settle issues peacefully may generate a negative image. Bad experience prejudices and images increasingly exert their influence in international politics and transnational relations.

Once found in the same political entity, the Ottoman Empire, Turkey and Syria were born to different parents as new states. The process of decay and eventual disintegration of the Ottoman Empire went through a difficult period in which many of its subjects pursued different paths interests. The final blow comes during the First World War in which European powers expropriated lands ruled by the defeated Ottomans. During the course of the war, the Arabs fought different sides of warring parties. Although the majority of the Arab subjects of the Empire remained loyal and fought alongside it, there were handful Arab leaders who sided with the European powers. This left a deep impact on the psychic of the Turks who registered it as a betrayal by their erstwhile fellow subjects and co-religions. In the years that followed, the historical, political and religious connections disappeared and each side went its own way of nationalistic fever. The situation was further complicated after Hatay province was transferred by the French colonial authorities in Syria in despite of Arab objections. Once the GAP project on the Euphrates came into the picture, it was interpreted with these negative historical relation and perception backgrounds and situations easily developed into an active confrontation. From the side of the Arab states, Syria and Iraq, the GAP project was viewed as a grave threat to their own interest. The deprivation of Euphrates water is the last straw for Iraq and Syria. Mary (2007) puts the context as "They see Turkish dams

built to improve the Turkish economy as a major security threat as well as an attempt by the West to use its ally, Turkey, as a weapon against Arabs”.

Unlike Turkey and Syria, Egypt and Ethiopia have no common border, were not ruled under the same empire but their histories have always remained interwoven. Their common story has culminated in various conflicts and crises, but beyond the dramas of strategic and political interests, there lay deeper dimensions of culture and identity (Erllich, 2002). The relations of the two countries can be approached from two main historical eras. These are the medieval and modern eras. In more recent, regional hegemony and influence were added to the list of the relations of the two counties.

For a long time, the historical relations and perceptions of both countries were shaded with deep sentiments of misgivings and ill-interoparations of actions of each other. For a long time, the Egyptians were aware the importance of Nile to their very existence and looked suspiciously anyone connected to it. They dreaded the prospect that an ill-intending party might one day rise and intervene in their source of life, the Nile. The Egyptians were more suspicious Ethiopia than any other country in the Nile basin countries and it accounted the largest share of the Nile water. On the other hand, Ethiopians on their part resented the pass of their resources to ungrateful beneficiary and dreamed of the day when they would able to utilize for their own development endeavours. The situation has become more intense after Ethiopia declared its intention of building the largest water dam in its territory. Egypt interpreted this move and actualization of its worst nightmare. After this, the relations of the countries were characterized with diplomatic squabbles and rationale rapprochements.

Acknowledging the difficulties associated with overcoming historical and past misperceptions, it is nonetheless possible to argue that countries can reshape their attitudes to each other and embark new courses of relations. The Turkey-Syria relation after the Adana agreement provides a good example. After a long period of hostile relations and nearly waging war on each other, the two countries, Turkey and Syria, redirected their relations into positive and close one. Thus, it is also valid to expect the same from the Ethio-Egyptian relations.



Ethiopia and Egypt could establish common ground and reset their relations easily as they have not been engaged the level of hostility and diplomatic wrangling like that of Turkey and Syria. In fact, Egypt has recently indicated a positive signal into this direction. In his inauguration ceremony, the newly elected president of Egypt, Abdelfatah Al-sisi, promised that the relations of the two countries should not be allowed to deteriorate. Moreover, the increased cooperation between the two countries observed in some fields like medical assistances, training, experience sharing and cultural exchanges, as well as some companies working in mining sector added to the list of positive actions. Egyptian medical professionals are already assisting Ethiopians by opening hospitals and providing health services that are expensive or not available in the country and an Egyptian company, Ascom Precious Metals Mining, that discovers the largest gold ore reserve ever discovery in the history of gold exploration in Ethiopia (TheReporter, 2014).

With this atmosphere of cooperation and people to people exchanges, it possible to expect that the countries can overcome their differences and hailed a new era of mutual understanding and cooperation.

### **6.6.Economic Interdependence**

Prominent international relations theorist like Rosecrans and Immanuel Kant hold that well integrated and economically interdependent countries are unlikely to go into wars as the great costs associated with such actions will deter them to do so. Alternative paths to pursuing political objectives become more appealing, but the mechanism by which trade alters state goals such that conflict becomes an outmoded and inefficient political tool remains unclear (Crescenzi, 2002). Interdependence strengthens the peaceful ties between states by creating incentives to maintain a cooperative (Ibid.). The opposite also true; if less or any interdependence among countries, they can easily go into a conflict or war.

Nile River served as an umbilical cord to connect Egypt and the other all upstream countries and to pass the water from up to down-streams as it passes from the mother to the baby; nothing is going back. So the upstream countries claimed to have their share something from their water, especially the mother of 85% of the total water, Ethiopia. A

recent dispute between the two countries is a result of this claim, construction of GERD. Ethiopia argues to get its share at any cost, even if Egypt uses a direct military attack on her largest and first project. Dina Mufti, the spokesperson of the Ethiopian Foreign Ministry, expressed his country position as: no circumstances will Ethiopia consider suspending the project, which is developing at full force with multiple sources of support (MadaMasr, 2014).

Likewise, Suleyman Demirel, the former Turkish president made similar statements in the case of Euphrates and what Dina Mufti stated; has expressed the position of Turkey to the GAP project. He said ‘‘Water resources are Turkey’s and oil is theirs [Syria and Iraq]. Since we do not tell them, ‘Look, we have a right to half of your oil,’ they cannot lay claim to what is ours’ (Hakki, 2006). President Demirel’s statements indicate the absence of any interdependence and one-sidedness of the resource flow. On the contrary, the existence of commercial or other form of economic interdependence could have encouraged the counties to view the problem differently. The result was both counties applying different counterproductive measures to score points against each other. Syria support for the PKK and Turkey’s threat of forces explains the situations. The tactics failed both countries and the final result was painful to each other. Syria has forfeited its leverage on peaceful negotiation and Turkey was forced to fight cost proxy wars.

From the information presented above, it is clear that there was low economic interdependence in the case of Turkey and Syria. The same situation also exists in Ethiopia and Egypt. This will take us to assume that it will not give incentive for the disputing countries, Ethiopia and Egypt, for peaceful settlement. However, the absence of the economic interdependence doesn’t necessarily mean that the countries will harden their respective positions and will not sort out their conflict peacefully.

## **7. CONCLUSION AND RECOMMENDATION**

### **7.1. Conclusion**

The Middle East and Northern Africa (MENA) are far from meeting the water that a sustainable development needs. This is further deteriorated by higher population growth rate, climate change concerns and other factors in the region. So there seem inevitable that the countries will be in conflict over inter-boundary rivers, as well as a possible environmental crisis. So there is a need to study the situations and impacts of cross-boundary Rivers and existing regional tensions. In this regard, we can find out that the Nile and Euphrates are among the most vulnerable rivers in the region.

The Nile River is becoming a point of disagreement among Ethiopia and Egypt, both known for their higher population and rate of population growth in the region. On the other hand, the volume of the Nile river water is at risk due to frequent evaporation as part of global warming. This in turn affects the agriculture which the countries are highly dependent on.

So far, Egypt has been more dependent on the Nile River for its agricultural and industrial consumptions. So there is a claim that it will face water crisis. Nearly eighty five percent of Ethiopia's population is based in a rural area with almost exclusive dependency on agriculture. The agriculture, further worsened by frequent droughts, is of low level of productivity. The Ethiopian population is also among the least accessed to improved drinking water. It is proved that Ethiopian Nile Basin is suitable for irrigation and generation of hydroelectric power.

With this intention to generate surplus energy Ethiopia unilaterally announced the construction of GERD with a claim that it will not have a negative impact on the flow of water to the downstream countries. However, Egypt objected the project with the fear that it will cause significant harm and decrease the runoff of the Blue Nile to the downstream countries, in addition to potential environmental and socioeconomic impacts.

At the beginning, on both sides, there were willingness and commitment to dialogue and negotiation over the dam. Gradually, however, the two countries relation is deteriorated

and the tension peaked when Ethiopia began diverting the Blue Nile. This was at peak while Egypt declared that it cannot compromise the Ethiopian dam construction and so it will defend each drop of Nile water with any possible way, including military actions. Ethiopia, by its side, asserted that it will not compromise the construction of the dam. Ethiopia claims that it is determined to utilize its resources to lift its people out of poverty. Emphasizing; otherwise, that it will not operate without precautions, reminding its track record of defending independence from all forces of foreign threats.

As the verbal and diplomatic tension grows up, Egypt immediately engaged in lobbying the international community for support against the claimed Ethiopia's violation of international law. It directly moved to block any means of support to Ethiopia by countries and organizations. On the other hand, Ethiopia insists that it can fund the project itself without help from international lenders wary of the diplomatic dispute.

Comparatively, we can find the experiences of Turkey and Syria helpful to the Nile conflict by which one can notice that the issue of water scarcity should be addressed in cooperation than competition. The water conflict between Turkey and Syria is managed after decades in a costly manner. Now that, the Ethio-Egyptian case has not yet directed to a clear agreement or conflict. It rather remained a current point of tension.

In addition, compared to the Euphrates basin, it is noted that the Nile basin suffers from poor water-shed management and agricultural practices. Drainage irrigation is widely practiced and high water demanding crops are cultivated, mainly in Egypt. Moreover, significant water ends up into the sea. These conditions underscore the need for more cooperation to manage the water economically. Therefore, the conditions of scarcity can serve Ethiopia and Egypt to reconsider their respective positions and reach peaceful solutions.

We can also claim that water-based conflicts can be managed through institutional framework to solve conflicts arising among states. Institutions can be utilized to bridge differences and resolve conflicts peacefully. In this regard, regional and international institutions have been credited to have contributed significantly in the efforts for the achievement of peaceful dialogue and settlement. We see that institutions offer a potential solution to the problem of managing common water resources. Specifically,

regional and international institutions serve as outlets for conflict management by providing an arena for riparian states to resolve their differences, by providing neutral information, reducing uncertainty, and minimizing transaction costs. In this regard, however, compared to the water management strategies of the West, it is identified that both the Nile and Euphrates basin countries has not utilized institutions for conflict resolutions.

The positive level of democratic engagement among the conflicting nations can facilitate the solutions. Here, democracies are hesitant to engage in armed conflict with other identified democracies by dissuades state-sponsored violence. But we observe that the level of democracy among the countries under the study was not impressive, though they are under varying levels of democratization. In this regard, we find that the level of democracy in the countries under Nile conflict is much worse than those in the Euphrates.

Asymmetry of power is one of the key causes for worsening the equitable and reasonable settlement of trans-boundary water sharing. Both the Turkey- Syria and Egypt- Ethiopia relations on the Euphrates and Nile respectively could be instances. In the Euphrates basin the upper stream, Turkey, is more powerful in military and economic than the downstream Syria. By contrast, in the Nile basin the downstream Egypt has the military, economic, and bargaining advantages over Ethiopia. Particularly, the asymmetry of power is the main reason behind the Turkish and Egyptian claim of hegemony over the Euphrates and Nile water respectively; which then and denied the right of the counterparts.

Geographically, the bordering advantage for the Turko-Syrian case differs from the Ethio-Egyptian one. Syria shared direct border with Turkey and could easily provide training and logistic support to the PKK against Turkey. And Turkey also has the advantage of using direct military campaign to halt the Syrian action. To the opposite, Egypt and Ethiopia does not have the similar geographic advantage for neither direct interventions nor indirect (proxy war) against each other.

We can acknowledge the diplomatic challenges associated with historical misperceptions. Nonetheless, it is possible to argue that countries can reshape their

attitudes to each other and embark new courses of relations. After a long period of hostile relations and nearly waging war against each other, Turkey and Syria, redirected their relations into positive and close one. Thus, it is also necessary to expect the same from the Ethio-Egyptian relations. Importantly, Ethiopia and Egypt have the advantage for resolution in that they have not been experienced in a chronic dispute so far.

The last but not the least is that, Egypt also could eliminate its fall on the influence of 3<sup>rd</sup> party, Israel and other super power countries by preferring the direct negotiation and peaceful settlement with the upstream country, Ethiopia. By making this important decision of Egypt will maintain itself and the other upstream countries from huge cost and the third party's influence, that have either a political or economic need in the region, and it is also the shortest and the cheapest way to Egypt and the other basin countries. Generally, the two most populous and under developed Nile basin countries, Egypt and Ethiopia, piloted to solve their disagreement through bilateral negotiation and peaceful settlement without allowing any third party intervention, Israel and super power countries, due to the reasons and facts discussed in the above and to maximize their interest and facilitate the development activity without engaging any unnecessary conflict.

To sum up, we can point out that countries that are under unfavorable economic conditions and domestic instability should try to avoid direct military conflict and engage in non-violent dispute settlements. The long and costly way of settling the dispute between Turkey and Syria can be a lesson to Egypt and Ethiopia, since trans-boundary water conflicts could only and sustainability be settled through peaceful means. Certainly, engaging in a direct or indirect conflict can never be a solution; it rather costs further harm to the riparian states. Furthermore, interstate cooperation on trans-boundary rivers is more effective to address water scarcity and will lead to more efficient and sustainable utilizations.

## 7.2.Recommendation

1. As one of the most volatile regions<sup>3</sup> in the world, the Nile basin cannot afford a new dimension of conflict that could destabilize the region with unknown outcomes. States in the region should accept that a sustainable solution to the problem can only be achieved through negotiated settlements.
2. Instead of viewing it as a source of rivalry and discord among states, the Nile River should be treated as source of cooperation and interdependence. The two most populous and under developed Nile basin countries, Egypt and Ethiopia, have to solve their disagreement through bilateral negotiation and peaceful settlement without allowing any third party intervention, Israel and super power countries, due to the reasons and facts discussed in the above. Moreover, to minimize the cost and to solve peacefully the two countries could work in harmony to constitute a regional partnership, promoting cooperation and development to face the economic and social problems in the region, and promote peaceful methods to resolve the conflicts and to promote the ‘Win –Win solution’.
3. The two countries have many ways to settle the dispute peacefully if the two countries keep far away from a political interest from the dispute and its settlement; and both parties have to consider the water issue separately from the countries other issues and interests.

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<sup>3</sup> The Nile basin is a region which has been suffering from drought and famine, civil war and internal and cross-border displacement, inter-state war, international terrorism, border conflict, political instability, conflict among different ethnics and religions, water scarcity and food shortage, sharp population blow and economic crisis etc. The 2011 drought and famine, can be a sound example, affects the region’s courtiers like Somalia, Djibouti, Ethiopia, Kenya, Uganda and neighboring countries; and records death of more than 60,000 people. Darfur crisis; the ongoing civil war in the new born South Sudan, Ruanda, Kenya, Somalia, Congo; interstate war between Ethiopia – Somalia (2007), Ethio-Eritrea war (1998- 2000); unfinished Djibouti-Eritrea, Ethio-Eritrea, Ethio-Sudan, Sudan-South Sudan border conflicts; international terrorism, like Al-Shebab, in Somalia, Kenya and other neighboring courtiers; political insecurity and instability in Somalia, Sudan, South Sudan, Eritrea, Egypt, Kenya and other countries in the region too can well explain the volatility of the region besides the high evaporation of water and scarcity.

4. Ethiopian government still claims the flow of water will not reduce because of the GERD; and argues that the dam will only serve to produce hydroelectric power whereby the water will back to its path and keep its flow to Egypt. Fears also continuously forwarded from the Egypt side centering mainly on Ethiopia's intention to use the water for irrigation, and the potential huge volume of water loss due to evaporation from the dam. Such a fear and dispute could be settled through expertise cooperation and continuous assessment to assure mutually benefiting way out which needs to enable the two parties trust each other. This will be an alternative that secure Ethiopia's claim to use the river and Egypt's reliance on Nile. Egypt should accept that the statuesque can no longer be maintained in the Nile water dispute as upstream riparian nations will not continue to lay claim to their rights over the Nile.
5. Enhanced cooperation between the down-stream Egypt and the upstream countries, prominently Ethiopia, is the best way forward for Egypt's water future and regional stability.
6. The potential impacts of the GERD on the share of water for downstream countries should be thoroughly assessed before jumping to conclusions. Currently, the tripartite commission from three countries, - involving Egyptian, Sudanese, Ethiopian and international experts has been tasked to undertake the impact assessments. The outcome of the Commission's findings may prove to be the yardstick for future dialogue among the major Nile Basin nations.
7. Egypt's over-reliance on a single source of water, Nile, is strategically hazardous for its future water needs and even its national security. Notwithstanding, Even if the international conflicts surrounding the Nile are taken out of the equation, its over-dependence and poor management of the Nile water led to the depletion of its water resources. The repercussions of this over-dependence include a high rate of unemployment, diseases and hunger. Alternatives to the river may include desalinization, water recycling, and efficient use among others.



8. Egypt should embark close cooperation with the other countries in the Nile Basin and consider other options including the use of deep ground water like Libya has done it and also Egypt has to done in the effective use of water, about 10-15% of the Nile water goes to Mediterranean sea and another 10% of the Nile water lost due to evaporation. Egypt should have to substitute crops which needs more water by other crops which need less water. And both countries should consider substituting their source of energy from hydroelectric energy to nuclear energy.

## REFERENCES

- Abadie, A. a. (2007). Terrorism and the world economy. *Elsevier, European Economic Review* 52, 1–27.
- Aberra, G. (2013). There is Neither Customary International Law Nor a Treaty That Entitles Egypt to Nile Waters within Ethiopian Territory. *University of Texas, US*.
- Abraham, K. ( 2004). *Nile Dilemmas: Hydropolitics and Potential Conflict* . Addis Ababa, Ethiopia.
- Abraham, K. (2004). *Nile opportunities: Avenues towards a win- win deal*. Addis Ababa, Ethiopia.
- Action, P. (2012). *Why population matters to water resource*. Population Action.
- Ademo, M. (2013, 06 03). *Ali Mohammed Birra: The Voice of an Era*. 04 03, 2014 tarihinde <http://www.opride.com/oromsis/news/horn-of-africa/3679-ali-mohammed-birra-the-voice-of-an-era> adresinden alındı
- AFP. (2014, 05 22). *Gulf regimes aid Egypt's Sisi to ensure own security*. 06 15, 2014 tarihinde Yahoo News: <http://news.yahoo.com/gulf-regimes-aid-egypts-sisi-ensure-own-security-194439354.html> adresinden alındı
- AJE. (2014, 04 21). Egypt to 'escalate' Ethiopian dam dispute-Aljazeera English. Doha, Qatar.
- Al-Arian, L. (2013, 06 24). *Arab American Institute*. 05 15, 2014 tarihinde Water Wars on the Nile Basin: <http://www.aaiusa.org/blog/entry/water-wars-on-the-nile-basin/> adresinden alındı
- Ali, A. S. (2007). The Tigris-Euphrates River Basin: Mediating a Path Towards Regional Water Stability. *The Fletcher School Journal for issues related to Southwest Asia and Islamic Civilization*.
- Ali, A. S. (2007). The Tigris-Euphrates River Basin: Mediating a Path Towards Regional Water Stability. *The Fletcher School Journal for issues related to Southwest Asia and Islamic Civilization*.
- AlJazeera. (2014, 03 21). 04 18, 2014 tarihinde Egypt to 'escalate' Ethiopian dam dispute: <http://www.aljazeera.com/news/middleeast/2014/04/egypt-escalate-ethiopian-dam-dispute-201448135352769150.html#.U1U5ofCM7k0.facebook> adresinden alındı
- Almonitor. (2014, 03 13). *Sisi counting on Gulf aid to deal with Egypt's economic crisis*. 06 15, 2014 tarihinde Egypt Pulse: <http://www.al->

monitor.com/pulse/originals/2014/04/economic-crisis-egypt-influence-sisi-popularity.html##ixzz34madxCHz adresinden alındı

Anthony T., S. M. (2002). An Analysis of the Role of Virtual Water in Southern Africa in Meeting Water Scarcity: An Applied Research and Capacity Building Project.

Aquastat. (2014). *FAO* . 05 15, 2014 tarihinde FAO:

<http://www.fao.org/nr/water/aquastat/data/query/results.html> adresinden alındı

AR, A. (2005). *Counter-Terrorism in Somalia: Losing Hearts and Minds?* International Crisis Group.

Aras, B. (2004). Turkey and the greater Middle East. *TASAM Publications, Istanbul, Turkey* , p.87-8.

Aras, D. (2012). Turkish-Syrian Relations Go Downhill. *The Middle East*, 2.

ARGIL KASABAS. (2009). 07 15, 2014 tarihinde firat-nehri:

<http://argil.jimdo.com/f%C4%B1rat-nehri/> adresinden alındı

Arnaldo, M. (2003, 01 01). *Origins and early development of banking in Ethiopia*. 07 13, 2014 tarihinde IDEAS: <http://ideas.repec.org/p/mil/wpdepa/2003-04.html> adresinden alındı

Arnon, M. a. (2005). The Euphrates River Watershed: Integration, Coordination, or Separation? in Finger, M., Tamiotti, L. and Allouche, J. eds. *The Multi-Governance of Water: Four Case Studies*: Albany. *SUNY Press*.

Arsano, Y. (1997). Towards conflict prevention in the Nile Basin,. *Paper presented at the fifth "Nile 2002" Conference held in Addis Ababa, February 24-28*.

Arsano, Y. (2007). Ethiopia and the Nile Dilemmas of National and Regional Hydropolitics. *Center for Security Studies, Swiss Federal Institute of Technology, Zurich, Switzerland* . , p.38.

Ashton, P. J. (2002). Avoiding Conflicts over Africa's Water Resources. *Division of Water, Environment & Forestry Technology, CSIR, Ambio, South Africa.*, 31 (3): 236-242.

Ashton, P. J. (2002). Avoiding Conflicts over Africa's Water Resources. *Ambio*, 31(3): 236-242.

AWMISSET. (2014). 07 15, 2014 tarihinde Agricultural Water Managment Information System of Ethiopia : <http://www.mowr.gov.et/AWMISSET/Pages/Map1.html> adresinden alındı

- Bagis, A. (1989). GAP, Southeastern Anatolia Project: The Cradle of Civilization Regenerated. Istanbul:Interbank.
- Bilgel F., K. B. (2014). *The Economic Costs of Separatist Terrorism in Turkey*. Barcelona, Spain.
- Bishku, B. (2012). Turkish – Syria relations: A Checkered History. *Mideast Policy Council*.
- Bozdaglioglu, Y. (2003). Turkish Foreign Policy and Turkish Identity. *Routledge 29 West, New York, US*, p.116.
- CAPMAS. (2014). Central Agency for Public Mobilization and Statistics, retrieved in March, 2014.
- Charlotte, I. (2010, 11 19). *The Implications of Water Scarcity for Business*. 07 15, 2014 tarihinde Political Risk: <http://blog.inkerman.com/index.php/2010/11/19/water-scarcity-and-businesses/> adresinden alındı
- Clark, S. (2014, 03 16). 03 18, 2014 tarihinde Egyptian reconnaissance satellite launched by Soyuz: <http://spaceflightnow.com/> adresinden alındı
- Crescenzi, M. J. (2002). Economic Interdependence and Conflict in World Politics. *University of North Carolina, Chapel Hill.*, P-18.
- CSS. (2011). THE MUSLIM BROTHERHOOD IN EGYPT:HURDLES ON THE WAY TO POWER . *CSS Analysis in Security Policy*, 2.
- Çufali, M. (2010). Security Oranted Friendship History of Turkish –Syrian Relation. *Ankara Center for Thought(ACTR- ADAM), Ankara, Turkey*, p.67-74.
- Dan, E. (2003). *Egypt and Israel: A Reversible Peace*. 2014 tarihinde Middle East Forum: <http://www.meforum.org/565/egypt-and-israel-a-reversible-peace> adresinden alındı
- Daoudy, M. (2008). Asymmetric Power: Negotiating Water in the Euphrates and Tigris. *Political Science Department, Graduate Institute for International and Development Studies, Geneva, Switzerland*.
- Darwish, B. J. (1993). Water Wars: coming conflicts in the Middle East. *London*.
- DCSTAMPS. (2013). 07 15, 2014 tarihinde Dead Country Stamps and Banknotes: <http://www.dcstamps.com/?p=1266> adresinden alındı
- Degefu, G. (2003). “the Nile historical, legal and developmental perspective” . *Victoria, Canada.*, P.149.

- Deutsch, K. W. (1957). *Political Community in the North Atlantic Area*. Princeton University Press, Princeton, USA, cited in: Crockett, Sophie (2011), Louise Fawcett(1995).
- Dobrosielski. (2012, 03 12). *A Greater Role for International Institutions?* 05 2014, 13 tarihinde E-International Relation Students: <http://www.e-ir.info/2012/03/21/a-greater-role-for-international-institutions/> adresinden alındı
- Dolatyar, M. a. (2000). *Water Politics in the Middle East*. Mac Millan Press LMD, London. , p.7.
- Dunne, M. K. (2007). *International relation theories*. Oxford University press, New York , USA.
- ECCSA. (tarih yok). *A Brief Overview of the Bilateral Trade Relationship between Ethiopia and Arab Republic of Egypt*. 07 10, 2014 tarihinde Ethiopian Chamber of Commerce and Sectoral Association: [www.ethiopianchamber.com/.../egypt-profile](http://www.ethiopianchamber.com/.../egypt-profile) adresinden alındı
- Eder, A. Ç. (2001). Domestic Concerns and the Water Conflict over the Euphrates-Tigris River Basin. *Middle Eastern Studies, Vol. 37, No. 1* , pp. 41-71.
- Edward K., J. O. (1997). Transboundary Fresh Water Disputes and Conflict Resolution: Planning an Integrated Approach, *Water International. IWRA, U.S.A. , V,22* p.37-48.
- Elbakyan, E. (2012/13). The Kurdish Factor in Turkey-Syria Relations . *INTCESS14–International Conference on Education and Social Sciences Abstracts & Proceedings, 3-5 February, 2014- Istanbul, Turkey, Edited by Prof Dr. Ferit Uslu*, pp. 708-716, ISBN: 97.
- Erlich, H. (1982). *Ethiopia and Eritrea: Ras Alula (1875–1897)*. Michigan State University Press.
- Erlich, H. (2002). *The Cross and the River: Ethiopia, Egypt and the Nile*. Lynne Rienner Publishers, Boulder.
- ERTA. (2014). 05 13, 2014 tarihinde Ethiopian Radio and Television: <http://www.ertagov.com/amharic/> adresinden alındı
- ETGov. (tarih yok). *The official web site of Ethiopian Government*. 04 02, 2014 tarihinde <http://www.ethiopia.gov.et/web/pages/regional-states> adresinden alındı
- ETV. (2011, 06 14). *State owned Ethiopian television (ETV) on June 14, 2011 translated from Amharic (Ethiopian official Language)*. 04 02, 2014 tarihinde

[http://www.diretube.com/ethiopian-news/ethiopian-parliament-named-five-groups-as-terrorist-video\\_6e6bc3d3c.html](http://www.diretube.com/ethiopian-news/ethiopian-parliament-named-five-groups-as-terrorist-video_6e6bc3d3c.html) adresinden alındı

- Evans, D. J. (2001). *International affairs and Intelligence Studies Primer*. Evans Analytics, LLC, USA. , p, 276.
- Falkenmark, M. a. (1992). *Population and Water Resources: a Delicate Balance*. *Population Bulletin* , V(47) 3: 1-36. .
- FAO. (1997). *Irrigation potential in Africa*.
- FAO. (2005). *Population Prospects in the Nile Basin*. 03 03, 2014 tarihinde <http://www.fao.org/nr/water/faonile/PopulationProspects.pdf> adresinden alındı
- FAO. (2014). 05 15, 2014 tarihinde Food and Agriculture Organization of the United Nations (FAO): <http://www.fao.org/nr/water/aquastat/data/query/results.html> adresinden alındı
- FAO. (2014). *Water Uses*. 2014 tarihinde Aquastat : [http://www.fao.org/nr/water/aquastat/water\\_use/index.stm](http://www.fao.org/nr/water/aquastat/water_use/index.stm) adresinden alındı
- FAO. (tarih yok). *Report*. FAO.
- Fuller, G. E. (2008). *The New Turkish Republic: Turkey as a Pivotal State in the Muslim World*. *United States Institute Of Peace Press Washington, D.C.*
- Gebeto, P. J. (2010). *No more thirst: the citizen of the Nile*.
- GFP. (2014, 03 26). *Global Fire Power*. 05 10, 2014 tarihinde Egyptian fire power. adresinden alındı
- GFP. (2014, 03 27). *Global Fire Power*. 05 2014, 10 tarihinde Ethiopia Military Strength: [http://www.globalfirepower.com/country-military-strength-detail.asp?country\\_id=ethiopia](http://www.globalfirepower.com/country-military-strength-detail.asp?country_id=ethiopia) adresinden alındı
- GFP. (2014, 03 27). *Global Fire Power*. 05 2014, 10 tarihinde Ethiopia Military Strength: [http://www.globalfirepower.com/country-military-strength-detail.asp?country\\_id=ethiopia](http://www.globalfirepower.com/country-military-strength-detail.asp?country_id=ethiopia) adresinden alındı
- Gleick, P. H. (2003). *Water Conflict Chronology*. the world's water information on the world's fresh water resource.
- Gleick, P. H. (2009). *The World's Water 2008-2009: The Biennial Report on Freshwater Resources* . *Pacific Institute for Studies for Development, Environment & security, Washington, D.C.*, pp, 164.
- Goldschmidt Jr, A. (2009). *A brief history of Egypt*. *facts online, Pennsylvania, USA*.

- Gupta, N. S. (2001). Recent Changes in the Nile Region may Create an Opportunity for a More Equitable Sharing of the Nile River Waters. *Netherlands International Law Review*, Volume 58 / Issue 03 / December 2011, pp 363 – 385.
- GWRI. (2001). *The groundwater sector plan, national level*. . Cairo, Egypt.: Ground Water Research Institute-National Water Research Center. .
- Hakki, M. M. (2006). Turkey, Water and the Middle east: Some issues lying ahead. *Chinese Journal of International Law, published by Oxford University Press.*, Vol. 5, No. 2, 441 – 458 .
- Hale. (2009). Turkish and the Middle East. *Insight Turkey* , p.174.
- Hammond, M. ( 2013). *The Grand Ethiopian Renaissance Dam and the Blue Nile: Implications for transboundary water governance*. Canberra, Australia.: GWF Discussion Paper 1307, Global Water Forum, .
- Hamze, J. (2011, 09 18). *The conflict over the Nile water*. 07 2014 tarihinde EURASIA: <http://www.eurasia-rivista.org/the-conflict-over-the-nile-water/11230/> adresinden alındı
- Hensel P., M. S. (2006). Conflict management of riparian disputes. *Political Geography, Elsevier Ltd, USA.*, (25), p,384-411,.
- Horntel*. (2014). 07 15, 2014 tarihinde hornbiz: [http://hornbiz.com/userfiles/images/horn\\_of\\_africa\\_map.gif](http://hornbiz.com/userfiles/images/horn_of_africa_map.gif) adresinden alındı
- Hurriyet. (2014, 04 30). 05 2014, 13 tarihinde Hurriyet daily News . adresinden alındı
- IRIN. (2012, 10 29). *United Nations Integrated Regional Information Network (IRIN) Africa (2011): "Briefing: Ethiopia's ONLF rebellion*. 04 02, 2014 tarihinde <http://www.irinnews.org/printreport.aspx?reportid=96658> adresinden alındı
- IWLPB*. (2012, 02 14). 2014 tarihinde International Water Law Project Blog: <http://www.internationalwaterlaw.org/blog/2012/02/14/outcome-of-the-nairobi-nile-council-of-ministers-meeting-%E2%80%93-an-inevitable-consequence-of-a-level-playing-field/> adresinden alındı
- Jackson, R. a. (2007). Introduction to International Relations: Theories and approaches. *Oxford University Press, London, UK*.
- Johnson, K. a. (2012). Egypt is Prepared to Bomb all of Ethiopia's Nile Dams. *Business Insider*.
- JP. (2013, 06 22). *Jijiga Post*. 05 20, 2014 tarihinde GRD inflicts no harm on Egypt: Ambassador Mohamoud Dirir.: <http://jigjigapost.com/2013/06/22/grd-inflicts-no-harm-on-egypt-ambassador-mohamoud-dirir/> adresinden alındı

- Kameri-Mbote, P. (2007). "Navigating Peace: Water, Conflict and Cooperation: lessons from the Nile river Basin" . *Woodrow Wilson International center for Scholars*, No.4.
- Keita, M. a. (2011). *In Ethiopia, anti-terrorism law chills reporting on security* . Africa: Committee to Protect Journalists (CPJ) .
- Kibaroglu, A. . (2001). *Euphrates-Tigris Rivers System: Political Rapprochement and Transboundary Water Cooperation*.
- Kotra. (2014). 07 15, 2014 tarihinde Korea Trade- Investment Promotion Agency: [http://www.kotra.or.kr/KBC/addisababa/KTMIUI100M.html?SITE\\_CD=01005&SITE\\_SE\\_CD=1039603&TOP\\_MENU\\_CD=33771&LEFT\\_MENU\\_CD=35858&MENU\\_CD=35858&ARTICLE\\_ID=3003200](http://www.kotra.or.kr/KBC/addisababa/KTMIUI100M.html?SITE_CD=01005&SITE_SE_CD=1039603&TOP_MENU_CD=33771&LEFT_MENU_CD=35858&MENU_CD=35858&ARTICLE_ID=3003200) adresinden alındı
- Küçükcan, T. (2010). *Arab Image in Turkey. (SETA) Foundation for Political, Economic and Social Research, Ankara, Turkey*.
- MadaMasr. (2014, 04 08). *Egypt urges more talks before dam project continues*. 06 10, 2014 tarihinde Mada Masr: <http://www.madamasr.com/content/update-egypt-urges-more-talks-dam-project-continues> adresinden alındı
- Mahmoud, M. (2011, 05 10). *Israel and the Egyptian Revolution* . 07 2014 tarihinde Arab Center of Research and Policy Studies : <http://english.dohainstitute.org/release/35d3de00-35bf-4b6c-be54-323828feec50> adresinden alındı
- MALR. (2003). *Agricultural statistics, Volume 2, summer and Nile crops*. Cairo, Egypt: Ministry of Agriculture and Land Reclamation. .
- Mary, E. M. (2007). *Water and Conflict in the Middle East: Threats and Opportunities. Studies in Conflict & Terrorism*, Vol. 20 Issue 1, p1, 13p.
- McCully, P. (1996). *Silenced Rivers: The Ecology and Politics of Large Dams* ,. London: Zed Books.
- Mearsheimer, J. J. (2007). *The Israel lobby and U.S. foreign policy. Farrar, Straus and Giroux Publications, New York, USA*.
- MEDEA. (2014). *South-East Anatolian Project (GAP)*. 2014 tarihinde European Institute for Research on the Mediterranean and Euro – Arab cooperation: <http://www.medea.be/en/themes/geopolitics/south-east-anatolian-project-gap/> adresinden alındı



- MEMO. (2011, 02 03). *Egyptian - Israeli relations 1948 – 2011*. 07 03, 2014 tarihinde Middle East Monitor: <https://www.middleeastmonitor.com/resources/fact-sheets/2018-egyptian-israeli-relations-1948-2011> adresinden alındı
- MEMRI-TV. (2013, 05 05). Egyptian Blooper: Politicians, Unaware They Are on Air, Threaten Ethiopia over Dam Construction. Cairo, Egypt.
- Michael, S. (2013, 01 05). *Israel's Relationship with Egypt: An Uncertain Future* . 07 2014 tarihinde Sharnoff's Global Views: <http://www.sharnoffsglobalviews.com/israels-relationship-with-egypt-an-uncertain-future/> adresinden alındı
- Mohammed, J. (2009, 06 27). *Failure to Deliver: The Journey of the Oromo Liberation Front in the Last Two Decades*. 04 02, 2014 tarihinde the Gulele post: <http://www.gulelepost.com/2009/07/27/663/> adresinden alındı
- MS. (August 1, 2007). *Fast Facts About Microsoft*. Microsoft Corporation.
- MWRI. (2014). *Egyptian Ministry of Water Resources and Irrigation*. 06 15, 2014 tarihinde alındı
- NM. (2014). *National Master*. 03 04, 2014 tarihinde countries compared by GDP per capita (ppp): <http://www.nationmaster.com/country-info/stats/Economy/GDP/Per-capita/PPP> adresinden alındı
- OECD. (2008). *OECD Environmental Outlook to 2030*. 07 2014 tarihinde <http://www.oecd.org/environment/indicators-modelling-outlooks/40200582.pdf> adresinden alındı
- OLF. (2005). *Oromo Libration Front (OLF)*. 04 02, 2014 tarihinde <http://www.oromoliberationfront.org/> adresinden alındı
- OLFist. (2013, 10 26). *Is the Oromo Democratic Front (ODF) So Bad To Prohibit or Good Enough To Promote Freedom?* 10 01, 2014 tarihinde <http://mereja.com/forum/viewtopic.php?f=35&t=64057#p389151> adresinden alındı
- Ostrowski, J. (2002). *James Does Democracy Promote Peace? . Attorney at Law, 984 Ellicott Square, Buffalo, New York, USA.*
- PA. (2012). *Why population matters to water resource*. 07 16, 2014 tarihinde Population Action (PA): <http://populationaction.org/wp-content/uploads/2012/04/PAI-1293-WATER-4PG.pdf> adresinden alındı
- Patrick, S. (2011, 02 15). *The future of the (de)stabilizing Israel-Egypt peace treaty* . 07 2014 tarihinde The Middle East Channel:

[http://mideastafrica.foreignpolicy.com/posts/2011/02/15/the\\_future\\_of\\_the\\_destabilizing\\_israel\\_egypt\\_peace\\_treaty](http://mideastafrica.foreignpolicy.com/posts/2011/02/15/the_future_of_the_destabilizing_israel_egypt_peace_treaty) adresinden alındı

- Petter H., T. W. (2000). Shared rivers and interstate conflict. *Elsevier Science Ltd, Oslo, Norway.*, p.1.
- Phillips, C. (2011). *Turkey and Syria, Turkey's Global Strategy* . LSE IDEAS Special Report p.35.
- PI. (2010, 07). *Population and water*. 07 15, 2014 tarihinde Population Institute: [http://www.populationinstitute.org/external/files/Fact\\_Sheets/Water\\_and\\_population.pdf](http://www.populationinstitute.org/external/files/Fact_Sheets/Water_and_population.pdf) adresinden alındı
- Pipes, G. a. (1989). *danielpipes*. 04 11, 2014 tarihinde Middle East Forum: <http://www.danielpipes.org/8132/crisis-turkish-syrian-relations> adresinden alındı
- RaporEurope. (11 September 2012). *Turkey: The Pkk and a Kurdish Settlement*.
- Reuters. (2013, 06 11). 04 17, 2014 tarihinde Ethiopia dismisses Egypt's 'psychological warfare' oon dam: <http://www.reuters.com/article/2013/06/11/us-ethiopia-egypt-nile-idUSBRE95A0X620130611> adresinden alındı
- Russett, & Oneal. (2001). Triangulating Peace: democracy, interdependence and international organizations. sited in Swain, Ashok (2001).
- Scheumann, W. (2003). The Euphrates Issue in Turkish-Syrian Relations'. *Security and Environment in the Mediterranean Hexagon Series on Human and Environmental Security and Peace Volume 1*, pp 745-760.
- SIS. (2014, 06 20). 06 2014, 2014 tarihinde State Information Service-Egypt: <http://www.sis.gov.eg/En/Templates/Articles/tmpArticles.aspx?CatID=2787#.U6QIR7FqO4p> adresinden alındı
- Siverson, R. M. (1995). Democracies and War Participation: In Defense of the Institutional Constraints Argument. *European Journal of International Relations* , pp. 481–490.
- SOPAC. (2014). 6 14, 2014 tarihinde Pacific Water: <http://www.pacificwater.org/pages.cfm/water-services/water-demand-management/water-distribution/> adresinden alındı
- Starr, J. R. (1991). WATER WARS. *Global Water Summit Initiative*, 17-36.
- Steinitz, Y. (2006, 12 04). 02 08, 2013 tarihinde Not the peace we expected: <http://www.Haaretz.com>. adresinden alındı

- Stephen, J. a. (2002). The Nile basin regime: A role for law? *Water resources perspectives: evaluation, management and policy 2003*, pp. 93-117.
- SudanTribune. (2014, 04 30). *Sudan Tribune-Minga Negash*. 05 19, 2014 tarihinde Misplaced opposition to the Grand Ethiopian:  
<http://www.sudantribune.com/spip.php?article50822> adresinden alındı
- Swain, A. (1997). Ethiopia, the Sudan, and Egypt: The Nile River Dispute. *The Journal of Modern African Studies, Volume 35, Issue 04* , pp 675-694.
- Swain, A. (2001). Water war fact or fiction. 33 p. 769-781.
- TheReporter. (2014, 03 22). *The Reporter*. 04 02, 2014 tarihinde Egyptian company taps largest gold reserve in Ethiopia. adresinden alındı
- TSA. (2012, 08). *Factsheet on the Oromo Libration Front*. 04 02, 2014 tarihinde Think security Africa: <http://thinksecurityafrica.org/wordpress/wp-content/uploads/OLF.pdf> adresinden alındı
- Ulf, J. D. (2007). The Role of Diasporas in Peace, Democracy and Development in the Horn of Africa. *Media-Tryck SociologenvLunds university, Lund, Sweden*.
- UNDESA. (2014). *United Nations Department of Economic and Social Affiers*. 06 15, 2014 tarihinde Transboundary waters:  
[http://www.un.org/waterforlifedecade/transboundary\\_waters.shtml](http://www.un.org/waterforlifedecade/transboundary_waters.shtml) adresinden alındı
- UNDESA. (2014). *World Population Prospects: The 2012 Revision*. 04 03, 2014 tarihinde united nations secretariat department of economic and social affairs population division. adresinden alındı
- UNDESA. (tarih yok). *United Nations Department of Economic and Social Affiers* . 06 15, 2014 tarihinde Transboundary waters:  
[http://www.un.org/waterforlifedecade/transboundary\\_waters.shtml](http://www.un.org/waterforlifedecade/transboundary_waters.shtml) adresinden alındı
- UNEP. (tarih yok). *Some of the worst disasters in Africa, 1972-2000*. 03 20, 2014 tarihinde UN Environment Program; GEO: Global Enviroment Outlook. adresinden alındı
- USCB. (2013, 12 19). *United Stated Census Bureau (USCB)*. 05 13, 2014 tarihinde World Population Clock:  
<http://www.census.gov/population/international/data/countryrank/rank.php> adresinden alındı

- Varis, O. (2000). The Nile Basin in a Global Perspective Natural, Human, and Socioeconomic Resource Nexus. *International Water Resources Association, Water International Espoo, Finland.* , Volume 25, Number 4, Pages 624–637.
- Vaughan-Williams, N. (2005). International Relations and the “Problem of History”. *Journal of International Studies, ISSN 0305-8298.* , Vol.34 No.1, pp. 115-136.
- W.J.Cosgrove, C. a. (2012). *The Dynamics of Global Water Futures, Driving Forces 2011- 2050.* Paris, France: United Nation Water Educational, Scientific and Cultural Organization.
- Walta. (2013, 05 18). *Egypt Keen to Consolidate Business, Investment Relations with Ethiopia.* 07 12, 2014 tarihinde Walta Information Center (WIC): <http://www.waltainfo.com/index.php/explore/8236-egypt-keen-to-consolidate-business-investment-relations-with-ethiopia> adresinden alındı
- Webb. (1992). P-9.
- WFB. (2013, 02 21). *World Fact Book.* 05 10, 2014 tarihinde Egypt Demographic Profile: [http://www.indexmundi.com/egypt/demographics\\_profile.html](http://www.indexmundi.com/egypt/demographics_profile.html) adresinden alındı
- WFB. (2014). *CIA world fact book.* 03 2014 tarihinde alındı
- WFB. (2014, 03). *CIA world fact book, retrieved in March, 2014.* 03 2014 tarihinde alındı
- World Bank, W. (tarih yok). *World Bank data.* 07 22, 2014 tarihinde <http://data.worldbank.org/> adresinden alındı
- Worldatlas.* (2014). 07 15, 2014 tarihinde World Atlas: <http://www.worldatlas.com/webimage/countrys/af.htm> adresinden alındı
- WorldBank. (2014). 04 06, 2014 tarihinde Improved water source: <http://data.worldbank.org/indicator/SH.H2O.SAFE.ZS> adresinden alındı
- WWDR3. (2009). *Water in a Changing World.* 07 2014 tarihinde The United Nations World Water Development Report-3: [http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/WWDR3\\_Facts\\_and\\_Figures.pdf](http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/WWDR3_Facts_and_Figures.pdf) adresinden alındı
- Yesiltas, A. B. (2006). Turkey’s New Middle East Policy: The Case of the Meeting of the Foreign Ministers of Iraq’s Neighboring Countries,. *Journal of South Asian and Middle Eastern Studies, XXIX (4).*

Zewde, B. (2002). *A History of Modern Ethiopia 1855- 1991*, 2nd Ed. *Addis Ababa University Press, Addis Ababa, Ethiopia.*

## APPENDICES

**Appendix I: A Treaty between Ethiopia and Great Britain on the Delimitation of the Frontier between Ethiopia and Sudan (15 May 1902).**

1. Foreign & Commonwealth Office - GOV.UK. Accessed lastly on 10<sup>th</sup> June, 2014. <http://treaties.fco.gov.uk/docs/pdf/1902/TS0016.pdf>
2. Degefu, G. (2003). “the Nile historical, legal and developmental perspective” . *Victoria, Canada.*
3. Arsano, Y. (2007). Ethiopia and the Nile Dilemmas of National and Regional Hydropolitics. *Center for Security Studies, Swiss Federal Institute of Technology, Zurich, Switzerland.*

**Appendix II: Exchange of Notes between Her Majesty’s Government in the United Kingdom and the Egyptian Government on the Use of Waters of the Nile for Irrigation (Cairo, 7 May 1929)**

1. Arsano, Y. (2007). Ethiopia and the Nile Dilemmas of National and Regional Hydropolitics. *Center for Security Studies, Swiss Federal Institute of Technology, Zurich, Switzerland.*
2. Degefu, G. (2003). “the Nile historical, legal and developmental perspective” . *Victoria, Canada.*

**Appendix III: Agreement between the Republic of Sudan and the United Arab Republic on the Full Utilization of the Waters of the Nile (8 November 1959).**

1. Arsano, Y. (2007). Ethiopia and the Nile Dilemmas of National and Regional Hydropolitics. *Center for Security Studies, Swiss Federal Institute of Technology, Zurich, Switzerland.*
2. Degefu, G. (2003). “the Nile historical, legal and developmental perspective” . *Victoria, Canada.*

## **Appendix I**

### **A Treaty between Ethiopia and Great Britain on the Delimitation of the Frontier between Ethiopia and Sudan (15 May 1902).**

**(Ratification Exchanged in Addis Ababa on 28 October 1902).**

His Majesty King Edward the VII by the grace of God, King of the United Kingdom and Ireland and British Overseas dominions, Emperor of the Indies, and His Majesty Menelik II, by the grace of God, King of Kings of Ethiopia, encouraged by the desire to confirm friendly relations which exist between the two powers and to establish the frontier between Sudan and Ethiopia, and His Majesty King Edward having appointed Lt. Col. John Lane Harrington, Commander of the Royal Order of Victoria Agent Plenipotentiary to His Majesty King Menelik II, Kind of Kings of Ethiopia, vested with full powers in due form, and His Majesty Emperor Menelik, negotiating in his own capacity as Kind of Kings of Ethiopia hereby agree and accept that the following articles like them, their heirs, and their successors:

#### **Article 1**

The frontier between Sudan and Ethiopia, accepted by the two Governments shall be as follows: the line drawn in red ink on the map attached in duplicate to this Treaty extending from Kher Um Hagar in Gallabat, to the Blue Nile and the Baro, Pibor, and Akobo in Melile, and thence to the intersection of latitude 60 north with longitude 350 east (Greenwich Meridian).

#### **Article 2**

The frontier as defined in Article 1 shall be delimited and marked on the ground by a Joint Frontier Commission which shall be appointed by the two high contracting parties which shall provide information to their subjects after the delimitation.

#### **Article 3**

His Majesty Emperor Menelik, Kind of Kings of Ethiopia, shall undertake, before the Government of Her British Majesty, not to construct and authorize the construction of any structures on the Blue Nile, Lake Tana or Sobat which would have the effect of

obstructing the flow of their waters into the Nile, except in agreement with the Government of her British Majesty and the Government of Sudan.

**Article 4**

His Majesty Emperor Menelik II, King of Kings of Ethiopia shall undertake to grant to the Government of her British Majesty and to the Government of Sudan, the authorization to choose, Close to Itang on the Baro, a portion of territory with not more than 2,000 meters along the river and an area not exceeding 400 hectares, which shall be given to the Government of Sudan in order that the latter may administer and occupy it as a commercial station as long as Sudan remains governed by the Anglo-Egyptian Government: It shall be understood between the two high contracting parties that this territory thus granted, shall not be used for political or military purposes.

**Article 5**

His Majesty Emperor Menelik II, King of Kings of Ethiopia, shall grant to the Government of Her British Majesty and to the Government of Sudan, the right to construct a railway line across the Abyssinian territory linking Sudan to Uganda.

The layout of the railway shall be established by a reciprocal agreement between the two high contracting parties.

The present treaty shall come into force as soon its ratification, by Her British Majesty shall have been communicated to the Emperor of Ethiopia.

In faith whereof, His Majesty Menelik II, King of Kings of Ethiopia, on his own behalf, and Lieutenant-Colonel John Lane Harrington on behalf of his Majesty King Edward VII, King of the United Kingdom of Great Britain and Ireland and British Overseas Territories, Emperor of the Indies, have signed the present Treaty, drawn up in the English and Amharic languages in duplicate, both texts equally authentic and official, and have appended their seals to them.

Done In Addis Ababa on 15 May 1902

JOHN LANE HARREINGTON LT. COLONEL

SAAL OF HIS MAJESTY EMPEROR

MENELIK



## **Appendix II**

### **Exchange of Notes between Her Majesty's Government in the United Kingdom and the Egyptian Government on the Use of Waters of the Nile for Irrigation (Cairo, 7 May 1929)**

**No I:**

**Mohammed Mahmoud Pacha to Lord Lloyd, Office of the Council of Ministers**

(Cairo, 7 May 1929)

Your Excellency,

Further to our recent conversations, I have the honour to bring to the knowledge of your Excellency the viewpoint of the Egyptian Government on the irrigation problems which formed the subject of our discussion.

1. The Egyptian Government wishes to acknowledge that a solution to these problems would not be deferred to a subsequent date when it became possible for the two Governments to come to terms on the status of the Sudan but, regarding the settlement of the present provisions, it expressly reserves every freedom at any negotiations which could precede such an agreement.
2. Obviously, the development of the Sudan needs a quantity of water flowing from the Nile higher than used hitherto by the Sudan. Your Excellency is keenly aware of the fact that the Egyptian Government has always been desirous of encouraging such a development and shall continue in this direction. It would be ready to come to terms with her Majesty's Government on an increase in this quantity in so far as this would not infringe on neither the natural and historical rights of Egypt on the waters of the Nile nor on its agricultural development needs subject to obtaining satisfactory assurances with regard to the protection of Egyptian interests as set forth in the ensuing paragraphs of the present note.
3. This is why the Egyptian Government accepts the conclusions of the 1925 Nile Commission whose report features in the Annex and which is considered as forming an integral part of the present agreement. Nevertheless, in view of the delay on the construction of the Gebel Aulia dam which, according to paragraph

40 of the Nile Commission Report is considered as being the counterpart of the Gezira project, the Egyptian Government suggests that the date and the quantities of gradual sampling of waters of the Nile carried out by Sudan during the months of flood as stipulated in Article 57 of the Report of the Commission be modified in such a manner that Sudan may not take out more than 126 cubic metres per second before 1936 with the understanding that the periods set forth in the above article will remain unchanged until the stipulated figure of 126 cubic meters per second is reached. These quantities are based on the Nile Commission Report, and may therefore cover the reviews as set down in the Report.

4. It is also understood that the following provisions will be observed with regard to irrigation works of the Nile:
  - (i) The Inspector General of the Irrigation Service in Sudan, his staff as well as other officials that the Ministry of Public Works may appoint shall have every liberty to cooperate with the resident engineer of Sennar with a view to measuring the rates of flow and the maximum levels in order that the Egyptian Government may ensure that the water distribution and control of the dam be executed in observance of the Agreement concluded. The detailed practical provisions adopted by joint agreement by the Minister of Public Works and the Irrigation Adviser to the Sudanese Government shall come into force on the date on which the present note shall be confirmed.
  - (ii) Except with the prior consent of the Egyptian Government, no irrigation works shall be undertaken nor electric generators installed along the Nile and its branches nor on the lakes from which they flow if these lakes are situated in Sudan or in countries under British administration which could jeopardize the interests of Egypt either by reducing the quantity of water flowing into Egypt or appreciably changing the date of its flow or causing its level to drop.

- (iii) In order to enable it take all necessary steps with a view to conducting a study and recording the water conservation of the Nile in Sudan, the Egyptian Government shall enjoy all the facilities required to this end.
- (iv) Should the Egyptian Government decide to undertake work on the river and its branches, or take steps with a view to increasing water supply for the benefit of Egypt, it shall beforehand, come to terms with the local authorities on the measures to be taken in order to safeguard local interests. The construction, maintenance and management of works mentioned above shall be placed under the direct control of the Egyptian Government.
- (v) The Government of Her British Majesty in the United Kingdom and Northern Ireland shall use its good offices so that the carrying out of surveys, taking of measures, the conduction of preceding paragraphs be facilitated by the Government of regions under British influence.
- (vi) It is obvious that within the framework of the implementation of operations envisaged by the present note, uncertainties may appear from time to time regarding the interpretation of a question of principle or technical or administrative points.

Each problem of this nature shall be examined within a spirit of reciprocal honesty. In case of a dispute arising from the interpretation or execution of the above provisions or if one of the parties contravened the stipulated provisions of the present note and should the two Governments fail to resolve this problem, this problem shall be referred to an independent body for arbitration.

5. The present agreement can in no way be considered as affecting the control of the River – this being a problem which will cover free discussions between the two Governments within the framework of negotiations on the Sudan.

I seize this occasion, etc.

M.MAHMOUD

Chairman of the Council of Ministers

**No 2:**

**Lord Lloyd to Mahmoud Pacha**

**(Cairo, 7 May 1929)**

Sir,

1. I have the honour to acknowledge receipt of the note that your Excellency addressed me today.

2. By confoaming the provisions on which we mutually agreed and which were enumerated in your Excellency's note, I am entrusted with the task of expressing the satisfaction of her British Majesty's Government in the United Kingdom and Northern Ireland at the fact that these discussions have led to an agreement which will certainly facilitate the development of Egypt and the Sudan and promote their prosperity.

3. Her Majesty's Government in the United Kingdom shares the viewpoint of his Excellency on the fact that this agreement should deal, and deals essentially with the control of irrigation devices on the basis of the Nile Commission Report and does not affect the status quo in Sudan.

4. In conclusion, I would like to remind your Excellency that Her Majesty's Government in the United Kingdom has already recognized the natural and historical right of Egypt to the waters of the Nile. I am entrusted with the responsibility of declaring that Her Majesty's Government in the United Kingdom considers the observance of these rights as a fundamental principle of the policy of Great Britain and wishes to assure your Excellency that the principle of this agreement as well as its detailed stipulated provisions will be observed irrespective of the time and circumstances.

I seize this occasion, etc.

Lloyd

High Commissioner

The Residence

Cairo, 7 May

## **Appendix III**

### **Agreement between the Republic of Sudan and the United Arab Republic on the Full Utilization of the Waters of the Nile (8 November 1959).**

Considering the need felt by the Republic of Sudan and the United Arab Republic to undertake, on the basis of technical agreements other than those applied at present, new projects on the Nile making possible the full control and the increase in its output in order that its waters be fully utilized;

Considering that these projects require for their execution and administration, full agreement and total cooperation between the two Republics in order to control the advantages accruing to them and to use the waters of the Nile in such a manner as to secure the present and future needs of the two countries;

And considering that the Agreement on the waters of the Nile concluded in 1929 only provided for the partial utilization of the waters of the Nile and did not include the total control of the waters of the river, the two Republics agree that:

#### **First:**

#### **The Vested Interests up to the Present Time**

1. The quantity of waters of the Nile used by the United Arab Republic until this agreement is signed, shall be its vested interest prior to obtaining the advantages stemming from projects undertaken for the control of the Nile and works which shall increase its output-works featuring in this Agreement. The total amount of this vested interest shall be 48  $\text{bm}^3$  per year, measured in Aswan.
2. The quantity of water currently used by the Republic of Sudan shall be its vested interest prior to obtaining advantages which stem from works mentioned above. The total amount of these vested interests shall be 4  $\text{bm}^3$  per year measured in Aswan.

**Second:****Works for the control of the Nile and the distribution between the two Republics, of advantages stemming from there**

1. With the aim of regulating the waters of the river and controlling its flow into the sea, the two Republics agree that the United Arab Republic shall construct the Sudd el Aali in Aswan, the first of a series of structures on the Nile for the storage of waters over a one-year period.
2. In order to allow Sudan to use its share of water, the two Republics agree that the Republic of Sudan shall construct the Roseires Dam over the Blue Nile as well as any other structure that the Republic of Sudan shall deem necessary for the utilization of its share.
3. The net advantages stemming from the Sudd el Aali reservoir shall be calculated on the basis of the natural flow of the river at Aswan, taken over the years of this century, which is estimated to be 84  $\text{bm}^3$  per year. The vested interests of the two Republics, mentioned in the "first" articles as measured at Aswan as well as the average losses in water caused by storage over a period of one year in the Sudd el Aali reservoir shall be deducted from this output, and the difference shall constitute the net profits that the two Republics shall share.
4. The net profit of the Sudd el Aali reservoir mentioned in the preceding paragraph shall be shared between the two Republics in the ratio of 14 1/2 for Sudan and 7 1/2 for the United Arab Republic as long as the average output of the river remains within the limits of the average output mentioned in the preceding paragraph. This means that if the average output remained the same as the average of the preceding years of this century and which is estimated at 84 billion and if losses due to storage over the entire year remain the same as the present estimates of 10 billion, the net advantage of the Sudd el Aali reservoir will be 22 billion, the share of the Republic of Sudan being 14 billion 1/2 and the share of the United Arab Republic being 7 billion 1/2. By adding these shares to the vested interests, the total share of the net output of the Nile after the

Sudd el Aali reservoir has gone into full operation will be 18 billion 1/2 for the Republic of Sudan and 55 billion 1/2 for the United Arab Republic.

But if the average output increases, the net advantage resulting from this increase shall be divided between the two Republics in equal proportions.

5. As the net advantage stemming from the Sudd el Aali reservoir (mentioned in paragraph 3 of the "second" article) is calculated on the basis of the average natural output of the river at Aswan in the course of the years of this century, after deduction of the vested interests of the two Republics, and the losses due to storage for a period of one year in the Sudd el Aali reservoir, it is agreed that this advantage shall be subjected to reviews by the Parties, at reasonable intervals which shall be determined by joint agreement once the Sudd el Aali reservoir goes into full operation.

6. The Arab Republic of Egypt accepts to pay to the Republic of Sudan the sum of 15 million Egyptian pounds as compensation for damage caused to Sudanese goods as a result of the water storage in the Sudd el Aali reservoir up to a level of 182 meters (base reference). The payment of this compensation shall be carried out according to the attached agreement between the two Parties.

7. The Republic of Sudan pledges to ensure, before July 1963, the final transfer of the population of Halfa and other Sudanese nationals whose lands shall be flooded by the stored waters.

8. It is agreed that when Sudd el Aali goes into full operation and stores water over a period of one year, the United Arab Republic shall no longer need to store water in the Gebel Aulia dam. The two contracting parties shall then examine all the problems stemming from this renouncement.

**Third:**

**Works for the utilization of waters lost in the Nile Basin**

Considering the fact that at present, considerable volumes of water of the Nile Basin are lost in the swamps of Bahr El Jebel, Bahr El Zaraf, Bahr El Ghazal and the Sobat, and that it is essential that efforts be made in order to avoid these losses and to increase the output of the river for purposes of agricultural development in the two Republics, the two Republics have agreed that:

1. In agreement with the United Arab Republic, the Republic of Sudan shall erect structures with a view to increasing the output of the river by checking water losses from the Nile Basin, from the swamps of Bahr El Jebel, Bahr El Zaraf, Bahr El Ghazal and their tributaries, from the Sobat and its tributaries and from the White Nile. The net output of these projects shall be distributed in equal proportions between the two Republics and each shall participate in the costs in equal proportions. The Republic of Sudan shall finance the projects mentioned above from its own funds, and the United Arab Republic shall pay its share of costs in the same proportion of 50% which falls to it from the output of these projects.

2. If, as a result of the progress made in its agricultural development programme, the United Arab Republic considers that it is necessary to undertake one of the projects intended for increasing the output of the Nile mentioned in the preceding paragraph, after it has been approved by the two Governments and at a time when the Republic of Sudan does not need these projects, the United Arab Republic shall inform the Republic of Sudan of the date on which it can conveniently undertake the construction of the structure in question. In the two years following such a communication, each of the two Republics shall submit a programme spread over the period for the use of its share of waters thus recovered by the projects; each programme linking the two parties. On the expiry of two years, the Arab Republic of Egypt shall undertake the construction of works on its own account. When the Republic of Sudan is ready to use its own share according to the programme agreed upon, it shall pay to the United Arab Republic a share of the advantages due to Sudan in relation to the totality of advantages stemming from these projects: with the understanding that the share of each of the Republics shall not exceed one-quarter of the advantages stemming from these projects.



**Fourth:****Technical cooperation between the two Republics**

1. In order to ensure technical cooperation between the Governments of the two Republics with the aim of pursuing research and studies required for control works of the Nile and for the increase in its output and in order to pursue hydraulic studies of its surface waters, the two Republics agree that immediately after the signing of this Agreement, a Joint Permanent Technical Commission shall be set up which would comprise the same numbers of each party and whose functions would be:

- (a) The elaboration of basic work projects aimed at increasing the output of the Nile and the control of studies required for the development of these works before presenting them for approval by the Governments of the two Republics.
- (b) The supervision of the execution of works approved by the two Governments.
- (c) The development of the modus operandi for all the works which shall be undertaken on the Nile within the frontiers of Sudan and for those which shall be contracted outside the frontiers of Sudan in agreement with the authorities concerned in the countries in which such works shall be undertaken.
- (d) The supervision of the application of all the modi operandi mentioned in (c) relative to works undertaken within the frontiers of Sudan and relative to the Sudd el Aali reservoir and the Aswan Dam is secured by official engineers appointed for purpose by the two Republics; as well as the supervision of the performance of structures erected on the Upper Nile as set forth in the agreements concluded with the countries in which such structures are erected.
- (e) As it is probable that there could be a series of “ low level” years which would lead to a succession of low levels in the Sudd el Aali reservoir, to the extent that it might not be possible for the two Republics to draw all the water that they would need at any given time during the years specified, the Technical Commission is responsible for taking equitable steps which shall be followed by the two Republics; the recommendations shall be submitted for approval by the two Governments.

2. In order to make it possible for the commission to discharge the functions set forth in the preceding paragraph, so as to attend to the continued gauging of the Nile and maintain observations of surface water plans, these tasks shall be carried out under the technical supervision of the commission by engineers of the Republic of Sudan and engineers of the United Arab Republic in Sudan, in the United Arab Republic and in Uganda.

3. The two Governments shall set up the Joint Technical Commission by a joint decree and shall grant it the funds required for its budget. Depending on the requirements of the works, the commission may meet either in Cairo or Khartoum. Subject to the approval of the two Governments, the commission shall draw up the regulations governing the organization of technical, administrative and financial meetings and activities.

#### **Fifth:**

##### **General Provisions**

1. Should negotiations on the waters of the Nile with another Nile River State outside the frontiers of the two Republics be necessary, the Government of the Republic of Sudan and that of the United Arab Republic shall adopt a common viewpoint after the problem has been studied by the Technical Commission. The common viewpoint shall serve as a basis for all negotiations between the Commission and the said States.

If the negotiations result in an agreement allowing the construction of works on the river outside the frontiers of the two Republics, after having consulted with Government authorities of the States concerned, the Joint Technical Commission shall prepare all the technical details of the execution of works and operation and maintenance. After the Governments concerned have sanctioned these measures, the Commission shall supervise the implementation of these technical agreements.

2. Each time that River States other than the two Republics emphasize their right to a portion of the waters of the Nile, the two Republics have agreed that they shall examine

together these requests and shall come to a common viewpoint concerning them. If it results from this examination that a part of the waters of the Nile should be granted to one or the other of the said States, the quantity accepted shall be deducted from the share of the two Republics in equal proportions, calculated in Aswan. The Technical Commission mentioned in this agreement shall take the necessary steps with the States concerned with a view to ensuring that the water consumption shall not exceed that volumes agreed upon.

### **Sixth**

#### **Transitional period to deriving full advantage from the completed reservoir in Sudd el Aali**

Since the two Republics shall not be able to derive from the net advantage offered by the Sudd el Aali reservoir before the completion of its construction and before the reservoir can be fully used, the two Parties shall come to terms on their agricultural development programmes within the transitional period beginning and extending as far as the completion of the Sud el Aali reservoir without prejudice to their current water needs.

### **Seventh**

This agreement shall come into force after ratification by the two contracting Parties subject to the condition that each of the Parties shall inform the other Party of the date of ratification through diplomatic channels.

### **Eight**

Annexes (10 and (2, A and B) attached to this Agreement are considered as forming an integral part of the Agreement.

Drafted in Cairo, in Arabic, in two original copies on the 7th day of the month of Gumada El Oula 1379, on 8 November 1959.

For the Republic of Sudan

For the United Arab Republic

Lewa

MOHAMED TALAAT FARID

ZAKARIA MOHIE EL DIN.

**Annex (1)****Special Provision for a Water Loan Requested by the United Arab Republic**

The Republic of Sudan accepts in principle to grant to the United Arab Republic a water loan taken along the Sudan portion of the waters of Sudd el Aali in order to make it possible for it to pursue its already envisaged agricultural development programmes.

The United Arab Republic shall submit its loan request after a re-examination of its programmes, within the five years following the signing of this Agreement. If this re-examination undertaken by the United Arab Republic reveals that it needs this loan, the Republic of Sudan shall grant it a loan paid out of its own share not exceeding one and half billion, with the understanding that this loan shall discontinue in November 1977.

**Annex (2)****(A) To: The Head of Delegation of the Republic of Sudan**

In accordance with the (second) article, paragraph 6, of this agreement signed on this day, concerning the full utilization of the waters of the Nile, the compensations amounting to 15 million Egyptian pounds payable in pounds sterling or in another currency on which we two Parties shall agree, and calculated on the basis of a fixed rate of \$ 2.87156 to the Egyptian pound, shall be paid as agreed upon by the Government of the United Arab Republic in installments, as follows:

3 million pounds on 1 January 1960

4 million pounds on 1 January 1961

4 million pounds on 1 January 1962

4 million pounds on 1 January 1963

I would be grateful if you would confirm your agreement on the above conditions.

With my highest consideration,

Head of Delegation,

United Arab Republic

ZAKARIA MOHIE EL DIN

**Annex (3)****(B) To: The Head of Delegation of the United Arab Republic**

I have the honour to acknowledge receipt of your letter this day stipulating the following:

“In accordance with the (second) article, paragraph 6, of this agreement signed this day, concerning the full utilization of waters of the Nile, the compensations amounting to 15 million Egyptian pounds payable in pounds or in another currency on which the two parties shall agree, and calculated on the basis of a fixed rate of \$ 2.87156 to the Egyptian pound, shall be paid as agreed upon by the government of the United Arab Republic in installments, as follows:

3 million pounds on 1 January 1960

4 million pounds on 1 January 1961

4 million pounds on 1 January 1962

4 million pounds on 1 January 1963

I would be grateful if you would confirm your agreement on the above conditions.”

I have honour to confirm the agreement of the Government of the Republic of Sudan to the content of this letter.

With my highest consideration,

Head of Delegation,

Republic of Sudan

(Lewa)

MOHAMED TALAAT FA