



**ADDIS ABABA UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**

**Eastern Nile Basin: The Nexus  
Between Water Sharing and Benefit  
Sharing Arrangements**

**By:**

**ZERIHUN ABEBE YIGZAW**

Addis Ababa University

April 2011

**ADDIS ABABA UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
COLLEGE OF SOCIAL SCIENCES  
DEPARTMENT OF POLITICAL SCIENCE AND INTERNATIONAL RELATIONS**

**EASTERN NILE BASIN: THE NEXUS BETWEEN WATER SHARING  
AND BENEFIT SHARING ARRANGEMENTS**

**BY**

**ZERIHUN ABEBE YIGZAW**

**ADDIS ABABA**

**APRIL 2011**

**EASTERN NILE BASIN: THE NEXUS BETWEEN WATER SHARING  
AND BENEFIT SHARING ARRANGEMENTS**

**BY**

**ZERIHUN ABEBE YIGZAW**

**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS  
ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS IN  
INTERNATIONAL RELATIONS**

**ADVISOR**

**DR. AARON TESFAYE**

**ADDIS ABABA UNIVERSITY**

**SCHOOL OF GRADUATE STUDIES**

**COLLEGE OF SOCIAL SCIENCES DEPARTMENT OF POLITICAL SCIENCE AND INTERNATIONAL  
RELATIONS**

**ADDIS ABABA**

**APRIL 2011**

**EASTERN NILE BASIN: THE NEXUS BETWEEN WATER SHARING AND  
BENEFIT SHARING ARRANGEMENTS**

**ZERIHUN ABEBE YIGZAW**

**APPROVED BY BOARD OF EXAMINERS**

---

**Advisor**

---

**Examiner**

**Dedicated to:**

*My Late Grandma Gela Azage*

*and*

*My Love Bezawit B.A.*

## **Nile**

*...My name is Africa I am the mother of the Nile.  
O Nile, my prodigal daughter on the wilderness of the desert  
Bringing God's harmony to all brothers and sisters  
And calming down their noises of brass in their endless nakedness  
O Nile, you are music that restore the rhythm of existence  
Into the awkward stampeding of these Middle Eastern blindnesses  
You are the irrigator that cultivate peace  
From my Ethiopian sacred mountains of the sun  
Across to nod on the East of Aden and across Sinai  
Beyond Gibraltar into the heights of Mount Moriah  
O Nile, my chosen sacrifice for universal peace offering  
Upon whose gift the heritages of Meroe and Egypt  
Still survive for the benefit of our lone World.....*

Tsegaye Gebre-Medhin(1937-2006), Ethiopian Poet Laureate, August 1997

*"The only matter that could take Egypt to war again is water."*

*The late Egyptian president Anwar Sadat 1979*

*"I am not worried that the Egyptians will suddenly invade Ethiopia ... Nobody who has tried that has lived to tell the story. I don't think the Egyptians will be any different and I think they know that."*

*Prime Minister Meles Zenawi, November 23, 2010, Reuters*

## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	I
ACRONYMS.....	II
ACKNOWLEDGMENT.....	III
ABSTRACT .....	IV
CHAPTER ONE .....	1
1. INTRODUCTION .....	1
1.1. BACKGROUND OF THE STUDY.....	1
1.2. STATEMENT OF THE PROBLEM .....	2
1.3. RESEARCH QUESTIONS .....	4
1.4. OBJECTIVE OF THE STUDY.....	4
1.5. SCOPE AND LIMITATION.....	5
1.6. SIGNIFICANCE OF THE STUDY .....	5
1.7. METHODOLOGY AND METHODS OF DATA COLLECTION .....	6
1.8. ORGANIZATION OF THE THESIS.....	7
CHAPTER TWO .....	8
2. CONCEPTUAL FRAMEWORK .....	8
2.1. TRANSBOUNDARY WATER: SOURCE OF CONFLICT OR MEANS OF COOPERATION.....	8
2.2. CONTENDING DOCTRINES AND PRINCIPLES IN THE UTILIZATION OF TRANSBOUNDARY RIVERS.....	12
2.2.1. Contending Doctrines .....	12
2.2.2. Principles in the Utilization of Transboundary Waters .....	14
2.3. INTERNATIONAL WATER LAW: FROM HELSINKI TO BERLIN RULES .....	19
2.3.1. The Helsinki Rules of 1966.....	19
2.3.2. The 1997 United Nations Convention.....	20
2.3.3. The Berlin Rules on Water Resources of 2004 .....	22
2.4. BENEFIT SHARING IN TRANSBOUNDARY WATERS.....	24
2.4.1. The Concept of Benefit Sharing and Types of Benefits .....	24
2.4.2. The Transboundary Waters Opportunity Analysis (TWO Analysis) .....	27
2.4.3. Implementing The Benefit Sharing Approach: The Challenges.....	29
2.5. WATER SHARING VERSUS BENEFIT SHARING APPROACHES: THE DEBATE .....	32
CHAPTER THREE.....	35
3. WATER SHARING AND BENEFIT SHARING ARRANGEMENTS IN THE EASTERN NILE BASIN .....	35
3.1. WATER SHARING ARRANGEMENTS .....	35
3.1.1. The 1929 Agreement .....	36
3.1.2. The 1959 Agreement for the Full Utilization of the Nile.....	37
3.1.3. The Cooperative Framework Agreement of the Nile River Basin (CFA).....	39
3.2. BENEFIT SHARING ARRANGEMENTS ON THE EASTERN NILE BASIN.....	43
3.2.1. A Glance at Cooperation Attempts on the Nile .....	43
3.2.2. Nile Basin Initiative (NBI).....	45
3.2.2.1. ENSAP/NBI Projects .....	47
3.2.3. Beyond the Nile: 'Non-Water' Relations-Beyond the River Benefits? The Link with the Nile Waters .....	51

<b>CHAPTER FOUR</b> .....	<b>58</b>
<b>4. WATER AND BENEFIT SHARING POSITIONS, NILE POLICIES AND STRATEGIES OF EASTERN NILE BASIN STATES</b> .....	<b>58</b>
4.1. EGYPT.....	58
4.1.1. <i>Egypt: Nile Policy and Position</i> .....	58
4.1.2. <i>Egypt: Strategies</i> .....	63
4.2. SUDAN.....	70
4.2.1. <i>Sudan: Nile Policy and Position</i> .....	70
4.2.2. <i>Sudan: Strategies</i> .....	73
4.3. SOUTH SUDAN AND THE FUTURE OF THE (EASTERN) NILE BASIN.....	76
4.4. ETHIOPIA.....	79
4.4.1. <i>Ethiopia: Nile Policy and Position</i> .....	79
4.4.2. <i>Ethiopia: Strategies</i> .....	83
<b>CHAPTER FIVE</b> .....	<b>90</b>
<b>5. THE NEXUS BETWEEN WATER SHARING AND BENEFIT SHARING ARRANGEMENTS IN EASTERN NILE BASIN</b> .....	<b>90</b>
5.1. EASTERN NILE BASIN: WHICH WAY? WATER SHARING OR BENEFIT SHARING? .....	90
5.2. SCENARIOS OF WATER SHARING AND BENEFIT SHARING ARRANGEMENTS ON THE EASTERN NILE BASIN .....	95
5.2.1. <i>Water Sharing Agreement Without Benefit Sharing Arrangement</i> .....	96
5.2.2. <i>Benefit Sharing Arrangement Without Water Sharing Agreement</i> .....	96
5.2.3. <i>Benefit Sharing Arrangement Pending Water Sharing Agreement</i> .....	97
5.2.4. <i>Two Agreements of Water Sharing and Benefit Sharing Arrangements</i> .....	98
5.3. THE COOPERATIVE FRAMEWORK AGREEMENT-WOULD IT SOLVE THE NILE QUESTION? IN SEARCH OF A LASTING SOLUTION.....	100
5.4. THE FUTURE OF EASTERN NILE BASIN-MAKING A BALANCE SHEET: CONFLICT OR COOPERATION?.....	107
<b>CHAPTER SIX</b> .....	<b>110</b>
<b>6. SUMMARY AND CONCLUSION</b> .....	<b>110</b>
<b>BIBLIOGRAPHY</b> .....	<b>115</b>
<b>APPENDICES</b>	
<b>LIST OF INFORMANTS</b>	
<b>DECLARATION</b>	

## **List of Tables**

Table-1: Types of cooperation and benefits on international rivers. Page 26

Table-2: The conceptual framework for the TWO Analysis. Page 28

## Acronyms

Art.	Article
BCM/bcm	Billion Cubic Meter
CFA	Cooperative Framework Agreement of the Nile
ENCOM	Eastern Nile Council of Ministers
ENSAP	Eastern Nile Subsidiary Action Program
ENTRO	Eastern Nile Technical Regional Office
ICG	International Crisis Group
ICID	International Commission on Irrigation and Drainage
ILA	International Law Association
ILC	International Law Commission
IWRM	Integrated Water Resource Management
MoFA	Ministry of Foreign Affairs of the Federal Democratic Republic of Ethiopia
MoWR	Ministry of Water Resources of the Federal Democratic Republic of Ethiopia
MW	Megawatt
NBC	Nile Basin Commission
NBI	Nile Basin Initiative
NELSAP	Nile Equatorial Lakes Subsidiary Action Program
Nile-COM	Council of Ministers of the Nile
SAP	Subsidiary Action Program
SIWI	Stockholm International Water Institute
SVP	Shared Vision Program
TECCONILE	the Technical Cooperation Committee for the Promotions of the Development and Environmental Protection of the Nile
TWO Analysis	Transboundary Water Opportunity Analysis
UN	United Nations

## Acknowledgment

First and for most, I thank the Almighty God Who has never been apart from me in all walks of my life.

I would also like to thank Dr. Aaron Tesfaye, my advisor, for his intellectual comments and corrections in the process of writing this thesis. I am also very much indebted to Dr. Yacob Arsano for his early comments on the proposal and his encouragement and moral support which mean a lot to me. I would also like to express my gratitude to Dr. Venkataraman, Dr. Solomon Mebre, Ato. Demeke Achiso, Ato Abdiwassa Abdulahi, of the Department of Political Science and International Relations for their moral as well as material support. I am indebted to Dr. Amare Bantider of Dilla University whose fatherly advice and encouragement are sealed in my mind. I would also like to extend my thanks to all my informants abroad and home.

My deepest gratitude goes to my love Bezawit B.A., where her moral support, care, love and encouragement, despite the physical distance between us, peaked me up to the tower of success of this thesis. Thank you Beziye!! Kalkidan and Mulu whose prayer has never been apart from me, thank you so much.

I am very indebted to my beloved father Ato Abebe Yigzaw for his prayer and fatherly care and advice from childhood to date. My brother, Muluneh Ezezew, it is time to express my deepest gratitude to you for everything you has done in my university life from undergraduate program to date. I am very thankful for your support. Brothers Melkamu and Muluye Gared, Meseret Abebe I thank you so much.

I am very thankful to my friend Takele Worku for his care, advice, moral and material support. Kalkidan Negash, I am thankful for your moral support and the discussions we have had on various issues. I am also very grateful to friends, Wegene Mengstu, Dawit Melaku, Samuael Addis, Arega Kumlegn, Alagaw Ababu, Yideg Munana and Nebyou Gizaw, for their material as well as moral support. I would also like to thank Girma Tesfaw of *Addis Neger* newspaper whose encouragement and moral support had been an asset. This is also an opportunity to thank people in Unix Internet Center, Endalk, Madi, Yetim, Esayas, I thank you all. Dr. Wubalem Fekede, Ato Million Gebreyes, and Hirut of ENTRO I thank you so much. I also thank Ato Mesfin Worku and W/ro. Feqirte Leulseged, whose closeness and care has been like a family during my stay in their compound.

Daniel, the Gazette vendor, who search and collect a number of newspapers and magazines on the Nile, thank you. I am also grateful to Azeb for her help in writing the first two chapters of this thesis. I thank you all.

Lastly, I would like to thank all whose names are not mentioned but were helping me throughout my thesis.

## Abstract

*The main objective of this thesis is analyzing the nexus between water sharing and benefit sharing approaches in the context of Eastern Nile Basin. While water sharing as an approach is associated with the volumetric allocation of water, benefit sharing is seen as an alternative approach which is based on the sharing of benefits from the uses and non-uses of water. In (Eastern) Nile Basin both approaches has been go parallel. The water sharing approach has to do with the Cooperative Framework Agreement (CFA); which is meant an agreement that turndown the unfair status quo which bases itself in old bilateral or colonial agreements, and installed a system based on the principle of equitable and reasonable utilization. The recently popularized benefit sharing approach in Eastern Nile Basin has also adopted through the different projects prepared by Eastern Nile Technical Regional Office (ENTRO), which is a technical wing of the Eastern Nile Subsidiary Action Program (ENSAP).*

*The different positions, policies and strategies adopted by the Eastern Nile Basin states (Egypt, Ethiopia, Sudan), however, are at odds and contradicting. While Ethiopia needs to change the unfair status quo and then to manage the Nile water together on equal footing, Egypt and Sudan wants to continue with the status quo by keeping the water they divided between themselves intact. Hence, it should be clear that the benefit sharing approach to be fruitful necessitates some conditions such as peaceful hydropolitical relations between riparians, generally agreed agreement on the water itself, trust and confidence etc which is lacking in the Eastern Nile Basin. Therefore, without meeting such conditions, any attempt at joint projects is short term solution and does not address the fundamental problems.*

*Therefore, by analyzing the gap between the two approaches and their practicality on the ground with the existing situation, this study has come up with four scenarios in relation to the two approaches mentioned; water sharing and benefit sharing arrangements. These are, water sharing agreement without benefit sharing arrangement, benefit sharing arrangement without water sharing agreement, benefit sharing arrangement pending water sharing agreement and two agreements of water sharing and benefit sharing arrangements. Among the above scenarios, coming up with two agreements of water sharing and benefit sharing arrangements between the riparian states is a solution in solving the dispute over the Nile. Therefore, the signing of the CFA by all riparian states that destroys the real impediment of cooperation is a precondition for further upstream-downstream cooperation. Nevertheless, the divergent position of the riparians and their contradictory Nile policies and strategies have proved that unilateralism will remain the rule of the game till the near future and breeds conflict in the Eastern Nile Basin.*

*Key words: Eastern Nile, water sharing, benefit sharing, unilateralism, conflict, cooperation, Cooperative Framework Agreement*

# CHAPTER ONE

## 1. INTRODUCTION

### 1.1. *Background of the Study*

Water is an essential source of life. This is mainly because man's need for drinking, food production, energy supply, industrial development, and sanitation are dependent on water. In other words, "life ends whenever there is insufficient clean fresh water" (Harvey, 1966: 2). That is why states give special attention to water development projects and implementation of such related policies. However, due to different factors like population growth, expansion of agriculture, industrial development, sanitation and changes in the global environment, the demand for water is becoming critical and in many parts of the world, it is outstripping the supply. These factors, among others, place transboundary water resources, such as the Nile River an issue of concern as the basin is shared by many sovereign states.

The Nile River is the longest in the world, and 86% of its annual flow originates from the Ethiopian highlands through three sub-systems: the Abbay/Blue Nile, the Baro-Akobo and the Tekeze-Atbara sub-systems. The rest comes from the White Nile in the Great Lakes Region centered in Lake Victoria. Among these sub-systems, the Abbay/Blue Nile basin, with its tributaries, contributes 59 percent of the Nile waters. The Baro-Akobo and Tekeze-Atbara sub-systems also contribute 14 and 13 percents of the total flow of the Nile waters, respectively (Yacob, 2003: 139-140).

The Nile River Basin is shared by ten<sup>1</sup> north-eastern African nations, namely; Burundi, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Tanzania, Uganda, and Sudan. While, Egypt, Eritrea, Ethiopia and Sudan constitute the Eastern Nile Basin, the rest nations fall under the Equatorial Nile Basin region. However, while the Nile is a shared water resource that connects peoples across boundaries, there are no shared principles or basin wide treaties that govern the actions of the basin states pertaining to the utilization and protection of the river. If there are agreements, they are the 1929 Agreement between Great Britain and the 1959 Agreements between Egypt and the Sudan that allocate the waters of the Nile River ignoring upstream states. Thus, what prevails in the basin, are unilateral actions that never consider the need and interest of other riparian countries. Since then, no

---

<sup>1</sup>This number however will not be continue as South Sudan is becoming the newly born African state following the result of the January 2011 referendum where Southern Sudanese overwhelmingly vote for secession from the North. This will then make the riparian states of the Nile eleven and the Eastern Nile riparians five.

agreements have been reached between downstream and upper riparian countries about equitable and reasonable utilization of the waters of the river.

However, the Nile Basin is witnessing some cooperative developments beginning with the establishment of the Nile Basin Initiative (NBI) in 1999. Parallel with the negotiations of the New Nile Treaty i.e. the Cooperative Framework Agreement (CFA), 'joint' investments of the basin countries pertaining to the river are under preparation (ENTRO, 2009: 2). This is part of what is called as Benefit Sharing Approach—"allocating the benefits derived from the various uses (non-uses) of water, rather than the water itself" (Sadoff, 2008: 17). In fact, this approach has in particular been a major focus of the Nile Basin Initiative as well as donors such as the World Bank (Granit, 2009: 6).

This study, therefore, has tried to explore the linkage between water and benefit sharing arrangements in the Eastern Nile Basin with special emphasis on Ethiopia as upstream state and Egypt and the Sudan as downstream states. It also assesses the Nile policies, positions and strategies of these countries in terms of benefit sharing and water sharing entitlements. By doing so their national interests and policies, which will provide an insight about the nexus between water and benefit sharing arrangements and the future of the Basin is examined.

## ***1.2. Statement of the Problem***

Cooperative and integrated management of transboundary water resources is indispensable for the benefit of the riparian countries, as it has implications for the betterment of their economic, socio-cultural as well as political life. This is because of the reason that, "Effective management and efficient utilization of transboundary water resources are the sine-quo-non for the very survival and for the much needed economic development of the riparian countries" (Yacob, 2003: 143). If one looks at the Nile River Basin in general and the Eastern Nile Basin in particular, there is no basin wide and inclusive legal framework that governs the utilization as well as the protection of the river. However, upstream countries like Ethiopia are water suppliers and downstream countries Egypt and the Sudan are net water recipients or utilizers.

The utilization of the Nile River is essential to achieve socio-economic development and food self-sufficiency and alleviation of poverty for the riparian states. That is why; recently the question of water usage and allocation in the Nile Basin has received international attention (Hilawi, 1998: 13). The question then is not on the need to use the waters, but to explore the

bases up on which these nations share the Nile waters and/or its benefits and the approach(es) they follow.

In contemporary hydropolitics research, one can identify two approaches to the solution of conflicts over transboundary water resources. One approach is water sharing-the allocation and volumetric quantification of the water among and between the riparian countries, which has to do with the entitlement of water rights. The second approach is the most recent in hydro-political discussions. This approach calls for benefit-sharing-allocating the benefits derived from the various uses (non-uses) of water, rather than boldly emphasizing on the physical distribution or allocation of the water itself (Turton, 2008: 185, Sadoff, 2008:17).

In recent years, the Nile Basin countries have been negotiating for a framework of New Nile Treaty that will enable them to utilize the waters of the river equitably and reasonably for mutual benefit. Such treaty is needed because the status quo was based on unfair, non-inclusive and colonial or/and bilateral agreements, that favored downstream countries. Particularly, the 1959 Agreement '*for the Full Utilization of the Nile Waters*' signed between Egypt and the Sudan allocated the total flow of the Nile waters between themselves, 55.5 billion m<sup>3</sup> and 18.5 billion-m<sup>3</sup> respectively, 'ignoring the future needs of other ... riparians in the system' (Postel, 1999 in Turton, 2008: 185). While downstream countries uphold 'prior appropriation', 'historic rights' to maintain the unfair status quo, which is based on the 1959 Agreement, upstream countries like Ethiopia 'strongly supports new Nile water agreement' (Debay, 2008: 3-4). Nonetheless, despite such incompatibilities, the basin countries have been negotiated for a new Nile treaty and their almost twelve years of negotiation has produced the CFA of the Nile. Until now, six countries only-Ethiopia, Rwanda, Uganda, Tanzania, Kenya and Burundi have signed the CFA. Democratic Republic of Congo is also most likely to sign the CFA in the near future. However, downstream states such as Egypt and Sudan have "made public...their decisions not to accept the deal [the CFA] on April 13, 2010" (Addis Fortune, May 16, 2010).

While there has been a kind of stalemate regarding water sharing agreement, benefit sharing from water utilization with water security has been a major focus of the World Bank and Nile Basin Initiative (NBI) for the last few years (Granit, 2009: 6). This includes different joint projects and investments like on hydropower, watershed management, irrigation and drainage, flood preparedness, power trade and interconnection etc. Downstream states, both Egypt and the Sudan, are also emphasizing on broadening cooperation and joint investments

on water and non-water areas without focusing on volumetric allocation of the Nile waters. The question is; therefore, are there linkages between water sharing and benefit sharing negotiations on the Eastern Nile Basin?

Therefore, this study has attempted to analyze the interaction between the Eastern Nile riparians, mainly Ethiopia, Egypt and the Sudan, for water sharing and possible benefit sharing arrangements in the absence of a basin wide legal regime/agreement that acknowledge equitable and reasonable utilization of the waters of the Nile River. The positions and strategies of these countries regarding water sharing and benefit sharing arrangements is analyzed. By looking at the current state of affairs an attempt is also made to forecast what the future of the (Eastern) Nile Basin will look like.

### ***1.3. Research Questions***

The following are some of the questions that this study has tried to answer:

- Would it be possible for benefit sharing to be effective and fruitful without having a basin wide water sharing agreement on the Nile?
- What are the challenges that Eastern Nile Basin states faced to implement benefit sharing approach?
- What positions do these countries have on the subject of water sharing, benefit sharing and regional cooperation?
- Which condition; unilateralism or multilateralism, conflict or cooperation that is prevailing on the Eastern Nile Basin?

### ***1.4. Objective of the Study***

The general objective of this study is to explore and analyze the nexus between water sharing and benefit sharing arrangements on the Eastern Nile Basin. By doing so, it will also scrutinize the practicality and effectiveness of the benefit sharing arrangements on the Eastern Nile Basin at this point in time and in the near future.

Specific objectives also include

- analyzing the basis of country positions concerning (negotiations for) possible benefits based on benefit sharing approach and water rights or entitlements

- examining the challenges faced by the Eastern Nile Basin countries faced in relation to both benefit sharing and water sharing arrangements
- discuss the different principles of benefit sharing and water sharing approaches in the utilization of transboundary water resource from the point of view of Eastern Nile.
- forecasting what the Eastern Nile Basin will look like in the near future.

### ***1.5. Scope and Limitation***

This study mainly focuses on the Nile policies, positions and strategies of upstream-Ethiopia and downstream Egypt and the Sudan vis-à-vis water sharing and benefit sharing arrangements at both the sub-basin and basin levels. Therefore, the focus is only on these three countries. Nevertheless, whenever it is necessary issues regarding other riparians is being incorporated. The position of upstream Ethiopia, in one way or another, is representative of the Equatorial Nile Basin countries especially on issues regarding declaring the equitable and reasonable utilization at the Nile Basin at large. Thus, discussing the positions and strategies of each country is taken as a redundancy so that not covered in detail.

Although part of the Eastern Nile Basin, the policy and the strategy of Eritrea is not discussed because information on its position is scant and its participation in the affairs of the Basin is very limited. Furthermore, regarding the different benefit sharing related projects, this study did not discuss and analyze all the projects of Eastern Nile Subsidiary Action Program (ENSAP) in detailed manner. But an attempt is made to highlight these projects in a way that it is related with the subject under discussion. Access to clear and concrete information regarding government policies of Egypt and the Sudan other than those do discussed in the academic arena, time and financial constraints are some of the limitations that this study faced.

### ***1.6. Significance of the Study***

The study is significant because it contributes an input for policy makers and negotiators on the Eastern Nile Basin. In addition, the findings of this research will provide clear profile of the ongoing conflict and/or cooperation among Eastern Nile, in particular and among basin wide nations in general, in regards to water and benefit sharing arrangements. Finally, it will

also serve as source of information and be an addition to knowledge on the current debates on the hydropolitics of the Nile River.

### ***1.7. Methodology and Methods of Data Collection***

The approach employed in this research is qualitative. The focus in this research is on analyzing the gap between the two approaches raised-benefit sharing and water sharing as well as the gap between these approaches on one hand and the challenges of putting these approaches into practice on the ground on the other hand. Therefore, By analyzing the current state of affairs and the hydropolitical experience of the (Eastern) Nile Basin, this research has tried to prescribe the future. Document analysis is followed exhaustively. The research has discussed the existing theories of water as a source of conflict or means of cooperation also attempted to explore different doctrines/theories and principles on the utilization of transboundary water resources. In line with this, it has also discussed the debate between water sharing and benefit sharing approaches. Historical analysis of the relation between and among Eastern Nile countries regarding the Nile waters is also highlighted.

In addition, in-depth interview was conducted with persons from the Ministry of Water Resources and Ministry of Foreign Affairs of Ethiopia and others from the Embassy of the Arab Republic of Egypt to Ethiopia. Regarding the interview planned to the Embassy of the Sudan to Ethiopia people were not cooperative as intended but the gap is tried to be filled by conducting an e-mail interview with a Sudanese expert and official in the Ministry of Irrigation of Sudan. In-depth expert interviews were also conducted with people from different sectors. In this context, the researcher conducted e-mail interviews with experts from Ethiopia and Republic of South Africa. The researcher also interviewed officials from the Eastern Nile Technical Regional Office (ENTRO) regarding the current state of affairs in ENTRO. The selection of the interviewees was based on purposive sampling. Government policy papers/documents and agreements and memorandum of understandings are taken as primary sources.

In addition, secondary sources of data such as books, journal articles, documents from workshops and conferences were exhaustively utilized. Media outlets concerning current and timely issues such as press releases by government officials regarding the waters of the Nile have been used.

## **1.8. *Organization of the Thesis***

The paper is organized under six chapters. Chapter One is an introduction of the thesis. Chapter Two exhaustively dealt with conceptual framework regarding different concepts and principles of both water sharing and benefit sharing approaches of managing transboundary water resources. Whereas Chapter Three discusses different benefit sharing projects and water sharing arrangements in Eastern Nile. This chapter attempts to make clear the different water sharing agreements such as the 1929 and 1959 agreements and the Cooperative Framework Agreement of the Nile and their implications to the Nile Basin at large. It also tried to highlight, the different non-water cooperation efforts between and among Eastern Nile Countries. Chapter Four explores the Nile policies, positions and multilateral as well as unilateral strategies of Eastern Nile Countries pertaining to benefit sharing and water sharing arrangements. Chapter Five investigates and explains the nexus between benefit and water sharing arrangements in Eastern Nile. This chapter also tried to come up with the different scenarios of benefit sharing and water sharing arrangements in the Eastern Nile Basin by taking the current state of affairs, positions, Nile policies and positions of the Basin states as bases. By so doing in this chapter an attempt is made to make a balance sheet whether conflict or cooperation that is prevailing in the contemporary as well as the future (Eastern) Nile Basin. The final chapter is the conclusion, that synthesizes the basic questions, arguments and present findings of the study.

## CHAPTER TWO

### 2. CONCEPTUAL FRAMEWORK

#### 2.1. Transboundary Water: Source of Conflict or Means of Cooperation

Water is the most essential resource for life. Its indispensability is reflected in states' policies on agriculture, energy production, national economy, sanitation, rural and urban development as well as transportation. The construction of huge dams, canals and grandiose irrigation schemes are of such a reflection. Most of the available water from lakes, rivers and aquifers is being used to produce food in agriculture. Population growth and erratic rainfall are forcing states to harness any available surface or ground water to meet ever growing demand for food. Industrial and related activities make the second largest sector in consuming water. States are also building gigantic dams for hydroelectric power generation to meet energy requirements. It is obvious that with the growing and expansion of the industrial sector the need for water is also rising. However this precious resource is limited and unevenly distributed. Almost ninety-seven percent of the earth's water is found in the oceans and seas. It is almost less than three percent of the available water that is fresh and essential to maintain life and found in the form of lakes, rivers, swamps and ground waters as well as snow or ice.

According to studies nearly half of the global available surface water is found in no less than 263 international river basins and ground water resources cross under at least 273 international boundaries (Jagerskog and Zeitoun, 2009:4). Geographically speaking, transboundary rivers can be considered as one unit, however, since such rivers straddle many sovereign nations, the issue of water sharing can be politicized. Therefore, it is the existence of artificial political boundaries that complicate matters despite rivers are natural happenings that flow wherever they want. These rivers most of the time are known as international rivers. An international river is, one that either flows through the territory of more than one state sometimes referred to as successive river or separating the territory of two states from one another sometimes referred to as a boundary or contiguous river (Garretson et al, 1967:16). Article 2(b) of the 1997 UN Convention use the term international watercourse and defines it as a watercourse, parts of which are situated in different states. Under sub article(a) of this article watercourse is defined as "...a system of surface waters and ground waters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus." Different writers also use different names such as,

transboundary rivers, international watercourses, international river basins and so on. Hence, one can note that, an international river is “a widely shared common property resource used by many countries” (Aaron, 2008:15). For the purpose of this study different terms are used accordingly with the contexts dealt with.

In any case, shared fresh water resources are becoming scarcer than ever before and inversely the demand is rising from time to time. In addition to this, growing climate change which is affecting the flow of rivers is posing another challenge in the management and utilization of this resource. The question then is whether transboundary waters could be a source of conflict or cooperation? In regard to this there are two divergent views. One extreme view holds that water can be a source of potential conflict to the extent of actual war. On the other hand there is also a view that challenges the water war hypothesis by arguing that water could be a source of cooperation and further regional integration.

Those scholars who believe water could lead to actual war; ‘the so called water wars’ such as Gleik (1992:79 cited in Yacob, 2004:183) note that, “fresh water resources are objects of military campaign and conquest as long as they provide economic and political strength of nation states.” Similarly, Waterbury and Whittington (1998:150) also predict that, “The next century if not the next millennium, will witness rising international tension over natural resources” like water. The rationale behind water wars is linked with the scarcity of water, the rise of demand and consequent competition between riparian states to secure more water.

Hence, one should note that the mere existence of fresh water across artificial borders between states is not a cause or reason for conflict. As noted by Cosgrove (2003:4) conflicts over water resources are a result of many interrelated factors. For him water conflict is due to competition over the scarce resource which brings tension among users, because of demographic and environmental change. In other words, as “growing populations, urbanization and economic development all require more water for agricultural, municipal and industrial uses, there are greater risks” of conflict over water”(UN, 2008:2). Thus, water conflicts may occur because unilateral exploitation of such a resource by one nation may diminish its benefit to others (Aaron, 2008:16). It is lack of integrated water management between the riparian states that can be regarded as a cause of conflict as the water policy of one state may run into conflict with the other riparian.

In addition, one should also note that conflict over water may also be exacerbated by climate change. As noted by the UN (2008:2) climate change might pose “pressure on transboundary water resources in many areas with fluctuation in water availability and water quality.” In general, water conflicts are a result of multifaceted factors emanating from scarcity, growing climate change, and mismanagement of this resource following the unilateral policies of riparian states which result in competition that may lead to tensions and eventually to (violent) conflict.

In any case, it is possible that ‘competition over resources can lead to violent conflict,’ (Aaron, 2008:36) if there is no a legal regime that governs water use between upstream and downstream riparian states. Conflict in this sense is defined as the “struggle over values and claims to scarce status, power and resources in which the aims of the opponents are to neutralize injure or eliminate their rival” (Coser, 1956:8 in Mason 2004). For example, the most vulnerable river basins in terms of conflict include the Jordan, the Euphrates-Tigris and the Nile. Among the three, considering the hydropolitical history of the basin and the lack of any kind of legal regime that binds all the riparian states, the Nile River might have a greater potential for conflict (Prey 1993 in Mason 2004). In Fact, the Nile basin has experienced actual war till the late 19<sup>th</sup> century, as exemplified, in the battles fought between Ethiopia and Egypt. The latter`s aggressive moves from the 1832 Gedaref War to the 1876 Battle of Gura, sixteen major conflicts have been recorded (Yacob 1996). The main cause of these battles being Egypt`s ambition to subdue the Nile from its source as the motto of the expedition was ‘to put the whole Nile valley under the Green flag of Egypt’ (Wondmineh 1979) one could argue ‘water war’ has what the Nile experienced.

On the other hand, despite the “water wars” thesis there has not been any actual or armed military conflict between nations at least over the last century. As noted by the UN (2008:1) transboundary water resources may “provide opportunities for cooperation and promotion of regional peace and security as well as economic growth”. Scholars like Wolf (1998) also challenge the potential of water as a source of violent conflict by stating that “war over water is neither strategically rational, hydrographically effective, nor economically viable.” “Despite the potential for dispute in international basins, the records of acute conflict over international water resource is historically overwhelmed by the record of cooperation.” (Wolf, 2006:7). In other words, transboundary water resources can be a means for cooperation rather than causing conflicts.

In addition, “[m]any theorists refuted the thesis that water is a source of potential conflict by stating that cooperation is [usually] the norm, and [that] states are becoming increasingly interdependent” (Kibaroglu, 2002:43). This school argues that water is a means for cooperation because “potential transboundary impacts and conflicting interests can best be solved by cooperation ...” (ibid). In line with this Jagarkog and Zeitoun (2009:16) state that management of water related risks are deriving factors towards cooperation on transboundary water resources between riparian countries.

However, it must also be noted that, riparian countries “cooperate when the net benefits of cooperation are perceived to be greater than the benefits of non-cooperation [or unilateral actions], and when the distribution of these net benefits is perceived to be fair (ibid: 15). The idea is that to maintain their interest and even to maximize it over a shared water resource riparian states may calculate the costs and benefits of cooperation and they will pursue policy of cooperation when they professed it is profitable to cooperate.

The debate, however, must not be polarized and viewing water exclusively as a source of potential conflict or portraying them as a means for cooperation is problematic. Rather, “the way international relations over water are shaped need to be understood in the context of co-existing conflict and cooperation determined by power relations and the status of the political economies of the respective engaged riparians” (Mirumachi and Allan, 2007:14). The idea is that both cooperation and conflict can co-exist in a given transboundary river basin but what counts is the degree of unilateralism and multilateralism. If unilateralism prevails over cooperation then the probability for conflict is higher. In this case the cooperation that exists, if any, is pseudo as it tends to maintain the interest of the dominant state. In other words, the dominant state or the state with a better economic, political, military as well as diplomatic capability might hijack cooperation endeavors of the basin towards its interest. But when cooperation prevails, because the more states cooperate is the lesser the degree for unilateralism to prevail, conflict is unlikely as differences and disagreements are to be solved peacefully.

In general, “international rivers can elicit cooperation or conflict” (Sadoff and Grey, 2002:389) or both. It is up to riparian states to choose. But “cooperation on an international river can bring many benefits in part because treating the river basin as one system allows

optimized management and development...” (Sadoft and Grey 2005:2). That is, integrated management of a transboundary watercourse and its basin is beneficial, and cooperation can be achieved because all can benefit. This is due to, when the perception of policy makers and their cost-benefit calculation which makes cooperation outweigh any unilateral actions. Otherwise, transboundary rivers could be a source of conflict than cooperation as the policy of one state may have a collision with other state`s policy. Nevertheless, in recent years two approaches regarding the management of transboundary water resources are appearing and as a result riparian states have followed any approach they see appropriate for their respective basin. These approaches in one way or another are based on multilateralism in dealing with transboundary water resources. One such approach is a ‘*traditional*’ one and is based on ‘water sharing’ arrangement. The other is the most recent popularized paradigm based on the benefits from the uses and non-uses of a river. The following section attempts to look into these two concepts a bit in brief.

## **2.2. Contending Doctrines and Principles in the Utilization of Transboundary Rivers**

### **2.2.1. Contending Doctrines**

#### **1. Absolute Territorial Sovereignty (Harmone Doctrine)**

According to the Harmone Doctrine, the upstream states would be free to divert all the water from a shared water course without considering the need for downstream states (Rahman, 2009:209 Citing McCaffrey, 1996:549). The basic claim is sovereignty; meaning the state can do anything it wants on resources under its territorial jurisdiction. In other words, this doctrine avows that the upper “riparian states have exclusive ownership of water resource on their territory (both surface and ground) and the right to use them in any way they see fit” (Petrella, 2001:”46). A good example is a speech by Turkish Prime Minister Suleyman Demires who in 1992, regarding the utilization of Euphrates-Tigris rivers is quoted as saying “we [Turkey] do not say we share their [Iraqi or Syria] oil resources. They cannot say they share our [Turkey`s] water resources. This is a matter of sovereignty. We have a right to do anything we like” (Elhance, 1999:144). According to this theory, “any interest of lower riparian would be considered fairly by the upper riparian as a matter of comity, but not as a matter of right.” (Garretson et al, 1967:21). Any water need of downstream states is, therefore, under the mercy of upstream states and down riparian states have no right to claim a water from upstream. This theory, however, has a little support in state practice and does not represent

international water law as “it maintains the territorial sovereignty of one state and totally ignores the rights of other riparian states within a [shared] river basin.” (Aaron, 2008:73).

## **2. Absolute Territorial Integrity**

This doctrine asserts that lower riparian states of an international water course do have the right to maintain the uninterrupted natural flow of the river. As a matter of fact, this theory favors downstream riparians at the cost of upper riparians. According to this theory, downstream states “... have the right to benefit from the natural, uninterrupted, and undiminished flow of water courses originating in other countries.” (Petrella, 2001:46). Based on this theory the upper riparian states are restricted to use the water which originates in their territory, in such a way that will alter its flow rate and volume in relation to lower riparian states. Put it in other words, “... upstream states must be cognizant of the needs of others [downstreamers] and may not develop water related projects if they will cause harm to downstream states. (Aaron, 2008:73). Therefore, based on this doctrine, any water uses of upstream countries should have the consent and approval of downstream states. Like the Harmonic Doctrine the theory of Absolute Territorial Integrity has not international acceptance. These two doctrines “are extreme claims not supported by international jurists or international practice.” (ibid: 74).

## **3. Limited and Integrated Territorial Sovereignty**

According to this principle, “every [riparian] state has a right to use the waters on its territory, on conditions that this does not harm the interest of other states.” (Petrella, 2001:46). This doctrine to some extent restricts the doctrines of Absolute Territorial Sovereignty and Integrity to the extent necessary that will ensure each riparian a reasonable use of waters. As noted in Kibaroglu (2002:124), “This theory strikes a golden mean between the two preceding theories by recognizing a state’s sovereignty over the water of a transboundary river under its jurisdiction, but limiting the exercise thereof in such a manner as would ensure other riparians a reasonable share of the waters.” This theory recognizes the sovereignty of all riparians equally and hence it incorporates two principles together—equitable and reasonable use and the obligation not to cause significant harm on others. To some extent ‘this principle is regarded as a rule of international law’ because of its attempt to balance the two polarized and extreme claims. Nonetheless, this doctrine is not free from inaccuracy as it lacks comprehensiveness and clarity on what constitutes equitable and reasonable use and no appreciable harm.

#### **4. Community of Interests**

This theory stipulates a need for cooperation in international rivers. As far as this doctrine is concerned “no state may use the water on its territory without consulting other states to achieve integrated management based upon cooperation.” (Petrella, 2001: 46). This theory further “advocates for the concerns of the community created by the natural features, the physical unity, the ecosystem and the availability of water.” (Aaron, 2008:74). The quality of this doctrine lies on its call for an integrated management of a transboundary watercourse as one hydrological unit. As noted by Yacob (2004:206) the doctrine of community of interests envision “a reasonable share or equitable use by all riparian states [and] not causing unreasonable harm to any other state.” This doctrine offers abundant opportunity for the most beneficial use of water resources.” (Garretson et al, 1969:40).

#### **5. Doctrine of Prior Appropriation (Prior Use)**

Prior appropriation or use has been variously referred to by commentators as a “natural” or “historic right,” vested right and “ancient right.” (Garretson et al, 1967:50). According to Elmusa (1997:301), ‘prior use means that in any new division of water rights, the historic or established used are paramount.’ Put it other way, those states utilizing the shared water resource at some point in time before other riparian states by establishing facts on the ground have the right to claim such status in new water negotiations. The idea is that this doctrine “accords rights to those states who first used this water” (Aaron, 2008:74). In doing so, it supports neither upstream nor downstream countries. Based on this doctrine, “the senior” nation in using the waters is privileged to maintain its interest. (Garretson et al, 1967:50). States most of the time invoke the prior appropriation right because, “it is one factor to be weighed against others” (Elmusa, 1997:310). Nonetheless, in international river law there is no doctrine of prior appropriation, applying inflexibly ‘the prior in time prior in right concept as applied tendency by some states” (Garretson et al, 1967:57).

#### **2.2.2. Principles in the Utilization of Transboundary Waters**

The UNESCO, Technical Documents in Hydrology No.74 (Wouters, 2005:55) defines principles of international law as “a legally binding rule of a general character establishing certain rights and/or obligations of states and governing their conduct in a particular area of international relations.” From this definition one can infer that principles of international water law are those “important customary and general principles...applicable to transboundary water resources management that are accepted globally and incorporated in

modern international conventions, agreements and treaties” (Rahman, 2009:210). The most important principles evolved from various doctrines on the utilization of transboundary watercourses are *equitable and reasonable utilization* and *obligation not to cause significant harm*. Thus, in the subsequent pages an attempt is made to summarize these principles.

### **I. Principle of Equitable and Reasonable Utilization**

The principle of equitable and reasonable utilization of international rivers has gained widespread acceptance recently. The principle stands for the idea that in a shared river basin each riparian state has an equal right to use the water of the basin. Water rights in this regard means, “a mutually recognized access by [riparian states] to water quantities (fixed and/or percentages) under specific conditions pertaining to such things as points of extraction, seasons and priorities.” (Elmusa, 1997:300 citing Salibs and Bush, 1987:1). According to this principle each and every riparian has a right to utilize the water resources within its territory. Such a right is, however, limited by an obligation not to create unreasonable harm on a co-riparian state. In general terms, equitable and reasonable utilization rests on a foundation of shared sovereignty, equality of rights and it does not necessarily means equal use of waters (Rahman, 2009:210).

Equitable and reasonable utilization as a principle of transboundary water use has become the motto of contemporary international water law. For instance, “in broad terms the Helsinki Rules of 1966 seem to be parallel to what an “equitable” use would imply” (Hillawi, 1998:14). Article IV of the Helsinki Rules gives a detail explanation of what equitable and reasonable utilization is. More recently also Article 5 of the 1997 United Nations (UN) Convention also defines what this principle is all about. This convention under Article 5 sub-article-1 declares that “...an international water course shall be used and developed by water course states with a view to attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interest of the watercourse states concerned consistent with adequate protection of the water course.” In other words, it guarantees riparian states to utilize the water resource within their respective territory but at the same time it obliges them to take into account the interest of other riparian states. The Berlin Rules of 2004 under Article 12 also deal with this principle.

Thus the central question remains under what basic factors riparian states can use to *allocate* and *utilize* international watercourses equitably and reasonably? In fact for utilization to be

equitable, several factors need to be weighed, analyzed and considered. Article V (II) of the Helsinki Rules outlines *relevant factors to be considered* to determine equitable and reasonable utilization. Article 6 of the UN Convention of 1997 and Article 13 of the Berlin Rules also provided factors determining equitable and reasonable use. In one way or another, all these provisions mentioned factors such as Geography and hydrology of the basin, the social and economic needs of the basin, population dependent on the basin, availability of other water resources, existing utilization, climatic and ecological factors to a natural character and sustainability of proposed or existing use etc.

The principle of equitable and reasonable utilization has wide acceptance today and is part of general international water law. Despite such wider acceptance some questions still remain unanswered. Among others the weight given to these factors is something open for negotiation between the basin states. The Helsinki Rules (Article V(III)), the UN convention of 1997-Article 6(3) and the Berlin Rules of 2004 Article 13(3), states that ‘the weight of each factor to be determined by its importance in comparison with other relevant factors. In determining what is a reasonable and equitable use, all relevant factors are to be considered together and a conclusion reached on the basis of the whole.’

One scholar, Elmusa (1997:308), questioning factors that have not been assigned weight, noted that, “As such, ... [they] open the door for the parties to the conflict to accent those that are advantageous to them and the resulting apportionment may end up reflecting the relative power position of the parties rather than equity.” In this context riparian states may enter into disagreements as well as conflicts in negotiations of determining equitable and reasonable utilization. In addition, a thorough reading of ‘existing and potential use of the water of the international water course’ can be interpreted as it includes and rests upon the doctrine of ‘*prior use*.’ In such a situation, in international basins like the Nile where there is no binding legal regime this factor may result in a scramble for water between the basin states to create facts on the ground to be considered as existing use in negotiations for ‘equitable and reasonable utilization.’

Besides it is important to note that there is no (customary) international water law that binds states in the utilization of international water courses. Hence, the relevant provisions outlined in different ‘legal’ documents such as; the Helsinki and the Berlin Rules are not really binding

across the world. The UN 1997 Convention itself is not ratified as needed. This actually has impact on the general acceptance of equitable and reasonable utilization. Most of the time it is a general tendency even a norm of downstream states not to accept the principle of equitable and reasonable utilization. Generally, while upstream riparian states of international watercourses are proponents of this principle, downstream states are not. Thus, despite unanimous recognition as general rule of international water law, the principle of equitable and reasonable utilization has been challenged by another principle known as obligation not to cause significant harm to other watercourse state.

## **II. The No Significant Harm Principle (Obligation Not to Cause Significant Harm)**

Like the principle of equitable and reasonable utilization, the no significant harm principle is a sub set of the doctrine of limited territorial sovereignty. According to this principle, no state in international drainage basins is allowed to use the watercourses in their territory in a way that would cause significant harm to other basin states or to their environment including harm to human health or safety to the use of the water for beneficial purposes or to the living organisms of the water course system. (Rahaman, 2009:211). The no significant harm principle is relevant because of two aspects of the law of international watercourse; the allocation of the utilization of water and the protection of the environment. (Kibaroglu, 2002:149).

This obligation not to cause significant harm has been incorporated as an important subject in Article 7 of the UN Convention of 1997, which states in sub article-1, ‘watercourse states shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse states.’ In addition, the Berlin Rules of 2004 also under Article 16 prevent acts of states that cause significant harm to another basin state having due regard for the right of each basin states to make equitable and reasonable use of the waters. Neither of these two, however, defines what significant harm means. As Rahman (2009:211) explains the question is on the definition or extent of the word “significant” and how to define “harm” as significant harm.

The International Hydrological Program (IHP) of UNESCO has made an attempt to define what significant harm is. As stated in the Technical Document in Hydrology, No. 74, “significant harm” is the real impairment of a use, established by objective evidence. For harm to be qualified as significant it must not be trivial in nature but it need not rise to the

level of being substantial. Significant harm is determined by on a case by case basis.” In other words, the extent of “harm” is to be defined by the riparian states of an international watercourse. This principle is elastic and open for debate without having objective criteria or evidences of defining the level of significant harm caused by a riparian state on a co-basin state(s).

Furthermore, the no-significant harm principle is advocated by downstream states as if the upstream states are those who always cause significant harm on downstream states. International Water Law scholars such as Stephen McCaffrey are proponents of this principle stating that importance of protecting the “water state that has suffered harm” from the action of a “stronger states” that would otherwise be able to justify a harmful use due to the principle of equitable use. (McCaffrey 1994:14 cited in Kibaroglu, 2004:147). The idea here is those who cause significant harm are ‘stronger’ upstream states on ‘weak’ downstream riparian states. However, this claim by McCaffrey is fundamentally inconsistent with a basin where downstream dominance is a feature in an attempt to monopolize shared water without having a legal regime that governs all the basin states such as the Nile.

Thus, the most important question is, whether it is upstream states only that “cause significant harm” to downstream states? In other words, would downstream riparian states cause a significant harm in the utilization of international watercourse. If one looks at the Nile, for instance, upstream Ethiopia is always against the ‘no significant harm principle’ while Egypt is using such a discourse as a trump card in negotiations. This principle is viewed as if it is on the side of downstream states because of the weight that it has given in such a way. One only needs to look at the reverse. Especially in international watercourses where there is no a legal regime or institutional arrangement that regulates utilization of the water, downstream states do create ‘significant harm’ on the utilization of the watercourse on upstream states through different mechanisms. They do this either by implementing grandiose unilateral water projects to monopolize each and every drop of the shared water or by denying upstream riparians the means to utilize the water for instance by objecting international funding of upstream water projects.

### **2.3. International Water Law: From Helsinki to Berlin Rules**

As defined in Cosgrove (2003:31) “international water law... is a term used to identify those legal rules that regulate the use of water resources shared by two or more countries.” In spite of such clear definition there is no a well developed and strong legal instrument that governs the use of water resources internationally. The fact that, “modern international water law is the result of an evolutionary process on legal doctrines related to the agricultural and navigational uses of transboundary freshwater resources” its binding nature is very limited. (Eckstein, 2002:81-82). In line with this explaining the nature of international law (Aaron 2008 citing Hart, 1961) also noted that, “International water law does not have centralized international structures for making and enforcing law, instead it relies on a decentralized process of voluntary agreements and custom.”

Generally speaking international water law is a byproduct of customary laws, various treaties between states and different contradicting doctrines on the utilization of transboundary rivers. Nevertheless, the works and contributions of International Law Association (ILA) and International Law Commission (ILC) concerning the legal statues of international water courses and the development of international water law have a paramount importance. International water law recently has evolved from the Helsinki Rules of 1966 through the 1997 UN Convention to the Berlin Rules of 2004. Here under an attempt is made to clarify basic issues raised under the three major developments in light of transboundary watercourses such as the Nile.

#### **2.3.1. The Helsinki Rules of 1966**

The Helsinki Rules of 1966 were developed by the International Law Association (ILA); which is a scholarly non-governmental organization. According to Kibaroglu (2002:129), “the Helsinki Rules was the first attempt by an international organization to prepare a complete codification of the law of the international watercourses.” What makes the Helsinki Rules original is its provisions under article IV and V, which set from the well-know doctrine of equitable and reasonable apportionment, and some of the geographic, hydrological, climatic, historical, social, economic and technical elements assessed when effecting this apportionment. (Eckstein, 2002:82-83). As stated in the Helsinki Rules, “the principle of “reasonable and equitable utilization” of the water of an international drainage basin among the riparian states is the basic principle of international water law.” (Salman, 2007:679).

Despite its importance in incorporating the principle of “equitable and reasonable utilization of international rivers Helsinki Rules is not free from criticisms of its shortcomings and has not been practical. As summarized by Aaron (2008:80),

*The Helsinki Rules, which are based on customary international law, have not worked well in terms of allocation of surface and ground waters. The problem has been the conflict between the right of a state to use the water within its territory and possible harm to another states within the basin.*

Moreover, no weight is given for the different factors outlined to determine equitable and reasonable utilization of an international watercourse. The Helsinki rules further failed to consider water contribution of riparian states as a factor in determining equitable and reasonable utilization. Salman (2007:630) also noted that despite the fact that “the Helsinki Rules have no formal standing or legally binding effect...they remained the single authoritative and widely quoted set of rules for regulating the use and protection of international watercourse” until the adoption of the 1997 UN Convention on the Utilization of the Non-navigational Use of International Watercourses.

### **2.3.2. The 1997 United Nations Convention**

The United Nations Convention on the Law of Non-navigational Use of International Watercourses was adopted on 21 May 1997, with 104 states in favor where as 27 states abstained and 3 states voted against. This convention is largely based on the Helsinki Rules. It is divided into seven parts and 37 articles with an annex on arbitration. “As a framework convention, it addresses some basic procedural aspects and few substantive ones, and leaves the details for the riparian states to complement in agreements that would take into account the specific characteristics of the watercourse in question.” (Salman, 2007:632). As noted by Aaron (2008:82), “The most important sections of the convention are contained in Part II of the General principles, namely Articles 5, 6 and 7. These dealt with the rule of “equitable utilization” and the “obligation not” to cause significant harm...” Furthermore, the convention addresses issues like definition of (international) water courses (Art. 2(2)), watercourse agreements, (Art. 3), general obligation to cooperate (Art. 8), settlement of disputes (Art. 83) and arbitration on its annex.

Under part II, Article 5 clearly states what *equitable and reasonable unitization* is all about and the need for watercourse states participation. Under Article 6(1), the UN Convention set out “factors relevant to equitable and reasonable utilization. It lists natural, socio-economic,

demographic and other related factors and circumstances as basis for equitable and reasonable utilization.

On the other hand Article 7 of the Convention puts an “obligation not to cause significant harm,” Article 7(1) reads as:

*Watercourse states shall in utilization an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse states.*

This in fact is in a direct contradiction with Article 5(1) of the convention which states that “watercourse states shall in their respective territories utilize an international water course in an equitable and reasonable manner...” Besides, one can also ask what does the term “no significant harm” itself means?”

Regarding the incorporation of these two principles together in the convention Aaron (2008:84) noted that, “the convention does not prioritize but rather it straddles these important principles.” The UN Convention, “however, subordinates the non-harm rule to the rules of equitable utilization.” (Salman, 2008:633). But the very presence of the rule itself is criticized by upper riparian states of international watercourses. For instance, from the Ethiopian perspective, “The no significant harm” principle will hinder the development of water resources upstream. Equitable use is seen as an encompassing phrase as it means an equitable use for both upstream and downstream users, and there is therefore no need for the “no significant harm” article” (Mason, 2004:193 citing Ethiopian Academic 2001). The same is true for Turkey, which is an upstream state in the Euphrates-Tigris River Basin. On the contrary, Egypt as a downstream riparian state in the Nile questioned the only presence of the rule without clear definition of what ‘*significant harm*’ constitutes. From the Egyptian perspective, this provision of the convention is not strong and independent by itself but something hanged on the principle of equitable and reasonable utilization. (ibid).

The 1997 UN Convention is also being criticized as it is “designed basically for demand management rather than resources management...” (Fitzmaurice and Gerhard, 2005:17). According to the authors, the UN Convention as “the law on the management of water as a resource is weak” and besides the provisions of the Convention are “couched in a vague and hortatory language rather than legal requirements (ibid). The presence of divergent perceptions of states regarding the two principles mentioned and the consequent ambiguity it

carries are also another criticism against the UN Convention. When it comes to the Nile Basin, while only two states Sudan and Kenya are in favor, Burundi issued against, and the remaining riparians chose abstention. The most upstream and lower riparian states Ethiopia and Egypt respectively are abstained due to their divergent views and perceptions of issues of the convention such as: the definition of International watercourse, the obligation not to cause significant harm, and the principle of equitable and reasonable utilization, the modalities of notification and information exchange, the question of harmonizing existing agreements (Mason, 2004:192).

### **2.3.3. The Berlin Rules on Water Resources of 2004**

In the same year that the UN Convention was adopted in 1997, the Water Resource Committee of International Law Association (ILA) started reconsidering and revising the Helsinki Rules of 1966. And after a series of discussion and conferences in different cities from London in 2000 through New Delhi in 2002 to Berlin in 2004, the Berlin Rules “has come up with a comprehensive set of rules on all major aspect of the utilization, management and conservation of water resources...” (Fitzmaurice and Gerhard 2005:18). The Berlin Rules on Water Resources of 2004 is made up of 14 Chapters and 73 Articles.

The Berlin Rules define different water related terms in a detailed manner and it uses “international drainage system” unlike ‘international watercourse’ or ‘international river basin.’ This is because mainly, the Berlin Rules unlike the previous attempts-the Helsinki Rules or the UN Convention, are applicable to the management of all waters, both national and international, surface or ground, navigational or non-navigational. It also includes rules on impact assessment (Chapter IV), Ground Water (Chapter VII) and navigation (Chapter IX).

According to Aaron (2008:87) perhaps the most important development in the Berlin Rules is the Article dealing with equitable utilization. For him, “the most important change of Article 12 of the Berlin Rules [as compared to prior attempts] brought was to connect the right to an equitable share with the responsibility and obligation not to cause harm.” In line with this, Article 16 of the Berlin Rules also link “Avoidance of transboundary harm” with the “equitable and reasonable use of waters.” “Accordingly, it can be concluded that by subjecting each principle [the no significant harm and equitable utilization principles] to the other, the Berlin Rules present the two principles as equal. (Salman, 2007:637). By doing this the Berlin Rules is deviating from the Helsinki Rules which established equitable and reasonable

utilization as a core of international water law. And it also differs from the 1997 UN Convention which subordinates no significant harm to equitable and reasonable utilization.

It is also worth noting that, the Berlin Rules under Article 14 and Article 15 clearly states rules regarding water allocation. Article 14, for instance, reads as: *In determining an equitable and reasonable use, states shall first allocate waters to satisfy vital human needs.* This provision is important because at least it is an anti-thesis for those who argue against the volumetric allocation of water among riparian states. The idea is that before any water developments, the provision asserts for the allocation of water between riparian states as a base for any water development.

Nevertheless, the Berlin Rules is being criticized for its failure to “answer some difficult issues in inter-state relations vis-a vis water.” (Aaron, 2008:86). Aaron in this regard questions whether “a basin state has the right to divert water to a non-basin state in a unilateral manner” (ibid). Salman (2007:638) further annotated that, “in its attempt to incorporate the current customary rules and thinking on international environmental law, the Berlin Rules have downgraded the established and cardinal principles of international water law of equitable and reasonable utilization, and have equated it with the obligation not to cause significant harm.” By so doing, the Berlin Rules creates ambiguous terms and concepts in negotiations between upstream and downstream states. Furthermore, the idiom it uses as international drainage basin instead of international water course is problematic as it is also difficult to define what constitutes an international drainage basin. Like previous attempts the Berlin Rules do not incorporate water contribution as a factor in dealing with equitable and reasonable utilization.

However “the primary roles of international water law is to determine a state’s entitlement to the benefits of the watercourse (substantive rules) and to establish certain requirements for states’ behavior while developing the resource (procedural rules). (Cosgrove, 2003:31). Different institutions or organizations could formulate rules or riparian states may enter into agreements regarding transboundary water resources. But “...their efficacy depends on the willingness of riparian states to accept... [these rules] and be bound by them.” (Yacob, 2007:46). In general, however, in contemporary world, “Shared water resources remain the most important area that is not yet regulated by a binding international convention or treaty.” (Salman, 2007:639).

## **2.4. Benefit Sharing in Transboundary Waters**

### **2.4.1. The Concept of Benefit Sharing and Types of Benefits**

The concept of benefit sharing as an approach in the management of transboundary water resources is a new development-which is not more than a decade old. The most important work regarding popularizing this concept or paradigm is done by Claudia Sadoff and David Grey through their two Articles one “Beyond the river: the benefits of cooperation on international Rivers” published in 2002 and the second Article entitled “Cooperation on international rivers: A continuum for securing and sharing benefits” published in 2005. Sadoff and Grey (2002:389) argued that “international rivers can elicit cooperation or conflict. The choice between the two will in large part be determined by perceptions of their relative benefits.” They argues that, despite “there is enormous variation among the numerous international rivers of the world, non-cooperation has costs and cooperation have four interwoven benefits of environmental, direct economic, political and indirect economic in nature.” (ibid: 403). In other words, “Benefits are broadly defined to include economic, social environment and political gains.” (Sadoff and Grey, 2005:2).

Benefit sharing in one way or another is a concept based on “allocating the benefits derived from the various uses (and non-uses) of water. (Sadoff: 2008:17). In other words, the focus is not on the river but “beyond” the river. The approach is based on “a moving from sharing of water quantities to sharing of benefits.” (Dombrowsky, 2010). The emphasis is, therefore, on “the use of water, rather than the allocation of the water itself ...” (UN 2008:9). White et al (2008:4) also argued that, “water benefit sharing focuses on optimizing the values (economic, social, cultural, political and environmental) generated from water in its different uses and equitably distributing the benefits amongst water users and suppliers.” In general, “Benefit sharing can be defined as any action designed to change the allocation of costs and benefits associated with cooperation” on transboundary rivers. (Sadoff and Grey, 2005:3).

Looking at the different types of benefits is important in giving a better picture of what benefit sharing paradigm is all about. Sadoff and Grey (2002) identified four benefits from cooperation on international rivers. These are benefits to the river, benefits from the river, benefits because of the river and benefits beyond the river. The first and the base for other cooperation on transboundary waters is when “benefits also accorded to the river itself.” This has to do with “better management of the ecosystem.” (Sadoff and Garry: 2005). Maintaining

the health of the river is the starting point. “A healthy river is typically one with protected water sheds, preserving soil fertility and reducing contaminant and sediment soil transport, conserved wetlands, flood plains and ground water recharge areas to maintain their natural capacity to buffer river flow and water quality...” (Sadoff and Grey, 2002:394). These benefits can be taken as environmental benefits as well.

The second type of benefit is ‘economic’ in nature as it is a benefit derived from the direct economic use of the river. This for instance includes, improved energy generation (hydropower), irrigated agriculture, flood protection, etc (Klaphake, 2006:112). Pertaining to these economic benefits “an equitable benefit sharing may well require some form of redistribution or compensation” (Sadoff and Grey 2002:397). Sharing both the benefit and the costs is required. In line with this ownership questions over projects must be also answered.

The third benefit is more of political. Hence, transboundary water resources are shared between sovereign nation states, their use by one or more riparian(s) may lead to serious conflict and tension. But ‘because of the river’ international cooperation can ease tensions over shared waters, and provide gains in the form of the savings that can be achieved, or the costs of non-cooperation or dispute that can be averted.” (Sadoff and Grey, 2002:398). In line with this, reduction of costs because of the river, the riparian states can involve a policy shift to cooperation and development away from dispute or conflict.” (Sadoff and Gray 2005:2). This will help strengthening political relations between states and maintain peace and stability in the basin.

The fourth type of benefit is ‘benefit beyond the river.’ According to Sadoff and Grey (2005:2), because transboundary rivers can be catalytic agents of cooperation that yields benefits from the river and reduces costs because of the river can yield another form of benefit derived from greater cooperation even economic integration among riparian states. This type of benefit more or less goes further and look into the various benefits derived from economic ties between states like common market arrangements. It is an indirect economic benefit. Nonetheless, for this type of benefit to be realized, it requires agreements and mutual understandings on the management and utilization of the river shared.

As noted in Jagerskog and Zeitoun (2009:23) “practical examples of benefit sharing include the connecting of electricity transmission networks, the development of power pools for

energy markets and water transfer schemes developed between basins to meet water demand in water scarce areas. By doing so the general framework of benefit sharing approach has to meet in relative terms, the needs of the riparian states.

**Table 1:** Types of cooperation and benefits on international rivers (source: Sadoff and Grey, 2002:393, *Beyond the River: the Benefits of Cooperation on International Rivers*. In *Water Policy*. Vol. 4, No. 5. pp. 389-403)

<b>Type</b>	<b>The challenge<sup>2</sup></b>	<b>The opportunities</b>
Type 1: increasing benefits to the river	Degraded water quality, watersheds, wetlands, and biodiversity	Improved water quality, river flow characteristics, soil conservation biodiversity and overall sustainability
Type 2: increasing benefits from the river	Increasing demands for water, sub-optimal water resources management and development	Improved water resources management for hydropower and agricultural production, flood-drought management, navigation, environmental conservation, water quality and recreation
Type3: reducing costs because of the river	Tense regional relations and political economy impacts	Policy shift to cooperation and development, away from dispute/conflict; from food (and energy) self-sufficiency to food (and energy) security: reduced dispute/conflict risk and military expenditure
Type 4: increasing benefit beyond the river	Regional fragmentation	Integration of regional infrastructure, markets and trade

<sup>2</sup> According to the authors the challenges listed are challenges that riparian states of international rivers will face in the absence of cooperation. In other words, these challenges are challenges of non-cooperation.

### **2.4.2. The Transboundary Waters Opportunity Analysis (TWO Analysis)**

The Transboundary Water Opportunity Analysis (TWO Analysis) developed based on the benefit sharing approach introduced earlier. This approach was introduced first by the Stockholm International Water Institute (SIWI), the Council for Scientific and Industrial Research (CSIR) in South Africa and Phillips and Robinson Associates (PRA) in Namibia who have developed a report detailing a conceptual framework for use by basin states and other stakeholders sharing freshwater resources. (Granit, 2009:6). The original document was produced in 2008 by Phillips et al (2008) entitled;“The TWO Analysis: Introducing a Methodology for the Transboundary Opportunity Analysis.”

According to this study, “the particular emphasis” of the TWO Analysis “is placed on the potential baskets of the benefits at the regional level by identifying positive sum outcomes (PSOs) or win-win solutions which would benefit all basin states.” (Phillips et al. 2008:6). The main idea behind such an approach is that “it can assist basin states and other stakeholders to analyze potential benefits in a transboundary river basin to optimize economic growth, political stability and regional integration.” (Jagerskog and Zeitoun, 2009:22). By doing so, as an aspect of the broader benefit sharing approach it considers water sharing approach as a zero-sum-scenario. (Phillips et al, 2008:9). According to the document the general objectives of the TWO Analysis is (1)-to promote the sustainable and equitable use of transboundary water resources and (2) clarify trade-offs in relation to development.

The conceptual framework of the TWO Analysis “in its most basic form... consists of a matrix with four key factors of development opportunities, and two main categories of fresh water sources to realize those opportunities.” (ibid: 11). In this context the TWO Analysis is introducing possible benefits to be generated or development opportunities in transboundary water and their specific water sources (See Table 2.2). The four development opportunities identified are 1) hydropower production and power trading, 2) primary production 3) urban and industrial development and 4) environmental and ecosystem services (ibid). And the three categories of water sources are described as 1) new water-for an increased volume of fresh water to be made available, 2) the more efficient use and management of [the available] water and 3) others sources in basins that are not closed-surplus water can be put to productive use.

**Table 2:** The conceptual framework for the TWO Analysis. The table include examples of opportunities that could be realized using the TWO analytical framework in a specific river basin. (Source: Philips et al, 2008:7).

<p style="text-align: center;"><b>Categories: sources</b></p> <p style="text-align: right;">Factors: development</p>	a) New Water	b) Efficient use of water	c) Other sources in basins that are not closed
1. Hydropower and power trading	Location of reservoirs in high altitudes to minimize evaporative losses	Siting of multipurpose dams for e.g., hydropower and irrigation in optimal locations	Additional electricity generation through hydropower schemes and power pooling
2. Primary production	Re-use of treated waste-water for irrigation  Interbasin water transfer schemes	Green water use to increase agricultural outputs  Increase efficiency in irrigation	Investment in bio-energy crops  Introducing aquaculture
3. Urban growth and industrial development	Strengthen institutional management for water allocation to more high value use	Maximizing economic returns per unit of water in industry	Recharge of groundwater
4. Environment and ecosystem services	Use of “green credit schemes” through e.g., water purification in wetlands	Optimizing economic returns from developing fisheries and tourism sector	Allocate water to restore ecosystems
5. Others (every basin is unique and other opportunities may exist)	Desalinate water for high value use	Drought-proofing through improved land management	Flood protection

The TWO Analysis in general is more of a guidance for different stakeholders to explore and identify different options at different levels as each river basin and regional context is unique. (Jagerskog and Zeitoun 2009). Among others, the TWO Analysis gives emphasis first to create “basket of benefits” of relevance of transboundary basins. The primary drive when creating the basket of benefits is to use as broad an approach as possible, and this requires that [a] the whole basin should be addressed, initially, and [b] potential benefits should be included. (Phillips et al. 2008:15).

The TWO Analysis as a framework is being used in some transboundary basins like the Nile, Orange-Senqu in South Africa and also recently in the Baltic Turn Table Initiative in Europe (Granit, 2009:7). Regarding its implementation on the Nile, Phillips (2009:20) noted that at a present time the Nile River is managed sub-optimally and quantum improvements in economic returns from the river are possible. He also added that, the initial belief that the TWO Analysis can give rise to quantum improvements in transboundary basin is fully justified.

As noted in Jagerskog and Zeitoun (2009:25) the TWO Analysis should also consider the different barriers for development on a transboundary river basin context. He further outlined barriers such as a high-level inequality between riparian states, differences in political systems, differences in riparian state religious views, absence of regional cooperation framework, closedness of a basin, limited in capacity to manage water etc.

In general terms, the TWO Analysis as a framework in the management of transboundary water resources based on a benefit sharing approach goes one step forward from the original benefit sharing approach in its incorporation of sources of water and it also further attempted to see the benefit sharing approach in context of each river basin. However, the different challenges of implementation as barriers are also hindrances in implementing this approach. Furthermore, along with the benefit sharing approach, the TWO Analysis is in its embryonic stage which needs further elaboration and detail research in accordance with different basins with different geopolitical as well as hydropolitical situations.

### **2.4.3. Implementing The Benefit Sharing Approach: The Challenges**

The practicability of benefit sharing approach in international river basins varies from one basin to another. The political, economic, socio-cultural and other related issues within the basin have impacts on the implementation and fruitfulness of this approach. In some basins such as the Senegal, Orange-Senqu, Mekong and Columbia, benefit sharing approach is being implemented successfully. According to Yu (2008:65), in the mentioned river basins, for instance, “riparians focused on the division of benefits (and costs) of water use and not on the physical allocation of water” per se. This does not mean, however, the negotiation process on benefit sharing approach ignores the water sharing formula.

The idea is that benefit sharing can be effective, despite the challenges it may face in its implementation, when all riparians agree on the benefits and costs of the different water projects. In the negotiation process, for possible benefits and sharing of costs on river basins there must be an effort to level the playing field (Phillips et al, 2006 in Jagerskog and Lundqvist, 2006:13) and the riparian states should also negotiate on equal basis for equitable sharing of benefits.

While negotiating for possible benefits, states may also be challenged by the division of benefits and costs from different projects or joint investments. In this regard, “The two key challenges to benefits sharing approach are quantifying the cooperative benefits and determining the necessary conditions (e.g institutional, policy) needed to manage these benefits between multiple stockholders.” (Yu, 2008:10). According to Yu, the idea is, “Precise quantification of benefits is highly important and riparians are unlikely to accept international agreements unless this process is transparent, coherent and equitable. (ibid). Furthermore, the possible benefits to be derived from cooperation through a benefit sharing approach must exceed the benefits that riparian states could secure unilaterally.

In regarding to the effectiveness and practicability of benefit sharing, Phillips et al (2006) summarized that such an approach in the management of transboundary resources must not be taken as a universal remedy and final solutions in the management of transboundary watercourses. In other words, this approach is important in the management of transboundary water resources but it will face a challenge because it will not solve every problem within the basin concerned. This should also be seen from the perspective of the specific basin. This is because all river basins are not similar and appropriate and ready for benefit sharing approach identically. For instance, in certain basins the benefit sharing approach is highly relevant (primarily those in which security concerns are not at center stage) while in other circumstances it is not as appropriate. (Jagerskog and Lundqvist, 2006:13). Whenever the river basin is securitized and politicized it is difficult to reach up on an agreement and to implement benefit sharing approach. Furthermore the presence of “basin hegmon-as a stronger state in a shared basin that may dominate and ‘hijack’ the benefit sharing discourse so as to make it suit their interest is also a big challenge. (ibid).

In addition to the above mentioned issues, it must be noted also the hydro-political history of the basin has its own impact on the implementation of the benefit sharing approach. In basins

which have been characterized by mistrust and mutual suspicion, such as; Euphrates-Tigris, the Nile, and Jordan, it is too difficult to implement the benefit sharing formula. This also should be seen with the presence of unfair status quo and where some riparians are too rigid to reverse this. In line with this, previous agreements in the basins concerned have major impact, especially when there exists agreements that are partially accepted by riparians. In this context the problem will be worsened when the disagreement is between two extremes as upstream and downstream riparian states with hostile hydro-political history. For benefit sharing to be implemented and becoming effective, riparian states should have a legal base that declares the basin's water is a common property of all the riparian states concerned so that they can use it for the benefit of their own in a mutually agreed and consented principles. But if one or a group of riparian states are declaring that the water is solely their own against the interest of other riparian states and tries to maintain a rigid policy of excluding others by claiming previous unjust and unfair treaties it will be hard and difficult to come up with an agreed benefit sharing formula.

The most detail analysis of challenges in implementing benefit sharing approach is synthesized by Klaphake (2006:155-150). The author briefly outlined and explained that, *“Political factors and high transaction costs in negotiations, due to uncertainties and possibly the breadth and complexity of the matter under negotiation, may constitute crucial obstacles to reaching agreement on benefit sharing mechanisms.”* He placed sovereign national water rights and the perception of riparian states of their own water projects as a prestige projects as the major hindrances in implementing the benefit sharing mechanism.

Furthermore, “benefit sharing [also] requires a common understanding, interest and vision as well as the required political will to jointly manage river basins” (Arntzen, 2010:9). The management of transboundary water resources, therefore, should not be politicized and securitized to harness them for mutual benefit. If these resources are politicized the cost to reach on cooperative agreed principles will be difficult. Therefore, it is apparent for leaders of riparian states to have the political willingness to work together with co-riparian states and to utilize and manage the resource for the benefit of all.

## **2.5. Water Sharing Versus Benefit Sharing Approaches: The Debate**

In contemporary discussions and debates, emphasis has been given for benefit sharing approach in the management of transboundary rivers. Proponents of this approach such as Turton (2008) even go further saying that water sharing arrangement is a “traditional paradigm which viewed water as a stock in a zero-sum-game agreements of volumetric quantification of water in a system.” Whereas, benefit sharing focuses on the benefits from the use and non-uses of the river; which views ‘water as a flux that moves through space and time with variability in this flow being the norm.’ (Gleik 2000 in *ibid*:185). The idea is that; “To negotiate the management and development of international shared rivers, riparians can focus their negotiations on the allocation of water rights or on the distribution of benefits derived from the use of water.” (Sadoff and Grey: 2005:422). The view is that, both benefit sharing and water sharing arrangements are two alternative approaches for riparian states to choose in the management of transboundary watercourses.

For proponents of benefit sharing arrangement, despite the concept of water sharing “remains the most widely recognized mechanism for riparian states to engage in international rivers” (*ibid*), this “can trap riparians on a ‘win-lose’ framework with little room for compromise and no incentives for basin-wide management.” (Sadoff-et al, 2008:21). The main reason is water sharing arrangement is not flexible rather rigid and difficult to change it in a highly variable environment. Emphasizing on benefit sharing Sadoff and Grey (2005:422) further stated that, “...as populations and economies grow, in many river basins there will increasingly be insufficient water to apportion.... between riparian states.” Therefore, searching for other alternative approach or negotiation strategy like the benefit sharing approach is relevant. According to Sadoff et al (2008:21-22), “...a focus on benefit sharing clearly demonstrates the ways on which cooperation can actually increase the benefits of a river and on doing so promotes sustainability and efficiency.”

Despite benefit sharing is being viewed in such a way that as if it is separate from and alternative to water sharing arrangement, there are also arguments that the two approaches are not distinct and exclusive one another. Phillips et al (2006:141) argued that,

*the equitable allocations of water resources, and the apparently competing approach for sharing benefits, are in fact two sides of the same coin. Basin States are fundamentally interested in attaining a fair and just apportionment of international water*

*resources (and other natural resources), and the benefits arising from these.*

In other words, an agreement that declares to the minimum level (at least) water rights in the form of equitable and reasonable utilization of transboundary river between the riparian states is a base for the further generation of benefits. Arntzen (2010:8) noted that “in order to achieve cooperation of all [riparian] states, all parties should benefit and in this way joint management resource allocation and benefits are closely interconnected.”

In fact, separating benefit sharing from water sharing and labeling the former as a panacea of water management is problematic. Because the latter serves as a base for the former, a basin wide legal regime that declares equitable and reasonable utilization of water is a precondition. This in fact has many advantages. Among others, water sharing agreement is all about guaranteeing water property rights so that riparian states “...may start trading these rights and optimizing the use of the resource.” (Dombrowsky, 2010:26). Water sharing agreement can also ease tensions over the question of future water rights. Especially in basins where prior agreements apportioned the entire water between a few states only by ignoring the need of other riparians, new water sharing arrangement is a necessary or an agreement that nullify such a situation should be installed.

Generally, declaring water rights on equitable and reasonable way, water sharing arrangement can be regarded as a spring board for further cooperation between basin states. So “that water rights and benefit sharing should be treated jointly. (Qadumi, 2007:6). It is also worth noting that “viewed from the angle of individual countries, however, an offer to engage in joint projects as a rule [also] implies that such countries are interested in gaining water rights.” (Klaphake, 2006:141). Therefore, benefit sharing arrangement should be viewed as a means to diversify development opportunities in the utilization of transboundary rivers than discarding water allocation/sharing/ rights.

In relative terms the most success stories of benefit sharing in some international water courses is not devoid of water allocation rights. Klaphake (2006:142 emphasis mine) noted that *...all of the major infrastructure projects in the basins of the Incomati, the Orange-Senqu, the Senegal, the Cunene and the Zambezi are not only conditioned on agreements on the*

*“output side” of water use i.e., hydropower for example the relevant treaties also contain precise water-allocation targets.*

When it comes to the (Eastern) Nile Basin, since the dawn of the 20<sup>th</sup> century the Basin has been witnessing the co-existence of negotiations for both water sharing and benefit sharing approaches under the umbrella of the NBI. Different individuals have also published different articles on which approach should the (Eastern) Nile Basin adopt. For example for authors like Wondwossen (2009) the water sharing formula will end up with conflict so Nile Basin states` negotiation should focus on the benefit sharing approach. In line with this Tesfaye (2008) advice the (Eastern) Nile Basin countries ‘to come up with benefit sharing treaty rather than restricting themselves to water sharing agreements.’ They, however, did not show or explain the practicality of benefit sharing in the Nile Basin without solving the existing unsolved questions regarding equitable and reasonable utilization of the waters of the Nile.

On the other hand, the work by Muluaem (2009) was also part of the debate in relation to which approach should be installed in the Eastern Nile Basin and his work gave emphasis for equitable and reasonable water sharing formula which will apparently lead to reallocation of water. The most acute criticism against the benefit sharing approach comes from the work by Dereje (2010b), who labeled the benefit sharing approach as a noble-lie which will not answer the Nile question. However, these authors did little to show the linkages, between water sharing and benefit sharing arrangements. The next chapter will focus on the different water sharing and benefit sharing arrangements on the Eastern Nile Basin and their respective implications.

## **CHAPTER THREE**

### **3. WATER SHARING AND BENEFIT SHARING ARRANGEMENTS IN THE EASTERN NILE BASIN**

#### **3.1. Water Sharing Arrangements**

For many reasons, it is apparent for states sharing a given transboundary water resource(s) to have a legal instrument that regulates the use of the resource. One of the main reasons being “...without appropriate legal channels and adequate rules, the potential for conflict over water increases both at local and international levels.” (Doltayer and Gary 2000 in Yacob, 2007: 44). Reaching on an agreement is, however, not always a bed of roses. One must take into account and consider the different geographical, legal, political, economic, technical and even socio-cultural factors. Besides these there are also controversies as to which doctrine to follow and what principle(s) to agree upon as those doctrines and principles are mostly conflicting each other. Despite such challenges some states have managed to reach on an agreement either bilaterally or multilaterally. One can mention, for instance, the success stories in the Colorado, Indus and Ganges, Barhamputra, Senegal, Senqu-Orange, Mekong, Zambezi, Danube, Rhine river basins.

However, “the water resources of the Horn of Africa are regulated neither by law nor by common sense” (Yacob, 1996:46). A case in point is the mighty Nile River; where there is no inclusive and basin wide agreement which governs water allocations as well as utilization for all riparian states. If there are agreements then they are simply bilateral and colonial agreements that have remained partial instead of being comprehensive treaties. (Tesfaye, 2001:71). These agreements are controversial because they are always ignored by the non-signatory and unfairly disadvantaged upstream states mainly Ethiopia and claimed as binding by downstream riparians. The most controversial water sharing arrangements are the 1929 and 1959 agreements. Such agreements have never been recognized by upstream riparians and it became a necessity to explore a new initiative that would enable all the riparians to work together to utilize the Nile water for mutual benefit and to come up with a new basin wide framework. This was not however started for long until the establishment of the NBI in 1999. Thus after almost twelve years of negotiation by all riparian states except Eritrea, on May 14, 2010 the Nile Basin have entered in to a new historic agreement entitled-The

Cooperative Framework Agreement of the Nile River Basin (CFA). The following section gives the highlight of these treaties and their respective implications to the Basin states.

### **3.1.1. The 1929 Agreement**

The 1929 agreement was concluded between Britain (on behalf of the Sudan as its colony) and Egypt. In fact this agreement can be best regarded as an exchange of notes between the United Kingdom and the Egyptian Government. According to this agreement Great Britain, on behalf of its colonies pledged not to undertake works which would reduce the volume of the Nile water reaching Egypt. (Yacob, 2003:147-148). It further declares that any water development in the colonies of Great Britain in the Nile Basin will “not infringe Egypt’s natural and historical rights in the water of the Nile...” By doing so the note tries to attempt and establish and legalize Egypt’s ‘*historic rights*’ on the Nile denying the interest of other riparian states.

As a water sharing arrangement the agreement allocated 48 billion cubic meters of water to Egypt and 4 billion cubic meters for the Sudan. The agreement further guarantees Egypt the power to veto and supervise any upstream water projects from source to mouth. Paragraph 4(b) of the agreement reads as:

*Save with the previous agreements of the Egyptian government, no irrigation or power works or measures are to be constructed or taken on the river Nile and its branches, or on the lakes from which it flows, so far as all these are in the Sudan or in countries under British administration, which would, in such a manner as to entail any prejudice to the interests of Egypt, either reduce the quantity of water arriving in Egypt or modify the date of its arrival, or lower its level.*

This agreement totally excluded other riparian states and their share of the Nile waters as if the Nile was an exclusive property of Egypt which is tantamount to an insult to the Basin states. In this regard “the real losers...were Ethiopia, the country in which the Blue Nile River originates and which was completely ignored in the agreement, and the people and nations` of the Great Lakes region, from whose rivers the White Nile emanates. (Aaron, 2008:51). The question is therefore, whether this agreement is binding or not and on whom it has an effect.

From the perspective of Egypt it is a binding “international agreement which must be recognized by the other Nile Basin states too.”<sup>3</sup> From the perspective of upstream states notably, Ethiopia, this agreement is “non-existent.”<sup>4</sup> According to Tefera Beyene, Ethiopia do not know this ‘agreement’ because it was not party to it and the colonial power which signed the agreement on behalf of its colonies Britain was not representing Ethiopia which has remained an independent state over the years. Other upstream states of the White Nile also ignored this agreement and declare it is null and void by claiming the famous Nyerere Doctrine. According to this doctrine because the 1929 agreement was struck by a colonial power Britain it do not have any binding effect on the newly independent states (Okoth-Owiro, 2004: 14). Furthermore, the agreement has no legal force on upstream states of the Nile such as Ethiopia because it was neither signatory state nor has it acceded.

Besides, one could note that politically speaking the 1929 agreement was not an international agreement concluded between two or more sovereign states on equal bases. This is mainly due to despite Egypt achieved its independence from British in 1922 this was partial because Britain’s political and economic dominance in Egypt unabatedly continued up until 1952. In other words British who administered both countries, played the “roles of both referee and player.” (Fasil, 2009:19). Therefore, the agreement was concluded between Great Britain and Great Britain. In any case, as far as Eastern Nile is concerned, if the agreement is binding, it is on the signatory states not on the non-signatory state Ethiopia. Therefore, according to Fasil (2009:22), Ethiopia can use Article 34 of the Vienna Convention on the Law of Treaties of 1960 which states “a treaty, does not create obligations or rights for a third party without its consent” to repudiate this agreement.

### **3.1.2. The 1959 Agreement for the Full Utilization of the Nile**

The 1959 agreement was signed between the Republic of the Sudan and the United Arab Republic (Egypt) for the full utilization of the Nile waters on 8 November 1959. This agreement was entered as a revision to the 1929 agreement following the 1956 independence of Sudan and its rejection of the 1929 agreement. In fact because of this both Egypt and Sudan were in a verge of military conflict and were deploying their troops to their border

---

<sup>3</sup> Mostafa Ahmady, Head of Press and Information Office. Embassy of the Arab Republic of Egypt, Addis Ababa. Interviewed on 21 December 2010 from 09:00-10:50 am. Embassy of Egypt Chancery at his office

<sup>4</sup>Interview with Tefera Beyene, Director Boundary and Transboundary Rivers Affairs Directorate. Ministry of Water Resources and Energy of the Federal Democratic Republic of Ethiopia. Tuesday, 11/1/2011, from 11-12 AM. Office.

areas until ‘a pro-Egyptian government established as a result of the 1958 coup’d etat.’ (Fasil 2009, Swain, 1997:679). The 1959 agreement was, therefore, regarded as a success in terms of settling the serious confrontation between Egypt and the Sudan. (Yoseph, 2004:8). Be it as it may, the agreement was meant to control the Nile water by two downstream states only.

The 1959 agreement gave Egypt 75% (55.5 billion cubic meters) of the Nile waters and the rest 25% (18.5 billion cubic meters) to the Sudan. In other words, the agreement implied the bilateral appropriation of the Nile waters by two downstream riparian states alone. The title itself, “Agreement for the Full Utilization of the Nile Water” in the absence of the water source countries is an open insult to their national pride especially to Ethiopia which is a source of more than 86% of the Nile waters (Mason, 2004). As a result of this agreement, Egypt was able to construct the Aswan High Dam and create the largest manmade lake in the Sahara. Sudan also was able to construct a series of dams along Blue Nile-Rosaries and Sennar and Tekeze Atbara-Kashm el Girba (Swain, 1997:680, 684).

Furthermore, the 1959 Agreement entered between two independent states; Egypt and Sudan was binding for the signatories as a bilateral agreement. Like the 1929 colonial agreement, therefore, the 1959 Agreement is nothing to Ethiopia. What is astonishing is, however, the water that they divided among themselves never originates in their territory and even their contribution is negligible-almost zero. Egypt and Sudan entered to this agreement, “as if the Nile starts in Sudan and ends in Egypt.” (Yoseph, 2004:8). One of the most observable and tangible weakness of the 1959 agreement is its failure to include Ethiopia which is a source of 86 percent of the water.

Therefore, under the General Provisions section the 1959 Agreement states that if there is any claim on the Nile waters by other riparian states, it is to be considered by the two republics and both also agreed to have a unified view in any negotiations concerning the Nile. Besides, the agreement further institutionalizes the acquired rights of both states.

The 1959 agreement between Sudan and Egypt is, therefore, part of an attempt to monopolize the Nile waters by disregarding the need of other riparian states. As observed by Wondimneh (1979:43) the 1959 agreement

*might perhaps by thought to have been motivated by a desire on the part of these states to increase their irrigation works before the independence of the ex-British African countries and Zaire on the one hand, and on the other, before economically*

*backward Ethiopia can muster the financial and other resources to implement projects that can seriously affect their [Egypt's and Sudan's] interests.*

Furthermore, the 1959 agreement which guarantees Egypt the right to construct the Aswan High Dam can be best regarded as a mechanism to consolidate and legalize the so called 'historic rights' or 'established rights.' (Mason, 2004:183). By so doing, "In essence, what the 1959 Water Agreement established was the principle of prior use." (Aaron, 2008: 55). Thus, from the Egyptian perspective any water development is based on its share of 55.5 billion cubic meters of water as of the 1959 agreement. (Mostafa, 21 December 2010).

Therefore, the 1929 and 1959 agreements can be regarded as instruments employed to control every drop of the Nile waters by two states only with a lion share given to Egypt. Despite the agreements have been made as attempts to establish a water sharing arrangement; both agreements are endorsed to benefit a few water recipient states against many water supplier riparian states. But the agreements have remained as roadblocks to reaching a broader basin wide legal and institutional framework. In addition, these agreements have helped creating an upstream-downstream blocks with divergent positions in the Nile Basin. This is evidently also seen in the divergent positions of upstream-downstream riparians regarding the CFA which in some way or another overturns downstreamers' assertion of the so called prior agreements.

### **3.1.3. The Cooperative Framework Agreement of the Nile River Basin (CFA)**

The Cooperative Framework Agreement of the Nile River Basin (CFA) is a result of negotiations among the Nile Basin states lasted for almost twelve years. The negotiation which was started in 1997 later proceeds as the legal track with the establishment of the NBI in 1999. The final draft of the CFA was concluded on 26<sup>th</sup> June 2007 in Entebbe, Uganda in the Nile,-COM (Council of Ministers of the Nile) meeting. The CFA was "negotiated by the Ministers of Water Resource of the Nile riparians, legal and technical national negotiators, and external advisors on international water law." (Cascao, 2008a:7). Until the Nile-COM meeting in Alexandria, Egypt July 22-28, 2009 all riparian states were on board negotiating the document despite differences between upstream and downstream positions regarding the infant concept of "water security."

On May 14, 2010, however, four upstream states of the Nile-namely Ethiopia, Rwanda, Tanzania and Uganda signed the historic CFA in Entebbe-Uganda (The Ethiopian Herald, Sunday, 16 May 2010). After five days, Kenya also joined the deal (The Ethiopian Herald, Thursday, 20 May 2010). As agreed, in Alexandria-Egypt, all upstream states were to sign the CFA so that the remaining two riparian states Democratic Republic of Congo and Burundi would go along. (MOFA, Egypt Desk Officer, 12 January 2011).<sup>5</sup> Burundi later has signed the agreement on late February 2011 and D.R. Congo is also expected to join soon. The two downstream states, Egypt and Sudan, however, reject the deal despite they were part of the negotiation claiming the deal is against their interest and needs further dialogue and negotiation. (Mostafa, 21 December 2010, Capital November 7, 2010).<sup>6</sup>

For the CFA to be a legally binding document it needs six riparian states to sign and ratify it. At this point in time the CFA has signed by six riparians and following its ratification, it will become a binding document on the signatories. Despite upstream-downstream divergent interests, the CFA is believed to be a benchmark because it declares equitable and reasonable utilization of the Nile waters. The CFA in one way or another is highly influenced by the 1997 UN Convention on the Utilization of Non-Navigational International Water Courses. Such an influence leads the CFA to incorporate a number of provisions and legal principles. The CFA is, therefore, not a specific agreement that essentially apportions or allocates the Nile waters. Rather it "... outlines general principles of cooperative water resources management with respect to protection, utilization, conservation and development of the Nile River System" (Art. 1 of the CFA, Granit et al 2010:20, Tefera Beyene, 11 February 2011). Furthermore, the CFA is an agreement to establish a permanent legal and institutional framework that governs the action of riparian states regarding the waters of the Nile known as Nile Basin Commission (NBC) (Art.15 and 16 CFA, NBI Act 2002).

The CFA is a general framework designed to change the unfair status quo; which bases itself on unjust and unreasonable colonial or bilateral and non-inclusive agreements. In other words, if signed by all riparian states as intended, the CFA would be a basin wide legal instrument replacing the 1929 colonial and the 1959 partial agreements. This is because the

---

<sup>5</sup> An officer in the Ministry of Foreign Affairs of Ethiopia. Egypt Desk Officer. Interviewed on 12 January 2011. Time from 3:00 pm to 4:20 pm. His office.

<sup>6</sup> Ambassador Tarek A. Ghoneim, Ambassador of Egypt to Ethiopia. Interview with Capital Newspaper. Volume 12. No.621. Sunday November 7, 2010. Addis Ababa, Ethiopia.

CFA as a water sharing agreement declares equitable and reasonable utilization of the Nile waters. Article 4(1) of the CFA reads as:

*Nile Basin states shall in their respective territories utilize the water resources of the Nile river system and the Nile River Basin in an equitable and reasonable manner (...) each basin state is entitled to an equitable and reasonable share in the beneficial uses of the water resources of the Nile river system and the Nile river basin.*

The corner stone of this agreement is therefore this principle of equitable and reasonable utilization. Hence, “[i]t should be noted that at the outset that equitable utilization is chiefly a doctrine governing apportionment, or allocation of water between states sharing an international watercourse.” (McCaffrey, 2007: 385). To do this, there should be mechanisms of considering different relevant factors to apportion the shared water. For such a reason the CFA under Article 4(2) outlines relevant factors that the Nile Basin states shall take into account in ensuring equitable and reasonable utilization of the Nile River. Most of these factors are incorporated from customary international water law and the 1997 UN convention or the Berlin Rules of 2004. But unlike these all the CFA incorporates “..the contribution of each basin states to the waters of the Nile River system” (Article 4(2(i))) and the extent and proportion of the drainage area in the territory of each Basin states” (Article 4(2(h))) as relevant factors to this effect.

Nevertheless, the CFA like the 1997 UN convention did not assign weights to the outlined relevant factors. Article 4(4) of the CFA states that “the weight to be given to each factors is to be determined by its importance in comparison with that of other relevant factors in determining what is a reasonable and equitable use, all relevant factors are to be considered together and a conclusion reached on the basis of the whole.” According to Dereje<sup>7</sup> (15 March 2011) this is because “the ... equitable and reasonable utilization is not a static formula but a dynamic process involving compromises and comparisons of a series of factors none of which enjoys *a priori* weight or significance.”

In so doing the agreement opens the door for the contesting parties or riparian states so that they will negotiate to give weight to the mentioned factors. But it is difficult to reach on a consensus in giving weights to these factors due to divergent views and interests of Basin

---

<sup>7</sup> E-mail interview with Dereje Zeleke, PhD, Institute of Federalism and Legal Studies, Ethiopia Civil Service College. Sent on 11 March 2011. Received on 15 March 2011.

states are divergent. This simply can be seen from the divergent perceptions and views of factors such as “existing use, potential uses, population dependent on the basin, the social and economic needs of the basin states etc,” where Egypt and Sudan are emphasizing. On the other hand, upstream states boost on contribution to the water, geographic and other natural characters and other related factors. In general terms, the non-assigned weight to factors is problematic as riparian states may enter into conflicts in negotiations for ‘equitable and reasonable unitization.’ In any case endorsing this principle is meant paving the way for the allocation of water between the Basin states.

On the other hand the CFA also declares “obligation not to cause significant harm’ under article 5. Article 5(1) reads as: “Nile basin states shall in utilizing Nile river system water resources in their territories, take all appropriate measures to prevent the causing of significant harm to other basin states.” Despite its failure to define the level and extent of what significant harm consists of, the CFA tries to see harm as a result of activities of basin states pertaining to water use irrespective of the provisions of Article 4. In other words the CFA makes the *no significant harm principle* as an activity *inconsistent with equitable and reasonable utilization* of the waters of the Nile.

The nature of the CFA as a framework for water sharing agreement is further evidenced with its incorporation of the newly born and embryonic concept of ‘*water security*’ under Article 14; which previously was concerned with the issue of ‘existing agreements.’<sup>8</sup> This was changed, however, by the Nile-COM extraordinary meeting at Addis Ababa on 2006. According to analysts, the incorporation of the ‘water security’ concept was considered as ‘strategy of constructive ambiguity’ (Cascao, 2008a:11 citing Fischhendler, 2008b) which would in turn help bring the divergent riparian positions into a compromise in negotiation. (Dereje, 2010a:436). But this has been contested and challenged from different perspectives.

To begin with, the ‘water security concept’ itself is in its embryonic stage with no clear and agreeable definition. The incorporation of the concept by downstream states was simply an obstructive machination to maintain the 1929 and 1959 agreements via a back door. Evidence of this can be detected while the 17<sup>th</sup> meeting of the Nile-COM was in progress in

---

<sup>8</sup> The nature of article 14 from existing agreements to the water security concept was changed at the extraordinary meeting of the Nile held from March 30-31, 2006, Addis Ababa Ethiopia for details see the signed minute of the meeting.

Alexandria, Egypt, Egypt's Water and Irrigation Minister Mohamed Nasr Eddin Allam told journalists that "Egypt's historic Nile river rights [as of the 1929 and 1959 agreement are] not negotiable." (Reuters, 27 July 2009). As noted by Cascao (2008a:12) "The ambiguity introduced by the newfangled concept of "water security represents a continuation of the past zero-or-even negative-sum-game of the hydropolitical relations in the Basin." Furthermore, the incorporation of the water security concept in the CFA is criticized for its lack of clarity and lack of legal support "which found nowhere in international legal instruments dealing with international water courses. (Dereje, 2010a: 438).

Nevertheless, the CFA is a comprehensive treaty on the overall utilization, development, protection and management of the Nile. More soundly, however, the two major principles equitable and reasonable utilization and the obligation not to cause significant harm with the later incorporation of the immature water security concept and the controversies associated with it testify that the CFA is a water sharing agreement.

## **3.2. Benefit Sharing Arrangements on the Eastern Nile Basin**

### **3.2.1. A Glance at Cooperation Attempts on the Nile**

One of the ways to mitigate possible conflicts over the use of shared water resources like the Nile is through cooperation and institutional building-which will bring all the riparian states together for mutual benefit. An attempt to establish Nile based institution is perhaps a phenomenon since the late 1960s. As observed by Yacob (2007: 213), "The few partial and inconsequential attempts at establishing an institutional framework for the Nile basin were initiated by downstream nations, and oriented towards their interest." This is certainly seen in institutions' established before the late 1990s, such as Hydromet, Undugu and TECCONILE.

For example, the *Hydromet* (The Hydro-metrological Survey of the Equatorial Lakes) "was the first institutional arrangement consisting (either as full members or as observers) representative of all Governments of riparian countries"(Abdella, 2000: 550 cited by Zerihun, 2007: 28). The *Hydromet's* function was confined to the hydro-metrological aspects of Lake Victoria basin. "Its main purpose was to study, analyze, and disseminate to member states metrological data on the equatorial lakes and rivers." (Yacob, 2007:213). Its membership was also restricted to the basin states Egypt, Kenya, Sudan, Tanzania and Uganda, Ethiopia, not strictly on the basin, had an observer status since 1971. The Hydromet's results were

inconclusive. This was mainly because of “Suspicious and lack of trust among the Nile riparian states, the non-memberships of principal riparian states such as Ethiopia,” (Tesfaye, 2001: 24) which challenged the functions of Hydromet and ended without significant achievement.

In 1983 the second institutional attempt called ‘*Undugu*’ (which means ‘brotherhood’ in Kiswahili) was formed in Sudan. *Undugu*’s “...formulated objective... was to create cooperation in such common fields as: culture, environment, telecommunication, electric power, trade, and water resource development.” (Yacob, 2007: 214). While the rest riparian states with a non-basin state Central African Republic was the founding and signatory states, Ethiopia, Kenya and Tanzania had an observer status. But as Collins (1997:17) observed, “despite numerous meetings of ministers, heads of states. . .Which aggressively toured the capital of the riparian states,” *Undugu* failed to achieve its objectives and buried in peace “after its 10<sup>th</sup> ministerial meeting held in Addis Ababa in 1993.” (Yacob, 2007:214).

However, before *Undugu* was folded up, in January 1986, “The Nile Basin Ministers reached an understanding at their meeting, Bangkok, Thailand...that there was a need for a basin wide integrated development” (ibid). Following this the ‘un-song’ Nile Basin Integrated Development (NBID) was formed and in 1989 ‘it proposed, in any future water development projects the need to consider the concerns of all riparian states in the basin. It was, however, challenged by Egypt and Sudan.

Thus, with the initiative of Egypt, “the Technical Cooperation Committee for the Promotions of the Development and Environmental Protection of the Nile-TECCONILE, to meet annually as the Nile-2002 Conference” (ibid: 215) was formed in 1992. The uniqueness of TECCONILE, from its predecessors was that “It aimed at conservation and equitable entitlement of the water resources” of the Nile (Collins, 1997: 21-25). But the fact that its membership was not inclusive of all the riparian states contributed to its weakness of not being a basin wide institution.

In general terms, however, until the late 1990s almost all the attempts of institution building on the Nile were initiated by the downstream states and their focus countries were those in the Equatorial Lakes sub-basin of the Nile. Eastern Nile-the source of almost 86% of the total

flow of the Nile was ignored for long due to different reasons. Organizations from Hydromet to TECCONLE had served the interest of downstream states. In fact, to quote a Somali proverb, “the offspring of a stolen camel will always be illegitimate.”<sup>9</sup> Nevertheless, the Late 1990s witnessed the establishment of the Nile Basin Initiative (NBI) in 1999-which brought all the riparian states together.

### **3.2.2. Nile Basin Initiative (NBI)**

On May 2006, the then Egyptian Minister of Water Resources and Irrigation, Mohamoud Abu Zeid told Time Magazine that, “we [Egypt] realized that we cannot stop the countries of upper Nile from developing the water” (Robinson, 2006: 50) and “the status quo on the use of the “water is unsustainable, largely because of population growth and growing irrigation” (Brunnee and Toope, 2007: 140-142 cited by Mohamoda, 2003: 22). These facts coupled with the experiences gained from the Nile-2002 Conferences forced Egypt and the rest riparian states to work together and the NBI was launched as a new Nile based organization with full membership of all riparian states except Eritrea; an observer, in February 1999 in Dar El Salaam. “The NBI provides an agreed basin wide framework to fight poverty and promote regional economic development.” (ENTRO, 2005: 6).

Interestingly, the NBI is guided by a shared vision “to achieve *sustainable socio-economic development through the equitable utilization of and benefit from*, the common Nile basin water resources.” (NBI, 2001:2 emphasis mine). The NBI is not, however, established as a permanent legal institution but it “hopes to facilitate a cooperation enterprise between and among the riparian states.” (Yacob, 2007: 216). The NBI is a temporary and transitional institution established until a permanent legal institution-the Nile Basin commission (NBC) established following the Cooperative Framework Agreement.

The primary objectives of the NBI are:

1. To develop the water resources of the Nile Basin in a sustainable and equitable way to ensure prosperity, security, and peace for all its peoples,
2. To ensure efficient water management and the optimal use of the resources,
3. To ensure cooperation and joint action between the riparian countries, seeking win – win gains,

---

<sup>9</sup> Quoted in Sally Healy .(2008). *Lost Opportunities in the Horn of Africa: How Conflicts Connect and Peace Agreements Unravel*. A Horn of Africa Group Report. Royal Institute of International Affairs. Chatham House.

4. To target poverty eradication and promote economic integration
5. To ensure that the program results in a move from planning to action (NBI 2001).

According to the NBI Strategic Action Program (2001), to achieve its objectives, the NBI is composed of three main organs: 1) The Nile–COM (Council of Ministers of the Nile)-which served as the highest decision making body, 2) the Nile–TAC is the Technical Advisory Committee of the Nile to support the Nile– COM, and 3) the Secretariat- Nile-SEC.

The NBI entails a “Strategic Action Program that consists of two complementary programs, the Shared Vision Program (SVP) and Subsidiary Action Programs.” (Tesfaye, 2001: 109). Among these two, SVP’s primary purpose is to create an enabling environment for cooperation management and development in the Nile basin through a limited but effective set of basin wide activities and projects.” (NBI, 2001: 3). As a basin wide program the SVP, for instance, includes the Nile River Basin Cooperative Framework Agreement, which has to do with the formation of permanent institutional and legal framework and mainly declares equitable and reasonable utilization of the Nile waters. On other hand, the main objective of the SAPs “is to translate the shared vision into action, realizing transboundary development opportunities within the agreed basin-wide framework.” (ibid). SAPs, therefore, setup two sub-regional groupings: The Eastern Nile Subsidiary Action Program (ENSAP) includes Egypt, Ethiopia and Sudan, and the Nile Equatorial Lakes Region Subsidiary Action Program (NELSAP)-which includes Burundi, D.R. Congo, Kenya, Rwanda, Tanzania, and Uganda from the upper riparian states and Egypt and Sudan as downstreamers.

Assessing the effectiveness of NBI, “Agreements on the different projects to develop the Nile water was achieved” but “a mutually acceptable legal and institutional framework has...been difficult to agree on.” (Yacob, 2007: 216). In addition as observed by Cascao (2008a: 7), despite the draft document of the Cooperative Framework Agreement, i.e. a Comprehensive Legal Agreement on the Nile water resources concluded “on 26<sup>th</sup> June 2007, in Entebbe it has not yet been signed or ratified by the riparian states.” Thus, despite the fact that the formation of NBI has to do with the formulation of New Nile Treaty that binds all riparian states side-by-side with the preparation and implementation of projects on the ground, it has not achieved its main legal objective because of the failure of downstream riparian states to sign the CFA. This has resulted in questioning the very existence of the NBI itself.

### **3.2.2.1. ENSAP/NBI Projects**

The Eastern Nile Subsidiary Action Program (ENSAP) comprises three Eastern Nile countries namely-Egypt, Ethiopia and Sudan, Eritrea despite fall in the basin still it is an observer. It is established to translate the shared vision of the NBI into action in the Eastern Nile Basin (NBI 2001:5). To achieve this ENSAP initially identified seven sub-projects named Integrated Development of the Eastern Nile (IDEN) projects which are meant to have multipurpose so as to achieve win-win gains in the Basin. (ibid: 6). Later on 2005 one other component of ENSAP has been added as Joint Multipurpose Program during the 19<sup>th</sup> Eastern Nile Council of Ministers (ENCOM) meeting (ENTRO: 2009:3). Thus, the ENSAP has eight sub-projects of the following

1. Eastern Nile Planning Model
2. Flood Preparedness and Early Warning
3. Ethiopia-Sudan Transmission Interconnection
4. Irrigation and Drainage
5. Watershed Management
6. Baro-Akobo Multipurpose Project
7. Eastern Nile Power-trade Investment Program
8. Joint Multi-Purpose Program (ENTRO, 2005)

The first six projects are fast-track projects which are, by and large single sector projects designed to deliver tangible benefits on the ground in relatively short period of time to bolster confidence in NBI/ENSAP. The other two are of more complex, long term, multi sector and multi-country nature. (ENTRO, 2009:3). To facilitate the preparation, implementation and coordination of the mentioned projects the Eastern Nile Council of Ministers (ENCOM) established the Eastern Nile Technical Regional Office (ENTRO) in 2001 and started its operation in June 2002. (ENTRO, 2005:6).

The above mentioned projects are means to generate benefits for the Basin states in different ways. Projects prepared by ENSAP are more of based on a benefit sharing approach like other projects of the NBI at large which is based on the shared vision that stipulates “sustainable socio-economic development through the equitable utilization and benefits from the common Nile water resources.” (NBI, 2001:2). As noted by Jagerskog and Lundqvist (2006:12-13), “The Nile Basin Initiative has since its inception in 1999 worked towards the sharing of benefits.” The authors further argued that the benefit sharing approach itself is developed from

the projects and programs of the NBI itself. (ibid:12). This is confirmed by an official in ENTRO who said all the NBI projects under the technical track are about benefit sharing.<sup>10</sup>

The projects of ENTRO/ENSAP directly or indirectly are linked with the four types of benefits identified by Sadoff and Grey (2002). For instance, projects such as Watershed management, flood preparedness and early warning can be regarded as ‘benefits to the river.’ These are projects that are designed to maintain the health and safety of the ecology of the river so that it can be sustainably utilized for the benefit of the riparian states. Needless to state, projects such as Ethiopia-Sudan transmission interconnection, irrigation and drainage Baro-Akobo multipurpose projects, Eastern Nile power trade investment program and Joint Multi-Purpose Program are projects where the basin states can generate ‘benefits from the river.’ Once the states agreed on these projects and their implementation yield benefits to the riparians it would be argued that these projects were hoped to reduce political tensions ‘because of the river.’ Projects such as the Joint Multipurpose Program and the overall implementation of the different projects as well as growing trade and investment would show the basin states to think and plan further economic integration ‘beyond the river.’

Projects of ENTRO/ENSAP are designed to generate possible benefits through the sharing of costs for the mutual benefits of the basin states so as to “... ensure poverty reduction, prosperity security and peace for its [the basin’s] entire people.” (ENTRO: 2009:2). In addition, ENSAP further clarifies that its projects are based on a benefits sharing approach because it believes in the “joint development and management of the Eastern Nile water resources [that] could serve as a catalyst for greater regional integration with benefits that far exceed those derived from the river itself” (ibid) which is actually the core of the benefit sharing approach. All investment projects agreed by the riparian states of ENSAP and prepared by ENTRO are based on the benefit sharing approach.

Nevertheless, projects of ENSAP are technical and have not yet been significantly implemented but are in project preparation stage. But this does not mean that there are no projects implemented on the ground. Among the projects prepared by ENTRO the Ethiopia-Sudan Transmission Interconnection, watershed management and flood preparedness and early warning are being implemented. (Sallah Shazali, 15 March 2011). Furthermore, the

---

<sup>10</sup> Interview with Salah Shazali, PhD, Nile Basin Initiative (NBI), Eastern Nile Subsidiary Action Program (ENSAP), Eastern Nile Technical Regional Office (ENTRO), Senior Operations Officer. At his ENTRO Office on 15 March 2011 from 16:26-1:22PM.

most sensitive issue of irrigation in upstream Ethiopia was recognized despite Ethiopia is not satisfied with the size of the area which is under scrutiny (ibid). In addition, ENTRO has able to bring experts from the three basin states who are working together and prepare projects which helped identifying both opportunities and challenges. (ibid, ENTRO, 2009:4, Yacob Arsano, 2010 interview with Capital 2010, Sherif M.El Sayed,<sup>11</sup> 15 March 2011).

ENSAP through its arm ENTRO has conducted several pre-feasibility and feasibility studies in the Eastern Nile. As noted by Tesfaye (2008), ‘some if not all of the projects [of ENTRO], have gone through feasibility stages.’ But most of these projects are not yet implemented on the ground. One could mention a number of reasons such as political or economic in nature. These projects are huge investments with long term benefits to the basin states which needs huge capital. According to Tesfaye (ibid) the different studied projects of ENTRO “...are awaiting funds for their implementation.” In terms of funding, because most of the basin states are economically poor, implementation would require external funding by institutions like the World Bank. In other words, politically speaking the projects are to be implemented when the Basin states agree and wants them. If they are not agreed, projects will not be implemented and ENTRO will not move an inch this is what has been happening in the Eastern Nile Basin. (Sallah Shazali and Sherif M.El Sayed, 15 March 2011).

In other words, lack of political will and continuous commitment on the side of the basin states especially downstream states and their reluctance is one challenge. Financial issues are also other problems that hinder the implementation of the projects on the ground. Lack of generally agreed and accepted legal principles that bind all the basin states is the major challenge the basin states have been facing.

Besides these projects prepared by ENTRO/ENSAP, the NBI has also developed a Benefit Sharing Framework together with the Socio-economic Development and Benefit Sharing (SDBS) project.<sup>12</sup> According to Helen Natu, the project Manger of the SDBS, “Benefit sharing in the NBI Context can mean anything that society recognizes as valuable, such as livelihood improvement, food security, gender equality, amelioration of ecosystems and

---

<sup>11</sup> Sherif M.El Sayed, PhD, Nile Basin Initiative (NBI), Eastern Nile Subsidiary Action Program (ENSAP), Eastern Nile Technical Regional Office (ENTRO), Senior Regional Project Coordinator. At his ENTRO Office on 15 March 2011 from 03:10-03:48

<sup>12</sup>NBI News. Benefit Sharing Framework [BSF] for Nile Basin Countries Developed. [http://www.nilebasin.org/index2.php?option=com\\_content&task=vie...](http://www.nilebasin.org/index2.php?option=com_content&task=vie...) Accessed on 1/14/2011 at 10:14AM.

biodiversity, aesthetics, ethics etc.”<sup>13</sup> The project as a process was “started in 2005 with the main objective to enhance the process of integration and cooperation to further socio-economic development in the Nile Basin.”<sup>14</sup> The idea is that,

*The SDBS is aimed at building a network of professionals from economic planning and research institutions, technical experts from both the public and private sectors, academics, sociologists, and representatives from civic groups and NGOs from across the basin to explore alternative Nile development scenarios and benefit-sharing schemes.*<sup>15</sup>

The framework has three phases as Phase I, Phase II and Phase III. While phase I as stage1 of the process covers the different concepts and principles of benefit sharing in the context of the Nile Basin the later two phases are to deal with the qualitative and quantitative aspects of benefit sharing in the Nile Basin as stage2 and Stage3 respectively. Put it in other terms, “the Benefit Sharing Framework “Phase II entails the stage2 which will give the qualitative significance of a broad range of benefit sharing scenarios in a visual format such that the positive sum of outcomes can be identified and potential “baskets of benefits” proposed, while stage3 on the other hand will give the quantitative magnitude of “basket of benefits scenarios” (and their related costs) under a range of modeled situations and portfolios.”<sup>16</sup>

In this context the NBI has undertaken workshops and has prepared a training manual for different stakeholders from the Nile Basin states to identify possible benefits (Woodhouse and Philips 2009). This framework, however, is in its early stage and not yet fully operational. Especially the last two phases are key in materializing the benefit sharing approach and will take time to make it real in a region where there exists a legal deadlock on the major water sharing issue. That is why in a workshop held in Kampala-Uganda from 8-10 June 2009, the participants “recognized the importance of having the CFA in place to facilitate the use of the SDBS and other SVP outputs.”<sup>17</sup>

---

<sup>13</sup> Sudan Vision Daily Online. Human Development: Nile Basin Development Forum 2008 (2). Edited by Alula Berhe Kidani. Posted on November 18, 2008. Available at: <http://www.sudanvisiondaily.com/modules.php?name=News&file=article&sid=40844> accessed on 2/9/2011 at 9:56

<sup>14</sup> Supra note 9

<sup>15</sup> NBI News. Socio-Economic Development and Benefit Sharing: Project Brief. [http://sdbns.nilebasin.org/index.php?option=com\\_content&task=view&id=16&Itemid=39](http://sdbns.nilebasin.org/index.php?option=com_content&task=view&id=16&Itemid=39) accessed on 1/14/2011

<sup>16</sup> Supra note 9

<sup>17</sup> ibid

### **3.2.3. Beyond the Nile: 'Non-Water' Relations-Beyond the River Benefits? The Link with the Nile Waters**

Bilateral relations and cooperation efforts in Eastern Nile Basin have had a long history. In fact, the different cultural and societal values shared between the Basin states make their relations, what Prime Minister Meles Zenawi calls it, a Catholic marriage in which divorce is unthinkable.<sup>18</sup> While relations on 'non-water'<sup>19</sup> issues have been existed for long in bilateral format they have also come through different ups and downs- sometimes hot sometimes cold. In recent years the bilateral relations between Eastern Nile Basin countries is growing faster.

Relations between Egypt and the Sudan have a long history with different faces. The former was a colonizer<sup>20</sup> of the later for long with Britain under the Anglo-Egyptian Condominium. Later on after independence both became neighbors as sovereign states by themselves but Egypt's dominance and strong influence on every aspect of Sudanese politics continue unabatedly through different mechanisms.<sup>21</sup> Nevertheless, cultural, religious and linguistic unity between North Sudan and Egypt (Mason, 2004:181) and the growing economic investment of Egypt in the Sudan are observable facts that further maintain such relations. In this regard, trade and investment between the two countries is growing fast. For instance until 2010 Egyptian investment in Sudan had reached 3.5 billion dollars and Sudanese investments in Egypt stand at 89.42 million dollars. (Global Arab Network, Friday, 20 August 2010). Furthermore, both states have established a joint Egyptian-Sudanese Committee- which has concluded a number of economic, cultural and political agreements. Politically also Egypt has for long worked to maintain a unified Sudan (Mason, 2004: 181) despite its recognition of a foreseeable independent South Sudan very soon on the eve of the referendum. (Sudan Tribune, Sunday 5 December 2010).

The non-water bilateral relations between Egypt and Ethiopia goes back to the old days on which had established by religious sisterhood between the Ethiopian Orthodox Church and

---

<sup>18</sup> Prime Minister Meles Zenawi, Interview with Egypt TV. The Ethiopian Herald. Meles accentuates win-win relations on Nile waters utilization. Thursday 15 July 2010. Vol.LXVI No 264.

<sup>19</sup>In this research The use of the concept of 'non-water' relations represents all types of interactions between the Eastern Nile riparians that are not strictly related with the Nile River. These includes issues in relation of political, economic (trade and investment), socio-cultural, health and so on.

<sup>20</sup> This should be clear in that it was not colonizing the state in the classic sense but through the Anglo-Egyptian Condominium which was the creation of the British who controlled Sudan (the Nile) and through it Egypt.

<sup>21</sup> For details see Ali Abdala Ali. The Egyptian Role in Sudan's Development and Underdevelopment 1889-2010. Sudan Tribune. Published Sunday 27 June 2010. Available at: <http://www.sudantribune.com/The-Egyptian-role-in-Sudan-s,35500>

the Coptic Church of Egypt-which is based on a shared religious dogma and rituals. Furthermore, until 1958 the patriarch of the Ethiopian Church was ordained by the church in Egypt. In 1958, however, Ethiopia's church "Holy synod appoints the patriarch and other church leaders" (Yacob, 2007:198) independent of the Coptic Church of Egypt. Even today the religious ties between these two churches and the Islamic community between the two countries are growing in good faith (Mostafa 21 December 2010) as are social and cultural relations. This is also confirmed by an official from the Ministry of Foreign Affairs of Ethiopia.

Economic relations between Egypt and Ethiopia are also booming. According to Seyoum Mesfin, ex-minister of the Ethiopian Ministry of Foreign Affairs, "the volume of trade exchange between the two countries had been growing by 20 percent." (The Ethiopian Reporter, Saturday, 03 April 2010). A number of Egyptian companies are investing in Ethiopia in different economic sectors such as agriculture, manufacturing, service and so on. In this context, "the volume of Egyptian investment in Ethiopia is expected to increase to more than 1.1. Billion [US Dollar]" (Al-Ahram, 30 December 2010- 6 January 2011). The National Bank of Egypt is also investing in Ethiopia and has granted the lease of 22,000 hectares of land in Afar regional state to invest in agriculture. (Capital, 14 April 2010). Elswedy Cables; electric equipments producing company is also operating in Ethiopia. A new company- Egyptian Company for Chemical Industries had also to establish Tobacco Company in Ethiopia. (The Daily Monitor, January 12, 2011). In terms of the health sector both countries have good relations and Egypt, for instance, is sending a medical convoy every three months since 2009. (Mostafa, 21 December 2010).

In addition, both Egypt and Ethiopia have established a Joint Ministerial Commission leading to a number of visits being made to Ethiopia by higher officials and business people from Egypt in recent years. On December 2009 a delegation lead by Prime Minister Ahmed Nazif of Egypt with other five ministers paid a visit to Ethiopia. Aboul-Ghoit Foreign Minister of Egypt with Fayza Abul-Naga Minister of State for International Cooperation has also made a visit during the Third Ministerial Commission Meeting held in Ethiopia which led, on March 2010, to the signing of a number of Memoranda of Understanding on different areas. These includes on areas such as health, cultural arts and cooperation, agricultural cooperation, exploration, importation and transit of live animals and beef meat, protocol in scientific and

technological cooperation, cooperation in the field of information, cooperation in the field of environment, and also agreement on economic development and technical cooperation. (MoFA Egypt Desk Officer, 12 January 2011).

In terms of political relations, the two countries have for long remained distant from each other until the signing of the 1993 Framework for General Cooperation. This is because Egypt's indirect involvement in the politics of the Horn of Africa with the intention of seeing a divided and weak Ethiopia has remained unchanged. The calculation being, if Ethiopia is weak and divided as a result of unrelenting conflict and crisis, it will not be able to turn its efforts to development activities so that it will not utilize its water resources. As Medhane, (2002:170) keenly observes it, "...peace in Ethiopia has become synonymous with war against Egypt as understood by Egyptian leaders." Therefore, Egypt's involvement in the Horn of Africa has proven as obstructionist in terms of not to see a peaceful and stable Ethiopia.

Very recently, Shimeles Kemal, State Minister of the Ministry of Communication of Ethiopia, told Bloomberg News that, "We [Ethiopia] have solid evidence that Egypt is giving covert assistance to rebel groups."<sup>22</sup> (November 25, 2010). In interview with Reuters on November 23, 2010, Prime Minister Meles Zenawi vowed that "Egypt could not win war with Ethiopia over the Nile and that Cairo was supporting rebel groups in an attempt to destabilize his nation." (Reuters, Thursday, 25 November 2010).<sup>23</sup> But this was dismissed by the then Egyptian officials like Ahmed Aboul-Ghoit, Foreign Minister and President Hosni Mubarak. President Mubarak told Al-Ahram newspaper that, Ethiopia's accusation "is the first time we [Egyptians] hear that we [Egypt] support in any country. This is not something we do with any nation and this is not our form of conduct."<sup>24</sup> However, if the stones in Cairo had had mouth they could speak the reverse by confirming Egypt's incessant support for anti-Ethiopia forces or groups fighting the government of Ethiopia since the late 1950s.

---

<sup>22</sup> William Davison, Ethiopia Says it has Evidence that Egypt Supported Rebel Movements <http://www.bloomberg.com/news/2010-11-25/ethiopia-says-it-has-evidence-that-egypt-supported-rebels.html> last visited on 2/7/2011

<sup>23</sup> Reuters. Thu Nov 25, 2010. Egypt's Mubarak Dismisses Ethiopia Rebel Claim. Available at: <http://af.reuters.com/articlePrint?articleId=AFJOE6AO0BZ20101125>

Accessed on 11/26/2010 at 9:33

<sup>24</sup> *ibid*

The bilateral relations between the Sudan and Ethiopia have also a long history with both faces of cooperation and conflict. They share common people with common language and culture along their long borders. Politically speaking their relation for long was characterized by mutual intervention, suspicion and mistrust. Their bilateral relations, however, changed after the Ethio-Eritrea so-called border war. Observing the political dynamic in the Horn of Africa, Medhane (2004:120-121) noted that, “the Ethio-Eritrean war (1998-2000) [have] heralded the beginning of long-term bilateral cooperation between Sudan and Ethiopia.” Both countries are also members of the Inter-Governmental Authority on Development (IGAD). This has being cemented later on with the ever growing development and expansion of trade and other political relations between these two countries. But this does not mean that their relation is absolute on all sectors and affairs beyond the water. For instance, religious fundamentalism is what Ethiopia is following curiously where the nature of the Government of Sudan is believed to be exporting in the Horn of Africa at large.

Nowadays there is a very strong economic and political relations between these two bordering countries but differences remain over the Nile waters. They have signed a series of agreements in “...areas of customs, capacity building, cultural exchange, financial institutions, cross-border security, trade, investment, defence, agriculture as well as culture and tourism” (Addis Fortune, 04/27/2009, MoFA Sudan Desk Officer 12 January 2011). In recent years, their trade relations is cemented by Ethiopia`s import of the majority of its oil needs from the Sudan. The oil deal was first signed in June 2001 and comes amid increasing trade between both countries. (IRIN Africa, 27 March 2003).<sup>25</sup> In fact, some 80% of Ethiopia`s oil consumption comes from neighboring Sudan based on the two governments special agreement, which allows Ethiopia to purchase Sudan`s oil at lower prices than the global oil market (Sudan Tribune, Wednesday 16 June 2010<sup>26</sup>, MoFA; Sudan Desk Officer, 12 January 2011).

Politically Ethiopia has also strong relation with South Sudan. Following the Comprehensive Peace Agreement of the Sudan that sets different principles to solve the problem in South Sudan, Ethiopia has strengthening its ties with the would be independent state of South Sudan anticipating the result of the referendum held on January 2011. (MoFA; Sudan Desk Officer

---

<sup>25</sup>IRIN News. Ethiopia: Oil Imports From Sudan Standstill. Available at:

<http://www.irinnews.org/PrintReport.aspx?ReportID=42297> accessed on 1/21/2011 5:49 AM

<sup>26</sup> Sudan Tribune, June 15, 2010 Ethiopia imports \$1.2 Billion fuel from Sudan, Djibouti. Available at:

<http://www.sudantribune.com/Ethiopia-imports-1-2-Billion-fuel,35400> Accesses on 1/21/2011 5:42AM

12 January 2011). Regarding the choice of South Sudan; secession or unity, Ethiopia has made clear that it is the decision of the people of Southern Sudan. Unlike Egypt which for a long time had supported unity of the Sudan Ethiopia`s position is not openly stated (ibid). Nonetheless, Ethiopia has maintained its good relations with the national government of Sudan and the Government of South Sudan. Furthermore, Ethiopia is also involving as a member of the post-conflict reconstruction committee established by the African Union. (The Ethiopian Reporter Saturday, 23 May 2009).

Generally speaking the bilateral relations on specific ‘non-water’ related issues in Eastern Nile Basin are growing. This is true of especially Eastern Nile nations’ relations in terms of the economic sector such as trade and investment as well as cultural exchanges which is growing. This is true for all Eastern Nile nations as Egypt is also increasing its investments in both Sudan and Ethiopia in different areas. Their political relations, however, seems lagging. Notably Egypt`s under cover political moves with its obstructionist agenda against both Ethiopia and the Sudan is an observable and repetitively stated undeniable fact. At this point in time, relatively speaking, the good political relations in Eastern Nile Basin are the relation between the Sudan and Ethiopia. Now the question that one would like to answer is whether these ‘non-water’ bilateral relations are linked with the issue of the Nile waters.

According to Engineer Rashid Mohamed Rashid, Minister of the Ministry of Trade and Industry of Egypt, the basic argument behind Egypt`s overall attempts to strengthen and widen economic and trade is “within the [general] framework of enhancing cooperation between Egypt and the Nile Basin countries.” (The Daily Monitor, Wednesday, January 12, 2011). In fact following the decision of the seven upstream states to sign the CFA-during the extra-ordinary meeting of the Nile-COM in Sharma El-Sheikh in April 2010, Egypt`s different Ministries were busy in visiting one Nile basin state after the other to strength bilateral ties and relations. As far as Egypt is concerned, ‘Enhancing cooperation, strengthening trade and economic relations’ with upstream states has become the hymn of its officials.

As noted by some scholars such as Yacob Arsano, “Egypt`s move [of investing in Nile Basin Countries] should not be any different” of a normal investment dealing. He, nevertheless, stated that because of such investments, upstream states can “never compromise the

principles of the negotiations [of the CFA].” (Capital, Monday, 20 September 2010).<sup>27</sup> The idea is that this massive investment move of Egypt has a hidden agenda and seems intended to increase the bargaining position of Egypt in the basin. According to an official in the Ministry of Foreign Affairs of Ethiopia, Egyptian investments have been on the increase in an attempt to divide and rule the Nile Basin nations so that the CFA would not materialize. (MoFA; Egypt Desk Officer, 12 January 2011). An officer in the Embassy of Egypt to Ethiopia, however, argued that, this Egypt`s investment is part of its overall cooperation efforts with countries on trade and investment. Ambassador Tarek A. Ghoneim of Egypt to Ethiopia also vowed that investment of Egyptian companies in Ethiopia transcends the Nile issue. (Capital Sunday November 7, 2010). But the concern is that Egypt is also trying to diversify the issue by diverting the attention of the people as well as the governments of the host states from the issue of the Nile waters to other matters in the name of economic development. In other words, the aim is to switch basin states from a water sharing discussions on the Nile to different issues so that Egypt can maintain the 1959 Agreement which could be nullified by the CFA. This is demonstrated by Egypt`s ex-president Hosni Mubarak`s affirmation that, “economic cooperation and development was the surest way to raise the standards of living and reduce tensions in the Nile Basin Region.”(Al-Ahram Weekly Online 26 February- 3 March 2004).<sup>28</sup>

Thus, Egypt`s direct and indirect involvement in the Horn of Africa is linked with the Nile issue. As noted by Medhane (2004) “Egyptian politics have been structured around its desire to control the headwaters of the Nile, and therefore sought to isolate Ethiopia and prevent an alliance of the states in the Horn from emerging to challenge its sub-regional hegemony.” For such a reason the tension because of the Nile is not yet eased.

When it comes to Egypt`s involvement in the Sudan, say it economic or political, the perception of the Sudanese elites is that Egypt`s involvement in the Sudan is not free from the Nile waters. According to Ali Abdala Ali, Egypt`s over all involvement in Sudan is designed to make sure that strong government that challenges Egypt`s hegemony on the Nile Basin

---

<sup>27</sup>Capital, Monday, 20 September 2010. “Never Compromise the principles of negotiations for the sake of investment.” Prof. Yacob Arsano. Reported by Binyam Tamene. Available at: [www.capitalethiopia.com/index.php?vi...](http://www.capitalethiopia.com/index.php?vi...) Accessed on: 1/15/2011

<sup>28</sup> Gamal Nkrumah. It must be something in the water. 26 February - 3 March 2004 Issue No. 679. Available at: <http://weekly.ahram.org.eg/2004/679/eg3.htm> accessed 16/01/ 2011

does not emerge. (Sudan Tribune, Sunday 27 June 2010)<sup>29</sup>. And very recently also anticipating South Sudan's independence, Egypt is heading its bet and is investing there. This is nothing except Egypt's move to make sure that the secession of South Sudan will not infringe on changing the 1959 Agreement between Sudan and Egypt.

However, Ethiopian-Sudanese relation goes beyond the Nile waters as they share a long border and have an agreement in different areas. Their 'non-water' relations does not necessarily to determine their Nile relations. According to the official in the Ministry of Foreign Affairs of Ethiopia, the non-water relations with Ethiopia are not directly linked with the Nile waters but still they may have their own impact on water issues. (MoFA; Sudan Desk Officer, 12 January 2011). Therefore, their relations are more than the water but their non-water relations has its own repercussion on their relations over the Nile waters, but is minor in its impact.

Therefore, 'non-water' relations in the Eastern Nile Basin have different faces and implications. That is, 'non-water' relations between Ethiopia and Sudan are rarely linked with the Nile waters. But this is not actually the case in Egypt's non-water bilateral relations with both Sudan and Ethiopia. In one way or another Egypt's bilateral dealings with other Nile riparian states is very much linked with the waters of the Nile. In other words, strengthening economic ties and increased investment in upstream such as Ethiopia or Sudan is perceived as a mechanism to increase bargaining positions and to diversify issues of negotiation rather than further integration between the basin states beyond the river. Egypt's covert political involvements in the Horn of Africa is obstructionist in nature with the aim of preventing the emergence of strong governments in both Sudan and/or Ethiopia that would prioritize the water sector and challenge Egypt's hegimomial discourse regarding the Nile River. For such a reason the political costs because of the river are not yet minimized and tensions are not eased but goes the other way. This will be made clearer when one looks at the policies, positions and contradicting unilateral as well as multilateral strategies of the basin states which is the concern of the next chapter.

---

<sup>29</sup> Supra note 21.

## CHAPTER FOUR

### 4. WATER AND BENEFIT SHARING POSITIONS, NILE POLICIES AND STRATEGIES OF EASTERN NILE BASIN STATES

To have a clear image of what is on the ground in the Eastern Nile Basin, it is important to highlight the different Nile policies and related projects of the Basin countries. Thus, this chapter is concerned with the divergent positions of the Eastern Nile states regarding the different water and benefit sharing arrangements. This is mainly because their water policies and hydraulic projects on the Nile are based on the position they hold on the River. In addition, an attempt is will be made to investigate the different strategies that the Eastern Nile Basin states adopt both in negotiations through multilateral and unilateral approaches in terms of maintaining their respective interest on the Nile which reflects their positions and policy preferences.

#### 4.1. Egypt

##### 4.1.1. Egypt: Nile Policy and Position

Egypt`s Ministry of Water Resources and Irrigation is an institution charged with formulating water policies of Egypt. The Ministry has developed a twenty years water policy since 1997 based on three pillars until 2017. (ICID, 2005:13). These pillars are: maximizing available water resources-optimal utilization, focusing on water quality and preventing pollution, and developing water resources-cooperation with upstream states of the Nile to develop new water resources/. (ibid, Mason 2004, Alnaggar, 2005:55). Among the three policy pillars the first and the second pillars are the concerns of this thesis. The second pillar is not dealt with in detail because in orientation it concerns domestic policy with minimal linkage with the Eastern Nile Basin. Optimal utilization of the available water resource is, in fact, a national policy of Egypt (Mostafa, 21 December 2010) but with tremendous spillover effect at the Basin level at large.

The implementation of the optimal utilization of the available water resources as a key policy pillar was started in 1997 with plans for its accomplishment by 2017. To achieve this goal, Egypt is implementing grandiose desert reclamation projects in South-West and North-Eastern part of the country. These mega hydraulic projects are also known as the New Valley Project-“which are centralized in two areas namely Southern Egypt and Suez Canal and

Sinai.”<sup>30</sup> The project in the South is also called Toshka and the one in north in Suez and Sinai is known as Al-Salam Project. Both projects, however, have been criticized for diverting the Nile waters out of the natural basin. (Tesfaye, 2001:51, Phillips et al 2006). From the Egyptian perspective, however, these two parts of Egypt are parts of the Nile Basin. To back up this Egyptians argued that “they have satellite images and archeological findings proving both places are located on the Nile Basin” (Mostafa, 21 December 2010). Be it as it may, Egypt is undertaking these projects and is working day and night to accomplish all as planned by 2017 despite a number of opposition from upstream states, particularly Ethiopia.

According to Egypt State Information Service, “these Mega Projects will help create new urban communities outside the valley in the depth of the Egyptian desert.”<sup>31</sup> These include the creation of new urban centers with all necessary facilities and also the establishment of new industry, tourism and agricultural sites. In relation to the land reclamation project, “with the completion of the Southern Valley [Toshka] and the North Sinai [Al Salam] development projects, Egypt plans to raise the cultivable area from 3.4 million hectare to 4.6 million hectare by 2017.” (Postel, 1999: 71-72 cited in Yohannes, 2008: 38). By so doing the New Valley Project is aimed at resettling some seven million people. (Swain, 2002: 300).

The question to be answered is, yet, where the water will come from to irrigate this amount of land, to quench millions of people to be resettled and to meet the water demands of the planned industries to be erected? Actually, these projects are designed to pump water from the Nile. To this end, “the Mubarak Pump Station, the largest in the world, according to the Guinness Book of Records will pump up to 5.5 km<sup>3</sup>/ year of Nile water to make the desert green.” (Mason, 2004: 145). However, the un-answered question still is, whether the Nile have the needed amount of water for these projects.

According to the Egyptian stance, for projects are justified “by *international conventions* between Egypt and its *neighboring countries*.”<sup>32</sup> (emphasis mine). What the Egyptians are saying is that for these projects Egypt “will not withdraw more than its share specified in the 1959 Nile Agreement [with Sudan].” (Waterbury and Whittington, 1998:157, Mason, 2004: 144, Mostafa, 21 December 2010). Nevertheless, the ongoing mega projects of Egypt are

---

<sup>30</sup> Egypt State Information Service. Mega Projects. Available at: <http://www.sis.gov.eg/en/Story.aspx?sid=2313> accessed on 2/14/2011 at 2:51 pm

<sup>31</sup> ibid

<sup>32</sup> ibid

showing that Egypt's position regarding the 1929 and 1959 agreements is unbending. In deed from the Egyptian stance the country's 'historic rights' discourse is not negotiable. (Reuters, 27 July 2009). In other words as viewed by Yohannes (2008: 38), "[i]t [Egypt] continues to view its 55.5 bcm[billion cubic meter] share, per the 1959 agreement with the Sudan, as sacrosanct." Therefore, the Government of Egypt's position of saying the water needs of the projects is based on Egypt's international agreements with its '*neighboring countries*' is problematic and erroneous as the only signatory Nile riparian state of the 1959 Agreement was the Sudan only-where the agreement have no acceptance from the upstream perspective. As noted by Yohannes (ibid), "common sense dictates that a bilateral agreement on a sensitive and crucially important international river system [the Nile] is likely unacceptable to the other eight [upstream] riparian states." This is mainly because, "the division of the Nile River waters on the basis of the 1929 and 1959 agreements is neither equitable nor reasonable at present." (Phillips et al, 2006: 77).

Therefore, Egypt is against any new water sharing agreement that do not recognize the old bilateral or colonial agreements that guarantees it to monopolize the Nile waters against the interest of upstream states especially Ethiopia; the source of some 86 percent of the Nile flow. In this regard, despite the Cooperative Framework Agreement (CFA) of the Nile was negotiated for more than twelve years to change the old unfair regime by a new one based on the principle of equitable and reasonable utilization, Egypt has rejected it. Egypt through the then Minister of Ministry of Irrigation and Water Resources Mohamed Nassr Eddin Allam reiterate that Egypt is not signing the CFA because "the main hurdle is water security and the historic rights of Egypt and Sudan." (Reuters, 27 July 2009). What Allam referring to was, an old colonial agreement which is rejected and nullified by upstream states who signed the CFA.

As discussed in the previous chapter, the main bone of contention in the CFA that divided the Nile Basin nations was Article 14(b). Under this article Egypt claimed to maintain the status quo through the newly born '*water security*' concept so that the 1929 and 1959 agreements would be accepted by upstream states via a backdoor. This is evidenced by the speech of the then Water and Irrigation Minister who told reporters that Egypt rejects any new water sharing agreement on the Nile "that would deny it [Egypt] a right to 55.5 billion cubic meters of water a year and its veto powers over projects [of upstream states] that would harm its allocation" as per previous agreements. (ibid). Looking at its unreasonable fear and mistrust

to cooperate with upstream states notably Ethiopia by accepting the CFA and its adamant stance on past colonial or bilateral as well as non-basin wide agreements of 1929 and 1959, one is not mistaken if argued Egypt is paranoid and further Egypt is an Ethiophobic<sup>33</sup> state.

What Egypt wants, instead of signing the new agreement, is the continuation of ‘dialogue’ and ‘discussion’ on the issue until ‘agreement’ is reached based on ‘consensus’ between upstream and downstream states. (Capital, 7 November 2010). Furthermore, Egypt proposed “a new initiative ... [of] launching the Nile Basin Commission through a political declaration while continuing to negotiate the pending articles (mainly article 14(b)) in the draft CFA.”<sup>34</sup> In other words, what Egypt wants is not a new water sharing regime on the Nile Basin but the establishment of the Nile Basin Commission that will benefit riparian states by enhancing cooperation and by benefiting from joint development projects. (Mostafa, 21 December 2010). This proposal of Egypt, in one way or another, is based on the concept of Benefit Sharing-the focus should be not the water per se but riparian states must see opportunities also to get benefits beyond the river. By so doing, if the states were agreed on what Egypt proposed they will invest on joint development projects of the Nile basin states such as those of ENSAP/ENTRO projects and pending the major issue on water sharing based on equitable and reasonable utilization.

One could also relate this Egypt`s position with its desert reclamation projects of Toshka and Al Salam which are planned to be accomplished by 2017. One could then ask, would it be a coincidence that Egypt`s water policy of completing these projects and international

---

<sup>33</sup> Egypt is an Ethiophobic state. It is a country which is permanently characterized by Ethiophobia. This is mainly because the country is fearful of Ethiopia. It perceives any agreement with Ethiopia on water sharing will leave her security on the hand of Ethiopia. Egypt`s fear I think is, may be, in fact, emanated from the commonly and repeatedly stated dictum “*He who controls the Nile controls Egypt.*” (Halford, 1936 in Philips et al, 2006:77). In other words, Egypt perceives that new water agreement with Ethiopia on equitable and reasonable manner will allow Ethiopia to do anything it wants on the Nile so that Egypt will beg for water and controlled by Ethiopia. Furthermore, from the Egyptian point of view “Ethiopia`s primary concern was inflicting harm on Egypt, rather than benefiting from the Nile water.” (Badr, 2009: 57). This view is, however, erroneous as the intention of Ethiopia is not harming Egypt but utilizing the waters of the Nile for socio-economic development-without which the country`s dream of food security and development would remain a pipedream. As Prime Minister Meles Zenawi, told journalists in a press release, “We [Ethiopia] would work on the Nile to ensure Ethiopia`s interests not to anger Egypt.” (The Ethiopian Herald, 1 June 2010). In my understanding Egypt`s mistrust to cooperate with Ethiopia by dismantling the unfair status quo that bases itself on past, colonial, bilateral and non-inclusive agreements should not be interpreted in no way other than a perception of fear and phobia. Egypt do develop, therefore, an Ethiophobic way of looking the Nile and holding position which will take it nowhere but in persistent fear and mistrust.

<sup>34</sup>NBI News. Agreement on the Nile River Basin Cooperative Framework Opened for Signature by upstream countries. Available at: [http://www.nilebasin.org/index.php?option=com\\_content&task=view&id=165&Itemid=1](http://www.nilebasin.org/index.php?option=com_content&task=view&id=165&Itemid=1) accessed on 12/16/2010.

cooperation with upstream states of the Nile remain as pillars till 2017? One could also pose a question, why Egypt requested the United States of America to delay the referendum of South Sudan for another four to six years rather than conducting it on January 2011 as planned.<sup>35</sup> In other words, Egypt was pressuring the USA to delay the referendum in South Sudan if possible until 2017 a year where Egypt is planned to accomplish its job of controlling the Nile waters by mega projects of Toshka and Al Salam. One could also speculate that Egypt was working to complete the construction of the Jonglei Canal which was stopped and interrupted by the attack from the Sudan People`s Liberation Army (SPLA) in 1983. This is because as explained in the International Crisis Group (ICG) report of May 6, 2010, “[t]he Jonglei Canal ... remains a project of interest for Cairo, though plans remain on hold” (ICG, 6 May 2010:11 eclipse mine).<sup>36</sup> It is also worthy to mention here that “[i]n 2008 Sudan and Egypt agreed to take up construction again to finish the [interrupted Joneglei] canal. (Granit et al, 2010: 31 citing Mustafa 2008).

In any case, international cooperation with upstream Nile states is the third policy pillar of Egypt. As discussed in the previous chapter, until the late 1990s cooperative attempts on the Nile were established to maintain the interest of downstream Egypt at the expense of the needs and interests of upstream states. Nonetheless, since the establishment of the NBI in 1999 upstream states<sup>37</sup> have become active and have begun to play a crucial role with the intention of shifting the Nile Basin from the unfair status quo to a fair one where all the Basin states are benefiting from the common Nile water. But this was perceived as a challenge because Egypt is a nation that wants to perpetuate the status quo.

As far as Egypt is concerned, international cooperation as a policy pillar is based more on its policy of supply side management of water with the objective of increasing basic water

---

<sup>35</sup> As reported by the Egyptian newspaper Al Masry Al Youm quoting WikiLeaks “Egyptian officials have been pressuring the United States to delay a referendum on South Sudanese independence” for four to six years. The news with details is available at: <http://www.almasryalyoum.com/en/news/exclusive-egypt-requested-delay-sudan-referendum-according-new-wikileaks-cable> last visited on: Accessed on 2/16/2011 at 4:43

<sup>36</sup> According to this ICG *Africa Report of N°159, 6 May 2010 Sudan: Regional Perspectives on the Prospect of Southern Independence*, the Government of Egypt is improving its image in the South and has pledged a number of promises on different fields to work with the newly born African State. This all is about the Nile and Egypt seemingly is working in South Sudan to persuade the later not to join the position of the Upstream states and remained abide by the 1959 Agreement. The full analysis is available on pp. 9-12 of the report.

<sup>37</sup> In this context the role Ethiopia has been playing is worth to mention. Unlike its previous passive experience in involving in Nile based cooperation attempts (perceiving them all as irrelevant and tools of perpetuating the status quo) Ethiopia become an active founding member and active in the NBI. By so doing the country is able to work together with other upstream states to change the unfair status quo on the Nile to share and benefit from the Nile waters in equitable and reasonable manner.

supply as a result of negotiations with upstream states of the Nile (Mason, 2004: 151). According to Alnaggar (2005: 67), Vice-president of The National Water Research Center of Egypt, Egypt's cooperation with upstream states under the historic NBI is based on the need for the "[d]evelopment of new water resources." That is, Egypt does not want to lose its domination of the Nile waters via multilateral agreements by changing the status quo and adopting a new water sharing arrangement. Rather, as keenly observed by Mason (2004: 168), "Through cooperation Egypt seeks to consolidate the present amount of water (formulated in the Agreement of 1959) and if possible to increase the amount of water available (eg. Jonglei Canal)."

Egypt, therefore, needs an institution where the Nile riparian states are present and cooperating on multilateral projects that do not reduce the Nile water reaching Egypt. This is evidenced by its proposal to establish the Nile Basin Commission pending the negotiation on the CFA. In other words, Egypt is very positive about the benefit sharing arrangement employed in Eastern Nile and if Ethiopia is using the Nile waters to generate hydroelectric power devoid of touching the 1959 Agreement. Egyptian officials are very selective while speaking about cooperation on the Nile and upstream water developments. For instance, Ambassador Tarek A. Ghoneim of Egypt to Ethiopia said that, "We [Egypt] have no problem to understand that Ethiopia needs energy and that it has to use its water resources to get power. We are even willing to contribute to Ethiopia to help it meet its power demands. [And] we are also ready to buy Ethiopia's power." (Capital 7 November 2010). The indirect message is that, Ethiopia can use the Nile waters for hydropower purpose only not for irrigation. Nonetheless, this is also rhetoric not practical as Egypt is always criticized for being reluctant in the implementation of joint multipurpose projects through ENSAP/ENTRO.

#### **4.1.2. Egypt: Strategies**

Egypt has been making use of different tactics and strategies in order to maintain its grip and perpetuate the status quo on the (Eastern) Nile. Sustaining the uninterrupted flow of the Nile waters has remain the policy objective of Egypt since antiquity and to this end it has used tools ranging from failed direct military conquests through proxy wars to 'multilateral approaches' and 'negotiations' with upstream states. Until the second quarter of the 19<sup>th</sup> century Egypt had tried to subjugate upstream states notably Ethiopia militarily under its

imperialist ambition of ‘uniting the Nile valley under the green flag of Egypt.’ (Jesman 1959 quoted by Wondimneh, 1979: 8). For instance, “sixteen major Egyptian-Ethiopian conflicts were recorded between the 1832 Gedarefe war and the 1876 Battle of Gura” (Yacob, 1996: 40) where Egypt offensively clashed against Ethiopia with the aim of extending its borders to the south and controlling the Nile from its source. (Zerihun 2007). This Egypt’s ‘imperialist aspiration’ and expansionist move, however, remained as a cloud-cuckoo land of its leaders. Nevertheless, Egypt’s different strategies of assuring the uninterrupted flow of the Nile waters remained alive unlike the humiliating defeats it swallowed in battle fields-the last in Gura in 1876. Currently, “In order to achieve a consolidated control over the [Nile] water, Egypt utilized several approaches ...to prevent upstream riparian states from” utilizing the Nile waters (Cascao, 2008b). Some of these strategies or tactics Egypt has used are the following.

***Cooperation as strategy:*** to maintain the status quo and perpetuate the zero-sum-game on the Nile Egypt has made use of cooperative schemes as its strategy since the 1960s. To this end it had been “trying to bring upstream countries in line with its wishes.” (Yacob, 2007:225). The so-called previous cooperation attempts such as Hydromet, Undugu and TECCONILE were established by the initiative of Egypt for such a purpose. Even within the existing transitional basin wide cooperative arrangement (the NBI) Egypt has been trying hard to maintain the old regime that makes her the absolute beneficiary of the Nile at the cost of other riparian states. As keenly observed by Yohannes (2008: 53),

*Egypt’s regional posturing lacks the capital of sincerity. On the one hand, it appears to accept the notion of equitable utilization of Nile waters by promising to enhance its water resources through the promotion of efficiency, conservation, recycling, and desalination[which would be realized as a consequent of cooperation]. On the other hand, it seeks to perpetuate the inherited water regime.*

In multilateral negotiations on the Nile Egypt has been using different approaches of maintaining the status quo. These includes for instance: Egyptian leaders and negotiators as well as elites from the academia and others time and again capitalizing on Egypt’s heavily dependence on the Nile waters. This argument includes that Egypt has no any other water resource and the availability of other water resources including rain in upstream states. (Hassan and Rasheedy, 2007: 27). They further argue that, “with the exception of Egypt and

Sudan, none of the other Nile Basin countries heavily depends on the Nile waters<sup>38</sup>.” (Ayman 2001 cited by Mason, 2004:189). In line with this, Egypt argues that any cooperation attempts on the Nile with upstream states should be based on the acceptance of this Egypt`s heavy dependence on the Nile. Hefny and Amer (2005: 47) propagate that, “due to Egypt`s historical dependence on the Nile, cooperation in the Basin needs to be based on the acceptance of Egypt`s acquired rights.”

Thus, in negotiations Egypt has also “maintain its argument in favor of the “non-harm principle” based on ‘acquired rights and prior use.’” (Cascao, 2008a: 9). Furthermore, the incorporation of ambiguous terms and concepts has been part of Egypt`s strategy.<sup>39</sup> Notably, the inclusion of the new concept of ‘water security’ in the CFA; which is regarded as an attempt by Egypt to perpetuate the unfair status quo (Cascao 2008a, Dereje 2010a) is a good example. Besides, what Egypt wants is not the solution of the Nile problem but the process. (Medhane 2010). By so doing Egypt is using delaying tactics to finish its homework of creating *fait accompli* projects to deny upstream states access to the Nile waters.

***Unilateral Hydraulic Projects as Strategy of Creating Facts on the Ground:*** as mentioned in the previous pages, part of Egypt`s first policy pillar of optimal utilization of the available water resources Egypt is implementing mega hydraulic projects. These projects also known as New Valley Projects of Toshka and Al Salam are diverting the Nile waters out of its natural basin. Be it as it may, Egypt argues that these mega projects are based on its Nile share as per the 1959 Agreement. Needless to state, Egypt is undertaking these projects to use them as “powerful card for future negotiation” (Mason, 2004: 204) of water allocation on the Nile. In other words, “Egypt`s ambitious move can, nonetheless, be interpreted with certainty that is designed to create facts on the ground prior to the settlement of outstanding water reallocation issues with other Nile riparian states, particularly Ethiopia.” (Tesfaye, 2001:58). This is intended to perpetuate the status quo on the Nile by complicating the issue further making it worse for upstream states in future negotiations.

---

<sup>38</sup> In his recent interview with a local newspaper in Ethiopia, Egyptian Ambassador to Ethiopia, Tarek A. Ghoneim capitalized this Egypt`s dependency on the Nile by saying: “... Ethiopia has many sources of water, it has good rainfall, while Egypt depends entirely on the Nile. That is [the Nile] 95 percent of our water sources. ... apart from the Nile, we only have desert.”

<sup>39</sup> The upstream-downstream divide in the Nile negotiations on defining terms was most witnessed. Defining concepts like “Nile River Basin,” “Nile River System” and “water security” has been the most controversial ones that Egypt has tried to define it ambiguously in such a way that fits her interest

***Objection to international funding of upstream hydraulic projects:*** what has made Egypt confident for long time is that Ethiopia would not utilize its water resources intensively due to the latter's poor economic condition hampered by weak policy and political instability. Egypt was also sure that Ethiopia could not secured international finance to invest in huge water projects. Whenever Ethiopia knocks the doors of international funding institutions to finance huge hydraulic projects it is the Egyptians to object it claiming the project is against their national interest. To this end, Egypt's "...diplomacy geared toward denying upstream states [particularly Ethiopia] access to international financial resources." (Yohannes, 2008: 53). For instance, as observed by Swain (2002: 298), in the 1990s, "Egypt successfully blocked the African Development Bank from assisting Ethiopia financially with its proposed water development projects" on the Nile. This Egypt's strategy has partially worked because it had also policy backing of international financial institutions. For example, the World Bank's Operational Policy (OP7.50)<sup>40</sup> declared that, the Bank would fund projects on 'international water ways,' if there is consensus and agreement on the project between all the states sharing the water. In other words, the Bank did not fund any water project on an international or transboundary water if one of the basin states oppose the project as Egypt has been doing for long in the (Eastern) Nile Basin. In this regard in the mid-1970s Egypt was also successful in halting the proposed Arab funding and establishment of Arab Authority for Agricultural Investment Development (AAAID) focusing on the Sudan which aimed at "...convert[ing] the Sudan into the granary of the Arab world." (Yohannes 2008, Sudan Tribune<sup>41</sup>, 27 June, 2010). This all Egypt's diplomatic move of objecting international funding of upstream states is nothing but a strategy of maintaining the status quo on the Basin.

***Divide and Rule the Entire Nile Basin as Strategy:*** Egypt has also used the geographic nature of the Nile Basin System and the relatively large number of riparian states as an opportunity to meet its needs and maintain its grip on the Nile. The main target of Egypt in this regard has been alienating Ethiopia from the rest of the upstream states by favoring Nile riparian states of the Great Lakes Region through the White Nile. One of the major tactic it has been using is emphasizing on bilateral relations with the Nile Basin states. It have

---

<sup>40</sup>For details of the World Bank's policy see OP 7.50 - Projects on International Waterways available at: <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:20064667~menuPK:64701637~pagePK:64709096~piPK:64709108~theSitePK:502184,00.html> accessed on 2/17/2011 at 2:17 pm

<sup>41</sup> For details see supra note 21

cooperated with its upstream states of Sudan, Uganda, Kenya, Tanzania<sup>42</sup> on various water and ‘non-water’ related issues unlike its involvement in Ethiopia-where the emphasis is on trade and investment.

In this regard, Egypt has used the long stayed, “complacency of the White Nile riparian states” (Tesfaye 2001) to serve its interest. More recently also following the decision of upstream states to sign the CFA and its signing by five upstream states, Egypt has running fast to persuade the remaining two upstream states (D.R. Congo and Burundi) not to sign the CFA. In the visits of the leaders of the two countries in Cairo, Egypt has promised the leaders to cooperate on various issues including water and to boost their bilateral relations.<sup>43</sup> Nonetheless, Burundi has signed the CFA at the end of February 2011 and Democratic Republic of Congo is expected to sign in the unspecified future before 14 May 2011.<sup>44</sup> In any case, this divide and rule strategy of Egypt was meant to break up upstream states by favoring some against the other. It was supposed to flesh out their respective individual interest so that they could not become together as one and contesting Egypt of changing the unfair Nile regime.

***Military Threat as Strategy:*** Both Egyptian leaders and elites in international institution or the academia are known for their fear mongering scarcity of water and and labeling the Nile as a source of potential violent conflict to the extent of physical war. This has been seen in their perceived threat that Egypt will resort to war “... in an event of any attempt to decrease the amount of water by upstream countries.” (Yacob, 2007: 223). As noted by Hassan and Rasheedy (2007: 36), “On a number of occasions Egypt has demonstrated its preparedness to go to war” if the Nile waters reaching Egypt reduced. The late Egyptian president Anwar Sadat’s war toned speech of 1978 against Ethiopia (Yacob, 2007: 224) and the menace of ex-president Hosni Mubarak to bomb Khartoum in the 1980s (De Villers 2000 in Tesfaye, 2001: 86) and his warning to Ethiopia in the late 1990s (Yacob, 2007: 224, Tesfaye, 2001: 87) were also meant to be messages of threat and warning to stop the Sudan and more directly

---

<sup>42</sup> For details see Mason, 2004: 199

<sup>43</sup> For details on the visits of the leaders of D.R Congo and Burundi see: Mubarak, Burundi VP Ruffyikiri discuss Nile sharing available at: <http://www.almasryalyoum.com/node/264875>, retrieved on 19/02/2011 - 10:34, Egypt State Information Service, Egypt and DR Congo Relations, Available at: [http://www.sis.gov.eg/en/LastPage.aspx?Category\\_ID=1113](http://www.sis.gov.eg/en/LastPage.aspx?Category_ID=1113) accessed on 2/19/2011 at 10:24 AM.

<sup>44</sup> David Malingha Doya, Burundi Government Signs Accord on Use of Nile River Water. Feb 28, 2011 6:30 PM GMT+0300. Available at: <http://www.bloomberg.com/news/2011-02-28/burundi-signs-accord-on-water-usage-from-nile-that-may-strip-egypt-of-veto.html> Last visited on March 4, 2011 at 5:07 PM

Ethiopia from utilizing the waters of the Nile and interrupting or reducing its flow reaching Egypt.

Egyptian officials in international institutions are also known for their rhetoric of water war speeches. In the 1980s ex-United Nations Secretary General, Boutros Boutros Ghali made a remark that "...the next war in our region will be over the waters of the Nile, not politics." (Cited by Yacob, 2007: 224). He further confirmed this in 2005 during an interview with BBC which he indicated the Nile will be a source of war between upstream and downstream riparian states.<sup>45</sup> In 1995 also ex-Vice-President of the World Bank, Ismail Sergeldin warned that, "the wars of the next century will be water."<sup>46</sup> Most recently following, the extraordinary meeting of the Nile-COM in Sharm El-Sheikh-Egypt on April 2010 and the decision of upstream states to sign the CFA, ex-minister Mohamed Nassr Eddin Allam of Egypt confirmed to the Egyptian parliament that, "Egypt reserves the right **to take whatever course it [Egypt] sees suitable** to safe guard its share." (Daily News Egypt, 20 April 2010, emphasis mine). A good reading of the Minister`s speech indicates, Egypt is prepared to maintain the status quo on the Nile by any means necessary. Thus, verbal threats by the Egyptians is one strategy intended to push away the upstream states of the Nile particularly Ethiopia from using the Nile waters for fear of war with Egypt over the Nile.

**Proxy War as Strategy:** despite several defeats it swallowed in a number of battlefields by Ethiopia in the 19<sup>th</sup> Century, Egypt`s current strategy is a bit modified but continues in an old-fashioned way but the same ambitions. As noted by Yacob (1996: 40) Egypt`s "indirect [military] involvement through proxy actors continued unabated" with the aim of destabilizing the region so that Ethiopia would be unstable. Egypt has been criticized for its obstructionist policy in the Horn of Africa. From the view point of the "Egyptian leaders... their country`s virtual monopoly over the benefits of the Nile could only be sustained by underdevelopment and anarchy in the upper basin countries mainly Ethiopia." (Medhane, 2004: 41). For a long time, Egypt has worked in undermining peace in the Horn of Africa and destabilizing the region in a way that affects Ethiopia. Its support of Eritrean armed groups against the Government of Ethiopia during the civil war period and its strong support to

---

<sup>45</sup>The text of Boutros Ghali`s interview with BBC is available at:  
[http://news.bbc.co.uk/nol/shared/spl/hi/talking\\_point/world\\_forum/water/08\\_06\\_03/html/lecture\\_transcript.stm](http://news.bbc.co.uk/nol/shared/spl/hi/talking_point/world_forum/water/08_06_03/html/lecture_transcript.stm)  
Last visited on: 2/17/2011 at 3:25 pm

<sup>46</sup> Wolf, Aaron, Annika Kramer, Alexander Carius and Geoffrey Dabelko. Peace in the Pipeline. Viewpoint. BBC. Available at: <http://news.bbc.co.uk/go/pr/ft/-/2/hi/science/nature/7886646.stm> Posted on Friday 13, February 2009. last visited on 2/17/2011 at 10:41

Eritrea in weaponry during the so-called border war between Eritrea and Ethiopia (1998-2000) are such a manifestation. (Danael 1999). It has been also working hard for long with anti-Ethiopian forces in Somali for long. It was for instance the major arms supplier of Somalia in all battles Somalia fought with Ethiopia in 1960, 1964 and 1977-1978. (ibid).

More recently in 2006 also the United Nations Security Council<sup>47</sup> uncovered that Egypt was one of the major states supporting the Union of Islamic Courts in Somalia (UIC) which has targeted Ethiopia by declaring *Jihad*,<sup>48</sup> where the Government of Ethiopia was forced to engaged in military operation to halt the UIC`s move as self defence.<sup>49</sup> Ethiopia`s Prime Minister Meles Zenawi recently blame Egypt for supporting outlawed oppositions holding gun against his government. (Reuters, 25 November 2010). This covert move through proxies is aimed at destabilizing Ethiopia to make the country busy maintaining its security by fighting insurgents so that the water would flow freely untouched.

---

<sup>47</sup>In its 5575<sup>th</sup> Meeting the Security Council of the UN via its Resolution 1724 (2006) uncover that Egypt with other states such as Eritrea, Iran, Libya, Syria, Saudi Arabia as well as Hizobollah of Lebanon were involving in military support to the UIC. For details see: UN Security Council, *Resolution 1724 (2006) The Situation in Somalia*, 29 November 2006, S/RES/1724(2006), available at: <http://www.unhcr.org/refworld/docid/45c30c4bc.html> accessed 21 September 2008 last visited 24 February 2011 at 2:33 PM

<sup>48</sup> For details see BBC News. Somalis vow holy war on Ethiopia Monday, 9 October 2006 available at: <http://news.bbc.co.uk/2/hi/africa/6032907.stm> last visited on 2/24/2011 at 2:00 PM.

<sup>49</sup>BBC News. Time Line: Ethiopia and Somalia. Available at <http://news.bbc.co.uk/2/hi/africa/6159735.stm> last visited on 2/24/2011 at 2:00 PM.

## 4.2. Sudan

### 4.2.1. Sudan: Nile Policy and Position

For many years Sudan did not have a well articulated National Water Policy until 1992. (Amare et al, 2008:53). Later on it has also drafted a new water policy in 2000 which considers different issues like water resources, water utilization, water and environment, international issues, socio-economic issues, disaster management, and institutional and capacity building (ibid). The Ministry of Irrigation and Water Resources is charged with the overall management of the water resources of the Sudan and it has also established the Nile Water Directorate responsible for the overall activities on the Nile in Sudan. (NBI, 2005: 15).

Sudan has tremendous potential for agriculture. As one scholar noted, “Sudan was long hoped to be a bread-basket of Africa or the Arab world, yet it has largely failed short of these aims.” (Mason, 2004: 154). One could mention a number of reasons for this Sudan`s failure, such as, political, economic, and technological in nature. As pointed out by Mohamed (2006: 9), water development in the Sudan “has been limited...due to the long civil war and lack of funds for new investment.” But in the mean time Sudan has able to develop the Nile waters. The country is also the second principal beneficiary from the status quo on the Nile Basin following Egypt, because it is guaranteed 25% of the Nile waters per the 1959 Agreement with Egypt. To optimally utilize ‘its share of water’ it has been implementing a number of hydraulic projects. In line with this it has remained a good ally of Egypt on the Nile issue vis-à-vis Ethiopia. Historically Sudan`s position on the Nile waters reflects Egypt`s position. This has been its stance since the 1959 Agreement both countries signed for the full utilization of the Nile waters. According to Article 5 of the agreement both Egypt and Sudan should have a ‘unified view’ in negotiations with other Nile Basin states. Furthermore, according to a Sudanese Engineer Mustafa Mukhtar, “Sudan was always acting under pressure from Egypt” which can be taken as one reason that Sudan`s position is after Egypt. (Thursday 03 March 2011).<sup>50</sup>

Ana Elisa Cascao (2009: 257) has noted that although “Sudan has been historically aligned with Egypt`s Nile policies” for long “policy shift have occurred in the last decade and the development of the country`s water resources have recently become a political priority of”

---

<sup>50</sup>E-mail interview with Mustafa Mukhtar, water resources engineer in Canada. He worked for the Ministry of Irrigation Sudan - in Dams, Planning and Hydraulic Research Directorates.sent on 28 February 2011 received on 3 March, 2011 20:16

the government. This, however, does not mean that there is a radical Nile policy shift in the Sudan. As the second largest beneficiary of the status quo on the Nile, Sudan “wants to maintain its ‘prior appropriation’ rights and claims 18.5 billion m<sup>3</sup> of the Nile water. (Debay, 2008: 4). The official position of the Sudan regarding the 1959 Agreement is, for that reason, clear. From the Sudanese perspective, any new water sharing agreement on the Nile should consider the ‘established and historic rights’ of Sudan. In any case Sudan is not that much loud as Egypt, in officially Sudan declaring its share of the Nile water as per the 1959 agreement is a red line which should not be treaded. (Sudan Tribune, 6 August 2010).

In any case, as noted by Mason (2004: 189) the Sudanese perception of the 1959 Agreement is ambiguous. This is because there are people, especially from, the academia, who are opposing it and calling for its revision. A Sudanese engineer, Mustafa Muktar, for instance, published an article on Sudan Tribune explaining, “why Sudanese public opinion oppose the [previous] Nile water agreements?” (Sudan Tribune, 06 April 2010). Another Sudanese Professor, Ali Abdalla Ali on his part, after examining Sudan`s official Nile position which is a kith and kin to its northern neighbor- Egypt, advised Sudanese leaders and policy makers to change their current stance. He argued that for Sudan it is important to chart out new strategy of strengthening unity with Ethiopia rather than sticking to the 1959 Agreement which in one way or another allows Egypt to monopolize the Nile waters. (Sudan Tribune, 24 October 2009).

Nevertheless, Sudan like Egypt is against the new water sharing agreement unless the new agreement recognizes the established and historic right of the Sudan per the 1959 Agreement. That is why Sudan rejects to sign the CFA. Asked by journalists in a press release following the Nile Day celebration on February 22, 2011, why Sudan stands on the side of Egypt not to sign the CFA, the State Minister for Irrigation of Sudan Dr. Salih El Din Yousif, proclaim that “Sudan has rejected the Nile Basin Framework Agreement because it had refused to recognize the country`s [Sudan`s] main historical projects water rights like Gezira, El Rahad and El Managil schemes and not in support of Egypt.” (Sudan Vision Daily, 24 February 2011).<sup>51</sup> Together with Egypt, however, Sudan calls for the establishment of the Nile Basin

---

<sup>51</sup>Sudan Vision Daily, *Sudan Most Appropriate Mediator among Nile Basin Countries*. Reported by Alula Berhe Kidani, posted on 24 February 2011. Available at: <http://www.sudanvisiondaily.com/modules.php?name=News&file=article&sid=70042> accessed on 24 February 2011 at 4:00 PM.

Commission by political declaration of presidents of the riparian states while continuing the negotiation on the disputed articles of the CFA.<sup>52</sup>

Thus, order to achieve and support socio-economic development in the country Sudan has had plans to build dams along the Nile. (Hamad and El-Battahani, 2005:36). To this end Sudan has been constructing a series of dams along the main Nile and its tributaries. The Merowe and the Kajbar dams are the most recent constructions to generate some 1250 and 330 megawatts of hydroelectric power respectively. (Robinson, 2006: 51). The water stored in these dams is also planned to be used for irrigation in the long run. Furthermore, Sudan is also heightening the already built Rosaries Dam “to increase both the dam`s hydropower production and storage capacity, availing more water for irrigation.” (Cascao, 2009: 257 citing Sudan Tribune, 28 April 2008). According to Hamad and El-Battahani (2005: 36), the mentioned projects will help Sudan to fully utilize its 18.5 bcm share of the Nile as per the 1959 agreement of which it utilizes only 75 percent so far.

Regarding cooperation with upstream states, “Sudan wishes that each country in the Eastern Nile Basin specializes in what they are best at, where they have a comparative advantage” (Yacob, 22007: 228, Mason, 2004: 202-203) which could be achieved only through cooperation. Sudan`s cooperation strategy more or less is confined if the institution is based on the benefit sharing concept. It wants for instance to cooperate with upstream on projects such as water developments in Ethiopia like hydropower and watershed management; which will regulate water flow, avoiding seasonal flood and keep the soil upstream which is destroying its dams. In other words, from the Sudanese perspective, any cooperation attempt on the Nile should not infringe up on its historic rights as established by previous agreement with Egypt. This has seen with its decision of freezing its activities in the NBI, following the signing of the CFA by five upstream states.

According to, Sudanese Water Minister Kamal Ali Mohamed stated that, “We [Sudan] are freezing activities regarding the NBI until these issues, these legal implications are resolved.” (Addis Fortune, 4 July 2010). The Minster is arguing that the signing of the CFA has a legal implication and unless these legal issues in the CFA are not solved Sudan freezes its activities

---

<sup>52</sup>Agreement on the Nile River Basin Cooperative Framework Opened for Signature by upstream countries. Available at: [http://www.nilebasin.org/index.php?option=com\\_content&task=view&id=165&Itemid=1](http://www.nilebasin.org/index.php?option=com_content&task=view&id=165&Itemid=1) accessed on 12/16/2010.

of the NBI. But this Sudanese decision regarding the NBI was a surprise for observers. This is because Sudan is in relative terms the most beneficiary state from cooperation on the Nile. Sudan's withdrawal from the NBI, however, seems not to follow Egypt's steps as the latter earlier threaten to withdraw from the NBI following the signing of the CFA.

#### **4.2.2. Sudan: Strategies**

Sudan's strategies of maintaining its interest on the Nile based on its projects and Nile policy seemingly bases itself on "the principles of acquired [rights] and equitable and reasonable use of the shared water resources." (Debay, 2008: 14). In so far as, its legal position is concerned, Sudan stands with Egypt in terms of their legal argument and strategies. What makes Sudan a bit different as a downstream state is, like upstream Ethiopia for long it has been a victim of Egypt's stick. To achieve its goals, and to maintain its interests on the Nile, Sudan has been implementing different strategies. Some of them are dealt below.

*Cooperation as Strategy:* In the Eastern Nile Basin, Sudan have both bilateral and multilateral cooperation engagements with the Basin states. Multilaterally, Sudan in cooperation wants; if each riparian state specializes in areas in which they are best at, "Sudan in irrigation, Ethiopia in hydropower generation and Egypt in industry and know-how." (Yacob, 2007: 228). That is from this cooperation Sudan needs "an increase in water supply and then to share the increased supply" (ibid). This is actually the same policy strategy pursued by Egypt. Sudan is very much interested in cooperation because floods and sedimentation as a result of upstream soil erosion are the basic problems it faces and believes it can be solved if there is cooperation with upstream Ethiopia. As noted by Debay (2008: 4), from cooperation, Sudan "has interest in projects in upstream countries [notably Ethiopia] that would regulate and increase [the] flow [of water] and decrease silt." Furthermore, cooperation for Sudan is seen as a strategy of securing funds for water projects and a means or channel of getting information from upstream Ethiopia.

Besides, in its multilateral approach Sudan is exploiting its geographic gift as a bridge between upstream and downstream states in order to maximize its interest on the Nile. It has bilateral cooperative engagements with both upstream Ethiopia and most downstream Egypt. For example, it has had "good working relations [with Egypt] over water resources since 1959 in the Permanent Joint Technical Commission." (Ghany, 2000 cited in Mason, 2004:

199). On the other hand, Sudan had agreed several gestures of good will including the 1980 and 1991 protocols to cooperate on the Nile waters development” with Ethiopia.(Yacob, 2007: 197). The overall relation of Ethiopia and Sudan (political, economic and socio-cultural) is good. Both nations have been working together on projects like Ethio-Sudan Interconnection. This coupled with the “less urgent interest of Sudan in maintaining its acquired rights” (Mason, 2004: 168) are concerns of Egypt and watching any development closely. In this context Egypt`s parliament recently show its worry that “Sudan has adopted a stance similar to other Nile Basin countries in asserting its right to share and redistribute Nile resources, despite its [Sudan`s] declared support for Egypt.” (Al Masry Al Youm 13 January 2011).<sup>53</sup> In aggregate this multilateral and/or bilateral cooperation of Sudan shows that, in some way or another, it is interested that cooperation will open access to international funds for mega projects, control sediments and regulate water flow and furthermore it need an increase in water supply while keeping its acquired rights.

***Unilateral Projects:*** although not as ambitious as the mega projects in Egypt, Sudan is implementing its huge hydraulic projects along the Nile. Like in Egypt these projects are, according to Sudanese perspective, based on its share of the 1959 Agreement and to fully utilize its quota of 18.5 billion cubic meters of the Nile waters. The projects are in no way different from the projects in Egypt with intention as all are meant to create facts on the ground so that playing them as cards of *fait accompli* projects in future negotiations of water. The construction of Merowe and Kajbar dams, the heightening of Rosaries dam, and the planned dams of Dal, Sherei, Rumala, Rahad, Dinder could be considered as part of such a process.

***Domestic and International Financial Sources:*** for long Sudan was hindered to develop the Nile waters due to financial constraints and the long civil war in the south. As mentioned earlier despite Sudan had tried hard to secure international funding of projects it was in short of its dreams because of the overt and covert objections of Egypt. Following the signing of the Comprehensive Peace Agreement (CPA) with Sudan People`s Liberation Army (SPLA) that ends the civil war in the south, Sudan is making the most of its ability to use the relative peace prevail in the country and mobilize the oil generated income to water development

---

<sup>53</sup>Al Masry Al Youm. Thursday 13/01/2011. Egypt Parliament: Sudan`s Nile dam construction worrying. Available at: <http://www.almasryalyoum.com/en/news/egypt-parliament-sudans-nile-dam-construction-worrying> accessed on: 16/11/2011 10:02 AM.

projects and able to attract foreign investors. As noted by Cascao (2009: 258), in recent years “Sudan is benefiting from the massive revenues derived from its oil production, and foreign investment.” Furthermore, the emergence of China as an alternative financial source and its involvement in dam construction investments (ibid) can be regarded as an opportunity and strategy that Sudan is make use of to invest in water projects.

### **4.3. South Sudan and the Future of the (Eastern) Nile Basin**

Following the referendum conducted from January 9 to 15, 2011 as per the CPA, Southern Sudanese overwhelmingly voted for secession. As reported by the Guardian (7 February 2011), “The world’s newest country has been born with confirmation that southern Sudan voted almost unanimously for independence from the north.”<sup>54</sup> According to the CPA this South Sudan’s independence is to be confirmed after six months of the referendum on July 9, 2011. The independence of South Sudan will, therefore, tremendously change the geopolitics of East Africa in general and the Nile Basin in particular. What will be the position of the newly born state regarding the Nile is a question not yet answered. Undeniably, however, “the emergence of an independent South Sudan could in effect potentially imply some changes in the regional governance formats managing Nile water resources.” (Helly, 2009: 53). The future position of South Sudan, its policies and the strategies that it will adopt are major determinants of the future of the Nile Basin in general and Eastern Nile Basin in particular. In one way or another major issue that must be raised here is the stance of the new state on the 1959 Agreement.

Granit et al (2010) outlined four scenarios that the south Sudan’s referendum would bring about regarding the 1959 Agreement. These scenarios are; 1) unity, 2) independence with the 1959 Agreement, 3) independence without the 1959 agreement, and 4) independence and wait and see (ibid: 34). From these scenarios the unity scenario has ended not realized following the overwhelming vote of Southern Sudanese for independence. According to the authors the likelihood of the second scenario is also low. (ibid: 35). The low probability of South Sudan’s independence with the 1959 Agreement make sense because the agreement in some way or another has had a negative consequence on the interest of South Sudan. The 1959 Agreement provides bases for the construction of the Jonglei Canal which aimed at increasing the Nile waters by 25 to 27 billion cubic meters each year by drying “the Kyoga, Bahr el-Ghazal, Bahr El-Jebel, Sudd, and Machar swamps, [all in South Sudan and] allowing the two countries [Egypt and the Sudan] to equally share net water resources of between 16 bcm and 18.9 bcm.” (Yohannes, 2008: 74). The construction of the Jonglei Canal was then halted following the attack from SPLA (which is in charge of governing South Sudan at this

---

<sup>54</sup>The Guardian. Monday 7 February 2011 20.17 GMT. Sudan referendum result confirmed. Available at: <http://www.guardian.co.uk/world/2011/feb/07/sudan-referendum-result-confirmed>. Last visited on: 2/19/2011 at 11:10

moment) in 1983. The project is much hated in South Sudan because, as Yohannes (ibid: 71) describes, it is ‘a twin crime against nature and society.’ Furthermore, if South Sudan achieves its independence while retaining the duties and rights of the 1959 agreement, “this would curtail South Sudan`s freedom in engaging in project with its upstream neighbors” (Granit, et al, 2010: 35) which is less likely, taking the warm and amicable relations between South Sudan and upstream states of the Nile.

Regarding the third Scenario Granit et al (ibid) noted that if South Sudan`s independence results does not accept the 1959 Agreement, the new state will join upstream states and sign the CFA. However, it seems that South Sudan`s independence will not immediately accompanied by publically declaring its stance of not accepting the 1959 Agreement or its alliance with upstream states. This is because the urgent issues that South Sudan confronted with is not the Nile waters rather it is issues like the Abyie<sup>55</sup> case, demarcation of boundary with North Sudan and the issue of citizenship. The most probable scenario in the short term is therefore ‘independence and wait and see’ (ibid). But sooner or later the general consensus is due to different reasons and factors South Sudan as a mid-riparian of the Nile will join the stance of the upstream states.

Orally, however, president of the Government of South Sudan, Salva Kiir, told Essam Sharaf, prime minister of Egypt, that Government of South Sudan“expansion of plantation project [on the Nile] would be within the share of the entire Sudan as specified by the original treaties adding that Cairo need not worry.” (Sudan Tribune, 29 March 2011). Nevertheless, this ‘stance’ of Salva Kiir as discussed above may have no any back of the general public of South Sudan and the SPLM which for long opposes the Jonglei Canal which is a result of the 1959 Agreement. In addition one can contemplate that Kiir spoke this way to calm the situation in the Basin and to minimize the risks that Egypt may pose against the newly born South Sudan if the later goes against the 1959 Agreement.

For historical, political, environmental, legal as well as economic reasons it seems sound that South Sudan will not accept the 1959 Agreement. This in turn has its own tremendous

---

<sup>55</sup> Abyie is an oil rich area where both North and South Sudan are claiming it as their own and their dispute is not yet over. But the referendum that is independently arranged for Abyie will solve the problem but still the positions of both North and South Sudan is not to lose Abyie and whatever the result of the referendum would be Abyie is feared not to be a source of armed conflict between the North and the South.

hydropolitical implications both in legal as well as political terms. Legally it will refute the 1959 Agreement by signing the CFA and it will be a sign that equitable and reasonable utilization as a principle in (Eastern) Nile Basin prevails over the so-called acquired and historic rights. Politically also, South Sudan will be one additional power to the upstream states and changing the balance of power at least in theory by adding one upstream oriented midstream riparian.

## **4.4. Ethiopia**

### **4.4.1. Ethiopia: Nile Policy and Position**

Ethiopia a source of 86 percent of the Nile waters is a land of paradox. Despite the country's irrigable land potential is 3.7 million hectare (MoWR, 2002: 46), "having a fresh water resource amount of at least 110 billion m<sup>3</sup> per year" (Zewdie, 1994: 4) that quench millions of thirsty people, still it is still a country synonymous with persistent famine and poverty. A number of reasons could be outlined, such as, long civil war, political instability, poor policy, maladministration and lack of good governance as well as the country's reliance on seasonal and erratic rainfall the major ones. According to a research conducted by the Ministry of Water Resources (MoWR) of Ethiopia, "only some 8 million of the 55 million hectares of arable land is used for crop production due to insufficient or unreliable rainfall." (MoWR. 1996: 1). The erratic rain that the country relied on for long is no more an assurance to meet the food requirement of the rapidly growing population of the country. For such a reason, the government of Ethiopia has focused on increased water resource utilization to ensure food security. This possibly will only be achieved, therefore, if Ethiopia is able to utilize the Nile waters and its tributaries.

As noted by Yacob and Imeru (2005: 16), "increased agricultural production to meet Ethiopia's food and fiber needs can only be realized by harnessing the water resources of the Nile." This is because out of 3.7 million hectares 2.4 million hectares of irrigable land of Ethiopia is in the Nile Basin (Senai, 1997: 70). The Nile in Ethiopia can also furnish the country with thousands of megawatts of hydroelectric power; which can help boost the country's economy by both as a source of energy to meet domestic needs and by generating revenue as an exportable good. In this context, the hydroelectric power potential of the Nile in Ethiopia is estimated about 30, 000 megawatts. (The Ethiopian Herald, 15 May 2007), which is out of the country's overall aggregate of 45, 000 mega watt. Furthermore, the Nile in Ethiopia is a home for about 36 percent of the total population and is a source of 70 percent of Ethiopia's water resources. (Mason, 2004: 124). These all facts, hence, shows that the Nile has a paramount importance for Ethiopia's overall socio-economic transformation and development

To support the development of the country by utilizing the country's water resources, the Government of Ethiopia under the Ministry of Water Resources has developed "Ethiopian

Water Sector Strategy” in 2001 with the “principal objective of...translat[ing] the national water resources management policy into action.” (MoWR, 2001: 2). According to the water strategy document, the overall goal of Ethiopia`s national water management policy is: *“to enhance and promote all national efforts towards the efficient, equitable, and optimum utilisation of the available water resources of Ethiopia for significant socio-economic development on sustainable basis.”* (ibid: 1).

The utilization and overall management of transboundary water resources of Ethiopia is based on this general water management policy of the country. Regarding transboundary water resources such as the Nile the strategy document states that, “transboundary waters will be managed in compliance with international covenants adopted by Ethiopia, allowing to ascertain its entitlement and use of these waters.” (ibid: 8). Hence, Ethiopia`s Nile policy is based on this general framework and is based on; one, an agreement that the country adopts or any international covenants that it ratifies, two, these agreements or international protocols must also entitle the country its own share of the resources and their uses for any purpose that the country decide on. In other words, Ethiopia`s Nile policy firmly basis itself on the famous international water use principle of ‘equitable and reasonable utilization’ where by all riparian states sharing the River Nile have access, entitlement and share of the resources (MoFA, Egypt Desk Officer, 12 January 2011). In so doing, Ethiopia`s Nile policy firmly stands to change the unfair and unjust status quo on the Nile Basin which makes downstream states the sole beneficiaries of the fruits of the Nile at the expense of upstream states notably Ethiopia-the source of more than 86 percent of the total Nile flow.

What Ethiopia is arguing for is, therefore, the 1929 and 1959 agreements, which are either colonial or bilateral, are not binding up on the non-signatory nor consented and not colonized Ethiopia (ibid). According to Tefera Beyene, the so-called prior agreements on the Nile are not direct concerns of Ethiopia. (11 January 2011). Therefore, from the Ethiopian stance, “Whatever has been done by way of allocation of the water resources [as the case of the 1929 and 1959 agreements] without its [Ethiopia`s] participation cannot affect its entitlements to use the [Nile] water.” (Menilek 2009: 44 citing Fisseha 1981). Hence, Ethiopia has been calling for an inclusive and basin wide agreement that will enhance cooperation between the Nile basin states based on equitable and reasonable utilization of the Nile water resource. (Tefera Byene, 11 January 2011, Menilek 2009).

Thus, Ethiopia with other Nile source countries vehemently opposes the unfair status quo on the Nile and strongly supports a new water sharing agreement on the Nile based on equitable and reasonable utilization principle. That is why Ethiopia with other upstream states signed the new Nile Agreement-the CFA. Ethiopia and other upstream states sign the CFA because the cornerstone of this agreement is the principle of equitable and reasonable utilisation. (Menilek, 2009: 45). After putting his signature on the CFA, Asfaw Dingamo; ex-minister of the Ministry of Water Resource of Ethiopia, told reporters that, “[the CFA] benefits us all [riparian states of the Nile], harms none of us and leave none of us out.” (Addis Fortune, 16 May 2010). In general, the water sharing position of Ethiopia on the Nile is clear and unambiguous. It is based on equitable and reasonable utilization where all riparian states are entitled their own share of the Nile to meet the needs of their own respective people and use it for whatever purpose they want, be it irrigation or hydropower, industry or municipal.

Like its position on water sharing arrangement, Ethiopia`s position of the concept of benefit sharing cooperation endeavors is based on the principle of equitable and reasonable utilization. Regarding the benefit sharing arrangement most of the time what is being voiced and loudly spoken is if the riparian states are working on what they are best at. In this regard the general understanding is that it would be good for all riparian states of the Eastern Nile Basin ‘if dams built upstream in Ethiopia and generate hydroelectric power to export to the co-Basin States with lower cost so that the water will flow regulated downstream, evaporation loses will be minimized and siltation in downstream states will be minimized or removed.’ This is in one way or another, a process that involves the establishment of joint development projects as the case in ENSAP/ENTRO projects. In this regard the Water Sector Strategy Document of Ethiopia firmly provides the position of Ethiopia by stating that Ethiopia works to:

*Identify common development projects that can be developed jointly with other riparian countries on equitable basis, paying special attention to Ethiopia's interest. Towards this aim, give priority to multipurpose projects such as irrigation and hydropower, recognising that joint development of hydropower project alone is of less advantage to Ethiopia, since it regulates the flow for downstream countries, and it traps sediment giving longer life to downstream dams and reservoirs at the expense of Ethiopia's water structures.*

Hence Ethiopia's perception of benefit sharing is on joint water developments that as well entitles the country its water shares and not bound the country to generate hydroelectric power only because the country is best at doing it alone. According to Tefera (11 January 2011), the concept and practice of benefit sharing arrangement, from the Ethiopia side is viewed as a means not an end. Benefit sharing is seen probably as one means that will further enhance the principle of equitable and reasonable utilization of the Nile waters.

In relation to hydraulic projects, Ethiopia is also developing the Nile waters through the implementation of different projects from small scale to mega projects. According to Tefera (11 January 2011) Ethiopia is pressing on developing its Nile water resources for both hydroelectric power and irrigation purposes. Irrigation projects are undergone in the Nile in Ethiopia specifically in the Abbay and Tekeze Basins-in Arjo-Dedesa, Humera, and Gumera irrigation projects. These projects are to cover an area of 14,300, 43,000 and 14,000 hectares respectively.<sup>56</sup> Lake Tana basin and Koga irrigation projects both also inside the Ethiopian Nile.<sup>57</sup> Tana-Beles Hydroelectric Power project is a multipurpose project, inaugurated on May 14, 2010, has also a capacity of irrigating 140,000 hectares of land downstream of the hydroelectric power plant. (The Ethiopian Herald, 15 May 2010).

As mentioned earlier Ethiopia's potential of hydroelectric power generation is estimated as high as 45,000 megawatts out of which the country so far is generating only 2000 megawatt of electricity. (FDRE, 2010: 36). On the Nile Basin so far Ethiopia has built a few hydroelectric power plants at Tis Abbay (I and II), Fincha, Tekeze and Tana-Beles where in aggregate all generates some 978.4 megawatts together. (Addis Fortune, 06 February 2011). This current capacity is much lower than the potential that the Nile in Ethiopia endowed with which is estimated to be some 30,000 megawatts. According to the newly endorsed Growth and Transformation Plan (GTP) of the Federal Democratic Republic of Ethiopia, the government has planned to increase the hydroelectric capacity of the country to 8,000 to 10,000 megawatts at the end of the planned period (2014/15). (FDRE, 2010: 36, the

---

<sup>56</sup> Ministry of Water Resources and Energy. Ethiopian Nile Irrigation & Drainage Projects: Available at: <http://www.mowr.gov.et/index.php?pageum=4.2&pagehgt=1000px&ContentID=61> Last visited on: 2/19/2011 at 1:49 PM.

<sup>57</sup> Ministry of Water Resources and Energy, Available at: <http://www.mowr.gov.et/index.php?pageum=4.2&pagehgt=1000px> Accessed on: 2/19/2011 at 1:53 PM.

Ethiopian Herald, 15 May 2010). To this end ‘the Government of Ethiopia announced the plan to launch the construction of a hydro-power dam with a capacity of generating 5, 250 MW on the Nile River adjacent to the Ethio-Sudan border.’ (The Ethiopian Herald, 31 March 2011). The dam, which is named Grand Millennium Dam on the Nile is officially commenced on 2 April 2011 after Prime Minister Meles Zenawi laid down the foundation stone on the site where the dam is to be built in Benshangul-Gumuz Regional State. (The Ethiopian Herald, 3 April 2011). In general, “[w]ith the intention of achieving food self-sufficiency within three to four years, Ethiopia is presently considering 175 irrigation projects and four major hydropower stations to supply the major population centers with electricity.” (Yohannes, 2008: 86) where the Nile basin takes the lion share of the projects.

In sum, from the Ethiopia stance these projects from microdams, small and medium scale irrigation schemes to mega hydroelectric plants are meant to meet the ever growing energy needs and food requirements of the rapidly growing population. From the perspective of Ethiopia, the country is implementing these projects on the Nile because it is its right to do so-to utilize its Nile waters to meet the needs of the rapidly growing population. For Ethiopia, harnessing its natural resources in order to achieve socio-economic transformation for its people and over all development of the country is both a duty and right.

#### **4.4.2. Ethiopia: Strategies**

For long Ethiopia has failed to develop the Nile waters due to different multifaceted problems. Its involvement in basin wide ‘cooperative schemes’ initiated by downstream states such as *Hydromet*, *Undugu* and TECCONILE was non-existent or limited to an observer status. Since the last decade, however, Ethiopia has emerged as an active player in the hydropolitics of the Nile River Basin. This Ethiopia’s stance has aimed at changing the unfair status quo and instead establishing a general basin wide framework that levels the ground for all riparian states based on the principle of ‘equitable and reasonable utilization’ so that the country benefits and entitles its share of the Nile waters. To this end Ethiopia has employed a number of evolving strategies. These Ethiopia’s evolving and assertive strategies on the Nile, according to Wondwosen (2010), are “to challenge Egypt’s entrenched hegemony.” Some of the strategies that the country has been employing are discussed below.

***Open Objection to Prior Agreements:*** Ethiopia for long has been opposing the so-called prior agreements from the outset. And it openly declares that any agreement that do not involve her on the Nile is invalid and will not arrest the country from utilizing the Nile waters. “Whatever has been done by way of allocation of the water resources without its participation cannot affect its entitlements to use the water” of the Nile. (Mason, 2004: 190).

***Cooperation as Strategy:*** Ethiopia`s assertive and active involvement in cooperation endeavors on the Nile is a recent phenomena as observed in its active participation in the NBI. Ethiopia`s such assertiveness is a result of two of its national interest priorities on the Nile. One is its firm position in changing the old and unjust regime on the Nile Basin that benefits the downstream states against her interest. In other words, Ethiopia`s need is to come up with a new regime on the Nile Basin where the country is entitled its share of the Nile based on equitable and reasonable utilization-which can be achieved by cooperation with other upstream states. Second through cooperation Ethiopia also believe to secure funds from international financial institutions such as the World Bank for its water projects. As noted by Mason (2004: 169) from the Ethiopian side “international cooperation is seen as a way to access international financial resources.”

***Domestic Funding and Search for Alternative International Financial Sources:*** one of the chance that Egypt has had in securing the untouched Nile flow has been the poor economic condition that Ethiopia situated in for long which hinders it from developing the Nile waters. And for long Egypt has denied Ethiopia access to international finances by opposing Ethiopia`s projects as if the projects are against its very survival either openly using the policies of institutions like OP. 7.50 of the World Bank or through its covert diplomatic clout. This lack of finance to fund water projects, nonetheless, seems no more a problem for Ethiopia as the country is ascertain for alternative financial sources either domestic or bilateral funding. According to Prime Minister Meles Zenawi, despite “Ethiopia is still poor, but it is able to cover the necessary resources to build whatever infrastructure and dams it wants on the Nile water” (The Ethiopian Herald, 21 May 2010 quoting the interview of the prime minister with Al Jazeera TV). In this regard, the inauguration of Tekeze hydroelectric power dam on November 2009 is regarded as a success and proof that Ethiopia can finance huge hydraulic projects like the dam along Tekeze. In addition to this, in the marking of the official commencement of the construction of the Grand Millennium Nile Dam, Prime Minister Meles Zenawi stressed that, ‘the estimated cost of the dam which is 3.3 billion euro

is to be covered by the government and the direct participation of the people.’ (The Ethiopian Herald, 3 April 2011).

Beyond the domestic funding the other alternative financial source Ethiopia in search of is to “strike bilateral funding agreements with countries outside of the [Nile] basin and go ahead unilaterally.”(Yacob 2007, Mason 2004). In this context, Ethiopia “seems to be in a better position than in the past to bring alternative funding for” its hydraulic projects “including from its current main external partner, China.” (Cascao, 2009: 256). Norway is also another country involving in funding water projects in Ethiopia. For instance, “for the feasibility study of Baro and the pre-feasibility Study of Karadobi multi-purpose Hydropower Projects, the Government of Ethiopia has received a grant of 40 million Norwegian Kroner (NOK) from the Government of Norway.”<sup>58</sup> Furthermore, Norwegian Water Resources and Energy Directorate have also signed an agreement of cooperation for the feasibility studies of two large dams along the Nile-the Mandaya and Beko-Abo Multipurpose Projects.<sup>59</sup>

**Unilateral projects:** Ethiopia`s unilateral strategy is seen not arrogantly as Egypt has been doing in its mega projects but as a last resort if cooperation and agreement is not reached between the riparian states on equitable and reasonable utilization of the Nile where Ethiopia for long advocates for. Despite economically poor and developing, Ethiopia is striving to go ahead with hydraulic projects unilaterally. This was confirmed by Prime Minister Meles Zenawi`s remark that, developing the Nile unilaterally is unstoppable. (The Ethiopian Herald, 21 May 2010). In this regard his speech in marking the official commencement of the Grand Millennium Dam on the Nile on April 2, 2011 sounds that ‘despite the downstreamers should also share the cost of the project as they are also beneficiaries from the dam, they move the contrary undercutting Ethiopia`s bid to secure funding to cover the cost... hence Ethiopia has forced to rely on its savings alone to cover the huge expense.’ (The Eethiopian Herald, 3 April 2011).

**Population Growth, Erratic Rain, Drought:** reports from different government sectors as well as research works indicate that Ethiopia`s population is growing rapidly and meeting the

---

<sup>58</sup>Ministry of Water Resource and Energy. Baro and Karadobi Hydropower Projects Available at: <http://www.mowr.gov.et/index.php?pagenum=4.3&pagehgt=1000px> Accessed on: 2/19/2011 at 1:45 pm.

<sup>59</sup> Norwegian Water Resources And Energy Directorate Signs Agreement With Ethiopian Ministry Of Water Resources (MoWR). Available at: [http://www.norway.org.et/News\\_and\\_events/etiopia/Norwegian-Water--Resources-and-Energy-Directorate-signs-agreement-with-Ethiopian-Ministry-of-Water-Resources-MOWR-/](http://www.norway.org.et/News_and_events/etiopia/Norwegian-Water--Resources-and-Energy-Directorate-signs-agreement-with-Ethiopian-Ministry-of-Water-Resources-MOWR-/) accessed on 1/13/2011 at 6:53 AM.

food requirement of these growing population is a big task. By 2015 Ethiopia's population is estimated to reach to 88.6 million (Yacob, 2007: 175) and by 2050 it 'is expected to reach to 170.2 million by 2050. (Yohannes, 2008: 83 citing UN Population Fund, 24 October 2005.). Feeding this population then requires the development of the country's water resources including the Nile where more of the country's water is situated in. This will help the country to overcome the food insecurity problem so that alleviating poverty is the target. Downstream Egypt repeatedly argued that Ethiopia has sufficient rain fall to meet its needs and to grow crops. But as observed by Yohannes (ibid: 85) "Ethiopia's chronic food insecurity stems in part from an overdependence on rain-fed agriculture, which is vulnerable to dry spells, delayed or interrupted rains, and full-scale droughts." Therefore, recurring drought as a result of erratic rain where the country depends a long to produce are no more seen as a solution to relied on. The solution is to develop the available water and achieve socio-economic transformation.

***Climate Change:*** One thing that the world cannot escape from is the ever growing climate change. Climate change do have an impact on the environment at large and it will change water flows to the negative and even will induced conflicts in transboundary water resources. (Debay, 2008: V). In this regard the Nile Basin is not free from the impact of climate change and unless immediate measures are taken coupled with the rapidly growing population of the basin states conflict because of competition over scarce water will emerge. This climate change, however, must not perceived as a source of conflict, and Ethiopia is arguing to enhance cooperation to better solve the challenges the Eastern Nile Basin states faced together. "Ethiopia believes that the threat of such conflicts can be averted only through regional cooperation. (Tefera and Fekahmed, 2009 :53). By so doing Ethiopia is using "[c]limate change in a way ...[as] more-not less-reason for accelerating cooperation on the Nile (ibid :51).

***Adherence to the 'principle of equitable and reasonable utilization':*** Unlike the hydropolitical stance and behavior of many upstream states in other transboundary watercourses such as Euphrates-Tigris River Basin;<sup>60</sup> which adheres to the doctrine of

---

<sup>60</sup>In this regard Ethiopia is not acting in a way that irritates Egypt or Sudan by claiming Absolute Territorial Sovereignty to the extreme as Turkey have been doing in Euphrates-Tigris River basin as a water source country. Ones Turkey's prime minister, Suleyman Demires in 1992, concerning the utilization of Euphrates-Tigris rivers, was quoted for saying "we [Turkey] do not say we share their [Iraqi or Syria-both downstream states], oil resources. They cannot say they share our [Turkey's] water resources. This is a matter of sovereignty.

absolute territorial sovereignty, Ethiopia adheres to the famous principle of ‘equitable and reasonable utilization.’ This is because Ethiopia believes in cooperation and interdependence as a solution to the Nile dispute. But Egypt has accused of Ethiopia as if “Ethiopia claimed total sovereignty over its waters, disregarding the international status of the Nile...” (Badr, 2009: 57). As a strategy Ethiopia is using this principle to neutralize Egypt and its sticky position of less internationally accepted and one sided doctrines of transboundary water use with no international law backing such as ‘historic rights, acquired rights, and established rights.’ “As a result, Ethiopia's case has become more attractive [internationally] in recent years, while Egypt's is becoming less attractive, as it always clings to a less acceptable principle and archaic agreements.” (Wondwesson 2010).

*Upstream-upstream cooperation as a strategy:* As noted in Tesfaye (2001) upstream states of the Nile from the Equatorial-D.R. Congo, Kenya, Burundi, Rwanda, Tanzania, and Uganda were complacent on the Nile issue until recently. This was, may be because they have other water resources and their less share of the Nile waters (some 15 percent or less) and or because of the political turmoil within their respective territories like a case in Rwanda, D.R. Congo, Burundi as well as Uganda. For long both Ethiopia and these countries had no “any combined strategy and alliance in view of the downstream countries, thus weakening the upstream position.” (Yacob, 2007:205). But this has been changed and now these countries are more assertive on the Nile than ever they were before and they are no more unworried about it.

Ethiopia has worked hard to strength the cooperation between upstream states and has succeeded in diplomatic terms. What both Ethiopia and other upstream states share is the unjust and unfair status quo on the Nile. To this end these countries have been cooperating on the Nile-COM meetings and CFA negotiations and have developed one common strategy. (MoFA; Egypt Desk Officer, 12 January 2011). Following the decision of upstream states to sign the CFA what Egypt pursues as a policy and strategy, as mentioned earlier, was to break and weaken the chain of upstream-upstream cooperation by visiting the capital of one

---

We have a right to do anything we like” (Elhance, 1999:144). When it comes to the Nile it is the reverses, the one who shall be begged is begging for cooperation. While downstream Egypt is threatening upstream Ethiopia not to use the Nile “Ethiopia has shown willingness in sharing the water resources that arise in its territory with downstream nations.” (Yacob, 2007: 227). And Ethiopia`s words are too smooth, it time and again has been calling downstream Egypt and Sudan to cooperate and to utilize the common shared waters of the Nile for mutual benefit and for win-win gains on equal footing.

riparian after another or inviting their leaders to visit Cairo and pledging a lot of promises. Now, however, all upstream states are calling one word 'equitable and reasonable utilization on the Nile.' It is what makes them all one and the same-reversing the unfair status quo on the Nile.

***Upstream water projects for mutual benefit:*** The other strategy that Ethiopia employs to use the Nile equitably among all the Eastern Nile Basin countries is its position and willingness in saving water upstream and regulate the water flow downstream. This has to do with the construction of multipurpose dams in upstream Ethiopia which will enhance efficient and effective water use by eliminating downstream high evaporation at Aswan High Dam. This dam has installed to create Lake Nasser in the open desert which allows more than 10 billion cubic meter of water to evaporate. The newly constructed Merowe Dam of Sudan also evaporates lots of water. (Tefera, 11 January 2011).

***Defensive strategies:*** As noted by Yacob (1996) Ethiopia's stance on the Nile in relation to the multiple and acute strategies of Egypt is more of 'defensive and reactive but indomitable.' To this end Ethiopia has been defending its sovereignty from imperialist and expansionist moves of Egyptian leaders in a series of battles in the 19<sup>th</sup> century. It has been also able to defend its peace and stability by vanquishing employed proxies of Egypt in the Horn of Africa-notably in the north Eritrea and in the Southeast through Somalia. (Zerihun 2007). In relation to Egypt's diplomatic and political clouts of objecting international finance Ethiopia has geared its diplomacy to get international finances from those who does not set conditions bilaterally or if not to finance project by itself; which actually is the country doing it at this moment. Ethiopia has also listened the war drums and war threats from Cairo for long, from Anwar Sadat to Hosni Mubarak. Against all these war drums of Egypt, Prime Minister Meles Zenawi reacted by saying,

*And from time to time Egyptian presidents have threatened countries with military action if they move. While I cannot completely discount the sabre-rattling I do not think it is a feasible option. If Egypt were to plan to stop Ethiopia from utilising the Nile waters it would have to occupy Ethiopia and no country on earth has done that in the past.<sup>61</sup>*

---

<sup>61</sup>Quoted by Mike Thomson. BBC News. *Nile Restrictions Anger Ethiopia*.  
<http://news.bbc.co.uk/2/hi/africa/4232107.stm> Accessed on: 1/7/2007

As indicate above the different Nile policies and positions as well as the strategies that the Eastern Nile Basin states pursue are diverse, divergent and contradicting as well. While upstream Ethiopia is calling for equitable and reasonable utilization of the Nile waters downstream Egypt and Sudan persistently uphold the ‘acquired and historic rights’ doctrines to maintain the status quo on the Nile. For such a reason while Ethiopia signs the New Nile Agreement-the CFA, Egypt and Sudan reject it because it do not recognize the past bilateral or colonial agreements. Regarding the different joint multipurpose water projects all the three states have divergent views. Ethiopia sees the benefit sharing case as a means to implement the equitable and reasonable utilization principle by guaranteeing each riparian state a right to use the Nile waters for any purpose that the country needs; irrigation or hydropower. From the downstream perspective joint multipurpose projects in upstream states in line with benefit sharing arrangement is seen as positive if the projects are not to consume water such as upstream irrigation. But hydropower projects and dams are seen as positive because water will be regulated and siltation also reduced downstream. This shows that there is an intricate relation between the water sharing and benefit sharing arrangements which is the focus of the next chapter.

## CHAPTER FIVE

### 5. THE NEXUS BETWEEN WATER SHARING AND BENEFIT SHARING ARRANGEMENTS IN EASTERN NILE BASIN

#### 5.1. Eastern Nile Basin: Which Way? Water Sharing or Benefit Sharing?

As discussed in Chapter Two, water sharing and benefit sharing despite seeming separate and mutually exclusive both should be treated as two sides of the same coin. (Phillips et al 2006). By definition both approaches are seen as complementary and reinforcing at the same time. Such a view, however, is not similar and appropriate for all transboundary water resources as each river basin across the world are unique and different because of their geography, hydro-political history, socio-economic relations, cultural ties and differences, nature of regimes and their perception of the resource and other co-riparians. These factors are relevant and should be seen in dealing with benefit sharing as well as water sharing issues. In line with this, the hydro-political policies as well as the different strategies that are pursued by the basin states are fundamental factors that should be examined either as an opportunity or challenge in managing transboundary water resources.

Pertaining to the management of the waters of the (Eastern) Nile Basin, there are debates over which approach (water sharing or benefit sharing) should be followed or adopted by the basin states. According to Tesfaye (2008: 66) any negotiation on the Nile waters “...should...be made to come up with the **Nile Basin Benefit Sharing Treaty** rather than restricting...to the Nile Basin Waters Agreement.” For Tesfaye the (Eastern) Nile Basin do have a potential benefits that will benefit all the Basin states. Therefore, “The challenge is not so much in identifying benefits but rather to put them in a realistic framework as funded and agreed upon by governments on a bilateral basis”(ibid). Thus, the question that remained an unanswered is, however, why ‘it is a challenge to put the identifying benefits in to a realistic framework?’

One of the works that advocate for the benefit sharing agreement on the (Eastern) Nile Basin is Wondwosen`s (2009) article which criticizes the water sharing arrangement as source of potential conflicts rather than a solution. Wondwossen argues, “the negotiations of riparian states in the Nile Basin should continue focusing on benefit sharing and win-win option instead of the water-sharing scheme that usually ends up in the accentuation of conflicts

among countries over water.” (ibid: 136). Nevertheless, his conclusion of advising the (Eastern) Nile Basin states to come up with a benefit sharing formula and his arguments of belittling the water sharing approach lacks comprehensiveness. Besides, Wondwossen’s article was devoid of at least mentioning the hydropolitical history of the basin and the so called claims of prior or established rights by downstream states as a challenge in coming up with the formula that he advised for the riparians of the Nile.

The most extreme criticism against the benefit sharing arrangements in (Eastern) Nile Basin is a work by Dereje Zeleke (2010b). According to Dereje “[i]n terms of resolving the Nile waters question, it will be argued, benefit sharing offers nothing but a false hope and is thus doomed to failure.” (ibid: 234). For Dereje the benefit sharing arrangement is a mechanism of downstream states notably Egypt followed by its ‘junior partner’ Sudan employed to buy time to complete their giant resource capture projects so that precluding the upstream basin states from utilizing the Nile waters (ibid). What Dereje missed as a point is that he totally saw no sign of hope and benefit from employing the benefit sharing approach in the Nile Basin and capitalizes on the unavoidable reallocation of the Nile waters only.

The most detail work regarding benefit sharing in the Eastern Nile Basin is a work by Muluaem Fetene (2009). In his thesis Muluaem discuss the different comparative advantages of Eastern Nile Basin states pertaining to benefit sharing arrangements and the challenges of implementing benefit sharing arrangement. For him “Optimal exploitation of the potential of a benefit sharing arrangement demands the establishment of equitable water rights over the Nile water.” (ibid: 108). Like arguments from Phillips et al (2006) Muluaem’s argument is that “the two options [benefit sharing and water sharing arrangements] are not mutually exclusive but rather mutually reinforcing.” (ibid: 104). Fetene’s work in some way or another highly emphasized on enhancing the principle of equitable and reasonable utilization of the Nile water which ultimately will lead to the (re)allocation of the water.

As seen above, the position of Eastern Nile riparians regarding both the benefit sharing and water sharing arrangements is at odds because they have developed divergent policies and positions. For Egypt and the Sudan any attempt to reallocate water on the Nile should be based on their so-called ‘historic or established rights’. In other words, if upstreamers recognized what Egypt and Sudan demand, they were to negotiate on water that does not exist as the entire flow of the Nile is divided between the water recipients and evaporation.

Whereas for Ethiopia there should be a new agreement where all riparians agreed upon and are entitled to their own respective share of the Nile waters and the right to use it for any purpose they need.

Historical accounts with state practice do indeed indicate that, the Nile Basin is the most securitized and highly politicized river basin. This is substantiated by the positions, Nile policies uphold and divergent strategies employed by riparians. From the perspective of downstream states particularly Egypt, the Nile is a national security issue and any attempt of using the Nile by upstream states is treated as a threat against the national security of the country. Sudan is a country in between. It needs the water of the Nile for its socio-economic development, and in relative terms most beneficiary from cooperation but always on the side of Egypt in the name of maintaining ‘established or acquired rights.’ Actually what detains Sudan in entertaining other solutions is the 1959 Agreement with Egypt. The Nile for Ethiopia has a lot of implications. It is vital in realizing the country’s overall development and is a national security issue, broadly defined. This is mainly due to the political implication of the Nile water that exposes and challenges its very survival and territorial integrity due to Egypt’s role in the Horn of Africa. Thus, one can argue that, solving the Nile question at the basin level is therefore solving a lot of regional political issues in the Greater Horn of Africa.

The hydropolitical history of the Eastern Nile indicates us that the Basin is characterized by mistrust and suspicion. The perception of states regarding the Nile is full of hostility. The overall development and progress of upstream Ethiopia have been perceived as a danger to downstream states notably Egypt. A strong Sudan have been also professed as a threat by Egypt. As agreeably noted by Phillips et al (2006: 33) in the Nile Basin “...all efforts by upstream States to develop the resource are translated into a potential zero-sum threat perception.” One of the objectives and goals of the ENSAP/NBI was to build trust and confidence among the riparian states. To achieve this ENSAP/NBI has been doing its best and be able to bring officials and experts of the basin states to work together and to speak at least the same language.<sup>62</sup> However, officials of ENTRO stated that “we cannot say that we reach on the best level high that is required”(ibid). This indicates that it will take time to build confidence and to destroy the challenges of mistrust and suspicion that the basin has been

---

<sup>62</sup> Yacob Arsano, interview with Capital, Monday, 15 February 2010, Sallah Shazali and Sherif M.El Sayed, 15 March 2011.

facing in implementing the benefit sharing approach which needs among others confidence and trust.

Furthermore, the Eastern Nile Basin is the one where unilateralism overrides the so-called cooperative/multilateral endeavors. It is not inflated if one argues the Nile Basin is a good example of the scramble for water. Egypt`s mega projects, Sudan`s dam construction claims actions are based on the 1959 Agreement and Ethiopia`s recent unilateral projects along the Nile and its tributaries are demonstrations of such scramble for the water of the Nile. This competition however has had impact in future multilateral approaches and adds a fuel to the already existing mistrust and suspicion. In other words, “[u]nilateral action in a basin would mean no cooperation, not even communication or information exchange, over the management and development of the shared river.” (Sadoff and Grey, 2005: 424). Thus, for the success of any multilateral approach in transboundary water resource management, there should be, in relative terms, convergence of policies regarding shared water resources. But as indicated above the Nile policies, positions and strategies of Eastern Nile Basin States are contradictory and divergent which in one way or another manifests the prevailing unilateralism in the basin.

As noted in Tesfaye (2008: 65), “[t]rade relations, experience of joint programs, similarity in major policy direction, tradition of cultural and social relations and history are among factors that would influence the venture of benefit sharing and cooperative arrangement.” Fundamentally, “Benefit sharing requires a common understanding, interest and vision as well as the required political will to jointly manage river basins.” (Arntzen et al 2010). In this context, benefit sharing arrangement as an approach of managing transboundary river basin involves wide-ranging acceptance of the different identifying projects and the equitable distribution of costs and benefits which can only be done as a result of joint action and cooperation. As noted by Sadoff and Grey (2005: 424), “[j]oint action occurs when riparians act as partners in the design, investment, and implementation of international rivers development.”

Arrangements of monetizing the costs and benefits of joint projects are also issues which should be addressed after the riparian states agree on the relevance and importance of the projects. In other words, states must first, before investing on joint projects, should agree on the need of the project and the conditions that should be meet. This is because, the real world

is composed of sovereign and independent states where “each [state] seek[s]...to maximize its own comparative advantage by pursuing narrowly-defined national interests.” (Phillips et al, 2006: 30). In other words, for such kind of joint projects to be effective including good management of resources, there is a need by political leaders to be to compromise from a narrowly defined national interest to the broader common interest of all riparian states. In this context again the (Eastern) Nile Basin is unfortunate as downstream states if not including upstreamers are overriding by their particular unilateral interests.

According to Phillips et al (ibid: 156), “A necessary condition for the success of any benefit-sharing approach amongst the Nile River co-riparians is to generate a new ‘basket of options,’ based on incentives that are powerful enough to change the paradigm by which water resource management is practiced in contemporary times.<sup>63</sup>” However, these ‘basket of benefits/options’ to be discussed or negotiated first should have a foundation where all the riparians stand together on equal foot as equal partners. There should be a general agreement between riparian states first to agree on the ownership of the Nile waters. Who owns the Nile? This question must be answered first.

Downstream states notably Egypt has been insisted in its position of considering its veto over upstream water projects per the 1929 and 1959 agreements which it considers sacrosanct. Sudan as the second principal beneficiary of the status quo is standing firm by calling upstream Ethiopia to recognize its current share as per the 1959 Agreement. Thus, the playing field is not level, as the riparian states are not on equal footing. As the water right question is not yet answered any attempt of joint development of water projects or sharing benefits from such projects is a temporary solution of the Nile dispute. Thus, the above challenges should first find solutions to make the benefit sharing fruitful on the Eastern Nile Basin.

It is worth noting that solving the Nile issue be it by allocating water or sharing of benefits or both should be to transform the conflict<sup>64</sup> between upstream and downstream states so that

---

<sup>63</sup> He was meant that in contemporary times the most acceptable approach is benefit sharing and it would be better if the Nile riparians follow this rather than insisting on the physical water per se.

<sup>64</sup>According to the Conflict transformation school “The potential for change lies in our ability to recognize, understand, and redress what has happened, and create new structures and ways of interacting in the future.” (Lederach and Maiese 2009: 8). So basically to change the (Eastern) Nile Basin to the better and to benefit from the bounties of the Nile riparian states by establishing a new system or structure of managing the Nile, they must first address the real predicament of cooperation. This also should be followed by continuous political commitments of states and building up of confidence and trust.

they will be able to work together and benefit from the common Nile water resources. As stated by Lederach (2003) the structural dimension of conflict transformation highlights the underlying causes of conflict and the patterns and changes it brings about. The fundamental cause of conflict or dispute over the Nile waters is water rights and entitlement; the issue of ownership, fairness and equity. Furthermore, it involves the political, social and as well as economic needs of the basin states attached with the shared river-the Nile. These questions therefore should be answered. Here it should be also underlined that conflict transformation requires the capacity to reflect on the conflict without being overwhelmed by the present situation so that short term solutions are integrated with long term strategies. (ibid).

Thus, the major impediment is, the lack of agreement that binds all the states and regulates the overall management of the Nile Basin. This could be possibly happen if all the (Eastern) Nile Basin States agree on accepting the CFA and open a new era of cooperation in the Basin. In other words, any cooperative engagements in the Nile Basin should adjudicate the principle of equitable and reasonable utilization against the so-called 'prior use, historic or acquired rights' which is critical for cooperation and regional integration beyond the river. This has to also be reflected by state practices beyond the signing of a mere treaty. For benefit sharing to be effective in the Eastern Nile Basin, therefore, equitable and reasonable utilization of the Nile water should be declared and end the unjust status quo. Without such a condition any attempt of joint projects are short term solutions for a problem and shelving fundamental issue of water right for tomorrow; which will provide the Nile Basin States no solution of the fundamental problem.

## **5.2. Scenarios of Water Sharing and Benefit Sharing Arrangements on the Eastern Nile Basin**

Looking at the different policies and positions of the Easter Nile Basin states regarding water sharing and benefit sharing arrangements as well as the different strategies they pursue and current state of affairs on the Basin, it is possible to come up with four different scenarios. One thing which should be noted is that in dealing with the nexus between water sharing and benefit sharing arrangements there is the issue of looking at the basin at large as one geographic unit and making a distinction between the Nile Equatorial Lakes Basin and the Eastern Nile Basin. This is mainly due to the fact that the water sharing arrangement is a basin wide project that involves all the Nile littoral states in both the White Nile and Eastern

Nile Sub-Basins. Whereas issues relating to benefit sharing arrangement are those different projects being treated separately as NELSAP and ENSAP. Hence, dealing with these two issues is based on such an approach- in this thesis, when I say water sharing agreement it is about the whole basin and the benefit sharing one is that which focuses on projects of ENTRO/ENSAP. Below an attempt is made to make clear the four scenarios identified and their respective implications.

### **5.2.1. Water Sharing Agreement Without Benefit Sharing Arrangement**

This scenario could happen if the Nile Basin states would agree on the physical allocation of the water of the Nile and pay no attention to any joint development projects in line with the benefit sharing approach. Put another way, this could materialize when the Nile Basin States agree on the volumetric allocation of the Nile water and disagree on, may be, the monetization and quantification of the different benefits identified from joint water development projects. In this regard, despite not specifically an agreement for volumetric allocation of water, by declaring the equitable and reasonable utilization principle the CFA can be taken as such an approach. Basin states in this regard may relegate on the different projects in ENTRO/ENSAP and focus on their own projects and maintaining the water that is to be allocated to them. This is, however, far from the challenges that the Nile Basin states faced; which will force them to manage the Nile waters in integrated manner for mutual benefit. In this context growing climate change that could pose negative impact on the basin and a consequent deterioration of both the quality and quantity of the Nile water will oblige the basin states to come to table and solve the problem they have faced.

### **5.2.2. Benefit Sharing Arrangement Without Water Sharing Agreement**

There are two choices for the Nile Basin States to come up with a kind of benefit sharing arrangement without water sharing agreement. One is when the basin states focused on joint development projects without a need for water sharing entitlements. “Such a scenario reveals that the operation of benefit sharing arrangement that did not call for a water sharing arrangement is possible in a situation where benefit sharing projects are of such a nature that did not impact the existing water use pattern” of the basin states (Muluaem, 2009: 105). This would involve the establishment of the Nile Basin Commission with a total rejection of the signing of the CFA or replacing it by an agreement that focuses on joint water development projects per se. In other words, it is one means of perpetuating the status quo and institutionalizing the so-called prior agreements regarding the physical water and the water

rights of riparians. This is unlikely to happen as upstream states have signed the CFA and are calling the remaining riparians to join the deal.

The second choice for Eastern Nile Basin states could be signing a new benefit sharing agreement that openly discard prior partial agreements but with broader issues on the table beyond the water. In this context the concern is not on the volumetric allocation of the water for riparian states but to come up with different benefits from different projects. This will involve then to monetize and quantify who gets what from the different joint development projects and investments on the Nile which will take time and consider a number of factors discussed above such as political will and need of the projects, perception, trust and confidence, relatively peaceful history of hydropolitical relation between the Basin states and so on qualities which the Nile Basin actually lacks. Furthermore, it should be noted that as a matter of fact because they are sovereign entities, while dealing with the benefit sharing arrangement riparian states are also very much interested in maintaining their water share from the shared river. Hence, the acceptance of this scenario in any of its forms is far from the reality on the ground so is the possibility of implementation.

### **5.2.3. Benefit Sharing Arrangement Pending Water Sharing Agreement**

In this context the objective is to ‘enhance cooperation’ on the so-called issues that are not directly linked to the water. The concern is, enhancing joint development projects and continuing the negotiation on the major issue of water sharing until both upstream and downstream states agree on the disputed article of the CFA. This in one way or another is what Egypt and Sudan are calling for following the signing of the CFA by upstream states. From the perspective of downstream states it is possible to establish the Nile Basin Commission without an immediate signing of the CFA and then continue the negotiation on water sharing until all riparians reaches on consensus. For both states the Commission will undertake the works of the NBI and different sub-basin projects-such as the ENSAP ones which are, as mentioned in the previous pages, based on the benefit sharing approach. Be that as it may, the problem is most of the projects prepared by ENTRO/ENSAP are still technical and on paper. What challenges the implementation of different projects identified by ENSAP/ENTRO are lack of ‘continuous country commitment and availability of fund.’ (Sherif M.El Sayed, 15 March 2011). In short, implementation of these projects is lagging because of the lack of finance, the reluctance and lack of political will and mistrust mainly from downstream states particularly Egypt and its perception of itself as the hegemonic

power in the Basin and trying to dictate what should be done. This in turn shows the fact that Egypt's attempt is using the benefit-sharing approach in a way that may allow it to exploit the common resource of the Nile under a quasi-sharing formula that itself has defined, solely for its own benefit. (Phillips et al, 2006: 31).

What would happen in the Nile Basin was such a scenario. Establishing the Nile Basin Commission by declaration of presidents of the Basin states was meant an institution that would replace the overall responsibilities and works of the NBI including the sub-basin projects. And the move was to invest on the different projects of the NBI under the general guidance of the Egypt and Sudan dreamed Nile Basin Commission.

Nevertheless, for the CFA signatories negotiation is over and what is important is to sign the CFA so that the Nile Basin Commission will be established and the Nile can be managed and used together by the riparian states equitably and reasonably. From this one can understand that the division is between those who needs to maintain the status quo and those who needs its reversal. Egypt's and Sudan's call for establishing the Nile Basin Commission without signing the CFA could be interpret as part of their delaying tactics to complete their unilateral hydraulic constructions and create *fait accompli* projects so that "the harder it may prove to negotiate a Nile Basin agreement." (Mason, 2004: 172).

#### **5.2.4. Two Agreements of Water Sharing and Benefit Sharing Arrangements**

If there is the political will and the confidence between the riparian states the CFA is an opportunity to come up with two agreements of water sharing and benefit sharing approaches in the Nile Basin. The idea is to adopt an agreement that incorporates both approaches in separate documents as well as one single document. In this regard Articles 4 and 31 of the CFA can be regarded as stepping stones for this. Article 4 of the CFA openly declares that "Nile Basin States shall in their respective territories utilize the water resources of the Nile River system and the Nile River Basin in an equitable and reasonable manner." It further outlines the different factors to be used to determine this equitable and reasonable utilization of the water. By so doing the CFA is declaring the water right of each riparian state and its share in accordance with the relevant factors mentioned. Under Article 31(1) the CFA declares that "Nile Basin States shall recognize the utility of sub-basin organizations and arrangements." This is the recognition of the sub-basin arrangements of the Nile-ENSAP and NELSAP and their respective water related projects which, in fact, do have a character of

benefit sharing arrangement. This should be clear, however, that these sub-basin arrangements are in “consistent with those of the Nile River Basin Commission and with the principles and rules set out in, or adopted under, the Framework.” (Article 31(2) of the CFA).

Taking the current state of affairs into consideration based on this scenario, arrangements can be made to solve the Nile waters dispute and to provide a lasting solution. By signing the CFA Eastern Nile Basin states can continue negotiating on the different benefit sharing projects. In this case, studies should be made of identifying possible benefits from joint development projects and their monetization or quantification. This could include making an arrangement of ‘who gets what’ and mechanisms that will enhance ‘equitable and reasonable sharing of the identified benefits.’ This could necessitate enhancing the already established Benefit Sharing Framework of the Nile and strengthening the existing arrangements of ENTRO/ENSAP and implementing the fast-track projects to develop confidence and trust. In some way or another, because the Nile Basin states cannot coup up the different challenges that they may face in managing the Nile River Basin, they should come together and discuss possible way outs. Furthermore, they could also develop new water resources that they can share and enhance cooperation and strengthen their relations.

In this scenario what is important to note is the riparian states obviously could not benefit optimally from the Nile waters if they simply allocate the water between themselves alone without establishing an agreeable tool of sustainably managing the resource with long term strategies. In other words, it is apparent to create an adoptive mechanisms of Integrated Water Resource Management (IWRM). By definition, IWRM is “*a process that promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.*”(Xie, 2006: 4 citing Global Water Partnership). In simple terms, IWRM involves stakeholders from local to international level to sustainably manage and benefit from the commonly shared water resources which in one way or another is related the central foundations of the benefit sharing approach. Therefore, after declaring the right of the Nile basin states to use the water of the Nile in their respective territories in equitable and reasonable manner via the CFA, there should be arrangements of developing or continuing long term strategies of the benefit sharing framework so that the riparians can benefit all without harming one another.

### **5.3. The Cooperative Framework Agreement-Would it solve the Nile Question? In Search of a Lasting Solution**

By nullifying the so-called prior agreements on the Nile (the 1929 and 1959 agreements)- which “did not provide any basis for cooperation of any form” between upstream and downstream riparians of the Nile (Yacob Arsano, 14 March 2011),<sup>65</sup> the CFA is believed to provide a new platform for cooperation between the riparians of the Nile. The key concept of this agreement is equitable and reasonable utilization of the Nile waters. Strictly speaking, as stated in previous pages, the CFA as an agreement is not about the volumetric allocation of the Nile water. But it also involves other issues pertaining to Nile River such as development, management, protection and utilization. Thus, looking at the key issue of ‘equitable and reasonable’ utilization with the positions of the Nile riparians, and an apparent future water allocation, the CFA is more or less a water sharing agreement.

In any case, up to now, six riparian states have signed the CFA and D.R. Congo is expected to sign soon. As a result the CFA is in a position of being a legal document that binds the signatories following its ratification as per article 42 of the CFA. The sad story of the situation, however, is that no downstream state has not yet signed the agreement because all the signatories are from the Nile’s upstream. Time and again downstream; Egypt and Sudan has declared that they will not sign any new water sharing agreement unless it recognizes their ‘historic or established rights’ as per prior colonial or bilateral agreements. For such a reason they have rejected the CFA and vow not to sign in the future until what they are demanding is fulfilled.

Some of the reasons that both Egypt and Sudan for not signing the CFA and their sticky position of holding prior partial agreements as binding and recognizable are a result of some (mis)calculations. One is their threat perception of upstream water developments and their fear of leaving security to other states (upstreamers). This can best be expressed by saying deep-rooted mistrust. Second, is their perception of regional hegemonic power able to deter the moves of upstream states by using all sorts of power from warning to withdrawing from the NBI to the threat to use any means suitable to protect their ‘historic rights’ (especially Egypt). The third reason could be also the reason that they were using the negotiation on the

---

<sup>65</sup> E-mail interview with Yacob Arsano, PhD, Associate Professor of political science & international relations at Addis Ababa University (14 March 2011). Sent on 7 March 2011 received on March 14, 2011 5:21

CFA as something that will take time; may be two and more decades. In the mean time it seems that they were very confident that they would complete their unilateral projects that would make them the sole beneficiaries of the Nile waters by systematically precluding upstream states from the use of the Nile waters through *fait accompli* projects. Nevertheless, things have gone the other way and their threat to withdraw from the NBI as well as their call for continuing the negotiation fall on logically deaf ears of upstream states as the later go ahead with the signing of the CFA. Thus, after May 14, 2011 it is likely that the Nile Basin Commission will be established by the signatories as planned on time.

Nevertheless, unless the upstream-downstream disagreement over the CFA is resolved it will take the basin nowhere except incubating conflicts. Thus, needless to say the only solution to avert any potential conflicts on the Nile is cooperation. It is time therefore for the (Eastern) Nile Basin states to agree and go ahead with signing the CFA. According to Mustafa, a Sudanese engineer, “Egypt [for instance], has no other option [other than signing the CFA], as it is the weakest ring in the chain.” (Mustafa, 3 March 2011). Mustafa, also added that, Sudan has not yet signed the CFA because of the pressure from Egypt but this will not continue. The idea is, downstream states are water recipients and the water is in the hand of upstream states so it is better if they cooperate with their upstream neighbours and enjoy the bounty of the Nile together. Mustafa is too optimist that downstream states “will not only sign the agreement [the CFA], but they will be the leaders in commending its benefits.”

For Anthony Turton<sup>66</sup> (8 March 2011) “if the CFA is underpinned by robust benefit-sharing agreement, then it will become the foundation of a new and better Nile Basin” which means the downstream states will join. Yacob (14 March 2011) also stated that Egypt and Sudan will also join the CFA. For him this is because “accepting CFA is in the best interest of downstream countries ...[and it]... does not entail any harm to the interests of” these countries. There are also arguments that because both Egypt and Sudan are to lose their claim of historic or established right based on the 1959 bilateral agreement “they have made it clear that they won’t accept such a “loss” and thus, one may conclude that they won’t join unless some change is introduced to the CFA (amendment, guarantee, etc).” (Dereje, 15 March 2011). Nevertheless, amendment of the CFA is very unlikely in a way that Egypt and/or

---

<sup>66</sup>E-mail interview with Dr. Anthony Turton, Environmental Advisor, Speaker, Author of a number of books, journal articles on versatile issues related to water. Sent on Monday, 7 March, 2011 8:57 received on Tuesday, 8 March, 2011 7:09

Sudan wants because of the basic reason of the disagreement is maintaining the status quo or not; where upstreamers never accept. For Dereje, “It is also likely that they [Sudan and Egypt] may opt to join the CFA and neutralize the very agreement and the Commission<sup>67</sup> through various stalling tactics and issue diversion instead of staying out and see what the other riparian countries might do.” (15 March 2011).

The other argument that strengthen that Egypt and Sudan could sign the CFA are the choices left for them and the resultant costs and benefits of these choices. In contemporary (Eastern) Nile Basin there are two choices that are left for downstream Egypt and Sudan. One choice is joining the CFA and work with upstream states cooperatively by renouncing old and partial agreements so that declaring equitable and reasonable utilization. The second choice is to go ahead with their unilateral undertakings by persistently rejecting the CFA. The choice is their own and needs political commitment and decision. Nevertheless, they know that as downstream states the cost of non-cooperation is much and damaging as the water itself is not in their hand and they cannot also stop the unilateral move of upstream states. Downstream states therefore has no any option except signing the CFA if they are to benefit much from the Nile.

The question is, however, when will downstream states sign the CFA, if they do? One thing which should be clear is that in the near future before the closing day of signing of the CFA, it is unlikely that they will sign as it can be clearly understood from their current position on the Nile and the internal political situations that they found in.<sup>68</sup> The probability for their signing will be perhaps through the process of accession after 14 May 2011. This would require the involvement of external parties like the World Bank in pressurizing downstream Egypt to come to table. But again their signing of the CFA by itself is not enough and will not end the Nile dispute as well. This is because the CFA has also unfinished jobs regarding

---

<sup>67</sup>The Commission is to refer to the Nile Basin Commission that is going to be established after the CFA is signed and ratified by the needed majority of countries and most likely will be established after 14 May 2011.

<sup>68</sup>In this context the unfinished job of South Sudan’s independence and the following negotiations on oil and boundary demarcation as well as citizenship issue is the major concern of the Sudan. It is being expected that South Sudan will declare its independence on July 9, 2011 which is after May 14. The situation in Egypt is different. Following a public revolt lasted for 18 days a man who crowned as president for 30 years, Hosni Mubarak has ousted from palace and it is military that is undertaking care-taker administration in Egypt. Now Egyptian military rulers are busy in restoring peace and stability domestically and their focus is fenced in such a way. Presidential election in Egypt is planned to be conducted within six months which means after May. So for both countries if they are to accept and sign the CFA it is through accession which could be after May 14, 2011.

determining equitable and reasonable utilization in later days of an apparent allocation of the Nile water among the littoral states of the River.

The problem is mainly due to the an un-assigned weight to the different factors outlined under article 4(2) of the CFA in determining equitable and reasonable utilization of the water of the Nile. As stated under article 4(4) of the CFA,

*The weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors. In determining what is a reasonable and equitable use, all relevant factors are to be considered together and a conclusion reached on the basis of the whole.*

Put it in other terms, the weight to be given to the mentioned factors is by negotiations between the riparian states. For experts such as Anthony Turton (8 March 2011), “The law [CFA] is deliberately vague in this area for good reason.” For him before assigning weights to the mentioned factors in determining what is equitable and reasonable utilization there must be a foundation and this foundation is ‘political agreement which could be followed by law of assigning weights-which is the matter of solely the negotiating parties to consider.’(ibid). The idea is that first the riparian states should politically agree on declaring equitable and reasonable utilization as a general guiding principle then assigning weights is the concern of experts negotiating.

Once the riparians overcome the “predicament [the status quo by signing the CFA]” assigning weight is a “problem [and] by definition this can be solved” as a result it will not be a challenges. (ibid). In line with this for Mustafa (3 March 2011), the un-assigned weight of these factors “is always a challenge, even four decades of work on the international water law failed to provide specific answer to this thorny question...but each challenge could be transferred into a step in the road of success.” For these experts the un-assigned weight of these factors will be solved as a problem and Nile riparian states will agree on and will not be a challenge in huge amount.

The idea of considering an un-assigned weight of these factors as less challenging in some way or another, however, is problematic. As noted by Elmusa (1997: 308) the un-assigned weight of “factors open the door for parties to the conflict to accent those that are advantageous to them...” This would be most sound in basins such as the Nile which is highly

securitized and consequently where the upstream-downstream riparians do have divergent positions and strategies. Therefore, reaching on a generally agreed and acceptable formula of water sharing will not be an easy task. In this context for instance Egypt and Sudan may accentuate on the population dependent on the basin, existing and potential use of the water, the extent and proportion of the drainage area in the territory of each Basin State (especially Sudan) and so on, to best maintain their interest and to perpetuate the status quo on the Nile. Ethiopia, on the other hand may stress on contribution of water, the effects of the use or uses of the water resources in one Basin State on other Basin States-to win over negotiations on the positive repercussion of dams in Ethiopia to downstream riparians. Based on the divergent positions and negotiation strategies of the riparian states considering the factors as less challenging is, therefore, erroneous and misleading.

In line with this, the negotiation for reallocation of the water after the establishment of the Nile Basin Commission will also face another challenge which in one way or another linked to the previously mentioned issue. It is understandable that negotiating on a situation where there is no weight assigned for the factors will not be easy and negotiations for assigning weight will take time. It will take years that one cannot predict. But in a basin where scramble for water is in its peak in the years of negotiation for the equitable and reasonable allocation of the waters of the Nile, in the mean time of reaching on an agreement, the basin will witness escalation of unilateral actions. This will make things worse and challenge the move to solve the Nile question in the future.

The other contentious issue in the process of coming up with an agreement of managing transboundary water resources is striking a balance between the principles of equitable and reasonable utilization and obligation not to cause significant (or appreciable) harm. A through reading of the CFA gives us a picture that puts the '*no significant harm*' principle under the principle of equitable and reasonable utilization. According to Article 5(2) of the CFA any action of a riparian may cause significant harm on the utilization of another riparian state if its use of the water of the Nile disrepute the factors outlined under article 4; which proclaim equitable and reasonable utilization. The disagreement over article 14(b) also has to do with the upstream and downstream divide on what constitutes '*significant harm*' despite the way to define this was through the new concept of '*water security*.' Upstream states compliments article 14(b) in a way that fits the principle of equitable and reasonable utilization; stating that "*not to adversely affect the water security of any other Nile Basin State.*" On the other hand,

downstream states' firmly struggled to rewrite it in a way that acclaims the no significant harm based on '*established or historic rights*' doctrines by proposing an argument which says "*not to adversely affect the water security and **current uses and rights** of any other Nile Basin State.*"(emphasis mine).

Most of the time, the postulation is that 'it is strong upstream states creating harm on geographically weak water recipient downstream states.' As noted by Elmusa (1997: 324) "[e]ven if an upstreamer`s dam can withhold water from the downstream, the later might be able to deny the former water by political and other means, thus effectively reversing their stream positions." This is what has been the episode in the (Eastern) Nile Basin. In other words, practically in the Nile Basin, it is not upstream states which are creating harms on the water utilization of downstream riparians rather it is the reverse. Basing their arguments on an old and bilateral as well as colonial non-inclusive agreements, downstream states of the Nile have been implementing unilateral projects that will complicate the Nile issue in the future. The unilateral projects can be interpreted as a downstream harm against upstream riparians because the intention of the projects is to monopolize the Nile water by creating *fait accompli* projects so that no water would be left to upstream states. Furthermore, the political as well as diplomatic clouts of downstream Egypt<sup>69</sup> in no way can be interpreted other than denying the means for upstream Ethiopia and precluding Ethiopia (and to a lesser degree Sudan) systematically from utilizing the Nile waters.

Thus, signing the CFA is a necessary but not sufficient condition in resolving the Nile question. As a necessary condition "the CFA is a major step forward because it breaks the impasse created by the 1959 Agreement." (Turton 8 March 2011). Therefore, the CFA is the destruction of the real conflict on the Nile. In line with this it openly declares the principles of equitable and reasonable utilization as its corner stone. By so doing it entitles all riparians of the Nile to utilize the Nile waters in their respective territories for any purpose they need in equitable and reasonable manner. In line with this, "[a]ccepting the CFA is a critically important basis to avoid unilateralism and to enhance cooperation in the Nile basin. (Yacob, 14 March 2011). The CFA is not, however, a sufficient condition in solving the Nile question

---

<sup>69</sup> In this regard the different strategies that Egypt employees, as discussed in the previous chapter, have been targeting precluding upstream states from utilizing the Nile waters. The unilateral actions of implementing grandiose and ambitious water projects as well as political moves promoting proxy war in the Horn of Africa to destabilize the region so that it affects Ethiopia, as New Valley Project planned to be completed by 2017 and its diplomatic move of objecting international funds for upstream projects are significant harms that Egypt has been causing on upstream riparians.

and is not a lasting solution by itself. There should be long-term strategies and mechanisms of strengthening the joint management of the Nile Basin as one geographic unit as a basin and enhance the sustainability of its use to optimal level and its protection for mutual benefit and win-win gains. This will help to overcome the different challenges that the Nile Basin has been faced.

The Nile Basin is also witnessing alarming population growth. According to the United Nations Population Division, by 2050 the population live in the Eastern Nile Basin Countries is estimated to reach more than 375 million in all the three countries including South Sudan. Where in each Ethiopia, Egypt and Sudan (both North and South) 173,811,000, 129,533,000, 75,884,000 respectively.<sup>70</sup> The question which needs an answer is, would the Nile Water be sufficient to meet the requirements of this growing population? quenching a multitude of thirsties? produce the food needed to feed these population? The Nile is a closed system where no water is left to the sea. It is being over exploited and used. To meet the need of the rapidly growing population the basin states of the Nile should employ mechanisms of using the Nile sustainably for mutual benefit and looking further strategies beyond the water per se.

Furthermore, like the attempts of the 1997 UN Convention which highly influence Nile negotiations, the CFA is weak in terms of river basin management. It actually tries to entail the management and protection of the Nile River Basin and obliges riparians to “take all appropriate measures” to conserve and protect the ‘Nile Basin and its ecosystems’ in their respective territories “individually” or “where appropriate jointly” (Article 6). Hence, environmental enigmas such as an ever threatening climate change, deforestation, desiccation, and land degradation which in turn deteriorating the quality and quantity of the flow of rivers are challenges that Nile riparians face ahead. In line with this increase siltation and sedimentation in downstream dams are also challenges. These all can be mitigated by cooperative engagements beyond the mere water sharing formula and not by unilateral undertakings as well. Therefore, there should be mechanisms of pointing out possible benefits and costs and their equitable and reasonable share as incentives of cooperation in jointly managing the river as one geographic unit and tackling these challenges.

---

<sup>70</sup> United Nations Population Division, World Population Prospects: The 2008 Revision Population Database. Available at <http://esa.un.org/UNPP/> accessed on 3/13/2011 11:36 AM.

Finally, the CFA should be supported by a system that will bring all riparian states together for win-win gains and solve the Nile question permanently. Following this, the basin states could be able to share both the water and the benefits from the use and non-use of the water and strengthening their relations and create a better Nile Basin. The CFA is, therefore, a golden opportunity to solve the Nile question but not sufficient and should be supported by other mechanisms that involve the basin states to consider benefits and cooperate beyond the water per se.

#### **5.4. The Future of Eastern Nile Basin-Making A Balance Sheet: Conflict or Cooperation?**

As discussed in Chapter Two of this thesis it is probable that both conflict and cooperation can co-exist in a given transboundary river basin. The problem, however, lies on the degree of unilateralism and multilateralism that exists within the basin. In line with this, the issue that divide the basin states and their position is important. In this regard, contemporary (Eastern) Nile Basin is attesting the coexistence of both unilateralism and multilateralism where the former is dwarfing the later. By definition if unilateralism is outweighing multilateralism, there is high probability for conflicts to emerge as the implication is, there is little or no cooperation. This in turn do have its repercussions in the future relations of the basin states and the overall situation in the basin. Egypt is working day and night to complete its grandiose unilateral projects; the New Valley Project as planned in 2017. Sudan has also been constructing a series of dams along the main Nile and its tributaries like Tekeze-Atbara. Ethiopia is also doing its best to utilize the Nile waters and is undertaking various irrigation and hydropower hydraulic projects along the main Nile and its tributaries including the its new hydroelectric dam on the Nile; the Grand Millennium Dam.

The Nile Basin states have not yet also reached on an agreement of settling the dispute over the CFA. Upstream states are calling for establishing a system based on the principle of equitable and reasonable utilization of the Nile water and creating a mutually agreed basis for cooperation by reversing the status quo. On the contrary, downstream riparians have insisted on maintaining the status quo based on partial agreements which have never been accepted by upstream states. The battle now is, therefore, between accepting a principle that is backed by customary international water law i.e. equitable and reasonable utilization in one hand and

those doctrines which do not have such a quality i.e. ‘historic or ancient rights or prior use’ on the other hand.

The positions, Nile policies and different strategies of the riparian states of the Eastern Nile are also at odds and contradicting each other and evolving in divergent move. It is therefore difficult to come up with a generally agreed framework and point of reference with such a situation. The question is then whether there is/are way(s) to converge these divergent and contradictory positions between the riparian states in the near or far future. The only solution at this point in time is if downstream states join the CFA and continue the cooperation that has started within the NBI framework by establishing a permanent Nile Basin Commission. Predicting the future is a difficult job. As mentioned in the previous pages, for pundits, there are incentives and factors that requires both Egypt and Sudan to join the CFA. But from the perspective of contemporary position of these states they seemingly will not join the CFA in the near future. And if they do as they have threatened to withdraw from the NBI, new era of deadlock will be the next destiny of the Nile Basin which is actually a move of back to the future.

The most important thing that should be addressed also is, the fate of NBI itself and its sub-regional arrangements. What makes Eastern Nile different as a sub-basin in the Nile system is it is shared by four riparians while two are most downstreamers; Egypt and Sudan, Ethiopia and Eritrea are upstreamers and Eritrea is an observer with no participation in the NBI. Hence, the problem is under current state of affairs the proportion is 1-to-2 and ‘if Egypt and Sudan withdraw from the NBI as they warned there will be no ENTRO/ENSAP.’ (Sallah Shazali and Sherif M.El Sayed, 15 March 2011). Their main reason for this is the issue of the CFA. For people in ENTRO before the legal deadlock as a result of the CFA things were going smoothly. But now the CFA is becoming a challenge for ENTRO as the position of the member states of ENSAP is contradictory. (ibid). For ENSAP to exist or to continue performing its entrusted functions therefore there should be mechanisms of solving the divergent positions of the riparians.

The only thing that the Nile Basin states can do to avert conflict is engaging themselves in and strengthening cooperation to mutually benefit from the Nile. Cooperation is the only way out. But things at this point in time are blurred. The only thing that one can do is logical speculation. Hence, if Egypt and Sudan join the CFA, that will be a golden opportunity for

the Nile Basin at large in tear downing the major predicament (the so called historic rights) for further cooperation. If it so happen, it will pave a new era of cooperation on the Nile and riparians can achieve the golden Shared Vision of the NBI. In this regard the CFA should be followed by an arrangement of a benefit sharing like approach with projects that involves all the (Eastern) Nile Basin states to mutually benefit from the Nile bounties.

On the other hand it is also likely that both Egypt and Sudan will insist on claiming the so called '*historic rights*' and remain outside the CFA. The implication is, therefore, the states are deciding to go ahead unilaterally with their respective projects and the cost will be huge. Here the divide is basin wide in nature as upstream versus downstream. The former who signed the CFA and will establish the Nile Basin Commission as intended and the later who reject and decide to be out of the deal. Especially in relation to Eastern Nile Basin if there will be cooperation that will be established if the new state South Sudan join the CFA. Nonetheless, there will be no cooperation in the basin if Egypt and Sudan withdraw as they warned and the cost will be huge. In this context, the (Eastern) Nile Basin will witness nothing other than competition for water which sows seeds of conflict-may be a violent one.

Taking the existing downstream unilateral projects (especially Egypt`s) and their completion as a base one can also speculate that in the future downstreamers will join the CFA. But the problem is that, they will follow another delaying tactics in negotiations of both allocation of water as well as implementing the different multipurpose projects identified and prepared. This in some way or another could entail the continuation of unilateralism under pseudo cooperation institution. The future is too uncertain just simply opened for speculations.

## CHAPTER SIX

### 6. SUMMARY AND CONCLUSION

Managing transboundary water resources is not always easy and simple. Especially in a basin such as the Nile which has been characterized by a number of inconveniences the task is difficult. With growing environmental degradation and climate change which poses challenges in both quality and quantity of water, as well as rapid population growth that will definitely increase the demand for water, it is apparent for riparians to follow cooperative approach of managing the Nile. In contemporary Nile Basin, the riparian states have employed mechanisms of managing the Nile through a transitional organization known as Nile Basin Initiative (NBI). The NBI has a Shared Vision “*to achieve sustainable socio-economic development through the equitable utilization of and benefit from the common Nile water resources.*”

Through the NBI to achieve the Shared Vision, the (Eastern) Nile riparians have followed two approaches/tracks. One is the legal track which mainly focused on high level negotiations between Water Ministers of the Nile riparians for a basin wide Nile agreement- the Cooperative Framework Agreement of the Nile which will then establish a permanent legal regime or institution know as Nile Basin Commission. The cornerstone of the CFA is the principle of equitable and reasonable utilization. By so doing the CFA throw out the unfair status quo and the so called prior agreements which has been claimed by downstream states as binding and recognizable. This, however, has never been accepted by upstream Nile states. It is this unfair status quo which for long impede the Nile riparians from working together and promoting unilateralism directly or indirectly. Thus, the CFA is all about the destruction of this predicament on the Nile Basin.

The negotiation for the CFA has culminated then with the decision of upstream states to sign the CFA on April 2010 during the extra-ordinary meeting of Nile-COM at Sharma El-Sheikh-Egypt. This signing of the CFA on May 14, 2010 by upstream states has opened a new history in the Basin. Downstream riparians have opposed the signing of this agreement as a unilateral move of upstream states. Hence, the main cause for the division between upstreamers on one hand and downstreamers on the other hand is Article 14 (b) of the CFA. The battle between the up and down streamers of the Nile regarding this article is between

those principles backed by international water law-equitable and reasonable utilization in one hand and those doctrines which have no such a quality-prior use, established or historic rights on the other hand. While the former is a base to bring all the riparians of the Nile with equal footing, the later is a blow of downstream states to perpetuate the unfair status quo at the expense of upstream states. In any case, whether downstream states accept it or not, the CFA has ruined the unfair status quo.

The second track in the NBI is the technical track. In this track the main focus is on project preparation that can be implemented on the ground. Based on the Shared Vision, Eastern Nile states-Egypt, Ethiopia and Sudan have set up a joint investment program known as Eastern Nile Subsidiary Action Program (ENSAP) with an executive arm, Eastern Nile Technical Regional office (ENTRO). (ENTRO, 2009:3). Under ENTRO/ENSAP different investment projects, of which six fast-track to provide benefits on the ground and two long-term multipurpose projects, have been studied and prepared and most of the studies of the projects are finished and waiting for funding for implementation. Watershed management and Ethio-Sudan Transmission Interconnection are being implemented.

Hence, the approaches that are being adopted by Eastern Nile riparians can be labeled under two approaches. The legal track that results in the CFA is based on a water sharing approach and the technical track that focuses on preparing joint investment projects is purely a kind of benefit sharing approach in orientation. In line with the later Socioeconomic Development and Benefit Sharing (SDBS) framework of the Nile is prepared by the NBI. This study, therefore, has attempted of investigating and analyzing the complex relation between these two approaches in Eastern Nile Basin.

Benefit sharing as an approach is a new development by focusing on the different benefits that can be derived from both the uses and non-uses of the water rather than focusing on the volumetric allocation of a shared water. Theoretically speaking the benefit sharing approach is the best way of managing transboundary water resources and the benefits this approach typifies-benefits to the river, from the river, because of the river and beyond the river are multicolored foods on a table. Nevertheless, implementation of this approach is not a bed of roses as it need conditions for its fruitfulness. As all transboundary river basins are unique in different aspects, the implementation of the benefit sharing approach in any of its forms

differs from basin to basin and requires different conditions based on the context that the basin finds.

The main argument and philosophy behind the recently popularized concept of benefit sharing is its quality of reducing tensions over the utilization of transboundary water resources by diversifying issues of cooperation between and among the basin states beyond the water. The idea is, because non-cooperation has costs and cooperation do have benefits, states should engage in cooperation by diversifying and broadening issues of negotiation. The idea was that, the more the broader the table is the better the degree to accommodate interests of riparians.

The focus of benefit sharing in the context of the Nile is taken as an instrument to ease tensions over water allocation or water sharing issues by investing on joint investment projects. The focus was simply 'to see and share benefits beyond the river and then to bring the states together to work on water related issues.' The initial focus has been targeting on issues other than allocation or sharing of the waters of the Nile and bringing the riparian states of the Nile so that confidence and trust could be build. Implementing the benefit sharing concept do requires different conditions. And in the long run, the idea was that, water storage dams will be build in upstream Ethiopia which will save water, generate hydroelectric power, and supported by a watershed management that would minimize or remove siltation and sedimentation in downstream so that increase water supply and efficient use of water and productive land. At this point in time, however, the benefit sharing approach on the Nile in large scale is more of a paper value as the conditions necessary for benefit sharing are not met or fulfilled.

Many reasons can be enumerated why the benefit sharing arrangement in the Nile Basin at this point in time as well as in the near future will not be effective. Among others the basic hindrance to implement this approach in the Nile Basin is that, the Basin is in short of almost all the conditions needed. Suspicious and mistrustful hydropolitical history, low economic capability, religious and cultural diversity, low trade and economic ties as well as stiff hydropolitical position and divergent Nile policies are the major features of the (Eastern) Nile Basin. In line with this the 'non-water' political relations between the riparians has had negative repercussions. In this regard the culpability belongs to Egypt. Egypt`s overall non-water relations are meant machinations of maintaining the status quo on the Nile and so is the

benefit sharing approach which in fact deepens the mistrust between riparians. And above all the (Eastern) Nile Basin is characterized by lack of agreed principle or common point of reference that declares common ownership of the Nile and its overall management. For benefit sharing to be effective, therefore, it should meet the precondition of having a general agreed principle. Furthermore, the implementation of a benefit sharing approach will be realized as a result of lengthy and complicated negotiations of agreeing on the investments identified, quantification and monetization of benefits and costs, location of the projects, the issue of ownership of the projects, which actually will take time.

The positions, policies and (unilateral or multilateral) strategies of the (Eastern) Nile riparians have been also at odds and contradictory that hinders making the benefit sharing approach difficult in the Basin. In this context, the most contentious issue in the hydropolitical relation of the Basin states is water right, entitlement or ownership. While downstream states need to maintain the unfair status quo which bases itself on partial agreements (colonial or bilateral), upstreamers have called their downstream neighbours to use the Nile equitably and reasonably in accordance with customary international water law. In simple terms environmental benefits 'to the river,' getting greater benefits of irrigation or hydropower 'from the river,' reducing tensions 'because of the river,' as well as further integration between the basin states 'beyond the river' could be achieved if the fundamental conflict and tension of Nile water sharing and right is solved. The claim to sovereign water rights should be viewed as the first step in managing transboundary water resources and before they press on benefit sharing mechanism first they need to solve claims on water rights. Therefore, in a situation where the total flow of the river is divided between two downstream riparians and evaporation in the Sahara Desert talking about broadening basket of benefits, joint development projects and their possible benefits to the basin states is no more than giving an anesthetic to a patient rather than curing the curable disease.

At this point in time the CFA is a golden opportunity for all the Nile riparian states to embark a new era in the Basin by breaking the stalemate. The new era that should follow the CFA, if all the Nile riparians sign should be to embrace all the riparians and to embarrass none of them. Here it should be clear that, the signing of the CFA is not a panacea for all the problems that the (Eastern) Nile riparians faced but it is a chance to make the basin suitable of solving problems by destroying the real predicament of cooperation.

The CFA-which is mainly about equitable and reasonable utilization of the Nile is basically a document that declares riparians have an entitlement and their own share of the Nile water. To equitably and reasonably utilize the water it has outlined a number of determining factors. In any case, the CFA is primarily based on a water sharing approach of managing transboundary water resource. However, the problems that the riparians of the Nile faced are beyond the water. Ever growing deterioration of the environment, land degradation, deforestation which in turn negatively affects water flow in both in its quantity and quality as well as rapid population growth that pressures the demand for water could not be solved unilaterally. In this regard, like the 1997 UN Convention, the CFA is weak in discussing integrated water resource management. Therefore, the signing of the CFA by all riparian states cannot be taken as the final solution for the problem that the Nile Basin faced but the chance to bring about a system to come up with a lasting solution. Thus, for the CFA to be realized in good faith, for riparians to benefit from the Nile in sustainable manner, and to solve common environmental enigmas for mutual benefit, there should be mechanisms of managing the river beyond the allocation of water per se. Existing projects prepared by ENSAP especially the Joint Multipurpose Project should be enhanced.

Nevertheless, the situation in contemporary (Eastern) Nile Basin is not clear. It is rather blurred. Following the signing of the CFA by upstream states, upstream-downstream relation of the Basin states is in 'no conflict-no cooperation' environment. This does not mean that, the regional initiative NBI is dissolved or it is working well. Unless the legal deadlock because of the CFA is solved, the future of the (Eastern) Nile Basin is becoming more uncertain than ever before. Despite the difficulty to forecast what the future of the Basin will look like, it is foreseeable that unilateralism will remain the rule of the game at least till the near future. The unilateralism that Nile has been experiencing is not healthy. It is possible for unilateralism as national water policies to exist in a transboundary river basin as the riparians are sovereign and independent. But whenever multilateral approach of managing a shared river basin is dwarfed by unilateralism that is the beginning of the end. What the (Eastern) Nile Basin experiencing today is this excessive unilateralism that has been destroying trust and confidence but fermenting suspicions and mistrust that breeds (violent) conflict. It is time to avert the not unlikely upstream-downstream potential violent conflict over the Nile; say it direct or indirect. If not, the Nile`s doomsday is not far from reality. The clock is ticking.

## BIBLIOGRAPHY

### 1. Books and Articles

- Aaron Tesfaye. (2008). *The Political Economy of the Nile Basin Regime in the Twentieth Century*. Lewiston, New York, The Edwin Mellen Press.
- Amare Hailelassie et al. (2008). *Institutional settings and livelihood strategies in the Blue Nile Basin: Implications for upstream/downstream linkages*. Colombo, Sri Lanka, International Water Management Institute.81p. (IWMI Working Paper 132)
- Berber, F.J. (1959). *Rivers in International Law*. The Library of World Affairs. Number 46. London, The London Institute of world Affairs
- Bošnjaković, Branko. (2003). *Negotiations in the Contexts of International Water Related Agreements*. UNESCO/IHP/WWAP. IHP-VI/Technical Documents in Hydrology/PC→CP. Series n<sup>o</sup>-8.
- Cascao, Ana Elisa. (2008b). Ethiopia—challenges to Egyptian hegemony in the Nile Basin. *Water Policy*. Vol. 10, No. 2. pp. 13-28.
- \_\_\_\_\_. (2009). Changing Power Relations in the Nile River Basin: Unilateralism vs. Cooperation. *Water Alternatives*. Vol. 2, No. 2. pp. 245-268.
- Cosgrove, William J. (2003). *Water Security and Peace*. A Synthesis of Studies prepared under the PCCP-Water for Peace Process. UNESCO-Green Cross International Initiative.
- Daniel Kendie. (1999). Egypt and Hydro Politics of the Blue Nile River. In *North East African Studies*, Vol.1, No.1-2 (New Series). pp:141-169. Henderson, Henderson State University
- Debay Tadesse Woldemichael. (2008). *The Nile: is it a Curse or blessing?* ISS Paper 174. November 2008
- Deng, Biong Kuol. (2007). Cooperation between Egypt and Sudan over the Nile River Waters: The Challenges of Duality. *African Sociological Review*. Vol. 11, No.1. pp.38-62.
- Dereje Z.Mekonnen. (2010a). “The Nile Basin Cooperative Framework Agreement Negotiations and the Adoption of a ‘Water Security’ Paradigm: Flight into Obscurity or a Logical Cul-de-sac?” In *European Journal of International Law*, vol. 21 (2), May 2010, 421 – 440.
- \_\_\_\_\_. (2010b). From tenuous legal arguments to Securitization and Benefit Sharing: Hegemonic Obstnacy – the Stumbling Block against Resolution of the Nile Waters Question. In *Mizan Law Review*. 4(2). pp. 232-257.
- Dombrowsky, Ines. (2010). Benefit-sharing in transboundary water management through intra-water sector issue linkage? In Lundqvist, J. (ed.) 2010. *On the Water Front: Selections from the 2009 World Water Week in Stockholm*. Stockholm, Stockholm International Water Institute (SIWI). pp. 25- 31.

- Eckstein, Gabriel. (2002). Development of international water law and the UN Watercourse Convention. In Anthony Turton & Roland Henwood (eds). (2002). *Hydropolitics in the Developing World: A South African Perspective*. South Africa. African Water Issues Research Unit (AWIRU), Centre for International Political Studies (CIPS), University of Pretoria.
- Egre, Dominique. (2007). United Nations Environment Programme: Dams and Development Project. Compendium on Relevant Practices-2<sup>nd</sup> Stage. Revised Final Report: Benefit Sharing Issues. February 10<sup>th</sup>, 2007.
- El Harizi, Khalid et al. (2007). *Understanding Policy Volatility in Sudan*. The International Food Policy Research Institute (IFPRI). Development Strategy and Governance Division. IFPRI Discussion Paper 00721. October 2007.
- Elhance, Arun P., .(1999). *Hydropolitics in the Third World: Conflict and Cooperation in International River Basins*. Washington D.C, United States Institute of Peace Press.
- Elmusa, Sharif S. (1992). *Water Conflict: Economics, Politics, Law and Palestinian-Israeli Water Resources*. Washington, D.C., Institute for Palestine studies.
- Fasil Amdetsion. (2009). Scrutinizing the Scorpion Problematique: Arguments in Favor of the Continued Relevance of International Law and a Multidisciplinary approach to Resolving the Nile Dispute. *Texas International Law Journal*. Vol. 44. No.1. pp. 1-43
- Fitzmaurice, Malgosia and Gerhard Loibl. (2005). Current State of Development in the Law of International Watercourses. In Obe, Surya P. Subedi. (2005). Ed. *International Watercourses Law for the 21<sup>st</sup> Century: the Case of the River Ganges Basin*. USA, Ashgate Publishing Company.
- Garretson, A., Haytun, R., Olmstead, C. (1967). (eds). *The Law of International Drainage Basins*. Oceania Publishers. New York, USA.
- Granit, Jacob et al. (2010). *The Nile Basin and Southern Sudan Referendum. Regional Water Intelligence Report*. Paper 16.. Stockholm, Stockholm International Water Institute (SIWI).
- Granit, Jacob. (2009). Building Benefits.... Not Conflict... From Shared Water: Introducing the Transboundary Water Opportunity Analysis. In *Stockholm Waterfront-A Forum for Global Water Issues*. No. 1. May 2009. Stockholm International Water Institute (SIWI). pp. 6-7.
- Hamad, Osman El-Tom and Atta-El-Battahani. (2005). Sudan and the Nile Basin. In *Aquatic Sciences: Special Feature Article*. Vol. 67, 2005. pp.28-41.
- Hamdy A. Hassan and Ahmed Al Rasheedy. (2007). The Nile River and Egyptian Foreign Policy Interests. In *African Sociological Review*. Vol. 11, No.1. pp. 25-37
- Hammer, Jort. (2010). Southern Sudan: The New Kid on the Block? Assessing the Neighborhood on the threshold of Southern Sudan's Self-determination referendum. CRU Policy Brief. The Hague, The Netherlands Institute of International Relations.

- Harvey, Lashley G. (1966). *Water: Modern Methods of Use and Conservation*. Stamford, Connecticut, USA, International Publication, Inc.
- Healy, Sally. (2008). *Lost Opportunities in the Horn of Africa: How Conflicts Connect and Peace Agreements Unravel*. A Horn of Africa Group Report. Royal Institute of International Affairs. Chatham House.
- Hefny, Magdy and Salah El-Din Amer. (2005). Egypt and the Nile Basin. In *Aquatic Sciences: Special Feature Article*. Vol. 67, 2005. pp. 42-50.
- Helga Haftendorn. (2000). Water and International Conflict. In *Third World Quarterly*. Vol. 21, No. 1 (Feb., 2000), pp. 51-68 Published by: Taylor & Francis, Ltd. Stable URL: <http://www.jstor.org/stable/3993524>. Accessed: 05/11/2009 03:14
- Helly, Damien. (2009). (Ed). *Post-2011 Scenarios in Sudan: What role for the EU?* European Union Institute for Security Studies. November 2009 No. 06.
- Irna van der Molen & Antoinette Hildering. (2005). Water: cause for conflict or cooperation? In *Journal on Science and World Affairs*, Vol. 1, No. 2, 2005, pp.133-143.
- Jagerskog, A. and Zeitoun, M. (2009). *Getting Transboundary Water Right: Theory and Practice for Effective Cooperation*. Report Nr. 25. Stockholm, Stockholm International Water Institute (SIWI).
- Jagerskog, Anders and Lundqvist, Jan. (2006). Benefit Sharing in International Basins. *WaterFront*. No. 1, May 2006.
- Kibaroglu, Aysegul.(2002) *Building a Regime for the Waters of the Euphrates-Tigris River Basin*. The Hague, Kluwar Law International.
- Klaphake, Axel. (2006). Cooperation in international rivers from an economic perspective: the concept of benefit sharing. In Waltina Scheumann and Susanne Neubert. (2003). (Eds.). *Transboundary water management in Africa: Challenges for Development Cooperation*. study for the research and consultancy project „Cooperation on Africa’s transboundary water resources“ on behalf of the Ministry for Economic Cooperation and Development (BMZ). German Development Institute. pp. 105-172.
- Kliot, Nurit. (1994). *Water Resources and Conflict in the Middle East*. New York: Routledge.
- Lederach, John Paul and Maiese, Michelle. (2009). Conflict Transformation: A Circular Journey with a Purpose. *New Routes* Volume 14 Number 2/2009. *Conflict Transformation: Three Lenses in One Frame*. A Journal of Peace Research and Action. published by the Life & Peace Institute.
- Lederach, John Paul. (2003). *The Little Book of Conflict Transformation*. Intercourse, PA: Good Books.
- Llomaki, Jukka. (2000). *Institutional Challenges of Developing Transboundary waters*. Research Report. Helsinki University of Technology. Laboratory of water Resources.
- Mason, Simon A. (2004). *From Conflict to Cooperation in the Nile Basin: Interaction Between Water Availability, Water Management in Egypt and Sudan, and*

- International Relations in Eastern Nile Basin*. Switzerland, Swiss Federal Institute of Technology.
- McCaffrey, Stephen C. (2007). *The Law of International Watercourses*. 2<sup>nd</sup> edition. The Oxford International Law Library. United States of America, Oxford University Press.
- Medhane Tadesse. (2002). *Al-ittihad: Political Islam and Black Economy In Somalia. Religion, Money, Clan and the Struggle for Supremacy Over Somalia*. Addis Ababa. Mega Printing Enterprise.
- \_\_\_\_\_. (2004). *Turning Conflicts to Cooperation: Towards an Energy – Led Integration in the Horn of Africa*. Addis Ababa, Friedrich –Ebert-Stiftung Ethiopia Office.
- Michel, David and Amit Pandya. (2009). (eds). *Troubled Waters: Climate Change, Hydropolitics, and Transboundary Resources*. STIMSON. Pragmatic Steps for Global Security.
- Mohammed Mustafa Abbas. (2006). *Towards Hydropolitical Cooperation in the Nile Basin: Assessment of Joint Integrated Water Resource Projects Between Sudan and Ethiopia to Transform Conflicts*. UNESCO/Keizo OBUCHI Fellowship Program 2005.
- Mohamoda Dahilon Yasin. (2003). *Nile Basin Cooperation: A Review of the Literature*. Nordiska Africa Institute No. 26
- NBI News. Agreement on the Nile River Basin Cooperative Framework Opened for Signature by upstream countries. Available at: [http://www.nilebasin.org/index.php?option=com\\_content&task=view&id=165&Itemid=1](http://www.nilebasin.org/index.php?option=com_content&task=view&id=165&Itemid=1) accessed on 12/16/2010.
- NBI. (2001). *Nile Basin Initiative, International Consortium for Cooperation on the Nile*  
NBI.(2001). *Nile Basin Initiative, International Consortium for Cooperation on the Nile (ICCON). Strategic Action Program: Overview* Nile Basin Initiative Secretariat in Cooperation with the World Bank
- \_\_\_\_\_. (2005). *National Nile Basin Water Quality Monitoring Baseline Report for Sudan*. Nile Basin Initiative Transboundary Environmental Action Project.
- Nicol, Alan. (2003). *The Nile: Moving Beyond Cooperation*. UNESCO Technical Documents in Hydrology, PC-CP Series 16. Paris, UNESCO.
- Ohlsson, Leif. (1991). (Ed). *Hydropolitics: Conflicts over Water as a Development Constraint*. London. UK, Zeed Books Ltd.
- Okoth-Owiro, Arthur. (2004). *The Nile Treaty: State Succession and International Treaty Commitments: A Case Study of the Nile Water Treaties*. Occasional Papers- 9, East Africa, Nairobi. Konrad Adenauer Stiftung and Law and Policy Research Foundation.
- Osman El-Tom Hamad and Atta El-Battahani. (2005). Sudan and the Nile Basin. In *Aquatic Sciences: Special Feature Article*. Vol. 67, 2005. pp. 28-41.

- Peter H. Gleick. (1993). Water and Conflict: Fresh Water resource and International Security. In *International Security*. Vol. 18 No. 1, (Summer 1993). pp. 79-112.
- Petrella, Ricardo. (2001). *The Water Manifesto: Agreements for A World Water Contract*. New York, USA, Zed Books.
- Phillips, D. et. al. (2006). *Transboundary Water Cooperation as a Tool for Conflict Prevention and Broader Benefit Sharing*. Sweden, Ministry for Foreign Affairs.
- \_\_\_\_\_. (2009). *The Transboundary Water Opportunity Analysis as a tool for RBOs*. Phillips Robinson And Associates. Report Prepared for SADC Water Division.
- \_\_\_\_\_. (2008). *The TWO Analysis: Introducing a Methodology for Transboundary Water opportunity Analysis*. Report Nr. 23. Stockholm, Stockholm International Water Institute (SIWI)
- Postel, Sandra. (1999) *Last Oasis: Facing Water Scarcity*. New York: W.W. Norton and Co.
- Qaddumi, Halla. (2008). *Practical Approaches to Transboundary Water Benefit Sharing*. Working Paper 292. Westminster, London, Overseas Development Institute.
- Rahaman, Muhammad Mizanur. (2009). Principles of international water law: creating effective transboundary water resources management. *International Journal of Sustainable Society*, Vol. 1, No. 3, 2009. pp. 207-223.
- Robinson, Simon. (2006). The Waters of Life. In *Time* May 1, 2006. Vol. 167. No. 18. Weekly Magazine. Published by. United States, Time Warner Publishing.
- Sadoff, Claudia W. and David Grey. (2005). Cooperation on International Rivers: A Continuum for Securing and Sharing Benefits. *Water International*. (2005). Volume 30, Number 4. pp. 1-8.
- \_\_\_\_\_. (2002). Beyond the River: the Benefits of Cooperation on International Rivers. In *Water Policy*. Vol. 4, No. 5. pp. 389-403
- Sadoff, Claudia W. et al. (2008). *Share: Managing Water Across Boundaries*. Glands-Switzerland.
- Salman, Salman M. A.. (2007). The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law. *Water Resources Development*. Vol. 23, No. 4, pp. 625–640, December 2007.
- Starr, Joyce R. (1991). Water Wars. In *Foreign Policy*. No. 82 (Spring, 1991), pp. 17-36 Published by: Washingtonpost. Newsweek Interactive, LLC Stable URL: <http://www.jstor.org/stable/1148639> Accessed: 05/11/2009 03:14
- Swain, Ashok. (1997) Ethiopia, the Sudan, and Egypt: The Nile River dispute. *Journal of Modern African Studies*, Vol. 35, No. 4. pp. 675-694.
- \_\_\_\_\_. (2002) The Nile River Basin Initiative: Too Many Cooks, Too Little Broth. *SAIS Review*, Vol. XXII. No. 2. pp. 293-308.

- Tesfaye Tafesse. (2001). *The Nile Question Hydro Politics, Legal Wrangling, Modus Vivendi and Perspectives*. London, UK. Transaction Publishers.
- Turton, Anthony and Roland Henwood. (2002). (eds). *Hydropolitics in the Third World: A Southern African Perspective*. African Water Issues Research Unit (AWIRU), Centre for International Political Studies (CIPS). Pretoria, South Africa, University of Pretoria.
- Turton, Anthony. (2008). A South African Perspective on a Possible Benefit Sharing Approach for Transboundary Waters in the SADC Region. In *Water-Alternatives* (2008). Volume 1 Issue 2. pp. 180-200.
- UN Water. (2008). *Transboundary Waters: Sharing Benefits, Sharing Responsibilities*. Thematic Paper.
- Undala Z. Alam. (2002). Questioning the Water Wars Rationale: A Case Study of the Indus Waters Treaty. In *The Geographical Journal*. Vol. 168, No. 4, Water Wars? Geographical Perspectives (Dec., 2002), pp. 341-353 Published by: Blackwell Publishing on behalf of The Royal Geographical Society (with the Institute of British Geographers) Stable URL: <http://www.jstor.org/stable/3451476> Accessed: 05/11/2009 03:05
- Wallenstein, Peter and Swain, Ashok. (1995). International Fresh Water Systems as a Source of Conflict and Cooperation: Learning from the Past and Prescribing for the Future. In Bächler, Günther. (1995). *Environmental Crisis: Regional Conflicts and Ways of Cooperation*. Occasional Paper No. 14, September 1995. Center for Security Studies and Conflict Research (CSS), Swiss Federal Institute of Technology, ETH Zurich. pp. 138-147.
- Waterbury, J. and Whittington, D.(1998) Playing Chicken on the Nile the Implications of Microdam Development in Ethiopian Highlands and Egypt's New Valley Project. In *Middle Eastern Natural Environment*. Yale FXES. Vol. 103.pp 150-167.
- White, Arthur Silva. (1896). The Coming Struggle on the Nile. In *The North American Review*. Vol. 163, No. 478 (Sep., 1896), pp. 326-336. University of Northern Iowa Stable URL: <http://www.jstor.org/stable/25118708> Accessed: 05/11/2009 02:53
- White, D., Wester, F., Huber-Lee, A., Hoanh, C. T. and Gichuki, F. 2008. *Water Benefits Sharing for Poverty Alleviation and Conflict Management: Topic 3 Synthesis Paper*. CGIAR Challenge Program on Water and Food, Colombo.
- Wolf, Aaron T. (1998). Conflict and Cooperation along International Waterways. *Water Policy*. Vol. 1 No. 2, pp. 251-265.
- Wolf, Aaron. (2001). *Transboundary Waters: Sharing Benefits, Lessons Learned*. Thematic Background Paper. International Conference on Freshwater. Bonn.
- \_\_\_\_\_. (2003). "Water Wars" and Other Tales of Hydromythology. In McDonald, Bernadette and Dogloas Jehl. (2003). (Eds.). *Whose Water is it? The Unquenchable Thirst of a Water-Hungry World*. National Geographic. Washington, D.C. pp. 109-124.

- Wondimneh Tilahun. (1979). *Egypt's Imperial Aspiration over Lake Tana and the Blue Nile*. Addis Ababa University. Addis Ababa. United Printers Limited.
- Wondwosen Teshome. (2009). Transboundary Water Cooperation in Africa: The Case of the Nile Basin Initiative (NBI). In *Review of General Management*. Volume 10, Issue 2, 2009. pp. 129-138.
- Wouters, Patricia K. et al. (2005). *Sharing Transboundary Waters. An Integrated Assessment of Equitable Entitlement : The Legal Assessment Model*. IHP-VI Technical Document in Hydrology N°74. Paris, UNESCO Working Series SC-2005/WS/13.
- Yacob Arsano and Imeru Tamrat. (2005). Ethiopia and the Eastern Nile Basin. In *Aquatic Sciences: Special Feature Article*. Vol. 67, 2005. pp. 15-24
- Yacob Arsano. (1996). Sharing Water Resources for Economic Development in the Horn of Africa. In Belay Gessesse et al.(1996). *Trading Places: Alternative Models of Economic Cooperation in the Horn of Africa*. Uppsala, Life and Peace Institute. pp. 29-84.
- \_\_\_\_\_. (2007). *Ethiopia and the Nile: Dilemmas of National and Regional Hydropolitics*. Thesis Presented to the Faculty of Arts of the University of Zurich. For the Degree of Doctor of Philosophy.
- Yohannes, Okbazghi (2008). *Water Resources and Inter – Riparian Relations in the Nile Basin: The Search for an Integrative Discourse*. New York, State University of New York.
- YU, Winston H. (2008). *Benefit Sharing in International Rivers: Findings from the Senegal River Basin, the Columbia River Basin, and the Lesotho Highlands Water Project*. Africa Region Water Resources Unit Working Paper 1. Final Version November 12, 2008. The World Bank, Africa Region. Sustainable Development Department. Report no. 46456.
- Zeitoun, M. (2007). The Conflict vs. Cooperation Paradox: Fighting Over or Sharing of Palestinian-Israeli Groundwater? In *Water International*. Volume 32, Number 1, pp. 105-120. March 2007.
- Zeitoun, M. and Mirumachi, N. (2008) Transboundary water interaction I: reconsidering conflict and cooperation. *International Environmental Agreements: Politics, Law and Economics*, Vol. 8, No. 4. Pp. 297–316.
- Zewdie Abate. (1994). *Water Resource Development in Ethiopia: Evaluation of Present Experiences and Future Planning Concepts, A Management Method for Analysis a Key resource in a nation`s development*. Reading Ithaca Press.

## **2. Policy Documents and Reports**

- ENTRO, Eastern Nile Technical Regional Office. (2005). *Nile Basin Initiative (NBI): Eastern Nile Technical Regional Office (ENTRO):Annual Report. 2005*
- \_\_\_\_\_. (2008). *Watershed Management in the Eastern Nile Basin: Challenges and Opportunities*. Addis Ababa, Ethiopia.

- \_\_\_\_\_. (2009). A Call for Accelerating Action Eastern Nile Cooperation. A Report Presented on the First and Second JMP Regional Parliamentarian Exchange Visits and Study. Tours August 7-13, 2007: Ethiopia and Sudan, April 20-29; South Africa, Lesotho and Egypt. Eastern Nile Subsidiary Action Program (ENSAP). Eastern Nile Technical Regional Office (ENTRO). Addis Ababa.
- Federal Democratic Republic of Ethiopia. (2010). *Growth and Transformation Plan (GTP): 2010/11-2014/15*. Draft. Ministry of Finance and Economic Development (MoFED). Addis Ababa.
- ICID-International Commission on Irrigation and Drainage. (2005). Country Policy Support Programme (CPSP). Water Policy Issues of Egypt. Project Funded by Sustainable Economic Development Department National Policy Environment Division The Govt. of The Netherlands (Activity No.WW138714/DDE0014311. New Delhi.
- MoI-Ministry of Information. (2002). The Federal democratic Republic of Ethiopia: Foreign Affairs and National Security Policy. Audiovisual Department. Addis Ababa.
- MoWR (Ministry of Water Resources of the Federal Democratic Republic of Ethiopia). (1996). Abbay river Basin Integrated Development Master Plan Project. Phase 1. Reconnaissance Section III-Sectorial Studies. Volume II-Water Resources. Part 4. Irrigation and Drainage. BCEOM. French Engineering Consultants in Association with BRGM and ISL.
- \_\_\_\_\_. (1997). Abbay river Basin Integrated Development Master Plan Project. Phase 2. Data Collection-Site Investigation Survey and Analysis. Section I- Main Report.
- \_\_\_\_\_. (2001). *Ethiopian Water Sector Strategy*.
- \_\_\_\_\_. (2002). *Water Sector Development Program*. Main Report Volume II.
- MoWR, Ministry of Resources and Energy. Ethiopian Nile Irrigation & Drainage Projects: Available at:  
<http://www.mowr.gov.et/index.php?pagenum=4.2&pagehgt=1000px&ContentID=61> Last visited on: 2/19/2011 at 1:49 PM.
- MoWR, Ministry of Water Resources and Energy, Available at:  
<http://www.mowr.gov.et/index.php?pagenum=4.2&pagehgt=1000px> Accessed on: 2/19/2011 at 1:53 PM.
- NBI (2002) *Nile Basin Act*. [Online]. Available at: [faolex.fao.org/docs/pdf/uga80648.pdf](http://faolex.fao.org/docs/pdf/uga80648.pdf) accessed on 23/02/2007
- MoWR. Ministry of Water Resource and Energy. Baro and Karadobi Hydropower Projects Available at:  
<http://www.mowr.gov.et/index.php?pagenum=4.3&pagehgt=1000px> Accessed on: 2/19/2011 at 1:45 pm.
- United Nations Population Division, World Population Prospects: The 2008 Revision Population Database. Available at <http://esa.un.org/UNPP/> accessed on 3/13/2011 11:36 AM.

United Nations Security Council Resolution 1724 (2006) UN Security Council, *Resolution 1724 (2006) The Situation in Somalia*, 29 November 2006, S/RES/1724 (2006), available at: <http://www.unhcr.org/refworld/docid/45c30c4bc.html> accessed 21 September 2008 last visited 24 February 2011 at 2:33 PM

World Bank's policy see OP 7.50 - Projects on International Waterways available at: <http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:20064667~menuPK:64701637~pagePK:64709096~piPK:64709108~theSitePK:502184,00.html> accessed on 2/17/2011 at 2:17 pm

ICG- International Crisis Group. (2008). *Sudan's Comprehensive Peace Agreement: Beyond the Crisis*. International Crisis Group (ICG). Policy Briefing. Africa Briefing. Nairobi/Brussels No. 50. 13 March 2008.

ICG-International Crisis Group. (2010). *Sudan: Regional Perspectives on the Prospect of Southern Independence*. Africa Report of N°159, 6 May 2010.

### **3. Workshop , Thematic and conference papers**

Alnagar, Dalal. (2005). Water Resources Management and Policies for Egypt 55-69. In *Policies and strategic options for water management in the Islamic countries*. Proceedings of the Symposium organized by the Regional Centre on Urban Water Management (RCUWM-Tehran). 15-16 December 2003 Tehran, Islamic Republic of Iran. International Hydrological Programme (IHP) of the United Nations Educational, Scientific and Cultural Organization (UNESCO). IHP-VI Technical Document in Hydrology N°73. Paris.

Arntzen, J. et al. (2010). Issues and Options Regarding Resource Allocation and Benefit Sharing of Shared Watercourses in the SADC Region. 11<sup>th</sup> WaterNet/WARFSA/GWP-SA Symposium, 27th -29th of October 2010 Victoria Falls, Zimbabwe

Badr, Marawan. (2009). The Role and Experiences of Egypt in Managing Transboundary Water Conflicts. In Debay Tadesse Woldemichael. (2009). (Compiler and editor). *Climate Change and Transboundary Water Resource Conflicts in Africa*. Workshop Report. 29–30 September 2009. Mombasa, Kenya. pp. 55-60.

Cascao, Ana Elisa. (2008a). Ambiguity as strategy in Transboundary River Negotiations: The Case of the Nile River Basin. Paper Presented in Nile Basin Development Forum. Khartoum, November 2008.

Collins, Robert O. (1997). The Best Laid Schemes O'mice and Man: In Search for the Waters of the Nile, 1900-2000 for the International Conference, the Nile Civilization, History, Myths on 19-22 May1997. Tel Aviv, Israel.

Debay Tadesse Woldemichael. (2009). (Compiler and editor). *Climate Change and Transboundary Water Resource Conflicts in Africa*. Workshop Report. 29–30 September 2009. Mombasa, Kenya.

DWF-Danish Water Forum. (2007). Transboundary Water Cooperation: National Commitment, Stakeholders and IWRM in the Mekong, the Nile and

- SADC/Zambezi: Lessons Learned and Which way forward? Workshop Paper. March, 1-2, 2007, Copenhagen, Denmark.
- Hensel, Paul R. and Marit Broachmann. (2008). Armed Conflict over International rivers: The Onset and Militarization of River Claims. Paper Presented at the Annual Meeting of the American Political Science Association, Boston, August 2008.
- Minelik Alemu Getahun. (2009). Challenges of cooperation on the Nile River – An Ethiopian perspective. In In Debay Tadesse Woldemichael. (2009). (Compiler and editor). *Climate Change and Transboundary Water Resource Conflicts in Africa*. Workshop Report. 29–30 September 2009. Mombasa, Kenya. pp. 41-47.
- Mirumachi, N. and Allan, J.A. (2007). Revisiting Transboundary Water Governance: Power, Conflict, Cooperation and the Political Economy", *Paper presented at International Conference on Adaptive and Integrated Water Management, 12-15 November 2007*, Basel, Switzerland.
- Mokorosi, Palesa seloane. (2007). Can Benefits be shared equitably among a variety of stakeholders in a transboundary river basin? Learning from Zambezi and Orange-Senqu River Basins. Paper prepared for 8<sup>th</sup> WaterNet/WARFSA-SA Symposium. Livingstone, Zambia, October 30<sup>th</sup>-November 3<sup>rd</sup>, 2007.
- Senai Alemu. (1995). Problem Definition and Stakeholder Analysis of the Nile river Basin. A Paper Presented at the 3<sup>rd</sup> Annual Nile 2002 Conference held at Arusha, Tanzania. February 13-15, 1995
- Teferra Beyene and Fekahmed Negash. (2009). Role of Government in Preventing Climate Change-Induced Water Resource Conflicts – An Ethiopian perspective. In Debay Tadesse Woldemichael. (2009). (Compiler and editor). *Climate Change and Transboundary Water Resource Conflicts in Africa*. Workshop Report. 29–30 September 2009. Mombasa, Kenya. pp. 49-54.
- Tesfaye Tafesse. (2008). Benefit Sharing Framework In Transboundary River Basins: The Case Of The Nile. In Gedion Asfaw and Kamal Eldin E. Bashar. (2008). (eds). *Nile Basin Development Forum 2008 Proceedings* 17<sup>th</sup> 19<sup>th</sup> November 2008, Khartoum, Sudan. pp. 59-68.
- Woodhouse, Melvin and David Phillips. (2009). Nile Basin Initiative: Transboundary Water Sharing Framework. Training Manual. Version 1. 13<sup>th</sup> January 2009. Prepared for a Benefit Sharing Framework Training Workshop. January 20-22, 2009, Addis Ababa.
- Xie, Mei. (2006). Integrated Water Resources Management (IWRM)– Introduction to Principles and Practices. World Bank Institute (WBI). Paper prepared for Africa Regional Workshop on IWRM, Nairobi, Oct. 29-Nov. 2006, under GEF's International Waters Learn Program.
- World Water Council. (2004). Proceedings of the Workshop on Water and Politics: Understanding the Role of Politics in Water Management, Marseille, February 26-27, 2004.

Yacob Arsano. (2004). Four Approaches to Cooperation in the Nile Basin. In Mulugeta Feseha and Tesfaye Tafesse (eds). *Proceedings of the Conference on Management of Water Resources in Ethiopia*. Institute of Development Research (IDR). Addis Ababa. pp.181-218.

\_\_\_\_\_. (1997). 'Predicaments of Cooperation in the Nile Basin', in *Ethiopia in Broader Perspective, vol.11, papers of the xiiiith International Conference of Ethiopian Studies*, pp: 29-48, Kyoto 12-17 December 1997, edited by Katsuyoshi Fukui; Eisei Kurimoto and Masayoshi Shgeta, Shokado Book Sellers: Kyoto.

\_\_\_\_\_. (2003). Transboundary Waters prospects for Peaceful Coexistence in the Horn of Africa. In Tafesse Olika, Yacob Arsano and Oyvind Aadlan (2000). (eds). *Topics in Contemporary Political Development in Ethiopia: Towards Research Agenda Framework of DPSIR-NIHR Research Programme (1998-2003)*. Proceedings of Launching Workshop of the Department of Political Science and International Relations (DPSIR) and the Norwegian Institute of Human Rights (NIHR). Held at the Graduate School of Addis Ababa University, February 11-12, 2000, Department of Political Science and International Relations, Addis Ababa University.

Yoseph Endeshaw. (2004). Review of the Validity or Continuous Application of the Nile Water Treaties. Paper Submitted at the National Water Forum. ECA, October 25-27, 2004.

#### **4. Treaties and Agreements**

The 1929 Note /Agreement. 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)/. In Yacob Arsano. (2007). *Ethiopia and the Nile: Dilemmas of National and Regional Hydropolitics*. Thesis Presented to the Faculty of Arts of the University of Zurich. For the Degree of Doctor of Philosophy. pp. 296-399.

The 1959 Agreement. Agreement Between the Republic of Sudan and the United Arab Republic on the Full Utilization of the Waters of the Nile (8 November 1959) In Yacob Arsano. (2007). *Ethiopia and the Nile: Dilemmas of National and Regional Hydropolitics*. Thesis Presented to the Faculty of Arts of the University of Zurich. For the Degree of Doctor of Philosophy. pp. 306-312

The 1997 UN Convention. United Nations. (1997). United Nations Convention on the Law of the non-Navigational Uses of International Watercourses. Available at: [untreaty.un.org/texts/instruments/English/conventions/8\\_3\\_1997.pdf](http://untreaty.un.org/texts/instruments/English/conventions/8_3_1997.pdf)

The Berlin Rules. ILA-International Law Association. (2004). Berlin Conference (2004) Water Resources Law. International Water Law Project Available at: [www.internationalwaterlaw.org/documents/.../ILA\\_Berlin\\_Rules-2004.pdf](http://www.internationalwaterlaw.org/documents/.../ILA_Berlin_Rules-2004.pdf)

The Cooperative Framework Agreement of the Nile. Available at:

[http://internationalwaterlaw.org/documents/regionaldocs/Nile\\_River\\_Basin\\_Cooperative\\_Framework\\_2010.pdf](http://internationalwaterlaw.org/documents/regionaldocs/Nile_River_Basin_Cooperative_Framework_2010.pdf)

Nile River Basin Cooperative Framework Project. (2006). Minutes of the Extra-Ordinary Nile-COM Meeting. Addis Ababa, Ethiopia, March 30-31, 2006.

## 5. Newspapers, Magazines and Online News Sources

Addis Fortune, 16 May, 2010. Ethiopia Signs with Three of Ten Nile Basin Nations. By Tesfalem Weldyes. Vol. 11, No. 524.

Addis Fortune, 2 May 2010, Sudan Supports Egypt's Nile Stance as Other Nations Try to Sway Both. Vol. 11, No. 522.

Addis Fortune. 4 July 2010. Sudan to Stop Cooperating with Nile Initiative. Vol. 11, No. 531.

Addis Fortune. 6 February 2011. Project-X: Turning the Energy Tide. By Tesfalem Weldyes. Volume 11. No. 562.

Addis Fortune. Ethiopia, Sudan Consolidate Standards through MoU. 04/27/2009. Available at: <http://www.addisfortune.com/Ethiopia,%20Sudan%Consolidate%...> Accessed on: 1/21/2011, at 5:45 AM.

Al Masry Al Youm. Egypt Requested Delay Sudan Referendum According to WikiLeaks Cables. <http://www.almasryalyoum.com/en/news/exclusive-egypt-requested-delay-sudan-referendum-according-new-wikileaks-cable> last visited on: Accessed on 2/16/2011 at 4:43

Al Masry Al Youm. Mubarak, Burundi VP Ruffyikiri discuss Nile sharing available at: <http://www.almasryalyoum.com/node/264875>, retrieved on 19/02/2011 - 10:34, Egypt State Information Service, Egypt and DR Congo Relations, Available at:

Al Masry Al Youm. Thursday 13/01/2011. Egypt Parliament: Sudan's Nile dam construction worrying. Available at: <http://www.almasryalyoum.com/en/news/egypt-parliament-sudans-nile-dam-construction-worrying> accessed on: 16/11/2011 10:02 AM.

Ali Abdala Ali. (2010). Sudan Tribune. The Egyptian Role in Sudan's Development and Underdevelopment 1899-2010. Published Sunday 27 June 2010. Available at: <http://www.sudantribune.com/The-Egyptian-role-in-Sudan-s,35500>

\_\_\_\_\_. (2009). Struggle over The River Nile; what should be Sudan's strategy? Sudan Tribune, Saturday, 24 October 2009. Available at: [http://www.sudantribune.com/spip.php?page=imprimable&id\\_article=32892](http://www.sudantribune.com/spip.php?page=imprimable&id_article=32892)

BBC News. Somalis vow holy war on Ethiopia Monday, 9 October 2006 available at: <http://news.bbc.co.uk/2/hi/africa/6032907.stm> last visited on 2/24/2011 at 2:00 PM.

- BBC News. Time Line: Ethiopia and Somalia. Available at <http://news.bbc.co.uk/2/hi/africa/6159735.stm> last visited on 2/24/2011 at 2:00 PM
- Boutros Ghali Interview with BBC is available at: [http://news.bbc.co.uk/nol/shared/spl/hi/talking\\_point/world\\_forum/water/08\\_06\\_03/html/lecture\\_transcript.stm](http://news.bbc.co.uk/nol/shared/spl/hi/talking_point/world_forum/water/08_06_03/html/lecture_transcript.stm) Last visited on: 2/17/2011 at 3:25 pm
- Capital (2010). 'Sudan and Egypt still in Denial,' in *Capital vol.12 no, 582*, pp:30. Sunday Feb.14, 2010, Interview with Dr, Yacob Arsano. by Binyam Tamene.
- Capital, Monday, 15 February 2010. Sudan and Egypt still in denial. Interview with Dr. Yacob Arsano Available at: [www.capitalethiopia.com/index.php?view=art...](http://www.capitalethiopia.com/index.php?view=art...) Accessed on 1/15/2011.
- Capital, Monday, 20 September 2010. "Never Compromise the principles of negotiations for the sake of investment." Prof. Yacob Arsano. Reported by Binyam Tamene. Available at: [www.capitalethiopia.com/index.php?vi...](http://www.capitalethiopia.com/index.php?vi...) Accessed on: 1/15/2011
- Capital, Sunday 7 November 2010. Hailemariam: 'Nile Deal is sealed.' Vol. 12, No. 621.
- Capital, Sunday, 10 January 2010. Egypt set for huge farmland lease in Afar. Reported by Yohannes Anberbir. Vol. 11, No. 578
- David Malingha Doya, Burundi Government Signs Accord on Use of Nile River Water. Feb 28, 2011 6:30 PM GMT+0300. Available at: <http://www.bloomberg.com/news/2011-02-28/burundi-signs-accord-on-water-usage-from-nile-that-may-strip-egypt-of-veto.html> Last visited on March 4, 2011 at 5:07 PM
- Egypt State Information Service. [http://www.sis.gov.eg/en/LastPage.aspx?Category\\_ID=1113](http://www.sis.gov.eg/en/LastPage.aspx?Category_ID=1113) accessed on 2/19/2011 at 10:24 AM.
- Egypt State Information Service. Mega Projects. Available at: <http://www.sis.gov.eg/en/Story.aspx?sid=2313> accessed on 2/14/2011 at 2:51 pm
- Gamal Nkrumah. It must be something in the water. 26 February - 3 March 2004 Issue No. 679. Available at: <http://weekly.ahram.org.eg/2004/679/eg3.htm> accessed 16/01/2011
- Global Arab Network, Friday, 20 August 2010. Egypt, Sudan prepare for joint meeting. Friday, 20 August 2010 18:15. Available at: <http://www.english.globalarabnetwork.com/201008206964/Economics/egypt-sudan-prepare-for-joint-committee-meeting.html> Hillawi Tadesse. (1998) Its Use and Development: the Nile River Basin in *Ethioscope* A Quarterly Magazine of the Ministry Foreign Affairs of Ethiopia. Vol. 4 No 5. pp 13-23
- IRIN News. Ethiopia: Oil Imports From Sudan Standstill. Available at: <http://www.irinnews.org/PrintReport.aspx?ReportID=42297> accessed on 1/21/2011 5:49 AM
- Leila, Reem. Worries over Nile waters. In Al-Ahram Weekly on Line, 30 December 2010- 6 January 2011. Available at: <http://weekly.ahram.org.eg/print/2010/eg112.htm>

- Maha El Dahan. Reuters. 27 July 2009. Egypt Says Historic Nile river Rights not negotiable. Available at: <http://www.reuters.com/article/2009/07/27/us-egypt-nile-framework-idUSTRE56Q3LZ20090727> Last visited on 2/16/2011 at 3:23
- Medhane Tadess. From the Unknown to Uncertain: The Nile Water Negotiations. Addis Fortune, 9 May 2010. Vol. 11, No. 523.
- Mike Thomson. BBC News. *Nile restrictions anger Ethiopia*. <http://news.bbc.co.uk/2/hi/africa/4232107.stm> Accessed on: 1/7/2007
- Muktar, Mustafa. Sudan Tribune. Why Sudanese public opinion opposes the Nile Water Agreements? Available at: [http://www.sudantribune.com/spip.php?page=imprimable&id\\_article-35863](http://www.sudantribune.com/spip.php?page=imprimable&id_article-35863) Published 06 August 2010.
- NBI News. Agreement on the Nile River Basin Cooperative Framework Opened for Signature by upstream countries. Available at: [http://www.nilebasin.org/index.php?option=com\\_content&task=view&id=165&Itemid=1](http://www.nilebasin.org/index.php?option=com_content&task=view&id=165&Itemid=1) accessed on 12/16/2010.
- NBI News. Benefit Sharing Framework [BSF] for Nile Basin Countries Developed. [http://www.nilebasin.org/index2.php?option=com\\_content&task=view...](http://www.nilebasin.org/index2.php?option=com_content&task=view...) Accessed on 1/14/2011 at 10:14AM.
- NBI News. Socio-Economic Development and Benefit Sharing: Project Brief. Available at: [http://sdb.nilebasin.org/index.php?option=com\\_content&task=view&id=16&Itemid=39](http://sdb.nilebasin.org/index.php?option=com_content&task=view&id=16&Itemid=39) accessed on 1/14/2011
- Norwegian Water Resources And Energy Directorate Signs Agreement With Ethiopian Ministry Of Water Resources (MoWR). Available at: [http://www.norway.org.et/News\\_and\\_events/etiopia/Norwegian-Water-Resources-and-Energy-Directorate-signs-agreement-with-Ethiopian-Ministry-of-Water-Resources-MOWR/](http://www.norway.org.et/News_and_events/etiopia/Norwegian-Water-Resources-and-Energy-Directorate-signs-agreement-with-Ethiopian-Ministry-of-Water-Resources-MOWR/) accessed on 1/13/2011 at 6:53 AM.
- Reuters. Thursday, 25 November 2010. Egypt`s Mubarak Dismisses Ethiopia Rebel Claim. Available at: <http://af.reuters.com/articlePrint?articleId=AFJ0E6A00BZ20101125>
- Samaan, Magdy. "Minister stresses Egypt's right to Nile water in Parliament." Daily News Egypt 20-Apr-10. Accessed on Friday 23 April 2010. Available at: <http://www.zawya.com/Story.cfm/sidZAWYA20100421050115/Minister%20stresses%20Egypt's%20right%20to%20Nile%20water%20in%20Parliament?pass=1>
- Sudan Tribune, June 15, 2010 Ethiopia imports \$1.2 Billion fuel from Sudan, Djibouti. Available at: <http://www.sudantribune.com/Ethiopia-imports-1-2-Billion-fuel,35400> Accesses on 1/21/2011 5:42AM
- Sudan Tribune, Sunday, 5 December 2010. Egypt admits foreseeable South Sudan independence. Available at: <http://www.sudantribune.com/Egypt-admits-foreseeable-South,37170> accessed 23 February 2011.

Sudan Tribune, Thursday 29 March 2011. Sudan Tells Egypt it will respect existing Nile water treaties. Available at: <http://www.sudantribune.com/South-Sudan-tells-Egypt-it-will,38423> accessed on 30 March 2011.

Sudan Vision Daily Online. Human Development: Nile Basin Development Forum 2008 (2). Edited by Alula Berhe Kidani. Posted on November 18, 2008. Available at: <http://www.sudanvisiondaily.com/modules.php?name=News&file=article&sid=40844> accessed on 2/9/2011 at 9:56

Sudan Vision Daily, *Sudan Most Appropriate Mediator among Nile Basin Countries*. Reported by Alula Berhe Kidani, posted on 24 February 2011. Available at: <http://www.sudanvisiondaily.com/modules.php?name=News&file=article&sid=70042> accessed on 24 February 2011 at 4:00 PM.

Tarek A. Ghoneim, Ambassador of Egypt to Ethiopia. Interview with Capital Newspaper. Volume 12. No.621. Sunday November 7, 2010. Addis Ababa, Ethiopia.

The Daily Monitor. Wednesday, January 12, 2011. Egypt to Establish Tobacco company in Ethiopia: report. Vol. XVII, No. 009.

The Ethiopian Herald, 15 May 2007. Utilizing power generation potentials EEPCo: Current performance. Vol. LXII, No. 708.

The Ethiopian Herald, Friday, 21 May 2010. Meles says Egypt won't be able to stop Ethiopia from building dams on Nile. Vol. LXVI, No. 217.

The Ethiopian Herald, Saturday, 15 May 2010. *Nation Will Generate up to 10,000 MW in five years: Meles*. Vol. LXVI, No. 212.

The Ethiopian Herald, Tuesday, 1 June 2010. "We would work on the Nile to ensure Ethiopia's interests, not to anger Egypt." Vol. LXVI, No. 226.

The Ethiopian Herald. 15 July 2010. Meles Accentuates win-win relations on Nile Waters Utilization. Vol. LXVI, No. 264

The Ethiopian Herald. Four riparian countries sign CFA Initiative. Vol. LXVI No. 213. Sunday, 16 May 2010

The Ethiopian Herald. Kenya signs Nile Basin Deal. Vol. LXVI No. 216. Thursday, 20 May 2010

The Ethiopian Herald. 'Grand Millennium Dam on the Nile.' Vol. LXVII, No. 173. Thursday 31 March 2011.

The Ethiopian Herald. 'Grand Millennium Dam: Turning a new page of cooperation!' Vol. LXVII, No. 176. 3 April 2011.

The Ethiopian Reporter Saturday, 23 May 2009. "We should create a regional market where we can trade among ourselves." Interview with Aerop Deng Kuol. The Mission Head of Regional Cooperation Ministry of the government of Southern Sudan in Addis Ababa. Available at:

[http://en.ethiopianreporter.com/index2.php?option=com\\_content&tas...](http://en.ethiopianreporter.com/index2.php?option=com_content&tas...)

Accessed on: 1/21/2011 at 6:46 AM.

The Ethiopian Reporter, Saturday, 03 April 2010, Ethiopia, Egypt sign cooperation agreements. Available at:

[http://en.ethiopianreporter.com/index.php?option=com\\_content&task=view&id=2464&Itemid=1](http://en.ethiopianreporter.com/index.php?option=com_content&task=view&id=2464&Itemid=1) last visited on 21 March 21, 2011. At 12:49.

The Guardian. Monday 7 February 2011 20:17 GMT. Sudan referendum result confirmed.

Available at: <http://www.guardian.co.uk/world/2011/feb/07/sudan-referendum-result-confirmed> Last visited on: 2/19/2011 at 11:10.

William Davison, Ethiopia Says it has Evidence that Egypt Supported Rebel Movements

<http://www.bloomberg.com/news/2010-11-25/ethiopia-says-it-has-evidence-that-egypt-supported-rebels.html> last visited on 2/7/2011

Wolf, Aaron, Annika Kramer, Alexander Carius and Geoffrey Dabelko. Peace in the

Pipeline. Viewpoint. BBC. Available at: <http://news.bbc.co.uk/go/pr/fr/-/2/hi/science/nature/7886646.stm> Posted on Friday 13, February 2009. last visited on 2/17/2011 at 10:41

Wondwesson Michago. (2010). On Nile, Ethiopia Goes Soft to Get Tough. On Addis Fortune. 25 April 2010. Vol. 10, No. 521.

## ***6. Senior Essay and Thesis***

Mulualem Fetene. (2009). The Concept of Benefit Sharing in the Context of the Eastern Nile Basin. LLM Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Laws (LLM) at the Addis Ababa University Faculty of Law. Unpublished.

Zerihun Abebe. (2007). The Blue Nile, Egypt and Ethiopia: Two-Edged Egypt's Policy on the Nile. A Senior Essay Submitted to the Department of Political Science and International Relations, College of Social Sciences, Addis Ababa University. Unpublished.

# Appendices

## Appendix-1

### Guiding Questions of Interview for ENTRO/ENSAP/NBI

My name is Zerihun Abebe a postgraduate student at Addis Ababa University in the Department of Political Science and International Relations. I am conducting my MA Research on the hydro politics of the Eastern Nile Basin entitled; '*Eastern Nile Basin: The Nexus Between Water Sharing and Benefit Sharing Arrangements.*' The main objective of the study is to investigate the link between water sharing and benefit sharing mechanisms of dealing the management of the Nile waters. Therefore I am collecting data and relevant information that can better help me to have a better understanding of the different issues in the Eastern Nile Basin. Therefore, your genuine information is highly appreciated and valuable for the success of the study. I would like to assure you that confidentiality for your comments will be respected and will be used only for research purposes.

I thank you for your time and cooperation!

1. What are the most success stories or achievements of ENTRO since its commencement?
2. What is the current status of ENTRO and its projects? Which projects are ongoing? Which projects are phase out?
3. When and how can the different projects of ENTRO implemented?
4. What do you think are the conditions and relevant bases for the different projects of ENTRO to be effective and meet their objective as intended?
5. What are the challenges that different projects of ENTRO/ENSAP has been facing in implementation?
6. How can you evaluate the participation and assertiveness of Eastern Nile Countries in implementing the projects of ENTRO?
7. What could be the future of ENTRO projects if the Eastern Nile Basin States` disagreement on the Cooperative Framework Agreement of the Nile continues unresolved? What will be the future of ENSAP/NBI itself if Egypt and Sudan withdraw?

Thank You in Advance!!!

Zerihun Abebe

Addis Ababa University

## Appendix-2

### Guiding Questions of Interview for Experts

My name is Zerihun Abebe a postgraduate student at Addis Ababa University in the Department of Political Science and International Relations. I am conducting my MA Research on the hydro politics of the Eastern Nile Basin entitled-*Eastern Nile Basin: The Nexus Between Water Sharing and Benefit Sharing Arrangements*. The main objective of the study is to investigate the link between water sharing and benefit sharing mechanisms of dealing the management of the Nile waters. Therefore I am collecting data and relevant information that can better help me to have a better understanding of the different issues in the Eastern Nile Basin from the experts point of view. Therefore, your genuine view is highly appreciated and valuable for the success of the study. I would like to assure you that confidentiality for your comments will be respected and will be used only for research purposes.

I thank you for your time and cooperation!

1. What do you think are the conditions and relevant bases for the benefit sharing on the Nile to be effective and fruitful?
2. Is it possible to come up with a benefit sharing agreement between the Basin states of the Nile irrespective of the dispute over legal issues such as the 1929 and 1959 agreements as well as the newly signed Cooperative Framework Agreement of the Nile (CFA)? If yes, how? If not why?
3. Do you think the CFA will solve the overall problems that the Nile Basin faced? If yes how? If not why?
4. Do you think the downstream states of the Nile will join the CFA? If yes what are the basic backing reasons? If no do you foresee any violent conflict between the basin states of the Nile between upstream and downstream?
5. The CFA has no specified weight given for the different outlined factors to determine equitable and reasonable utilization. Would it be possible, therefore, to allocate the water harmoniously by compromising the divergent interest of all the riparian states?
6. What roles do external actors and donors-such as the United States, European Union and the World Bank could play in solving the Nile question especially in pressuring Egypt to accept the principle of equitable and reasonable utilization instead of historic or established rights?

Thank You in Advance!!!

Zerihun Abebe

Addis Ababa University

## **Appendix -3**

### **Interview Guiding Questions to the Embassy of the Arab Republic of Egypt to Ethiopia**

My name is Zerihun Abebe a postgraduate student at Addis Ababa University in the Department of Political Science and International Relations. I am conducting my MA Research on the hydro politics of the Eastern Nile Basin entitled-*Eastern Nile Basin: The Nexus Between Water Sharing and Benefit Sharing Arrangements*. The main objective of the study is to investigate the link between water sharing and benefit sharing mechanisms of dealing the management of the Nile waters. Therefore I am collecting data and relevant information that can better help me to have a better understanding of the different issues in the Eastern Nile Basin from the experts point of view. Therefore, your genuine view is highly appreciated and valuable for the success of the study. I would like to assure you that confidentiality for your comments will be respected and will be used only for research purposes.

I thank you for your time and cooperation!

1. What are the general guiding principles of Egypt`s Nile policy and Position?
2. How do you assess the overall relations between the Eastern Nile Basin states both in relation to water and “non-water issues”?
3. In which areas that Egyptian companies are more interested to invest in Ethiopia? Why?
4. What are the areas that Egypt is more interested to cooperate with Ethiopia?
5. Do you think that the CFA will be signed by all riparians of the Nile? Why?

Thank You in Advance!!!

Zerihun Abebe

Addis Ababa University

## **Appendix-4**

### **Interview Guiding Questions to the Ministry of Foreign Affairs of Ethiopia.**

My name is Zerihun Abebe a postgraduate student at Addis Ababa University in the Department of Political Science and International Relations. I am conducting my MA Research on the hydropolitics of the Eastern Nile Basin entitled-*Eastern Nile Basin: The Nexus Between Water Sharing and Benefit Sharing Arrangements*. The main objective of the study is to investigate the link between water sharing and benefit sharing mechanisms of dealing the management of the Nile waters. Therefore I am collecting data and relevant information that can better help me to have a better understanding of the different issues in the Eastern Nile Basin from the experts point of view. Therefore, your genuine view is highly appreciated and valuable for the success of the study. I would like to assure you that confidentiality for your comments will be respected and will be used only for research purposes.

I thank you for your time and cooperation!

1. What are the guiding principles of Ethiopia`s in its relations with Egypt and Sudan?
2. What constitutes the current relations between Ethiopia and its Nile neighbors before and after the signing of the Cooperative Framework Agreement of the Nile?
3. What is the current status of cooperation between upstreamers of the Nile Basin?
4. How do you assess the overall relations between the Eastern Nile Basin states both in relation to water and “non-water issues”?
5. Do you think that there is/are linkage/s between water and non-water relations of Eastern Nile Riparians?
6. What are the areas that Egypt or Sudan are more interested to cooperate with Ethiopia?
7. Do you think that the CFA will be signed by all riparians of the Nile? Why?

Thank You in Advance!!!

Zerihun Abebe

Addis Ababa University

## **Appendix-5**

### **Interview Guiding Questions to the Ministry of Water Resources and Energy of Ethiopia**

My name is Zerihun Abebe a postgraduate student at Addis Ababa University in the Department of Political Science and International Relations. I am conducting my MA Research on the hydro politics of the Eastern Nile Basin entitled-*Eastern Nile Basin: The Nexus Between Water Sharing and Benefit Sharing Arrangements*. The main objective of the study is to investigate the link between water sharing and benefit sharing mechanisms of dealing the management of the Nile waters. Therefore I am collecting data and relevant information that can better help me to have a better understanding of the different issues in the Eastern Nile Basin from the experts point of view. Therefore, your genuine view is highly appreciated and valuable for the success of the study. I would like to assure you that confidentiality for your comments will be respected and will be used only for research purposes.

I thank you for your time and cooperation!

1. What are the major challenges Ethiopia faced in utilizing the Nile waters?
2. What are the policy, position and strategies Ethiopia adopt regarding the management and utilization of the Nile river vis-a-vis downstream states?
3. What kind of projects is Ethiopia implementing on the Nile?

Thank You in Advance!!!

Zerihun Abebe

Addis Ababa University

## **List of Informants**

1. E-mail interview with Dr. Anthony Turton, Environmental Advisor, Speaker, Author of many articles and books on versatile issues related to water. Received on Tuesday, 8 March, 2011 7:09
2. E-mail interview with Dereje Zeleke, PhD, Institute of Federalism and Legal Studies, Ethiopia Civil Service College. Received on 15 March 2011.
3. E-mail interview with Yacob Arsano, PhD, associate professor of political science & international relations at Addis Ababa University. Received on March 14, 2011 5:21
4. Ministry of Foreign Affairs of the Federal Democratic Republic of Ethiopia Sudan Desk Officer Tuesday, 12/1/2011, from 03:10-04:00 PM. Office.
5. Ministry of Foreign Affairs of the Federal Democratic Republic of Ethiopia Egypt Desk Officer Tuesday, 12/1/2011, from 02:00-03:00 PM. Office.
6. Mostafa Ahmady, Head of Press and Information Office. Embassy of the Arab Republic of Egypt, Addis Ababa. Interviewed on 21 December 2010 from 09:00-10:50 am. Embassy of Egypt Chancery at his office
7. E-mail interview with Mustafa Mukhtar, water resources engineer in Canada. He worked for the Ministry of Irrigation Sudan - in Dams, Planning and Hydraulic Research Directorates. Received on 3 March, 2011 20:16
8. Salah Shazali, PhD, Nile Basin Initiative (NBI), Eastern Nile Subsidiary Action Program (ENSAP), Eastern Nile Technical Regional Office (ENTRO), Senior Operations Officer. At his ENTRO Office on 15 March 2011 from 16:26-1:22PM.
9. Sherif M.El Sayed, PhD, Nile Basin Initiative (NBI), Eastern Nile Subsidiary Action Program (ENSAP), Eastern Nile Technical Regional Office (ENTRO), Senior Regional Project Coordinator. At his ENTRO Office on 15 March 2011 from 03:10-03:48
10. Tefera Beyene, Director Boundary and Transboundary Rivers Affairs Directorate. Ministry of Water Resources and Energy of the Federal Democratic Republic of Ethiopia. Tuesday, 11/1/2011, from 11-12 AM. Office.

## **Declaration**

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

---

Zerihun Abebe Yigzaw

April, 2011

This thesis is submitted for examination with my approval as an advisor of the candidate.

---

Aaron Tesfaye, PhD.

April, 2011