Conflict and Cooperation among the Nile Basin Countries with Special Emphasis on the Nile Basin Initiative (NBI)

A Research Paper presented by:

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(Ethiopia)

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1. The Nile River Basin
List of Acronyms

CFA  Cooperative Framework Agreement
CIDA  Canadian International Development Agency
D-3  Project Name of the CFA
DRC  Democratic Republic of Congo
EAC  East African Community
FOA  World Food and Agriculture Organization
GEF  Global Environmental Facility
GWP  Global Water Partnership
NBD  Nile Basin Discourse
NBI  Nile Basin Initiative
Nile-COM  Council of Ministers of Water Affairs of the Nile Basin
Nile-Tec  Technical Advisory Committee of the Nile Basin Initiative
Nile-Sec  Secretariat of the Nile Basin Initiative
NRBAP  Nile River Basin Action Plan
SAP  Subsidiary Action Programs
SVP  Shared Vision Program
TECCONILE  Technical Cooperation Committee for the Promotion of the Development of the Nile
UNDP  United Nations Development Programme
Abstract

For centuries, the River Nile has been treated as a source of conflict rather than cooperation. This study explores past and present struggle between Egypt to maintain its control over the water of the Nile and other riparian countries that demand a more multilateral approach to fair and equitable utilization of the same. In the past, various attempts had been taken to establish basin-wide institutions specifically crafted to prevent conflict and manage competing interests over the utilization of the Nile River, but without success. Recently, the Nile Basin Initiative (NBI) with established to formulate a new agreement on how to utilize the River Nile for the benefit of all riparian countries. The expectation is that by creating a permanent basin-wide agreement shift from conflictive behaviour to cooperative relationship amongst the riparian countries. In conducting this study, however, it became clear that the initiative yielded mixed results, involving both conflict and cooperation. Above all, signing of the Cooperative Framework Agreement (CFA) has escalated existing conflictive behaviours of the riparian states into ‘water war’ rhetoric. Following the CFA, scholars (Swain 2011, Gleick 1993, Swain 1997) have predicted that the failure of the NBI would lead the Nile riparian countries into water war. Nonetheless, a key finding of this study, considering from realist and liberalist perspective, has shown that resorting to water war is unrealistic to the Nile riparian countries; and hence they would not go to water war. Conversely, it found that NBI has managed to shift power relations from hydro-hegemony to a more multilateral approach of water utilization, where negotiation is the only way out to resolve the question of the Nile water. All things considered, this study has proved that conflict and cooperation in the Nile River basin actually coexists.
Relevance to Development Studies

This study explores a topic central to the field of development studies, since it analyses the nature of conflict and cooperation in the Nile River basin. It does this within a theoretical framework of ‘water wars’, conflict and cooperation. This study addresses a gap in the literature relating to the Nile River, conceptualizing the history and recent conflict and cooperation as existing, not in an opposing relationship, but as inter-connected. Among other factors, development in the Nile Basin region has been dependent on peaceful co-existence among states. At a time when the Nile Basin states stand at a critical point concerning the contested Article of the CFA, this study has an urgent relevance to future moves towards institutionalising cooperation.

Keywords
Nile Basin Agreement; Cooperation; Conflict; Liberalism; Realism; Water Wars; Water Security; hydro-hegemony; multilateral approach; riparian states.
Chapter 1
Introduction

This chapter informs the reader about the research area, justification of the research, research objectives and significance, the research problem, and method of data collection and data analysis. The aim of this chapter is to clarify some key lines of enquiry, and to clarify the scope and limitations of the study. Finally, the structure of the subsequent chapters is outlined.

1.1. Background

The main focus of this paper is the Nile Basin Initiative (NBI), an intergovernmental organization created in 1999. The NBI is dedicated to equitable and sustainable management and development of the shared water resources of the Nile Basin. Its main objective is the achievement of sustainable socioeconomic development through the equitable utilization of, and benefit from, the common Nile Basin water resources (NBI Website 2010).

Map 1: Map of the Nile River


The NBI is intended to manage relations among states along the Nile River – known as ‘riparian states’, which depend on the longest river in the world. The Nile flows 6,700 kilometres from source to mouth, through eleven countries that are members or observers of the NBI: Rwanda, Burundi, Congo, Tanzania, Kenya, Uganda, Eritrea, Ethiopia, the Sudan, South Sudan and Egypt (Swain 1997:677). The two major tributaries of the Nile, the White and the Blue Nile, originate from Lake Victoria and Lake Tana respectively (Kameri-Mbote 2005:1). Atbara River in Sudan is the confluence where these two tributaries meet and officially, this is where the Nile gets its name. In terms of water contribution, the Ethiopian highland sources are by far the largest (86%); with the White Nile providing 14% of all Nile water (ibid.).

**Table 1**

The Nile River and its contributory sources

<table>
<thead>
<tr>
<th>Tributary</th>
<th>12-month water share/year (%)</th>
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<tbody>
<tr>
<td>Ethiopian Sources</td>
<td></td>
</tr>
<tr>
<td>Blue Nile</td>
<td>64</td>
</tr>
<tr>
<td>Sobat and Atbara</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
</tr>
<tr>
<td>Equatorial lakes</td>
<td>White Nile</td>
</tr>
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<td></td>
<td>15</td>
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Source: Kameri-Mbota 2005:1

**Table 2: Population Growth**

<table>
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<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>6.603.696,00</td>
<td>8.303.330,00</td>
<td>1.699.634,00</td>
<td>2.8</td>
</tr>
<tr>
<td>DRC</td>
<td>52.284.019,00</td>
<td>66.020.365,00</td>
<td>13.736.346,00</td>
<td>2.7</td>
</tr>
<tr>
<td>Egypt</td>
<td>71.518.343,00</td>
<td>82.999.393,00</td>
<td>11.481.050,00</td>
<td>1.8</td>
</tr>
<tr>
<td>Eritrea</td>
<td>3.801.913,00</td>
<td>5.073.279,00</td>
<td>1.271.366,00</td>
<td>2.9</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>67.272.331,00</td>
<td>82.824.732,00</td>
<td>15.552.401,00</td>
<td>2.6</td>
</tr>
<tr>
<td>Kenya</td>
<td>32.269.397,00</td>
<td>39.802.015,00</td>
<td>7.532.618,00</td>
<td>2.6</td>
</tr>
<tr>
<td>Tanzania</td>
<td>35.026.198,00</td>
<td>43.739.051,00</td>
<td>8.712.853,00</td>
<td>2.9</td>
</tr>
<tr>
<td>Uganda</td>
<td>25.215.902,00</td>
<td>32.709.865,00</td>
<td>7.493.963,00</td>
<td>3.3</td>
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<tr>
<td>Rwanda</td>
<td>8.310.051,00</td>
<td>9.997.614,00</td>
<td>1.687.563,00</td>
<td>2.8</td>
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<td>Sudan</td>
<td>35.667.097,00</td>
<td>42.272.435,00</td>
<td>6.605.338,00</td>
<td>2.5</td>
</tr>
<tr>
<td>Sum</td>
<td>337.968.947,00</td>
<td>413.742.079,00</td>
<td>75.773.132,00</td>
<td>26.9</td>
</tr>
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</table>


Table 2 shows recent population statistics within riparian states, populations that depend on the River Nile directly or indirectly for their
livelihood. This number is expected to exceed 600 million by 2025\(^2\). The table also shows the growth rate of the population (3% per a year) in Nile riparian countries. Between the years of 1960 and 1990, the population has doubled, and is projected to increase fivefold in the 30 year period between 1990 and 2025 (Ibid). As it is stated, “the demographic booms, development imperatives, climatic fluctuations and poor water management are among some of the factors that have caused water shortage” (Ibid, 7). Studies show that the annual per capita water availability in Nile river basin countries is dropping significantly; the increasing scarcity of water is compounded by the exponential population growth projected for the next two decades (Yohannes 2008:5).

Table 3 shows the dependency ratio on the River Nile and the projected scarcity of water in 2025 in selected countries of the Nile river basin. The Nile river basin has been classified as an at risk basin area (Wolf et al., 2003). Wolf identified, as major causes of conflict in at risk basin areas, uncoordinated development projects, the absence of common law and institution, and general animosity among parties. In order to avert such conflict, various as yet unsuccessful attempts have been undertaken by the Nile River riparian states to create a basin-wide agreement and a Nile River commission.

### 1.2. Statement of Research Problem

Struggle over the river of the Nile has had a long history. This struggle basically compounded within the upper and lower riparian countries having both conflictive and cooperative behaviour. As stated, “throughout its history,

\(^2\) Ibid
Egypt has jealously guarded its claim to the Nile waters, threatening military action against upstream Sudan and Ethiopia whenever they have announced water projects on the river (Wiebe 2001:731). The 1929 and 1959 agreements empowered Egypt to use and control the water of the Nile. While the first agreement grants Egypt veto power over any projects involving Nile water, the latter allows for full utilization of the resource, obliging Egypt to sharing only 15.5% of the water with Sudan. Since those treaties placed Egypt in a hydro-hegemonic position, Egypt has managed to control the use and course of water from source to mouth. As a result, the River Nile has no basin-wide agreement and governing body, as other major international rivers do (Arsano and Tamirat 2005:1). Recently, in spite of the 1929 and 1959 agreements, the upper riparian states have challenged Egypt’s monopolization of the Nile water by taking forward unilateral development projects.

To manage these competing interests, all the Nile riparian states, including Egypt, took an initiative to establish a permanent legal institution which would be responsible for Nile Water governance. Accordingly, the Nile Basin Initiative (NBI) was established in as an interim institution responsible for founding legal and institutional infrastructures. The NBI was thus expected to smooth the process of basin-wide negotiation until such a time as the cooperative framework agreement (CFA) could be put in place (Mekonnen 2010). After a decade’s negotiation, mediated by the World Bank, six riparian countries signed the CFA, while Egypt and Sudan refused to do so. Therefore, the main problem of this research is whether the theory of hydro-hegemony can explain the relationship between the riparian countries which oscillates between conflict and cooperation. The research also addresses recent conceptualizations of cooperation devoid of conflict, and which deny the coexistence of conflict and cooperation.

1.3. Justification/Relevance of the Research

Transboundary water conflict and cooperation has been the subject of ongoing debates and a growing field of literature among scholars of international relations, law and political geography. The body of literature seems to be shifting from a focus on water war (Gleick, 1993; Cooley, 1984; Starr, 1991) to the possibility of no water war, and from a no water war framework (Alavian, 2011; Wolf et al., 2005a; Wolf et al., 2005b; Kameri-Mbote, 2005) to one of conflict and cooperation (Mirumachi and Allan, 2007a). Where the first group argues that water in the 21st century, as a result of its scarcity, will bring about water war, the second group contends that shared water is a catalyst for cooperation. The third group brings a new approach and argues that conflict and cooperation exist together.

This study challenges the first two approaches by adopting the middle man approach that conflict and cooperation coexist, as developed by (Mirumachi and Allan 2007b). This approach addresses a gap in the literature.
relating to the Nile River, conceptualizing conflict and cooperation as existing in an opposing relationship.

1.4 Objectives and Questions

By using a new approach—conflict and cooperation coexist (Mirumachi and Allan 2007b), this research paper intends to explore the dynamics of conflict-cooperation nexus in the Nile Basin. It also aimed to explore how power dynamics have played a role in changing the position of riparian states from hydro-hegemonic configuration to multilateral approach, giving particular emphasis to the NBI and its collateral legal framework—the CFA. Thus, it tries to analyze the implication of signing the CFA for the reconfiguration of power relations among the riparian countries. The main question of this research is, thus:

- Could competing claims around the CFA, in relation to the current water use right, among Nile basin states lead to water wars or a combination of conflict and cooperation?

Three sub-questions are addressed in specific chapters:

- What factors prevented Egypt and the Sudan from signing the CFA when all the other riparian states signed in 2010?
- How the NBI has influenced the power relationship of basin states?

1.5 Methods of Data Collection and Analysis

In answering the research questions, this study employed a methodology that draws its theoretical tools from existing literature on conflict and cooperation. Two varieties of theoretical analysis, realism and liberalism, were engaged. The conceptual framework of hydro-hegemony and a multilateral approach were used as tools to identify competing interests within the framework of law and institution.

Primary and secondary data was collected to examine the actual and perceived interaction of the conflict and cooperation nexus between and among the riparian countries. Interview questions were developed to collect expert opinion on the ongoing situation surrounding the Nile River. To do so, experts from the Nile Basin Research Programme, Bergen University, were selected and expert opinion was also obtained from 8 high profile academics; 3 Norwegian, 1 Sudanese, 2 Eritrean and 2 Ethiopian. The study also engages primary data on the Nile Basin Initiative obtained through project design documents, progress reports and ministerial speeches. In particular, the website of the Nile Basin Initiative was used as a primary source for obtaining recent information on the Nile Basin Initiative.

Database sources for this study include, but are not limited to, Transboundary Freshwater Dispute (TFDD) of Oregon State University, Inventory of Conflict and Environment (ICE), World Bank, and World Water War database. These sources act as a catalogue of major Nile related water conflict and cooperation, and provide valuable evidence that allows for the analysis of conflict-cooperation interactions in the Nile Basin. Other important
documents reviewed as primary sources are the legal documents of the Law of the Non-Navigational Uses of International Watercourses (1997) and the Nile agreements (1929, 1959, and 2010). Secondary data of books, journals and reports were also used to understand conflictive and/or cooperative situations in Nile negotiations. Data is analyzed in order to identify variables that play a pivotal role in creating conflict and/or cooperation. Legal analysis is also performed on the selected legal documents and principles. Data analysis focused on identifying both the situation in which NBI and CFA negotiation has been suspended, and the key actors in the processes of negotiation.

1.6 Position of the Researcher

The researcher personally believes that the use of water can cause both conflict and cooperation, depending on the manner in which it is managed. The researcher also holds that the current growing demands for water in the Nile Basin will encourage cooperation on a regional level and will not necessarily lead to water wars. It is with a commitment to this stance that this study area was selected and the research was undertaken.

1.7 Organization of Chapters

The research paper is organised into six chapters. Chapter 1 informs the reader of the research area, the research problem, and the methods of data collection and analysis. While chapter 2 presents the theoretical framework of the research paper, chapter 3 identifies and analyzes Pre-NBI patterns of conflict and cooperation in the Nile Basin so as to identify the interaction of water related conflict and cooperation. Chapter 4 examines the relationship between conflict and cooperation during the NBI and tries to identify the outcomes of NBI negotiations. Chapter five provides a critical analysis of the outcomes of the NBI and the changes it introduced to the power balance. Chapter six concludes the whole body of the research paper.

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Chapter 2
Theoretical Framework of War, Conflict and Cooperation

Scholars, academician and even policy makers crucially rely on theory in order to link the abstract world to the real, on the ground world. For this reason, it is important to find working theories which will help to order the blizzard of information that surrounds the nature of conflict and cooperation in the Nile River Basin. International relations theories must be employed to examine the past and present conflictive and cooperative behaviour of states in the Nile River Basin. This chapter therefore briefly presents realist and liberalist theories of international relations as they relate to the behaviour of the Nile Basin countries.

Before outlining these theories, it is important to clearly define some key concepts, such as conflict, cooperation, water war, and hydro-hegemony, concepts which will be central to the argument.

2.1 Definition of Concepts

It is difficult to define the state of conflict separately from that of cooperation. Conflict is “a concept that is independent of co-operation; not always opposite to it” (Craig 1993, as cited in Mirumachi 2007:4). Others have defined conflict as “a struggle for status, scarce resources and significant social change” (Batros et al., 2002:12). It can also be defined as “a situation in which actors use conflict behavior against each other to attain incompatible goals and/or to express their hostility” (ibid.). Interestingly, “cooperation is not equivalent to harmony” (Axelrod and Keohane1985:226). Harmony, as a state of complete unity of interests, is impossible, yet cooperation can occur in circumstances where both contradictory and balancing interests exist (ibid.). In other words, cooperation does not mean the absence of conflict.

The term ‘water war’ is not clearly defined, but was coined by environmentalists to identify a water conflict from other conflicts. Accordingly, water war is “a type of conflict due to an acute shortage of water for drinking and irrigation”5. Hydro-hegemony is another loosely defined concept. The developers of the concept, Zeitoun and Warner (2006:1), defined it as “hegemony at the river-basin level, achieved through water resource control strategies such as resource capture, integration and containment”. We can now discuss these concepts in terms of international relations theory and its applicability to the Nile River basin.

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2.2 Realism and Water War

Realism is a broad theory which developed from the works of such thinkers as Machiavelli (*The Prince*, 1513), Hobbes (*Leviathan*, 1651), Hans Morgenthau (*Politics Among Nations*, 1948), and Reinhold Niebuhr (1951). Classical realists consider the behaviour of states to mimic human behaviour in their innate desire to dominate others, a desire which leads them to go to war (Morgenthau 1948). In a Realist system, where sovereign states compete for power and advantage to one another's detriment, war is an inescapable fact, and foreign policy must be understood in terms of the pursuit of the national interest of power (Booth 1991). States go to war in the pursuit of their own self interests, and based on their relative military and economic capabilities (Ibid).

Similarly, *realpolitik* defines the world as “a bleak one, based on competitive processes of conflict involving power-based, adversarial, confrontational, zero-sum, and win-lose approaches to dealing with conflict” (Sandole and Van der Merwe 1993:4). Sandole further argues that due to its values of high competition and defence of self interest, *realpolitik* has destructive outcomes. The subject of power is perhaps best stated by Morgenthau (1948), who contends that international politics, like all politics, is a struggle for power. Power is opted for international society is anarchic; there is no central authority which could govern the behaviour of the state (Bull 1977:315). A realist assumes that the behaviour of states function without the existence of a superior authority which might be capable of regulating their behaviour.

The neorealist structural theorist Kenneth Waltz (1998) contributed to the classical realist debate with an offense-defense approach. Offensive realism contends that states resort to power mainly to maximize their relative advantage (Aron 2003; Hobbes 1998). Defensive realism, however, contends that nations hunt for security rather than power (Walt 1987). In the defensive case, if security is guaranteed, states prefer a defensive to an offensive approach. In this situation, cooperation could prosper (Walt 1998:34).

Realism and neo-realism have different strategies with regard to implications for national security policy-making. While realism focuses on power-oriented strategies to justify the end, neo-realism favours security-oriented strategies based on the need to compete for security (Rose 1998). As the international system is anarchic, each state needs to secure its own interests, which leads weaker states to balance against, rather than bandwagon with, more powerful rivals (Walt 1998:35). Generally speaking, realists argue that power is the essence of security. Military might is, therefore, the highest priority for achieving national interests and security.

As access to water is essential for the survival of the state, it follows, if one subscribes to a realist approach, that water may be the cause of conflict (Cooley 1984). Ample of literature regarding water war predicts that in the 21st century, a scarcity of water and a lack of institutions for the management of

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6 An overview of the Field of International Relations, Accessed on 19 September, 2010 at <http://www.drtomoconnor.com/3040/3040lect02a.htm>
water bring about water wars. In his article The War over Water (1984), Cooley argued that the main cause for the 1967 Arab-Israeli War, major aspects of the Palestinian question, and the struggle over the future West Bank was conflict over the water. Since 1947, a number of cease-fire agreements between Israel and its neighbors had been concluded, and had failed because of the unsettled issue of the water question. World War II evidenced the strategic advantage of bombing water and water-resources systems as offensive military targets (Gleick 1993:79). There are several cases in which water works have been targeted, such as the bombing of hydroelectric dams on the Yalu River (which serves North Korea and China) during the Korean War, the bombing of an Iraqi hydroelectric station in Kurdistan by Iran in July 1981, and finally the bombing of irrigation water-supply systems in North Vietnam by the United States in the late 1960s (Gleick 1993:81-83).

Jacoby (2008:160) describes a state of hegemony, in which nations are constantly engaged in conflict to attain and/or maintain their dominance. The conceptual framework of hydro-hegemony is similar in outlook, having been developed by Zeitoun and Warner (2006) from realist theories of hegemony (Gramsci 1971), regimes (Keohane 1982), and power (Cox 1992; Lukes 2005). Specifically, power is expressed as coercive, bargaining and ideational (Mirumachi and Allan 2007a). While coercive power refers to material power (military might, economic strength, modes of production, and riparian position), bargaining power controls the rules of game by limiting choices regarding compliance and noncompliance. The third form of power, ideational power, induces compliances willingly (Zeitoun and Warner, 2006; Mirumachi and Allan, 2007a). Among the Nile riparian countries, Egypt is unique in possessing all three of these powers: with a military ranking of 16th in the world and 1st in Africa, Egypt is the undisputed military power in the riparian area. It is also in a stronger economic position, and ideationally well placed, as the Nile basin cooperative and conflictive negotiations, including the NBI, have all been controlled by. These three dimensions of power have helped Egypt to play a great role in determining the outcome of any claims over the Nile River.

Zeitoun and Warner state unequivocally that “the framework of hydro-hegemony is applied to the Nile, Jordan and Tigris and Euphrates river basins, where it is found that current hydro-hegemonic configurations tend towards the dominative form...there is evidence in each case of power asymmetries influencing an inequitable outcome” (Zeitoun and Warner 2006:1). A specific analysis of the Nile River Basin is presented in chapter three, in order to identify the hegemony in this area, and to ascertain how power has been maintained throughout the history of the river basin.

2.3 Conflict and Cooperation under Liberalism

The basis of liberalism dates back to the work of prominent philosophers like John Locke (1632-1704) and Immanuel Kant (1724-1804) who were argued for individual freedom and liberty. Kant set out three cornerstones for liberalism, namely: the establishment of a constitutional government and democratic institution both domestically and internationally to guarantee what Kant termed ‘perpetual peace’; the resolution of all disputes in a peaceful manner,
the replacement of the realist approach of self help with collective security, which calls the international community to act collectively to prevent the usage of illegitimate power (Kant 1795, cited in Murshed 2010:193-197; Doyle 2005:463).

Three ‘pillars of liberal peace’ were developed by Michael Doyle, whose focus is on “republican representation, an ideological commitment to fundamental human rights, and transnational interdependence” (2005:463). Doyle argued that if liberal states operated with these characteristics, they would not go to war with each other. Doyle declared that the absence of one or more of these pillars would lead states to war, whether they were democratic or not. Doyle’s concept of transnational interdependence looks to increase the value of trade and commerce as an alternative to war by creating interdependence between states. High levels of interdependence may act as a deterrent against war, as initiating conflict with a trading partner would compromise the welfare gains associated with trade (Polachek 1980). In addition, the notion of economic interdependence, as developed by Keohane and Nye (1977) describes partnered states and their fortunes as being inextricably tied together. The water war approach thus stands in direct contrast to the liberal economic interdependence theory and institutional capability.

Liberalists (Keohane 2005; Nye 1988) are considered to be the founders of the neoliberal school of thought who holds that international institutions can play a great role in promoting international cooperation and peace. In a similar vein, authors like Grieco (1988) consider that institutions have the capacity to promote cooperation by creating better communication among states through the sharing of available information. The risk of dishonesty is thus reduced, as the institution plays a mediating role and promotes cooperation among states (Nye, 1988). Nye also maintains that institutions are intermediate variables which can significantly affect states’ behaviour in terms of formulating policy preferences (ibid.). In summary, the building of international institutions, norms and regimes can be considered to be the foundational basis of neoliberal thought, whose project is to enable cooperation, even within independent states.

2.3.1 No Water War Approach

Under the umbrella of liberalism and neoliberal institutionalism, the ‘no water war’ approach rejects the realist water war theory and strongly argues for integrated water resources management. It supports the ability of institutions to manage competing interests, play a mediating role in dispute resolutions, and promote cooperation among states. In 1998, Aaron Wolf7 and his co-researchers at Oregon State University attacked the newly developing water

7Wolf is a professor of geography in the Department of Geosciences at Oregon State and President of Transboundary Freshwater Dispute Database (TFDD) which aids in processes of water conflict prevention and resolution.
war approach, creating a database which spans 53 years of transboundary water-related interactions. The database does not show the occurrence of ‘formal water war’ but, as can be seen in Table 4, includes every set of reported water-related interactions and incidents between 1946 and 1999.

### Table 4

Interaction between Conflict and Cooperation

<table>
<thead>
<tr>
<th>Cooperative or Conflicitive interaction</th>
<th>By Number</th>
<th>Cooperative interaction</th>
<th>Conflicitive interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Water Treaty</td>
<td>157</td>
<td>Cooperative</td>
<td></td>
</tr>
<tr>
<td>Military Support</td>
<td>7</td>
<td>Cooperative</td>
<td></td>
</tr>
<tr>
<td>Non-military Agreement</td>
<td>436</td>
<td>Cooperative</td>
<td></td>
</tr>
<tr>
<td>Verbal Support</td>
<td>628</td>
<td>Cooperative</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal Hostility</td>
<td>414</td>
<td></td>
<td>Conflicitive</td>
</tr>
<tr>
<td>Hostile Acts</td>
<td>56</td>
<td></td>
<td>Conflicitive</td>
</tr>
<tr>
<td>Military Acts</td>
<td>37</td>
<td></td>
<td>Conflicitive</td>
</tr>
<tr>
<td>Formal War</td>
<td>0</td>
<td></td>
<td>Conflicitive</td>
</tr>
</tbody>
</table>


What Table 4 shows is that the total number (1228) of water-related cooperative events overwhelms the incidence (507) of acute conflicts. In total, only 37 disputes involved violence, of which 30 occurred between Israel and one of its neighbors. The table also shows that only 5 violent events took place outside of the Middle East, while 157 treaties were negotiated and signed worldwide. On the whole, the researchers concluded that “no nations have gone to war specifically over water resources for thousands of years” (Wolf et al. 2005b:1). They further argued that “for water is so important, nations cannot afford to fight over it. Instead, water fuels greater interdependence. Thus, by crying ‘water wars,’ doomsayers ignore a promising way to help prevent war: cooperative water resources management” (ibid.).

The approach has won over many academics, scholars and policy makers, and has managed to bring a policy shift from a unilateral water use approach to a multilateral water use and water development approach. Water governance through established institutions and laws has been considered as a viable instrument for preventing potential conflict incidents. It was with this conviction that the Nile Basin countries negotiated for more than a decade under the auspices of the NBI to establish the Nile Basin Commission and its governing legal document. The initiative was financially supported by international donor institutions (mainly World Bank, UNDP, FOA and CIDA) and some western countries, but the negotiating process was suspended due to a water security claim raised by Egypt.

To conclude, the ‘no water war’ approach has played a great role in creating water conflict management institutions. However, this approach has
focused on a shift from conflict to cooperation, as it sees conflict and cooperation as separate state behaviour. It also conceptualizes of conflict as always being undesirable, while cooperation is always desirable. This outlook has now rooted itself widely amongst the Nile Basin riparian states, water resource management researchers, policy developers and legal advisers.

The implication for policy making is a focus on cooperation, ignoring the possibility of working with conflict. Another limitation to the ‘no water war’ approach is that it holds all forms of institution and cooperation as good, despite the nature of the organizing power principles which control the bargaining process. The approach also assumes all conflicts to be destructive rather than constructive. Above all, the possibility of ‘modus vivendi’ seems not to be taken into consideration; instead a leap is demanded from conflict to cooperation. This gap is filled by a third approach, that of ‘conflict and cooperation’ which allows for the coexistence of both conflict and cooperation, and holds that disputing parties may work together in those areas on which they agree.

2.3.2 Conflict and Cooperation Approach

The idea that interactions around transboundary water resources share both cooperative and conflictive behavior is well established by Zeitoun and Mirumachi (2008). The authors contend that “the examination of either conflict or cooperation refutes the reality of the vast majority of contexts where cooperation and conflict actually co-exist, and perpetuates the paradigm that any conflict is ‘bad’, and that all forms of cooperation are ‘good’” (Zeitoun and Mirumachi 2008:297). The interactions between conflict (war) and cooperation are highly sophisticated and complex in nature, as “the absence of war does not mean the absence of conflict” (Zeitoun and Warner 2006:437). It is this characteristic complexity that has attracted attention from international water academics, practitioners and communities, to a joint reading of conflict and cooperation over transboundary water issues.

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8 Modus Vivendi is a Latin phrase signifying an agreement between those whose opinions differ, such that they agree to disagree. It is a way of living, implies an accommodation between disputing parties to allow life to go on. Accessed on 13 September 2011, at <http://en.wikipedia.org/wiki/Modus_vivendi>
Based on the literature and conceptual frameworks reviewed, this study attempts to test the applicability of the theories illustrated in Figure 1 in relation to the Nile River Basin, and to adopt the theory most applicable to the situation of the NBI. The combined approach, that conflict and cooperation coexist, is hypothesized as being applicable to the Nile River situation.

2.4. Conclusion

In this chapter we have discussed the theoretical underpinnings of theories concerning inter-state conflict and cooperation in international relations, focusing on realist and liberal approaches in particular. This research treated the water war approach as a form of realism and contrasted this with a more liberal approach to conflict and/or cooperation. Towards the end of the chapter, we developed our own theoretical model as a progression beyond the ‘no water war’ critique. Chapter 3 will attempt to locate the behaviour of Nile Basin states within the theoretical frameworks set out in Figure 1. Chapter 4 will focus on the NBI, an understanding of which is important in the context of conflict and cooperation over Nile water.
Chapter 3
Pre-NBI Patterns of Conflict and Cooperation

In this chapter, the theory of water war is related to initiatives among Nile River Basin countries prior to 1999. The study highlights the hydro-hegemony of Egypt, whose powerful position has served as a deterrent to open conflict over the water of the Nile. However, for a century, the riparian states have been locked into patterns of mutual threat and the stalemate of ‘cold conflicts’. The database of the Inventory of Conflict and Environment⁹ (1997) ranks registered conflicts over Nile water at the level of ‘threat’ rather than violent conflict or war. Hence, after narrating the pre-1999 history of conflict and cooperation over the use of Nile water, this chapter concludes that the states of the Nile Basin did not engage in water wars during this period.

3.1 Pre-NBI Patterns of Conflict

Historically, the Nile has been treated as a cause for longstanding conflict amongst riparian states. For the most part, this has taken the form of stalemates, dominated mainly by Egyptian threats and counter threats by Ethiopia and the Sudan (Mohamoda 2003). The history of conflict related to the water of the Nile can be dated back to 1704, when the King of Ethiopia leveled a threat at the Egyptian Pasha that he would cut off the flow of the Nile water (Collins 1996). In 1898, France and Britain (not riparian states) did engage in ‘water wars’ over Nile water, defending their respective colonial interests and the interests of their colonies. In that year, a French military force attempted to take control of the headwaters of the White Nile, which stems from Lake Victoria (Merrill 2008). Case studies of the Inventory of Conflict and Environment (1997) show that several times throughout history, Egyptian leaders tried to unify the Nile valley under their rule by conquering Sudan. Sudan was invaded during the reign of Queen Sheba, during the Roman rule of Nero, and countless other times. These invasions were motivated by Egyptian fears that one day the Nile’s waters would no longer reach their country. Recent conflicts among Nile River countries can be seen to be “merely a continuation of a two thousand year-old struggle over who will control the regions scarce water resources” (Inventory of Conflict and Environment 1997). Yet the modern history of the Nile conflict can be traced back to Britain’s occupation of Egypt in 1882, Uganda in 1894, and the Sudan during the ‘river war’ of 1896-98. Accordingly, “from source to mouth the river was for the first time controlled from one centre; and from London, and by the British government” (Tvedt 2010: 3). This strategy was designed to protect the

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valuable Nile waters from being diverted and compromising their critical tenure of Egypt, the Suez Canal, and the Red Sea route to India (Ibid).

The Nile Water Survey Study was undertaken as part of a strategic plan after World War II, when the British government commissioned a complete hydrological study of the Nile Basin as a unified entity (Inventory of Conflict and Environment 1997). After 50 years of study, the report suggested the construction of the Jongli canal, which was intended to divert the flow of the Nile in south Sudan (in the Sudd) to increase the amount of water reaching Egypt (Tvedt 2004:63). The strategy was concretized through the signing of “the first Nile Water Agreement in 1929, between Egypt and Great Britain on behalf of Sudan and other British colonies in the basin (Uganda, Kenya, Tanzania)” (Cascao 2009:245).

The 1929 agreement gave Egypt exclusive property rights to use and control the Nile water, but failed to incorporate the interests of the other riparian countries. Specifically, it gave 48 Bm3/year to Egypt and 4 Bm3/year to Sudan, while excluding the other riparian zones (Case Study, Oregon State University). Above all, the agreement granted Egypt a veto power over any other riparian development projects that might affect the flow of the river to Egypt. The agreement states that “except with the prior consent of the Egyptian Government, no irrigation works shall be undertaken or electric generators installed neither along the Nile and its branches nor on the lakes from which they flow” (Article 4 (ii) of the 1929 Agreement). However, immediately after gaining independence from colonial powers the upper Nile riparian countries openly declared that they would not be bound by the colonial agreement. In 1956, Sudan unilaterally declared its non-adherence to the 1929 agreement. As a result, relations between Egypt and Sudan escalated into violent conflict during the period of 1956-1958 (Tvedt 2004: 267). This conflict employed military tools as a coercive power to secure national interests.

In 1958, Egypt sent an unsuccessful military expedition into the territory of Sudan from which the dispute between the two countries sprung. Egypt controlled a disputed area while both countries were in “amidst of negotiations over the Nile waters, and Sudanese general elections. Tensions were eased (and a Nile Waters Treaty signed) when a pro-Egyptian government was elected in Sudan” (Wolf 1998:254). As a result, the 1959 agreement was signed to accommodate the demands of the Sudan, without repudiating the former agreement. Out of the total 80 BCM as measured at Aswan High Dam, the ratio of total allocations of water was 55.5 BCM to Egypt and 18.5 BCM to Sudan per a year (Case Study, cited in footnote 10). The agreement served to re-establish the pre-existing rights of Egypt, and might be said to have granted Egypt her natural and historic rights to the Nile water while giving limited rights to Sudan.

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On the other hand, the upstream states regarded the treaty as an outdated and colonial agreement that ignored the needs of other riparian nations (Cascão 2009:245). Ethiopia, the source of about 85 percent of the Nile’s water, was not part of the agreement and refused to acknowledge it. In 1956, Ethiopia was one of the first upper riparian states to express its position on the agreement, stating that “Ethiopia simply does not acknowledge any existing treaty or other obligations preventing it from freely disposing of the Nile waters on its territory” (Godana 1985, as cited in Knobelsdorf 2005:630). In the same vein, following the achievement of independence in the 1960s, Uganda, Tanzania and Kenya contested the validity of the agreements and refused to be bound by them (Cascão 2009:245).

In 1962, Julius Nyerere, then president of Tanzania, sent an official statement to the Egyptian government stating that “an agreement purporting to bind in perpetuity to secure Egyptian consent before undertaking its own development programs based on its own resources was considered to be incompatible with Tanganyika’s status as a sovereign state” (Knobelsdorf 2005). Nyerere’s principle was that colonial agreements could not bind a newly an independent state, as the new state had not taken part in the negotiations nor signed the treaties that created the obligations (Carroll 1999:279). Later, the approach was developed as the “Nyerere Doctrine of Treaty Succession” (Knobelsdorf 2005:624). This doctrine has been used by the upper riparian states, who had not participated in the enactment of either the 1929 or the 1959 agreements. More recently (2003), the Kenyan parliament passed a resolution, also following Nyerere’s line of argument, which repudiated the Nile treaty regime. In the resolution, parliament declared that Kenya, which had not been party to the agreements and had not been consulted before the protocol was enacted, would not consider the agreements legally binding (ibid.).

Yet, Egypt views the upper riparian country’s repudiation of the agreements as an act of aggression. Despite many incompatible interests, Egypt has managed to use and control the water of the Nile asymmetrically; sometimes by using military force to secure her historical water share and at other times by upholding the colonial agreements as binding legal documents. The agreements, along with Egypt’s military power and economic advancement, have played a major role in attaining and maintaining the hydro-hegemonic position of Egypt (Jacoby 2008:17) in the region for the last 82 years. While Egypt is ranked as the foremost military power in Africa, and 16th among the world’s top 55 most militarized countries (Global Firepower 201111). Ethiopia is ranked 44th, and the rest of Nile Basin countries are unranked within the top 55 (ibid.). Economically, Egypt is also far wealthier than any other countries in the Nile Basin (World Bank database 2010).

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11 Online database Global Firepower (GFP) of Central Intelligence Agency (CIA), Accessed on 19 September 2011, at <http://www.globalfirepower.com/>
Figure 2 shows levels of development in terms of 2010’s gross domestic product, and places Egypt and the Sudan under lower middle income. Today, the Sudan is divided into two independent countries, which have already shared out the country’s GDP proportionally, but the statistics still serve to illustrate the economic situation in the Nile Basin. With the exception of Egypt and the Sudan, the riparian countries on the table are all classified as low income, which places them economically and politically in a vulnerable position in terms of bargaining for water allocation and even their own development projects. The poverty of her neighbouring countries has in effect helped Egypt to maintain her hegemonic position and dominated hydro-politics in the Nile River Basin. In order to maintain this position, Egypt declares its intention to go to war should the upper riparian countries undertake any development projects that could slow the flow of water towards Egypt. For example, when relations between the Sudanese and Egyptian governments deteriorated, the Sudanese government threatened to decrease the flow of Nile water. Egypt responded by warning the Sudanese government that they would declare war if Sudan obstructed the natural flow of the Nile water (Salem 2010:10).

In June 1995, Sudanese Islamic militants were suspected of an assassination attempt on Egyptian President Mubarak, in Addis Ababa. In response, Egypt took control of a disputed area on the Sudanese border which led to threats and continued tension between the two riparian states (Inventory of Conflict and Environment 1997). Moreover, in the same year, Mubarak aggressively warned Turabi, leader of Sudan's National Islamic Front that “those who play with fire in Khartoum ...will push us to confrontation and to
defend our rights and lives”. Foreign Minister Amir Musa also warned Turabi, stating that “I am warning Turabi not to play with fire, at the same time, not to play with water” (Sudan Update, 1995).

In 1978, Egyptian President Anwar Sadat warned Ethiopia against encroaching on Nile water. In 1988, Egyptian diplomat Boutros Boutros-Ghali made a similar threat, and in 1993, Egyptian World Bank official Ismail Serageldin clearly declared Egypt’s readiness to go to war with anyone who might slow/divert the flow of the Nile water (Dinar 2002a). Even more recently, Egypt claimed that it would “be willing and able to intervene militarily in order to maintain the status quo” (Sudan Update, 1995). The realist considerations of power and military might have always been given a high priority by Egypt. However, Egypt has not waged any open war against the Nile Basin states except for an unsuccessful military attempt against the Sudan in 1958.

In short under this section, historical accounts of actual conflicts over the Nile waters were presented. From the materials reviewed, it can be deduced that only two open military declarations have been made by riparian states – one by hegemonic Egypt against the Sudan in 1958 and another by 'post-imperial' Ethiopia in 1978. The 1958 Sudan-Egypt conflict is referred to in the registry of the Pacific Institute15 as a military war, while the 1978 Ethiopia-Egypt conflict is referred as a political tool. Except for these two incidents, the entire conflict situation has been merely conflict rhetoric rather than conflict proper. This, and the fact that the Inventory of Conflict and Environment (1997) classed the Nile River Basin as a 'threat' situation rather than open war, allows us to conclude that the Nile Basin states have almost never engaged in ‘realist’ patterns of conflict among each other by engaging in water wars. The situation clearly demonstrates that conflict and cooperation can combine in practice, rather than conflicts of interests necessarily leading to water wars.

### 3.2 Pre-NBI Patterns of Cooperation

Water management is highly complex and extremely political. Balancing competing interests over water allocation and managing water scarcity require strong institutions (Carius et al. 2004b:84). Various attempts have been made over the last half century to establish a strong institution that could govern the Nile water. Hydromet, UNDUGU16, and Technical Cooperation Committee

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15 The Pacific Institute is a World’s Water Database which organizes information on the world’s freshwater resources, such as Water Conflict Chronology, Accessed on 14 September 2011, at <http://www.worldwater.org/conflict.html>

16 The term ‘UNDUGU’ is derived from the Swahili language, and means brotherhood or solidarity.
for the Promotion of the Development of the Nile (TECCONILE) were major cooperative steps, but steps which succeeded one another without significant success.

3.2.1 The Hydromet Survey Project (1967-1993)

Hydromet, the first basin-wide organization, was established in 1967 and consists of all the riparian states of the Nile except for Ethiopia and DRC. It was initiated by the Great Lakes states immediately after they achieved independence in the 1960s. The organization was intended mainly to analyze the hydrometeorological survey of the catchments of Lakes Victoria, Kyoga, Albert and Mobutut Sese Seku, with an aim to reducing flood disasters due to high rainfall in the area (Tafesse 2001:104). In 1961, the Egyptians were invited to join the Hydromet project in 1967, along with Kenya, Uganda, Tanzania, the Sudan, UNDP and WMO, Egypt signed the Hydromet. The latter two organizations were called to the negotiation table by the Great Lakes States Coordinating Committee to provide both financial and logistical arrangements (Carroll 1999:292). Whereas UNDP’s special fund provided financial assistance up to US$1.8 million for the implementation of the project, the WMO was responsible for executing the planned activities of the hydromet project.

In 1968, a technical committee was established in Entebbe, Uganda to carry out the proposed project. The office in Entebbe facilitated the actual installation of collecting stations; 24 hydrometrological, 156 rainfall, and 67 hydrological stations, as well as 14 lake level measurements (Tafesse 2001). Ethiopia and DRC could not be motivated to become actively involved, as the project failed to deal with the main issues of fair and equitable allocation of the water of the Nile. Later, in 1971 and 1977 respectively, Ethiopia and DRC joined the Hydromet project with observer status. Proposals to establish the Nile Basin Commission under the auspices of hydromet were presented in 1970 by Egypt and the Sudan, but were met with suspicion and mistrust rather than success. The other Nile riparian states refused to cooperate, as they were provided with no incentives; joining a body for the allocation of Nile water might have lost them their rights to withdraw that very water (Carroll 1999:281).

For this reason, in 1977, Rwanda, Burundi, Tanzania and Uganda formed their own organization called Kagara Basin Agreement, which enabled them to develop and manage the River Kagara which flows into Lake Kagara (Tafesse, 2001:105). The agreement covered many projects, but failed due to lack of funds and political instability (Carroll 1999:295). On the whole, even though the project lasted for 25 years, it failed in its effort to develop an effective basin-based arrangement, as it did not boast major water contributor Ethiopia as a member country. The programme was also plagued by suspicions and a lack of trust among downstream nations (Swain 2011:701).

3.2.2 The UNDUGU (1983-1993)

Egypt initiated a project called ‘UNDUGU’ (Brotherhood) which ran from 1983-1993, alongside the Hydromet project. The aim was to form a Nile Basin
Economic Community and thus protect Egypt’s permanent interest in the Nile Basin. Egypt, Sudan, Uganda, Zaire, and DRC formed the organization, which was established in Khartoum, Sudan, in 1983 (Merrill 2008). Mekonnen calls the project the “first initiative for basin-wide cooperation” (2010:426). While Burundi and Rwanda joined the group later, Kenya, Tanzania and Ethiopia opted to distance themselves, taking on only an observer status that they might attend the UNDUGU meetings. One of the main objectives of the UNDUGU grouping was to create mutual benefit in areas of infrastructure, environment, culture and trade. Unfortunately, the organization was disbanded without achieving its intended objectives.

3.2.3 TECCONILE (1993-1999)

In December 1992, the Council of Ministers of Water Affairs of Egypt, Sudan, Rwanda, Tanzania, Uganda, and DRC formed TECCONILE. Ethiopia remained an aloof observer, and Burundi, Eritrea, and Kenya, marginal contributors to the Nile waters, preferred to join Ethiopia as observers rather than signatories (Collins, 2003). TECCONILE was the direct successor of the Hydromet project after its closure in 1992. When TECCONILE came into operation in January 1993, with its Secretariat in Uganda, it used the former hydromet’s secretariat office at Entebbe. The Council of Ministers of Water affairs had a technical committee in place to act as a steering committee that was responsible to carry out the project under the TECCONILE.

The initial project of TECCONILE was dealing with the environment and water quality of the Nile River; but later “an equitable entitlement of the Nile waters to the co-basin states had been included as an objective when the TECCONILE functionaries drafted and submitted to the CIDA- assisted NRBAP in May, 1995”(Tafesse 2001:106). The Action Plan (NRBAP) consisted of 22 technical assistance and capacity building projects, with estimated cost of US$ 100 million for its implementation. CIDA, UNDP, FOA, and the World Bank showed willingness to assist in the coordination of the project, in keeping with the objectives of their own agencies. The Nile 2002 Conference series was one of the greatest achievements of the TECCONILE action project. A series of conferences (1993-2002) were held in an attempt to bring about basin-based cooperation. The conferences were held annually, with each of the basin countries taking a turn to host. The attendants included Ministers of Water Affairs and technical experts from all the riparian states, so as to provide a forum for scientific discussion and informal dialogues to encourage the exchange of data and to promote cooperation for Nile Basin development (Swain 2011:692). Unlike its predecessors (Hydromet, UNDUGU and other local arrangements), TECCONILE was successful in bringing the Nile Basin states together in an organized dialogue.

3.3 Discussion: Pre-NBI conflict and cooperation Nexus

As previously discussed, all pre-NBI cooperative attempts had experienced both conflict and cooperative behaviors during negotiations. A certain positive spirit of cooperation remained in the region; TECCONILE, in particular had
provided a forum discussion and sharing of information among riparian states, and had built confidence within its member states. One can thus conclude that the pre-NBI cooperative attempts were catalysts for the creation of the NBI. However, these cooperative attempts had suffered from many shortcomings, both in planning and implementing, which had compromised their success. Suspicion and mistrust were chronic problems which eventually dissolved successive frameworks. The question raised here is why these conflictive and cooperative behaviors occurred in the Nile River Basin. What was the nature of the interaction between conflict and cooperation: did cooperation prevail over conflict or did conflict prevail over cooperation? Table 5 is a summary of chapter three which will help as in search for answers to questions raised here.

### Table 5

<table>
<thead>
<tr>
<th>Organization</th>
<th>Member countries</th>
<th>Observer</th>
<th>Form of interaction</th>
<th>Nature of Interaction</th>
<th>Nature of Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929 agreements</td>
<td>Egypt &amp; Britain</td>
<td>None</td>
<td>Unilateral</td>
<td>Egypt’s control over the Nile</td>
<td>Other riparian demands</td>
</tr>
<tr>
<td>1959 agreements</td>
<td>Egypt &amp; Sudan</td>
<td>None</td>
<td>Bilateral</td>
<td>Aswan High Dam, construction of Jongli Canal</td>
<td>Other riparian demands, the question of Halfa town</td>
</tr>
<tr>
<td>Hydromet</td>
<td>All, except</td>
<td>Ethiopia and DRC</td>
<td>Multilateral</td>
<td>Meteorological survey project</td>
<td>Nile Basin Commission proposal</td>
</tr>
<tr>
<td>UNDUGU</td>
<td>All, except</td>
<td>Ethiopia, Kenya &amp; Tanzania</td>
<td>Multilateral</td>
<td>Infrastructure</td>
<td>Allocation of water</td>
</tr>
<tr>
<td>TECCON</td>
<td>Egypt, Sudan, Rwanda, Tanzania, Uganda, and DRC</td>
<td>Ethiopia, Burundi, Eritrea, and Kenya</td>
<td>Multilateral</td>
<td>Environment and water quality</td>
<td>Allocation of water</td>
</tr>
<tr>
<td>BNI</td>
<td>All except</td>
<td>Eritrea</td>
<td>Multilateral</td>
<td>Investment projects</td>
<td>Water security</td>
</tr>
</tbody>
</table>

**A summary of Chapter three**

Table 5 shows the oscillating, sometimes overlapping interaction of cooperation and conflict in the Nile region. These interactions have been determined mainly by the two polar riparian states of the Nile Basin: Egypt and Ethiopia. While Egypt, contributing almost 0% of the Nile water, had been the major initiator and active member of cooperative frameworks, Ethiopia, contributing 85% of the Nile water, was left out of the Nile waters negotiations, holding only an observer status.

The positions of other riparian states, according to Ahmed Ali Salem, have historically swung between the two poles of Egypt and Ethiopia (2010:10). Sudan, the only other North African state in the Nile Basin, did not always side with Egypt, just as the equatorial lake riparian countries did not
always side with Ethiopia. For instance, immediately after its independence, Sudan refused to abide by the 1929 agreement. At times Sudan acted unilaterally to increase her share of the Nile water and at other times, usually at times of diplomatic confrontation, called for a renegotiation of the 1959 agreement. Such power plays can be seen in the Sudanese government’s threat in the 1990s to decrease the Nile water which Egypt received from Sudan. In turn, Egypt’s president threatened Sudan with a military response should it obstruct the natural flow of the Nile water (Salem 2010:11).

Social researchers (Waterbury 2002) and (Dinar 2009) have argued that should Sudan demand additional allocations of water, it would “not only challenge the status quo but truly rattle Egypt’s historical consumption” (Waterbury, 2002). It has been argued that the Sudanese demand for more water might create stronger alliances between Sudan and the upper riparian states, particularly with Ethiopia, as the two states share an objective-the demand for more water (Dinar, 2009). The Ethio- Sudanese agreement of 1991 on the use of the Blue Nile demonstrates Sudanese dissatisfaction with the 1959 water allocation. For this reason, the author argues that a potential Ethio-Sudanese alliance on the Nile could challenge Egyptian hegemony. It is clear that the Sudan changes its position dependant on its own national interests rather than in alliance with Egyptian positions.

Table 5 also shows the position of other riparian states in creating alliances and counter alliances. As is shown, Kenya, DRC, Tanzania and Burundi opted on one or two occasions to ally with Ethiopia, also deciding not to join some of the pre-Nile cooperative frameworks. Conversely, these and other countries, realistically calculating their own advantages, occasionally sided with Egypt. Unlike the alliances between the Sudan and Egypt, which was cemented by the beneficial 1959 bilateral agreement, these alliances did not last long.

Taking into consideration pre-NBI conflict and cooperation, the basin countries can be said to have had a low intensity scale of conflict, and a high intensity scale of cooperation. It is possible to say, for example, that close to the signing of the 1929 and 1959 agreements conflict was high, but cooperation between the Sudan and Egypt was. After the signing of the 1959 agreement, the intensity of conflict was lowered and cooperation was increased. Yet, peaceful co-existence was not consistent, and cooperation and conflict levels fluctuated.

For instance, during the era of hydromet (particularly before the Egyptian proposal to establish the Nile Basin Commission in 1970), cooperation levels could be said to have been high. Many hydrometeorological survey projects were carried out, winning a common consensus among the member states. But the Egyptian proposal in the 1970s sowed seeds of suspicion and mistrust, mainly between the down riparian states and the great lakes region. This resulted in the establishment of another local river organization (Kagara River

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Basin) in 1977. Hence, during that period the intensity of conflict was high and cooperation was low among the member states.

In sum, the Nile Basin countries have a long-established pattern of conflict and cooperation which is characterized by unilateralism, bilateralism and exclusive focus on technical issues. These trends of conflict and cooperation, discussed above, evidence the co-existence of conflict and cooperation. Mirumachi and Allan succinctly state that conflict may be “an integral part of inducing and sustaining cooperative behaviour and the two may coexist in various social settings” (2007:4). As we have already seen in detail, the water of the Nile has been a cause of both conflict and cooperation.

It is the manner in which water and water resources are managed, treated and governed that determines the nature and intensity of interactions. Whenever unilateralism and power plays a greater role in controlling the water resources, the intensity of conflict increases and cooperation decreases (1929, 1959, and 1970). Conversely, whenever common benefits (hydrometeorological survey, investment) take a lead, the intensity of conflicts decrease and cooperation increases. Considering, the River Nile as only an object of conflict disregards that fact that the Nile River is also an object of cooperation, uniting the riparian countries even during times of high tension. However, the River Nile cannot either be viewed exclusively as a catalyst for cooperation. Therefore, based on empirical findings, we can conclude that conflict and cooperation actually co-existed during the pre-NBI period.
Chapter 4
Conflict and Cooperation in the Nile Basin Initiative

We have discussed the failure of Pre-NBI cooperation in creating basin-wide agreement and shifting from a unilateral to a multilateral water use approach. The Nile Basin Initiative (NBI) was launched with that aim, to establish a basin-wide agreement, obtaining the full consent of all the riparian countries. The NBI has been seen “as a breakthrough from competition to cooperation, given the [pre-NBI] cooperation hallmarked with bilateralism, exclusive focus on technical issues, and riparian involvement which did not extend beyond the sub-basin level at its best” (Mekonnen 2010:425). Nevertheless, despite expectations to the contrary, the NBI is one of the situations in which both conflict and cooperation have existed alongside one another. While greater cooperation was realized in other areas, specifically in investment projects, conflict was rife in the process of drafting the CFA. This is thoroughly discussed in this chapter; while section 4.1 discusses patterns of cooperation, section 4.2 explores the conflictive behaviour of states within the NBI. Based on empirical data and the material reviewed, this study found that both conflict and cooperation actually co-existed during the NBI.

4.1 Pattern of Cooperation in the NBI

The Nile Basin Initiative (NBI), supported by the World Bank, was launched in 1999. Its secretariat office is located in Entebbe, Uganda, and it is a regional partnership within which all ten Nile basin countries, including Egypt, united to pursue long-term development and management of the Nile water. NBI is the result of a series of meetings (1993-2002) of the Council of Ministers during the TECCONILE period. This was a great achievement for the Nile riparian states, since “for the first time in history, all Nile Basin countries have expressed…to pursue this under a transitional arrangement-NBI-until a permanent legal framework is in place” (Karyabwite 2000:40).

4.1.1 Strategic Action Plan of the NBI

The NBI is an inter-governmental organization, committed to achieving sustainable socioeconomic development through the equitable utilization of, and benefit from, the common Nile Basin water resources (NBI Website 2010). An interview with Tore Saetersdal shows that within the umbrella of the NBI, “the Nile riparian states found an opportunity to communicate and to

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19 Director, Nile Basin Research Programme, Department of Research Management, University of Bergen (Norway, 13 July 2011)
develop their own regional development projects”. According to Saetersdal, the riparian countries collectively identified their multipurpose development projects, such as the generation and export of hydropower, and large/small-scale irrigation schemes. To achieve this major goal, policy guidelines were developed comprising five concomitant objectives for the NBI. These are (i) to develop Nile Basin water resources in a sustainable and equitable way to ensure prosperity, security, and peace for all; (ii) to ensure efficient water management and optimal use of resources; (iii) to ensure cooperation and joint action between riparian countries, seeking win-win gains; (iv) to achieve poverty eradication and promote economic integration; and (v) to ensure that the NBI programme encourages the move from planning to action (NBI Website 2010).

To reinforce the last objective, a Strategic Action Programme was set up to translate the shared vision into action on the ground. It focused on two mutually reinforcing programmes: a Shared Vision Programme (SVP) and a Subsidiary Action Program (SAP). Figure 3 represents the strategic action plan in a way that is easy to understand, clarifying the devised mechanisms’ means for achieving the intended objectives.

Figure 3
A Strategic Action Plan of the NBI

![Diagram of Strategic Action Plan]


Figure 3 shows the strategic action plan of NBI; the foundations for this cooperative action programme are laid at a basin-wide level. The action plan’s objectives were: to build confidence and capacity throughout the basin states under the umbrella of SVP, to pursue cooperative development opportunities and to realize concrete investment results at a sub-regional level under the SAP. As previously stated, SVP aimed to achieve sustainable socio-economic development through equitable utilization of, and benefit from, the common Nile Basin water resources. To this end, the SVP undertook seven basin-wide projects, with a major focus on building trust, confidence and capacity in
member countries, as well as creating an enabling environment for transboundary investments (Nile Basin Initiative Website, 2010).

For the purposes of this study, the Cooperative Framework Agreement project (known as D-3) is among the most important of the SVP’s projects. This project was suspended due to disagreements around ‘water security’ claim among the riparian states. Initially, the D-3 Project had a significant output, which resulted from a series of meetings (1993-2002) of the Nile Council of Ministers, during the TECCONILE era (Cascão 2009a). Sponsored by UNDP, the CFA project fell under the Nile River Basin Action Plan, approved in 1995. When the D-3 Project commenced in 1997, its main objective was to prepare for the legal and institutional management of the utilization of Nile water (Arsano 2007:217). Two years later, this TECCONILE process was replaced by the Shared Vision programme, under the NBI (ibid). The D-3 was composed of delegates, three experts from each of the member states of the Nile Basin. These delegates were given the difficult and contentious responsibility of drafting the CFA in line with the core principles of shared vision, relevant provisions of international watercourses laws, while taking into consideration vital socio-economic factors (Collins 2006:121). It is the CFA which created the greatest conflict between upper riparian and down riparian member states. Section 4.2 will discuss this issue in detail.

The SAP was designed as an actual implementation body at sub-basin level, which would focus on actual investment projects with transnational benefits. The SAP was designed to achieve “the overriding goal of the investment agenda to contribute to the alleviation of poverty, to reverse environmental degradation and promote socio-economic growth in the riparian countries” (Nile Basin Initiative Website, 2010). The same source shows that the SAP was divided into two, based on the expectation that due to their geographical proximity, they would have benefited mutually from joint investment opportunities. Accordingly, the members of the Nile Basin countries were divided into two: the Nile Equatorial Lakes Subsidiary Action Programme (NELSAP) and the Eastern Nile Subsidiary Action Programme (ENSAP). While the former consists of Eastern Nile countries Ethiopia, Eritrea, Egypt and the Sudan, the latter comprises the countries of the Equatorial lakes region; DRC, Rwanda, Burundi, Tanzania, Kenya and Uganda. The offices are located in Ethiopia and Rwanda respectively.

ENSAP has focused mainly on sub-regional integration for multi-purpose programmes, through investment projects. The Integrated Development of the Eastern Nile (IDEN) is a regional multi-purpose development-investment programme by and for the benefit of all three countries. IDEN consists of two investment avenues: the fast-track and the multi-purpose track (ENSAP Website 2011). Fast track projects include the Eastern Nile Planning model, Flood Preparedness and Early Warning, Ethiopia-Sudan Transmission Interconnection, Irrigation and Drainage, and Watershed Management. Multi-purpose projects include the Baro-Akobo Multi-purpose Water Resources Development and the Joint Multi-Purpose Programme (ENSAP Website 2011).
The result was the approval of 8 hydroelectric power projects on Baro, Geba, Birbir A and B and Karadobi in Ethiopia, and Merowi, Kajbar, Shirik, and Upper Atbara in Sudan; 7 irrigation schemes in the Lake Tana area, Nekemt-Didessa, Humera in Ethiopia, Kenana and Rahad. Phase II would see work on the Roseitories Dam Heightening and on Upper Atbara in Sudan (Arsano and Tamrat 2005:19-21). Construction of dams in Sudan and Ethiopia has been given more attention by ENSAP, due to their hydropower potential and the lower evaporation rates which will prevent silt concentration in Lake Nasser (Swain 2008:695).

Nile Equatorial Lakes Subsidiary Action Program (NELSAP) strives to realize the eradication of poverty, promote economic growth and reverse environmental degradation in the sub-basin Nile Countries (NELSAP Website)\(^2\). Committed to realizing their mission, the NELSAP countries identified 12 multipurpose projects targeted at investments in water resources management of shared sub-basins. Projects included Hydropower Development and Transmission Interconnection, Fisheries Development and Lakes Management, Water Resources Management, Agriculture Development, and Water Hyacinth Control. Kagera River Basin Integrated Water Resources Management and the Rusumo Falls Hydroelectric multipurpose project are aimed at producing renewable hydroelectric energy (about 90MW) to develop the multipurpose use of water and energy in Burundi, Rwanda and Western Tanzania.

4.1.2 Funding Mechanisms

The NBI has been supported by contributions from the NBI countries themselves and through the generous support of several multilateral and bilateral donors. Multilaterally, initial donors included the World Bank, the UNDP, and CIDA, a circle of donors which has gradually increased. The NBI had attracted attention, and received remarkable financial and technical support from the World Bank. Carroll addresses the Bank’s strategic interest in the stability and development of the region thus “the World Bank sees cooperation on the Nile as an opportunity to eradicate poverty and promote regional economic development” (Carroll 1999:299). James Wolfensohn, ex-President of the World Bank, showed personal commitment to the belief that “basin wide cooperation will help reduce poverty and conflicts in the region” (Swain 2002:11).

Acting on the above commitment, the World Bank took the lead in establishing the International Consortium for Cooperation on the Nile (ICCON) in order to provide financial and technical assistance for the realization of the vision of the NBI. Formally launched in 2001 in Geneva, ICCON consists of major bilateral and multilateral donors, including the World Bank, UNDP, the GEF, the FAO, USA, the European Union, the African Development Bank, the United Kingdom, Canada, Finland, Denmark, Italy, Sweden, France, Germany, the Netherlands, Japan, and Norway (Carroll

The Consortium donor partners expressed strong support of the scheme for Nile water development and management. The Nile Basin Trust Fund was also established under the World Bank administration to efficiently channel donor resources to the NBI (Swain 2008). Information is not available on the state of finances and donations, but various NBI investment programs, within both ENSAP and NELSAP, have been financially aided by ICCON. Unlike in previous cooperative frameworks (Hydromet and UNDUGU), financial constraints have not been blamed for hindering the functioning of the NBI and its subsidiary action program.

4.1.3 Citizen Participation

Citizen participation throughout the decision-making processes of public projects that affects their lives is now widely believed to be crucial for easy implementation and for creating a sense of ownership over the project itself. Yet, the NBI has not made allowance for citizen and NGO participation. However, the NBI does have links with three civic organizations: Nile Basin Discourse (NBD), East African Community (EAC) and Global Water Partnership (GWP). NBD is a network of civil society organizations from the riparian states that seeks to exert affirmative pressure over the development projects of the NBI. EAC is a regional intergovernmental organization of Eastern African countries aimed at improving quality of life by bringing about increased competitiveness; value added production, trade and investment through increased socio-economic and cultural integration.

The GWP works to build a water secure world through supporting sustainable development and management of water resources at all levels (NBI Website 2010). However, despite the existence of network linkages with the NBI, the aforementioned civic organizations do not appear to have any actual involvement in the process of selecting and/or implementing NBI investment projects. For this reason, the NBI has been criticized for being a “closed affair in which only the states involved and the World Bank have had input into decision making, largely ignoring the voices of ordinary people whose livelihoods depend on use of the Nile Basin’s resources” (Pottinger 2004:4). She pointed out that “few journalists know what is happening as far as the Nile is concerned. If you go there, they just give you the colonial treaties and some difficult-to-understand documents. We are hitting a wall” (ibid: 5).

Researchers from Makerere University, Uganda pose a similar argument, stating that the “NBI is no doubt a top-down arrangement that is a partnership between the governments of [the basin countries], donor institutions and the governments of the West” (Afunaduula and Balunywa 2003, as cited in Pottinger 2004:5). While such criticisms abound, it is a hard task to find any evidence that the NBI has opened its gates to public participation in decision making, including negotiation of CFA.

The next section will therefore concentrate on the negotiation process of the CFA (D-3) and its challenges both during the negotiation and after the signing of the CFA in May 2010. This section will also outline recent conflicts over Nile water.
4.2 Recent Conflict over the Nile Water

This section of the study will show that the current conflict over Nile River water is rooted in an imprecise legal definition of ‘water security’ (Article 14 of the CFA), and the incompatible goals of upper and lower riparian states. The upper riparian states demanded fair and reasonable utilization of the Nile water, and sought to disregard all previous agreements to which they were not party. The lower riparian states, on the other hand, insisted that the CFA should acknowledge previous agreements as integral to any new agreement (Arsano 2007:245). Securing national water supplies is vital not only for Egypt, but for all Nile Basin countries, especially in a period of exponential population growth. As “today all riparian states rely to a greater or lesser extent on the waters of the Nile for their basic needs and economic growth”22, there is sharper competition among Nile Basin countries over the use and control of Nile waters. There are fears that the situation that might lead to violent conflict. In 2002, Kofi Annan, then Secretary General of the UN, stated: “fierce national competition over water resources has prompted fears that water issues contain the seeds of violent conflict”23.

Taking this warning and the above factors into consideration, the Nile Basin countries had been negotiating to create a basin-wide agreement and institution to govern their competing interests. To do so, the cooperative framework (D-3 project) was entrusted to draft the CFA. The negotiation process of the CFA had passed at least four teams and negotiation phases before reaching the Nile-COM. The document passed from the drafting team, comprised of three senior experts from each of the basin countries to a panel of experts responsible for the first deliberations. Next, representatives from the respective countries’ governments participated in a second round of deliberation and discussion, before the Nile-COM met for final discussion and deliberation (Arsano 2007:93).

The drafting team was mandated to take into consideration factors such as the amount of available water, water in use, contribution of water sources to the river valley, the demand for water, benefits derived from water use, and population size and growth (Tafesse 2011). These factors were later worked into the CFA under Article 3 (4) which refers to equitable and reasonable utilization of the waters of the Nile River. The team, having taken all the above factors into consideration, submitted a draft of the CFA to the NBI Panel of Experts for discussion and deliberation. Every draft provision was negotiated (ibid.). The Panel of Experts became locked into positional bargaining, and could not agree as to whether historical agreements should be replaced by or

retained in the new agreement (Swain 1997:681). This confrontation can be termed as ‘institutional politics’ which, first, limits the process of framing workable institution; and second, limits the effectiveness of institution in the process of conflict management (Salih 2005:262).

While delegates from the upper riparian countries argued that a new agreement should repeal those existing agreements, which did not take into consideration the rights and interests of all the riparian nations, delegates from lower riparian countries explicitly stated their reservations regarding the replacement of agreements by new agreements. Egypt also proposed an alternative provision to protect the previous agreements, holding that the principles and framework should be “without prejudice to existing agreements” (Arsano and Tamrat 2005). Delegates from upper riparian countries argued according to international principles of water sharing and in favor of equitable and reasonable utilization. Lower riparian delegates, however, argued for avoiding any significant harm to themselves (Tafesse 2002:111).

These difficulties should not lead one to conclude that agreement cannot work. For example, 27 years of debates and discussions preceded the United Nations General Assembly’s acceptance on May 21, 1997 of the Law of the Non-Navigational Uses of International Watercourses as an international watercourses law (McCaffrey, 1998; McCaffrey and Rosenstock 1996). This law was intended to protect both upper and lower riparian states, and prescribed equitable and reasonable utilization under article 5, as well as the obligation not to cause significant harm under Article 7.

Even though no Nile riparian states have yet endorsed the International Watercourses Convention, the CFA drafting team incorporated certain principles enshrined in Article 5 and 7 of the Watercourse Convention (under Articles 4 and 5 of the CFA). It was from these principles that the fierce debate among delegates of the NBI panel of experts sprung. It was therefore with strong and specific reservations that the panel referred the CFA draft to respective national governments for further discussion (Mohamoda 2003). Each county’s government took the same position as their delegates on the NBI panel of experts. What is clear is that the long lasting dispute between upper and lower riparian countries centres on unsettled historical interests. In 2000, as per the appointed schedule, the draft CFA was referred to the Nile-COM to be opened for signature and ratification. Unfortunately, for reasons indicated, the draft CFA was kept shelved for many years. The Appendix of the CFA24 states that;

...at the end of the negotiations, no consensus was reached on Article 14 (b) which reads: not to significantly affect the water security of any other Nile Basin State (emphasis is original). All countries agreed to this proposal except Egypt and Sudan. Egypt proposed that Article 14 (b) should be replaced by the

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following wording: (b) not to adversely affect the water security and current uses and rights of any other Nile Basin State (emphasis is original).

In an attempt to move forward and to win consensus, much discussion and deliberation occurred between the upper and lower riparian states. Multilateral development cooperation and water distribution are not a zero-sum game. The upper riparian states had argued for a win-win approach which could resolve differences around the best possible utilization of the Nile water resources (Shema 2009). In contrast to this approach, Egypt tends to use her hydro-hegemonic position to direct and lock out specific issues from the wider negotiations. Even before joining the NBI, Egypt was hesitant about any pressure from upper riparian states for Egypt to decrease its water quota or relinquish its control over the waters of the Nile. An interview with Mitiku Mekonnen reveals this fact;

Initially Egypt was not willing to join the NBI cooperation. But later because of the World Bank lobby and pressure was (sic) consented to join the NBI. Egypt was (sic) feared that the new initiative would lessen its share of water.

Even after joining CFA negotiations, Egypt had been using its asymmetrical power basis in bargaining. Egypt’s position in the negotiating process was depicted by one author as the presence of an elephant whose size alone sets the rules for the game of negotiation, and determines who gets what, how and when. “One elephant in the [negotiating] room had been the history of Egyptian aggression in response to any perceived threats to its Nile water entitlement” (De Suarez, 2011). Chairman of the NBI (2009), John Nyaoro, also addressed this situation, stating that;

All the time they [Egypt] walk out, but they still come back … because there is no any other source that they can be able to use … and what we have been telling them, the only simple way is cooperation … and they will have to have a table to sit and negotiate and see what is the problem(Aljazeera.net, 2011).

Such a clear manifestation of power is, in realist terms, the end goal of a state. According to that same realist position, the conflict that arises here is the norm, and cooperation is not to be expected. This is because the pursuit of survival, relative gains and narrow national interest perpetuates the security dilemma (Dinar 2002a). By maintaining this position, Egypt managed to control the whole NBI negotiation process and undermine the formation of a CFA. As noted previously, Article 14 (b) on ‘water security’, was inserted to create deliberate ambiguity, and was used by Egypt to defend the hegemonic status quo (Mekonnen 2010; Mekonnen 2011). Article 14 (b) was not

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25 Dean, Jimma University Law Faculty, Ethiopia (Interviewed in the Hague, on 2 August, 2011)
embodied in the Law of the Non-Navigational Uses of International Watercourses (1997), which has served as an international guiding principle in the process of drafting trans-boundary water law. The ‘water security’ concept seems to have developed out of the deliberations of the NBI member states, and still has no legal basis.

The Law of International Watercourses has 37 articles, none of which explicitly or implicitly deal with the water security issue. This may be because water security issues are related to water stress, which in turn is better treated in the realm of politics than legal regime.

Due to competing interests, Egypt and Sudan vigorously opposed moving forward until the disputed water security issue was resolved (De Suarez 2011). For this reason the upper riparian states opted to open the CFA for signature after consecutive meetings in Entebbe in 2009, Dare salaam in 2009 and Sharm El Sheik in April 2010 had failed to win the consent of Egypt and Sudan (Salem 2010:13). The six upstream countries of Burundi, Ethiopia, Kenya, Rwanda, Tanzania and Uganda signed the CFA in Entebbe, Uganda, on 14 May, 2010, committing to leave it open for a period of one year (which expired on 14 May, 2011).

The period allocated for the signing the CFA lapsed without Egypt and Sudan coming onboard. Indeed, Egypt and Sudan’s unwillingness to sign the CFA was not a new phenomenon, but had been manifest from the very beginning during the process of the drafting the CFA.

Following signature of the CFA, top Egyptian officials have been visiting upper riparian countries such as Uganda, Kenya and the DRC, offering to support their development projects, especially in the water sector, in an attempt at diverting or controlling their claims (Salem 2010). At the same time, these Egyptian officials have disseminated many threats and warnings. ‘Redlines’-lines that could not be crossed-were identified by Egypt. Open rhetoric around the possibility of military action commenced immediately after the upper riparian states’ signing of the CFA. One newspaper source summarizes this position: “Egypt warns that new Nile agreement could prove a 'death sentence’”27. The CFA, which is now totally suspended, has indeed faced a ‘death sentence’. Moreover, Egypt has explicitly stated that she “will be willing and able to intervene militarily in order to maintain the status quo”28. Researchers, Shema (2009) and Swain (2002), have thus identified the NBI negotiation process as being superficial rather than genuine. In fact, many authors have predicted that failure of the NBI would lead the Nile Basin states into water war (Swain 2011; Gleick 1993; Swain 1997). After critically analyzing the current geo-political situation of the Nile Basin countries in line with realist

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and liberalist perspectives, this study has concluded the opposite- that the Nile riparian countries would not go to war.

4.3 Conclusion

All told, the achievements of the NBI are significant in the history of Nile River cooperation. For instance, the NBI won unanimous agreement in the process of adopting the Shared Vision Program (SAP), Subsidiary Action, and a number of huge investment projects undertaken by the SAP regional branches (see appendix 1 for project details). Water development investments in both ENSAP and NELSAP, believed to be beneficial to all, and received great support and effort. With a focus on trust building, information sharing and investment projects, one can describe the involvement of the leadership of the NBI and the international community as high. Nevertheless, many of the more successful cooperative frameworks have concentrated mainly on less controversial investment projects, thus avoiding the core of the dispute. This dispute was centred on ‘water security’ claim of the lower riparian countries that frozen the execution of the CFA.
Chapter 5
Analyzing Conflictive and Cooperative Outcomes of the Nile Basin Initiative

Bearing in mind the previous discussion of conflict and cooperation and the position of upper and lower riparian states in relation to the signature of the CFA, we shall now turn our attention to the most compelling questions at hand; could competing claims on the use of Nile water lead the region into water war or into a state of conflict and cooperation? How does power influence the relationship of the basin states? These questions will be analyzed through our theoretical framework of realism and liberalism, as set out in chapter two.

According to a realist perspective, it is unlikely that the countries of the Nile river basin would embark on a war. The Nile River riparian states will not go to war without calculating the possibility to win, the costs and outcomes of war, and taking into consideration domestic political situations. Taking these issues into consideration, no country can be certain of its victory. The case of the Nile, a water body shared by more than 11 countries and originating from the heart of another sovereign state, is different and more complex than other wars over issues such as boundaries. Our analyses of this study are, however, framed within shifting regional power politics which make war a more expensive option than cooperation. The NBI has created a shift in power politics, from hydro-hegemony to a multilateral approach. This analysis will examine these shifts in power in terms of the outcome of the CFA alliance, the position of South Sudan, alliances with major powers and Chinese involvement in development projects.

5.1. The CFA Alliances

As previously discussed, the CFA was signed by 6 countries, refused by 2 and awaiting signature by another 3 countries (namely South Sudan, DRC and Eritrea). Alliances and counter alliances have formed around the CFA, but this solidarity seems flexible. An interview conducted with Anders Bjoerkelo29 makes it clear how strong the CFA alliance could be. According to the interviewee, “the countries that signed the CFA have many common factors that they share together: poverty, scarcity of water, and more importantly, all these countries were not party to the previous Nile water agreements. But to me, their solidarity would maintain if and only if they gain economic benefits”. As stated, CFA alliance would stay stronger provided that their economic and national interests are protected in this partnership. The Sudanese demand for more water created doubt around whether Sudan would continue its alliance.

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29. Director, Center for Middle Eastern and Islamic Studies, Bergen University (Norway, 15 July 2011)
with Egypt or align with the upper riparian states. Sudan might position itself with the upper riparian countries for an opportunity to cancel some or all parts of the 1959 agreement, and its benefits from alliance with upper riparian countries. The 1991 agreement between Ethiopia and Sudan about the future use of the Blue Nile has set a precedent for cooperation. In that case, the power balance in the region would be 7 to 1, should Sudan join the CFA alliance.

Building confidence each other, upper riparian countries have practically started challenging Egyptian hegemony. Small/large scale development projects taken unilaterally, speeches made by upper riparian leaders, and above all, Egyptian cooperation in the development projects of upper riparian states, are clear signs of changing power politics. An evaluation of political speeches made after the signature of the CFA also demonstrates this tendency. For instance, in an interview with Aljazeera, Meles Zenawi holds that

I know that some people in Egypt have old-fashioned ideas based on the assumption that the Nile water belongs to them and that Egypt has the right to decide ... who gets what of the Nile water and that the upper riparian countries are unable to use the Nile water because they will be unstable and because they will be poor. These circumstances have changed and changed forever.

This interview clearly reveals two facts: Egypt successfully held asymmetrical control of the Nile water for millennia, but that power dynamic has already changed, and changed forever. The change, according to this study, is a result of the NBI and the subsequent CFA. Under the auspices of the NBI, with the support of the World Bank, upper riparian countries have found a chance to come together and to voice their respective compelling rights and obligations over the Nile water. Kamanzi says, in this regard, “if they [Egypt and the Sudan] decided to freeze their membership, the rest of the NBI members would work out adequate ways and means to pursue the same NBI objectives and this is within their reach”. The CFA Alliance holds the position that they will continue implementing the principles outlined in the CFA, an action which will challenge Egyptian hegemony.

The state of South Sudan came into existence in the middle of this tension. Eyes are on the newly independent South Sudan, wondering whether it will align with the upper or lower riparian countries. Which side, will South Sudan join in relation to the signature of the CFA? Will Egypt claim the country to be bound by the 1929 and 1959 agreements? Or will South Sudan reject all the previous agreements, invoking a Nyerere doctrine? These questions cannot necessarily be comprehensively answered in this study, but

30. Prime Minister of Ethiopia; Aljazeera, Struggle over the Nile, episode 1, Accessed 10 September 2011, at <http://english.aljazeera.net/programmes/struggleoverthenile/2011/06/2011667594146703.html>

without any doubt the position South Sudan will crucially affect both lower riparian and upper riparian countries. If South Sudan opts to side with the lower riparian countries, their ability to win out on the core disagreements of the CFA will be increased. Conversely, if South Sudan opts to align with the upper riparian states, it would assist the CFA alliances in accomplishing the vision of the NBI- ratifying the CFA and establishing the Nile River Commission. The third option is for South Sudan to take a neutral position as a mediator in an attempt to resolve the Nile water question amicably.

5.2. Alliance with Super Powers

Seen as domestically or regionally, the power and influence of African countries, is based on their strong relations with the outside world. Egypt has had a prominent position in the world politics having a good relation with global super powers. Egypt’s hydro-hegemony was established first by British colonists in the 1929 and 1959 agreements, and later by the Soviet Union during the Aswan High Dam Construction. During the Cold War, Egypt and Ethiopia were located in opposite camps. During the Nasser regime, Egypt was a Soviet ally, while Ethiopia allied with U.S.A. However, following a change of regime in both countries, Egypt changed its allegiance to U.S.A., Ethiopia to the Soviet Camp (Salem 2010:17). As a result, the U.S.A. became Egypt’s new global power ally, which helped Egypt to maintain her hydro-hegemony over the Nile water. But, after the end of the Cold War and the downfall of the military regime in Ethiopia (1991), Ethiopia again allied with the U.S.A. so both Egypt and Ethiopia came under one global superpower. Realists argue that from this position, “United States pressured both states, through the World Bank, to coordinate their positions” (ibid: 18). However, it appears that since the pro-democratic revolution (2010) in Egypt, U.S. foreign policy toward Egypt has begun to change. It seems that U.S has now turned its eyes to upper riparian countries like Ethiopia, Uganda and Kenya to carry out its mission in the fight against terrorism, particularly against al-Shabab in Somalia. This attention has allowed the upper riparian countries to be heard in international forums and helped them to challenge the Egyptian dominance over the Nile River.

5.3. Chinese Involvements in Development Projects

Studies show that the growing magnitude of Chinese involvement in investment throughout Africa has been “under-theorized aspect of the new geography of war and peace in Africa” (Hintjens and Pavan 2011:866). The Chinese involvement in the Nile River basin has been creating a steady shift in power balance from unipolarity to multipolarity. Egypt’s hydro-hegemony has also been faced practical challenges stemming from unilateral development projects

by upper riparian states undertaken with the Chinese government, and increasing cooperation among the upper riparian states. Can Egypt stop the upper riparian states from taking unilateral development projects as it was in the past? Can Egypt prevent the upper riparian countries obtaining development funds from international financial institution as it had been? These questions will be treated herein under.

It is obvious that Egypt had been the guardian of the Nile; and without Egypt’s prior consent it had been impossible to take any development projects on the Nile River. The country had also successfully blocked project funds from the world financial institutions and donor countries to the upper riparian countries (Cascão 2009b:259). Nowadays, with the involvement of China, World Bank and other international institutions, and individual countries’ involvement in the development of the Nile River, the nature of Egyptian control over the Nile River has changed. Swain claims that “China and its economic might have provided the possibility of securing alternative external support to the Upper Nile riparian countries for large water development projects” (2011:698). Cascao argues a similar point that upper riparian states’ access to alternative financial support is coming “mainly from China, a key external player in the basin. Such support was not available a decade ago. Such dynamics may significantly affect the relations between the Nile riparian and challenge Egypt’s enduring hydro-hegemonic position in the basin” (Cascão 2009b:251). Chinese involvement in upper riparian countries, particularly in Sudan33 and Ethiopia, has increased. Chinese interest in Sudan is in project areas like oil refineries, highway construction and large dams, and in infrastructure, telecommunications, and hydropower in Ethiopia (Swain 2011:699).

Table 6

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Cost ($)</th>
<th>Country</th>
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<tbody>
<tr>
<td>Merowe dam</td>
<td>1.2 billion</td>
<td>Sudan</td>
</tr>
<tr>
<td>Roseires dam heightening</td>
<td>396 million</td>
<td>Sudan</td>
</tr>
<tr>
<td>Petroleum sector (in 2007)</td>
<td>6 billion</td>
<td>Sudan</td>
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<tr>
<td>4 Tekezehydro electric dam</td>
<td>$224 million</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>Tana Beles modern hydropower</td>
<td>N/L</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>3 Neshiriver hydroelectric dam</td>
<td>N/L</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>Ayago north and south hydropower dams</td>
<td>900 million</td>
<td>Uganda</td>
</tr>
<tr>
<td>6 Mugere hydropower station</td>
<td>N/L</td>
<td>Burundi</td>
</tr>
<tr>
<td>7 Grand Inga (Inga 3)</td>
<td>80 billion</td>
<td>DRC</td>
</tr>
</tbody>
</table>


Table 6 shows only a few areas of Chinese development support in upper riparian countries and the Sudan. As a result of investment, the upper riparian

33 In this case, Sudan is treated an as upper riparian country in relation to Egypt. Because of Chinese involvement, Sudan has an opportunity to undertake a unilateral development project on the Nile Basin without awaiting the consent of Egypt.
countries have been encouraged to undertake unilateral investment projects on the Nile in spite of the 1929 agreement which obliges them to seek consent from Egypt. Tanzania, for example, spent US$27.6 billion constructing a pipeline to extract fresh water from Lake Victoria (Salem 2010:12). Another massive project, a hydroelectric dam, is under consideration in Kenya (ibid.). Recently, Ethiopia has officially started construction on a huge hydroelectric power project, believed to be the largest dam on the African continent34, on the Blue Nile. To add more, South Sudan plans to build a hydropower dam near the city of Wau, which sits on the Jut River, a tributary of the Bahr el Ghazal River, which is itself a tributary of the White Nile” (the Christian Science Monitor 2011)35. These are some of the unilateral development declarations undertaken by upper riparian countries to counter the hegemonic control of Egypt. Without regulations being drawn up to control these competing interests, the current hydro-hegemony of Egypt will not be able to control individual states’ unilateral exploitation of Nile resources.

In the face of these development projects, except for strong warning messages, Egypt has not taken military action against any one of the above mentioned countries. Indeed, Egypt has chosen the path of cooperation rather than declaring water war against the upper riparian countries. Recently, Egypt has shown willingness to cooperate with Ethiopia, Sudan and South Sudan in the construction of the above named dams, in order to expand trade and commerce36. In this case, Egypt’s attitude is realist; the cost of war could be greater than the cost of cooperation. Not only would it be unrealistic to go to war with all of the upper riparian countries, a state of war would ignite existing political instability both domestically and regionally. When the outcomes of war are so uncertain, cooperation may best protect national interests.

In an interview, Anders Bjoerkelo37, stated that “War cannot create water except by destroying lives and properties of the riparian”. Well aware of this fact, Egypt has not resorted to military options, despite its stronger military base in Africa. Therefore, it is possible to conclude that the nature of Egypt’s hydro-hegemony over the Nile has actually been changed. This conclusion produces two related conclusions: Egypt cannot control the utilization of the water of the Nile as she did before, and would not opt to go to war against the Nile riparian countries. The best solution, thus, remains for Egypt to enter into genuine renegotiations regarding access to Nile water. Unless common laws and a strong institution are established to govern unilateral development action

37. Director, Center for Middle Eastern and Islamic Studies, Bergen University (Norway, 15 July 2011)
programs, the lower riparian countries that (mainly Egypt) are more dependent on the Nile are likely to be affected more severely than the upper riparian.

On the other hand, the resolution of the disputed water security issue is complex and highly political problem. The situation must therefore be considered not only on a legal basis, but also in a broader political context. Balancing the competing claims over the Nile water allocation requires strong institutions, which in turn may not be achieved without genuine negotiation. The values of liberal institutionalists could also be helpful in resolving the issue; as “states’ behavior in the international arena is often a reflection of established rules, norms, and conventions and its meaning should be interpreted in light of these understandings” (Dinar 2002b:241). It follows that the meaning of the disputed Article must be interpreted in accordance with international norms and standards.
Chapter 6
Conclusion

This study has answered its main question of whether competing claims to use the Nile water would lead the region into water war, conflict or cooperation, or both conflict and cooperation. This question was analyzed through the contrasting theoretical frameworks of realism and liberalism. The findings, presented in short in this chapter, are structured around a number of points pertaining to water war, conflict or cooperation, and conflict and cooperation.

Struggles between the lower and upper riparian countries over the waters of the Nile are longstanding. Egypt’s claim to veto over the projects of the upper riparian countries and the demands of the latter to use the water of the Nile has caused continual conflicts of interest in the Nile Basin. This study has explored both past and the present struggle to use and/control the water of the river Nile. Egypt, backed by its dependency on the Nile water, the 1929 and 1959 agreements, and its military might has been a major user and defender of the Nile water; excluding the upper riparian countries. As discussed, these factors for the last 82 years placed Egypt in a hydro-hegemonic position in the Nile River Basin. Until the recent past, no other riparian countries undertook any significant development projects without the prior consent of Egypt. Despite controversies, the Nile riparian countries have not fought any water wars amongst themselves. It is apparent that the hydro-hegemony of Egypt has in the past served as an effective deterrent to open conflict over Nile waters, with Egypt being politically, economically and militarily the most powerful actor in the region. This played a role in inducing peaceful cooperation and avoiding open conflict. Therefore, it is evident to conclude that the theory of hydro-hegemony can help to explain that in spite of the oscillating interaction between conflict and cooperation, no wars have emerged among Nile riparian states over water issues.

Recently, the upper riparian states challenged Egypt’s monopolization of control over the Nile waters by undertaking a number of unilateral development projects. This was in spite of the terms of the 1929 and 1959 agreements. To manage their competing interests amicably, Nile riparian states have established basin-wide agreements, starting with Hydromet in 1967, but without managing to institutionalize these agreements. In 1999, all riparian states, including Egypt, agreed to establish a basin-wide agreement and institution - the Nile Basin Commission – which was to become a permanent legal institution responsible for Nile Water governance. The Nile Basin Initiative (NBI) was established in as an interim institution to facilitate basin-wide negotiations towards creating a more permanent legal and institutional set up. As this study found, the NBI has itself involved both conflict and cooperation. Some quite remarkable cooperation was evidenced in investment projects, and conflict was centred mainly on the process of drafting and signing of the CFA, which was eventually suspended. After a decade of negotiations, six riparian countries signed the CFA, whilst Egypt and Sudan refused to do so. As discussed in Chapter 4.2 these more recent conflicts over the Nile River
are an extension of past legal and historical rights claims. Therefore, it was concluded that refusal of Egypt and Sudan to sign the CFA primarily arose from their governments defending historically acquired rights encoded in the 1929 and 1959 Nile Waters Agreements.

In relational to the theoretical underpinnings of this research, we found that neither ‘water wars’ nor ‘conflict or cooperation’ approaches could fully explain the present situation of the Nile River Basin. Except for a single attempt to using the military as a tool, conflict has been limited to conflict rhetoric among riparian states, and has not taken the form of open violent conflict proper. Hence, we came to the conclusion that the ‘water war’ approach cannot explain the relations among states in the Nile Basin.

Similarly, as shown in the case of the pre-NBI period, as well as during the NBI decade, conflict was an integral part of cooperation. What this suggests is that conflict as a concept is not to be understood as completely independent of co-operation. Neither is cooperation equivalent to harmony, or the absence of conflict. An ‘either conflict or cooperation’ thus can not explain the nature of conflict in general and of the Nile River in particular. Conceptualizing Nile riparian interstate interactions in terms of ‘either conflict or cooperation’ does not help us to better understand the situation in the Nile River Basin in the period between Hydromet and the NBI. Rather, the NBI has always been characterized by a mix of elements of conflict and cooperation. The Nile River is an object of cooperation, uniting riparian countries along certain lines, even during times of high tension. This study has shown that a ‘conflict and cooperation coexist’ can best address the situation in the Nile River Basin for the River Basin is a place in which both conflict and cooperation coexist.

Following the signature of the CFA, the rhetoric of ‘water war’ was widely disseminated by Egyptian and international media. Scholars (Swain 2011, Gleick 1993, Swain 1997) also started to predict that failure of the NBI could lead the Nile riparian countries into a series of water wars. However, the conclusions of this study do not provide support for this view. It seems more likely that Nile riparian countries, and particularly Egypt, would go to some lengths to avoid becoming involved in a water war. This conclusion can be viewed as tenable from both a realist and a liberal perspective, since it is in Egypt’s national self-interest to avoid any military action that might jeopardize water supplies from the Nile.

Seeing from a realist perspective, it appeared that the cost of Nile water war would be higher than the cost of cooperation. This is because the changing power politics in the river basin has loosened Egypt’s hegemonic control over the Nile. Our findings show that the change in Egyptian hydro-hegemony is the result of a cumulative effect of the formation of the NBI and the subsequent creation of the CFA alliance. NBI negotiations have significantly influenced a shift in power relationship from strong unipolarity to greater multipolarity. This has also changed the patterns of water use from hydro-hegemonic configuration to a more multilateral approach. As discussed, a relative shift in power balance; the signature of the CFA; the position of South Sudan; strategic interest of the World Bank to promote cooperation in the region; Chinese involvement in development projects along with domestic political instability, are all factors that will complicate the situation more in
future, tending to avert resort to violence in the form of water wars. Egypt did not opt to enter a water war, despite a host of new upper riparian development projects started without permission. Egypt’s position in the current regional power configuration may not withstand mounting political pressures from lower Nile River Basin states. Had similar actions (unilateral development projects) been initiated before the 1990s, it is almost certain that Egypt would have considered this to be in violation of 1929’s veto power, and might even have responded militarily. This situation no longer seems to hold today.

Seeing from a liberal perspective, most conflicts over the River Nile, it has been argued, have been due to a lack, not of water, but of common institutions and a legal framework that could properly govern competing claims in future around access and use to water resources. Most Nile Riparian countries have come to recognize the need to establish in future a permanent set of legal and water management institutions that could govern their diverging interests; this new thinking has accompanied a shift in the pendulum from more competition to relatively more cooperation in recent years. The creation of strong institutions along liberal lines might help avert obvious dangers of water flow decline resulting from the proliferation of small and large-scale development projects. The NBI and its subsidiary action program have, recently, laid the foundation on which future cohesion, economic integration, and realistic cooperation can be constructed.

In short, taken from either a realist or liberal angle, the returns to any future ‘water war’ scenario appear likely to be low. On the contrary, the certainty of benefitting from future cooperation appears relatively higher than in the past. Therefore, whatever the rhetoric around the CFA and ‘the Nile water war’ discourse, we have found ample evidence that leads us to conclude fairly confidently that signing of the CFA would be less likely to lead the Nile riparian countries into water wars. It would be more likely to reinforce the tendency for conflict and cooperation to coexist within a context in which the need for cooperation is intensified by the prospect of future water shortages.
References


# Lists of Appendices

## Appendix 1 Projects of the NBI under Implementation

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Estimated Total Cost (Million US$)</th>
<th>Secured Financing</th>
<th>Source(s) of Secured Financing</th>
<th>Target Start of Implementation (Calendar Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. NBI Project Portfolio</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Egypt Irrigation &amp; Drainage (WestDelta) (agreed regionally, prepared and implemented nationally)</td>
<td>213</td>
<td>213</td>
<td>IBRD, Ethiopia</td>
<td>2007</td>
</tr>
<tr>
<td>Ethiopia Irrigation &amp; Drainage (agreed regionally, prepared and implemented nationally)</td>
<td>110</td>
<td>110</td>
<td>IDA, Ethiopia</td>
<td>2007</td>
</tr>
<tr>
<td>Ethiopia-Sudan Interconnection (agreed regionally, prepared and implemented nationally with technical assistance from NBI)</td>
<td>70</td>
<td>70</td>
<td>IDA, Sudan, Ethiopia</td>
<td>2008</td>
</tr>
<tr>
<td>EN Flood Preparedness and Early Warning Phase 1 (agreed and prepared regionally, implemented regionally and nationally)</td>
<td>4</td>
<td>4</td>
<td>NBTF, EN countries</td>
<td>2007</td>
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<tr>
<td>NEL Regional Transmission Interconnection Projects (agreed regionally, prepared regionally and nationally, implemented nationally)</td>
<td>360</td>
<td>317</td>
<td>AFDB, JICA, KFW, Netherlands</td>
<td>2010</td>
</tr>
<tr>
<td>• Kenya-Uganda transmission line</td>
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<td>• Burundi-Rwanda transmission line</td>
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<td>• Burundi-DRC-Rwanda transmission line</td>
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<td>• Uganda-Rwanda transmission line</td>
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<td>Watershed management Projects (Reg., Egypt, Sudan; excluding US$40 million Ethiopia - Tana Beles) (agreed and prepared regionally, implemented nationally)</td>
<td>52</td>
<td>35</td>
<td>GEF, Finland, Egypt, Sudan</td>
<td>2009</td>
</tr>
<tr>
<td>Lakes Edward and Albert Fisheries Project (Uganda-DRC)</td>
<td>170</td>
<td>40</td>
<td>AIDB</td>
<td>2011</td>
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<tr>
<td>TOTAL - NBI Prepared or Regionally agreed</td>
<td>979</td>
<td>789</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Selected NBI Assisted Projects</td>
<td></td>
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Appendix 2: Interview Questions

Questions

1. Many people have sought the river Nile as a source of conflict. How do you see the Nile River: as a source of conflict or cooperation or both?
2. Based on your answer for the above question, would you please explain why?
3. Do you think that the Nile Basin Initiative could resolve potential conflicts over the Nile?
   A. No
   B. Yes
   C. If yes or no is your answer, would you please explain how………………………………………………………………………
   …
4. Recently, some of the member states signed on the Cooperative framework agreement (CFA) and others (Egypt and the Sudan) not. Do you see any incompatible interest that compels them not to sign?
5. Do you think that the Nile Basin Initiative negotiation end up with violent conflicts, and why?
6. Do you think that the signed countries will go into implementation of the CFA without waiting the Egypt and the Sudan?
7. How do you see the position of South Sudan; would they sign the CFA?
8. What do you suggest to the unsigned states?
9. What would happen if the upper riparian countries go to implementation?
10. What would you suggest to the Nile Basin countries to realize their shared vision of the NBI?

Thank you Very Much!!