

**A HUMAN RIGHTS APPROACH TO SOLVING WATER CONFLICTS  
OVER THE USE OF TRANS-BOUNDARY RIVERS: FOCUS ON THE  
NILE BASIN**

**Submitted in partial fulfilment of the requirements of the degree LLM (Human  
Rights and Democratisation in Africa)**

**By**

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**3 November 2008**

## Declaration

I, **GESSESSE Fasil Mulatu**, declare that the work presented in this dissertation is original. It has never been presented to any other University or institution. Where other people's works have been used, references have been provided, and in some cases, quotations made. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfilment of the requirements for the award of the LL.M Degree in Human Rights and Democratisation in Africa.

Signed.....

Date.....

Supervisor: Dr. Raymond A. Atuguba

Signature.....

Date.....

## **Dedication**

This dissertation is dedicated to my mom Mrs. Bisrat Degu. You showed me the way to a successful life and thought me to be strong.

## **Acknowledgments**

I am grateful to the Centre for Human Rights, University of Pretoria, for giving me the opportunity to be part of this remarkable experience and for the support I received for the duration of the study. I am especially grateful to Prof. Michelo Hansungule for his guidance and comments. A special appreciation goes to Mr Tshepo Madlingozi who directed me to search for my passion. I also thank the members of the Faculty of Law, University of Ghana, especially Professor EK Quashigah for his assistance and care during the research. Special thanks to Mr. K.K.K Ampofo for his incisive comments. I am also indebted to my supervisor, Dr Raymond A. Atuguba for assistance.

Special thanks to Mr. Yonis Berekely and Yitna Getachew, for the support and assistance they gave me when I needed it and to Julia Neudert and Kalkidan Abera for their care and concern.

A most heartfelt gratitude for the assistance of various other people whose contribution were instrumental in various ways during my study. I am grateful to the entire LLM class of 2008 and my colleagues and friends in Ghana especially Sarah Swart, Matilda Lasseko, Charles Mmbando, Tazorora Musarurwa and Karen Uhlrich.

To all my family, friends and colleagues, whom I could not mention due to the constraint of space, I am truly grateful.

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## List of Abbreviations

African Charter	African Charter on Human and Peoples' Rights
African Commission	African Commission on Human and Peoples' Rights
ATP	Applied Training Project
AU	African Union
CBSI	Confidence Building and Stakeholder Involvement Project
CSOs	Civil Society Organizations
DOD	Declaration on the Right to Development
DRC	Democratic Republic of the Congo
ENSAP	Eastern Nile Subsidiary Action Program
ESC Rights	Economic, Social and Cultural Rights
EWUAP	Efficient Water Use for Agricultural Production
FAO	Food and Agricultural Organization of the United Nations
IBRD	International Bank for Reconstruction and Development (the World Bank)
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICJ	International Court of Justice
IMF	International Monetary Fund
KBO	Kagera Basin Organization
Km	Kilometres
M	Meter
NBD	Nile Basin Discourse
NBI	Nile Basin Initiative
NELSAP	Nile Equatorial Lakes Subsidiary Action Program
NGOs	Non-governmental Organizations
Nile	Nile River
NTEAP	Nile Trans-boundary Environment Action Project
OAU	Organization of African Unity
OP	Operational Policy
OP7.50	Operational Manual of the World Bank on Projects on International Waterways
RPT	Regional Power Trade
SDBS	Socio-Economic Development and Benefit Sharing
SERAC	Social and Economic Rights Action Centre
SVP – C	Shared Vision Program Coordination Project,

Tecconile	Technical Committee for the Promotion of the Development and Environmental Protection of the Nile Basin
TED	Trade and Environment Database
The Committee	The Committee on Economic, Social and Cultural Rights
UDHR	Universal Declaration of Human Rights
UN	United Nations Organization
UNDP	United Nations Development Program
WMO	World Meteorological Organization
WRPM	Water Resources Planning and Management Project
WWII	World War II or Second World War



## **Units of Measurement**

### **Units of flow**

Milliard -Traditionally, annual Nile River flows have been measured in thousands million cubic meters and expressed in 'Milliads'. More recent works refer to billion cubic meters per annum (billion  $m^3$ ) or  $m^3 \times 10^9$ .

### **Units of area**

Feddan is a unit of area.

1 feddan = to 4200 square meters ( $m^2$ )=0.42 hectares=1.037 acres.

1 square kilometre ( $km^2$ )=100 hectare =1,000,000 square meters ( $m^2$ ).

# Map of the Nile River Basin

IBRD/IBRD 30785



Source: Woodrow Wilson International Centre for Scholars, [www.wilsoncenter.org/water](http://www.wilsoncenter.org/water)

# CHAPTER 1

## INTRODUCTION

### 1.1 Background to the Study

Experts have predicted that any future wars will be over water resources. The former Secretary-General of the United Nations Organization (UN) Boutros Boutros-Ghali envisaged that water would be the source of international conflict.<sup>1</sup> In addition, the former Vice President of the International Bank for Reconstruction and Development (World Bank) and Chairman of World Commission for Water in the 21<sup>st</sup> Century (August 1998-March 2000), Ismail Serageldin has asserted that 'the wars of the next century will be about water.'<sup>2</sup>

The water resources that can be used by human beings are a very small portion of the total amount of water available in the world. From the total amount of water, 97% of it lies in the ocean and seas, 2% of all water is in glacial ice, and only 1% of all water is available for human use.<sup>3</sup> In addition, the current environmental change and high population growth has worsened the problem of water scarcity.<sup>4</sup> Countries that are dependent on rain water for agriculture can no longer solely rely on it because of its seasonal irregularity.<sup>5</sup> Hence, states plan and implement irrigation and other projects on rivers that might assist them in solving the problem of water scarcity.

The management and use of scarce water in river basins that are shared by several countries can be difficult.<sup>6</sup> In this context, the example used is the Nile River, which is shared

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<sup>1</sup> J Waterbury *The Nile Basin National Determinants of Collective Action* (2002) 9.

<sup>2</sup> F Filintan and I Tamrat 'Spilling Blood over Water? The Case of Ethiopia' in J Lind & K Sturman (eds) *Scarcity and Surfeit* (2002) 243.

<sup>3</sup> C Stockel, Environmental Impact of Irrigation: A review,  
<http://www.swwrc.wsu.edu/newsletter/fall2001/lrrImpact2.pdf> (accessed 27 August 2008)

<sup>4</sup> A Kiss 'Legal Procedures Applicable to Interstate Conflicts on Water Scarcity: The Gabcikovo Case' in E H.P Brans et al (eds) *The Scarcity of Water* (1997) 60.

<sup>5</sup> G Alem, Rainwater harvesting in Ethiopia: an overview 1999,  
<http://www.lboro.ac.uk/wedc/papers/25/387.pdf> (accessed 25 March 2008).

<sup>6</sup> For example, the Euphrates and the Tigris is shared between Turkey, Syria, and Iraq; the Orontes River between Syria and Turkey; the Jordan River, between primarily Israel, Jordan and the Palestine and secondly Syria and Lebanon; River Danube between Hungary and Slovakia; Mekong River between Tibet, China, Burma, Laos, Thailand, Cambodia, Vietnam; Amazon River between Peru, Colombia,

by ten African countries,<sup>7</sup> approximately 160 million people depend on it for survival and about 300 million people live within the ten basin countries.<sup>8</sup> The river originates from the basins of the White and Blue Niles.<sup>9</sup> The source of the White Nile is in the Great Lakes Region with a catchment area, which includes Tanzania, Rwanda, Burundi, Uganda, Congo/Zaire, Kenya and Sudan. The Blue Nile originates in the highlands of Ethiopia and Eritrea which includes the other major tributaries of the Nile, the Atbara and the Sobat, which amount to 85% of the Nile, while the majority of the water is used by Sudan and Egypt.<sup>10</sup>

Of the countries in the catchment area of the Nile, the population is projected to grow from 73 million in 1997 to 127 million in 2050 in Egypt; from 34 million to 60 million in Sudan and from 72 million to 171 million in Ethiopia.<sup>11</sup> The current population statistics in these countries proves that this estimated population explosion will occur.<sup>12</sup> Consequently, there will be a need for mechanized irrigated agriculture for additional food production to meet the needs of the increased populations.

Irrigated agriculture is the largest economic activity on the waters of the Nile. All of the riparian states economies are primarily agricultural with upstream states dependant on rainfed agriculture supported by abundant but unreliable rainfall and downstream states are heavily dependent on irrigated agriculture.<sup>13</sup>

Due to the aforementioned allocation of the Nile River, there are tensions among the riparian countries over the water use of the Nile. Egypt's interest over the Nile as well as the desire of other riparian countries to share the resource, together with population growth, seasonal

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Brazil, Bolivia, Venezuela and Ecuador and all the major River Basins in Africa. Almost in all Basins the riparians have conflicting interest.

<sup>7</sup> Nile River is shared by Burundi, Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, Uganda.

<sup>8</sup> P Kameri-Mbote, Water, Conflict and Cooperation: Lesson from the Nile River Basin, January 2007, <http://www.wilsoncentre.org/water> (accessed 07 March 2008)

<sup>9</sup> Nile River Dispute, <http://www.american.edu/ice/bluenile.htm> (accessed 25 March 2008).

<sup>10</sup> As above.

<sup>11</sup> [http://www.earth-policy.org/Books/Out/Ote6\\_3.htm](http://www.earth-policy.org/Books/Out/Ote6_3.htm) (accessed on 25 March 2008 )

<sup>12</sup> According to, The World Fact Book, 2008, Ethiopia's current population is 85,544,840, Egypt's 81,713,520 and Sudan's 40,218,456, <https://www.cia.gov/library/publications/the-world-factbook/geos/et.htm>, <https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html>, <https://www.cia.gov/library/publications/the-world-factbook/geos/su.html> (accessed 04 October 2008)

<sup>13</sup> Egypt and Sudan uses 94% of the available Nile water. Only 6% is left to all other riparians (n 9 above).

fluctuation of rainfall and the need to development will probably lead to conflict if these nations could not find a framework to cooperate and manage the scarce resource.<sup>14</sup>

## 1.2 Statement of the Problem

In the efforts to solve problems associated with water use, states engage economic and political means<sup>15</sup> and other dispute settlement mechanisms listed in Article 33 of the United Nations (UN) Charter. These methods include negotiation, inquiry, mediation, conciliation, arbitration, judicial settlements or resort to regional agencies or arrangements<sup>16</sup> but in the view of the writer give no or very little attention to the human rights of the people involved.<sup>17</sup> Generally distribution and the use of trans-boundary rivers are not based on human rights norms and principles.<sup>18</sup> The Nile Basin is a good example of such a case.

The Nile has been only partially appropriated by the downstream riparians through use rights. Only Egypt and Sudan have given formal acknowledgement of their rights, while the remaining eight riparians recognize neither the claims emanating from bilateral agreements nor any other riparian's claims on the Nile river.<sup>19</sup> Ideally, all the riparians commend the benefit of cooperation and coordination in water use.<sup>20</sup> However, in practice a number of riparians see little value in the public good of cooperation. Failure to value and prioritize the benefit of cooperation and ignorance are the major obstacles to collective action.<sup>21</sup>

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<sup>14</sup> Waterbury (n 1 above) 9.

<sup>15</sup> J Allan 'Developing policies for harmonizing Nile Waters development and management' in P Howell & J Allan(eds) *The Nile Sharing a Scarce Resource: A historical and technical review of water management and of economic and legal issues* (1996) 385.

<sup>16</sup> A Kiss 'Legal Procedures Applicable to Interstate Conflicts on Water Scarcity: The Gabcikovo Case' in Brans et al (n 4 above) 62.

<sup>17</sup> The only human rights related issue that is given emphasis is the environment. The River Rhine which is shared by (Switzerland Italy, Liechtenstein, Austria, Germany, France, Luxembourg, Netherlands and Belgium) is a good example. Another instance where human rights are mentioned in the context of water is in Article 1 of the Declaration of Amsterdam of the Second International Water Tribunal in 1992. The efforts made to solve water conflicts in the Middle East, Europe, Africa and elsewhere are evidence of the little attention given to the human rights norms and principles in solving water use disputes over trans-boundary rivers.

<sup>18</sup> As above.

<sup>19</sup> Waterbury (n1 above) 15.

<sup>20</sup> As above.

<sup>21</sup> Waterbury (n 1 above) 33.

The riparian countries, the international community and other concerned actors which are involved in the efforts to solve the Nile river disputes employ various means such as negotiations, establishment of organizations meant for cooperation and other political ways to foster basin-wide cooperation and agreement on water use. Despite these efforts, there is no agreement on the use of Nile by all riparians. Therefore, there is a need to find an alternative or additional means that can be agreed upon unanimously by all countries that share and use the river.

### **1.3 Research Questions**

The following questions are noted for examination, namely:

1. Do the efforts being made to solve the Nile water conflicts give due regard to human rights norms and principles?
2. Are the Nile water agreements compatible with international human rights law?
3. How can human rights norms and principles be used, if at all, to solve water conflicts over the use of trans-boundary rivers?

### **1.4 Objectives**

The objectives of the study are, *inter alia*, to:

- a. critically analyse the 1959 Nile River agreements from a human rights perspective;
- b. examine the applicability of international human rights law in water distribution and use and
- c. investigate how human rights norms and principles can be used, if at all, as a means of solving water conflicts over the use of trans-boundary rivers.

### **1.5 Significance**

This study adopts a human rights approach in its consideration of the problem of conflicts that may arise in connection with the use of trans-boundary rivers. It is particularly significant as it seeks to explore the solution from the human rights of the people in the riparian countries. It is believed that the study will contribute to the development of basin-wide cooperation among riparians by being employed in negotiations and planning of projects.

## 1.6 Literature Survey

The issue of water use of trans-boundary rivers has been the subject of a number of books and articles, including, to mention a few, N Kilot,<sup>22</sup> Patricia Wouters,<sup>23</sup> and A.S Wisdom.<sup>24</sup> The Nile has been the particular focus of a number of scholars, such as John Waterbury,<sup>25</sup> P.P Howell & J.A Allan,<sup>26</sup> H.E. Hurst,<sup>27</sup> A Swain,<sup>28</sup> and Robert Collins.<sup>29</sup> These scholars examined the Nile River issues from historical, economic, and international law perspectives.

To the knowledge of the writer, there are no books that address the subject of water use of trans-boundary rivers, particularly the Nile, from a human rights perspective. The current contribution is unique in that it intends to use human rights norms and principles as a mechanism for solving conflicts over the water use of trans-boundary rivers. The focal point is the Nile River Basin.

## 1.7 Methodology

The research methodology employed is mainly desk research. The study adopts both critical and active research methods.

## 1.8 Limitations of the Study

The issue of water use of trans-boundary rivers in general and the Nile, in particular, covers a very wide area, which has political, economic, historical, legal and national policy dimensions and involves a number of key players. To provide a comprehensive scope of the problem and solution, there is a need to consider all dimensions. However, this research is an overview of the nature, extent and cause of conflict over the Nile and proposes solutions based on human rights norms and principles. It neither discusses in depth all the causes of

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<sup>22</sup> N Kilot *Water Resources, and Conflicts in the Middle East* (1994).

<sup>23</sup> P Wouters *International Water Law* (1997).

<sup>24</sup> A Wisdom *The Law of Rivers and Watercourses* (1979).

<sup>25</sup> Waterbury (n 1 above).

<sup>26</sup> P Howell & J Allan *The Nile Sharing a Scarce Resource: A historical and technical review of water management and of economic and legal issues* (1996).

<sup>27</sup> H Hurst *The Nile, a general account of the river and the utilization of its waters* (1952).

<sup>28</sup> A Swain 'Ethiopia, the Sudan, and Egypt: The Nile River Dispute' (1997) 35, 4 *Journal of Modern African Affairs*.

<sup>29</sup> R Collins *The Waters of the Nile: Hydropolitics and the Jonglei Canal, 1900—88*(1990).

conflict and negotiations nor examines the riparians national policies in connection with water use.

## **1.9 Overview of the Chapters**

**Chapter one** introduces the study.

**Chapter two** sets the historical background of the water use on the Nile basin and its implications. It also discusses the experiences of other countries in solving water conflicts over the use of trans-boundary rivers, focusing on the Jordan River Basin.

**Chapter three** discusses the right to water and environment as espoused under different international and regional instruments. It also considers how water use of trans-boundary rivers is regulated under international laws and principles.

**Chapter four** analyzes how human rights norms and principles can be used in the context of the Nile to bring about consensus on water use.

**Chapter five** presents the conclusions and recommendations of the study.



## CHAPTER 2

### The Nile Basin: historical background of water use and its implications

#### 2.1 Introduction

The Nile River is one of the major sources of water in the North-Eastern part of Africa. It drains in a North-South direction and covers diverse climatic, relief and geological structures.<sup>30</sup> It also has a long history of water use, which started thousands of years ago. The Nile River became the source of agriculture to Egypt and Sudan approximately 7000 years ago, with artificial agriculture starting around 5000 years ago and continued until the early 19<sup>th</sup> century.<sup>31</sup>

Generally, the Nile River is used for transport, power, crops, and drinking water in Eastern and Central Africa; for transport, drinking and irrigation in Sudan and it is essential means of life in Egypt.<sup>32</sup> If water use is defined as 'the reduction of natural flow to the sea as the result of the intervention of man',<sup>33</sup> the total water use equals to some 60 km<sup>3</sup> or three-quarters of the natural flow.<sup>34</sup> Currently, the water that flows to the sea is estimated to be 17 billion cubic meters (km<sup>3</sup>).<sup>35</sup> Because of population growth in the area, the water needs and usage have relatively increased over the years.<sup>36</sup>

This chapter discusses the history of water use in Egypt and Sudan. It further examines the tensions between the riparian countries in relation to water use and the efforts made to solve

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<sup>30</sup> R Said 'Origin and evolution of the River Nile' in P.P Howell & J.A Allan (eds) *The Nile Sharing a Scarce Resource: A historical and technical review of water management and of economic and legal issues* (1996) 19.

<sup>31</sup> P Chesworth 'The history of water use in the Sudan and Egypt' in P Howell & J Allan(eds) *The Nile Sharing a Scarce Resource: A historical and technical review of water management and of economic and legal issues* (1996) 65.

<sup>32</sup> Hurst (n 27 above) 4.

<sup>33</sup> P Chesworth 'The history of water use in the Sudan and Egypt' in Howell & Allan (n 31 above) 65.

<sup>34</sup> As above.

<sup>35</sup> As above.

<sup>36</sup> As above.

the problems. It further discusses the experiences of other countries in solving the problem of conflict over the use of trans-boundary rivers.

## 2.2 Historical background of water use in the Nile Basin

### 2.2.1 Water use in Egypt

Before the completion of the Aswan High Dam the Egyptian use of the Nile water was what is called 'timely water'. 'Timely water' in this context is defined as 'the water required during the period of February to July when the natural river flows were insufficient to meet demands and water had to be drawn from storage.'<sup>37</sup>

The first attempt to build a barrage around the river Nile was made by Mohammed Ali Pasha, who was the ruler of Egypt in 1805.<sup>38</sup> The attempt to build the barrages started in 1834 and was completed in 1861.<sup>39</sup> These barrages functioned until their replacement in 1939.<sup>40</sup> The use of the Nile by the Egyptians progressed remarkably with the completion of the first phase of the Aswan Dam in 1902 and the consecutive improvement of its storage capacity in 1912 and 1934, which increased the capacity from 1 km<sup>3</sup> to 5.1 km<sup>3</sup>. The ultimate completion of the Aswan High Dam in 1963 increased the storage capacity of the dam to a total of 162 km<sup>3</sup> and its live storage to 107 km<sup>3</sup>.<sup>41</sup> This created an opportunity for Egypt to be independent of the varying seasonal flood of the Nile and protected it from annual drought.<sup>42</sup>

Ninety-five percent of the Egyptian population lives on the banks of the River and it has irrigated 100% of its arable lands.<sup>43</sup> Consequently, Egypt is totally dependent on the Nile. According to the Food and Agricultural Organization of the United Nations (FAO) 2000 report on the population and water use in the Nile Basin countries, Egypt uses 53.85 km<sup>3</sup>/year or

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<sup>37</sup> P Chesworth 'The history of water use in the Sudan and Egypt' in Howell & Allan (n 31 above) 66.

<sup>38</sup> P Chesworth 'The history of water use in the Sudan and Egypt' in Howell & Allan (n 31 above) 67.

<sup>39</sup> as above.

<sup>40</sup> P Chesworth 'The history of water use in the Sudan and Egypt' in Howell & Allan (n 31 above) 69.

<sup>41</sup> When the Aswan dam is referred, it should not be confused between the two dams namely the newer Aswan High Dam and the older Aswan Dam. The construction of the old Aswan Dam began in 1889 and completed in 1902. The initial design was improved in two phases, from 1907-1912 and 1929-1934. Whereas the construction of the Aswan High Dam began in 1960 and was completed in 21 July 1970 but the first stage was completed in 1963.

<sup>42</sup> P Chesworth 'The history of water use in the Sudan and Egypt' in Howell & Allan (n 31 above) 69.

<sup>43</sup> The Nile Basin Initiative: Challenges to Implementation <http://www.nilebasin.net/doc/kim3.htm> (accessed 28 August 2008).

78% for agriculture, 5.23 km<sup>3</sup>/year or 8% for domestic use and 9.57 km<sup>3</sup>/year or 14% for industry, which makes the total water use 68.65% km<sup>3</sup>per year.<sup>44</sup>

## 2.2.2 Water use in Sudan

In Sudan the history of the water use of the Nile for irrigation started just about at the same time and in the same pattern as that of Egypt. The first basin irrigation started around 3000BC.<sup>45</sup> In 1906, the first modern irrigation was developed to cultivate cotton by using pump water at Zeidab.<sup>46</sup> In 1910, the English weaving companies started the first irrigation by pump scheme at Taiba and constantly increased the irrigation area until 1921.<sup>47</sup> The major turning point in the irrigation development was in 1925, with the completion of the Sennar Dam on the Blue Nile that irrigated a total area of 300,000 feddans<sup>48</sup> in the Gezira. In 1955, the Gezira scheme served to irrigate an area of one million feddans. The development of the Managil extension after independence increased the total area irrigated by the Gezira scheme to two million feddans. The pump schemes, which were developed on both the Blue Nile and White Nile, supplied a total of one million feddans.<sup>49</sup> Other schemes were also developed in the 1960's and 1970's,<sup>50</sup> which significantly increased the total irrigated area. The completion of the Roseires dam on the Blue Nile in 1966 supported the expansion of the Gezira and the running of the Raha in the 1970's.<sup>51</sup>

According to the FAO 2000 report on the population and water use in the Nile Basin countries, Sudan uses 36.07 km<sup>3</sup>/year or 97% for agriculture, 0.99 km<sup>3</sup>/year or 3% for domestic use and 0.26 km<sup>3</sup>/year or 1% for industry which makes the total water use 37.31% km<sup>3</sup>per year.<sup>52</sup>

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<sup>44</sup> FAO 2000 AQUASTAT, FAO's Informational System Water and Agriculture, <http://www.fao.org/ag/agl/aglw/aquastat/dbase/index2.jsp> (accessed 10 March 2008)

<sup>45</sup> P Chesworth 'The history of water use in the Sudan and Egypt' in Howell & Allan (n 31 above) 71.

<sup>46</sup> As above.

<sup>47</sup> As above.

<sup>48</sup> Feddan is a unit of area. 1 feddan = to 4200 m<sup>2</sup>=0.42 hectares=1.037 acres

<sup>49</sup> P Chesworth 'The history of water use in the Sudan and Egypt' in Howell & Allan (n 31 above) 71.

<sup>50</sup> The Rahad was developed in the 1970's and serves a total area of 3,000,000 feddans.

<sup>51</sup> P Chesworth 'The history of water use in the Sudan and Egypt' in Howell & Allan (n 31 above) 72.

<sup>52</sup> n 44 above.

## 2.3 The tensions between the Nile River riparian countries

The use of the Nile River has never been without problems. The tensions and conflict started in ancient times dating back to the time of the Pharaohs.<sup>53</sup> The modern conflicts are marked by colonialism in the 20<sup>th</sup> century.<sup>54</sup> It can be said that among the ten riparian countries only two countries have been significantly using the water. Even if other riparians would want to be dependent on the Nile River for agriculture and hydroelectric power, the use of the water is very complicated due to, *inter alia*, political, economic and legal reasons.<sup>55</sup>

As described by Alemu Senai,<sup>56</sup> Egypt is totally dependent on the Nile River for agriculture, power, industry and other uses. Sudan, on the other hand, ranks second to Egypt in terms of dependence. Only Ethiopia has a great interest to be dependent on the River for agriculture. All the other riparians due to high and regular rainfall their interest is very minimal with few exceptions to use it for hydroelectric power generation.<sup>57</sup>

Historically, there were tensions and various warnings among the riparians, especially between the downstream Egypt and the upstream Ethiopia. The actual conflicts can be said to have started during the colonial conquest where Britain was involved in the issue on behalf of the Egypt, Italy on behalf of Ethiopia and Belgium on behalf of the DRC.<sup>58</sup> The colonialists signed various agreements on the construction of dams on the tributaries of the Nile that would affect the flow of the water to Egypt and Sudan.<sup>59</sup> The 1929 agreement can be cited

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<sup>53</sup> M El-Fadel et al 'The Nile River Basin: A Case Study in Surface Water Conflict Resolution' (2003) 32 *Journal of Natural Resources and Life Science Education* 109.

<sup>54</sup> As above.

<sup>55</sup> J Allan 'Developing policies for harmonizing Nile Waters development and management' in Howell & Allan (n 15 above) 385.

<sup>56</sup> A Senai 'Problem Definition and Stakeholder Analysis of the Nile River Basin', paper presented to the Third Nile 2002 Conference, Arusha, Tanzania, (1995) quoted in J Waterbury *The Nile Basin National Determinants of Collective Action* (2002) 4-6.

<sup>57</sup> Waterbury (n 1 above) 4.

<sup>58</sup> n 9 above.

<sup>59</sup> The Anglo Italian protocol signed on 15th April 1891, The treaty between Britain and Ethiopia of 15th May 1902, The agreement between Britain and the government of the independent state of Congo signed on 9<sup>th</sup> of May 1906, the 1901 agreement between Britain and Italy over the use of the River Gash, The Tripartite (British-France -Italy) Treaty of December 13,1906, The 1925 exchange of notes between Britain and Italy concerning Lake Tanner, The agreement between Egypt and Anglo Egyptian Sudan dated 7<sup>th</sup> May 1929.

as the major one that favours Egypt entirely.<sup>60</sup> It was sponsored by Britain and provided, among other things, for the allocation of water which was 48 billion and 4 billion cubic meters per year to Egypt and Sudan respectively, the entire reservation of the water of the Nile during January to July 15 to Egypt, the right to monitor the Nile flow in the upstream countries, the right to undertake Nile River related projects without the consent of upper riparians and the right to veto any construction projects that would affect Egypt's interest.<sup>61</sup> According to this agreement, Egypt was given a monopoly over the Nile.<sup>62</sup> However, these agreements are not regarded as binding by riparians because they were signed under the auspices of the colonialist.<sup>63</sup>

After the Second World War (WWII), the tensions in the area had increased as the result of the changing political setting in the world.<sup>64</sup> The years 1954-58 can be characterized as the time of revived political tensions between the Sudan and Egypt.<sup>65</sup> The tensions were also as a result of construction of the Aswan High dam.<sup>66</sup> The tensions reached their climax between 1956 and 1958, which resulted in Sudan's claim for the revision of the 1929 agreement. The military take-over in Sudan in 1958 opened the arena for renegotiation of the 1929 agreement, which resulted in the 1959 agreement<sup>67</sup> between the Republic of Sudan and Egypt. This agreement allocated the Nile water only to Egypt and Sudan.<sup>68</sup>

After the conclusion of the 1959 agreement, Ethiopia complained about the water allocation of the agreement and with the assistance of the United States Bureau of Reclamation,<sup>69</sup> the

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<sup>60</sup> The 1929 Nile Water Agreement: Legal and Economic Analysis, [http://works.bepress.com/cgi/viewcontent.cgi?article=1000&context=joseph\\_kieyah](http://works.bepress.com/cgi/viewcontent.cgi?article=1000&context=joseph_kieyah) (accessed 04 October 2008)

<sup>61</sup> Exchange of Notes Regarding the Use of Waters of the Nile for Irrigation Purposes, May 7, 1929 between Egypt and Anglo-Egyptian Sudan.

<sup>62</sup> K Mekonnen, The Defects and Effects of Past Treaties and Agreements on the Nile River Waters: Whose Fault Were They? <http://www.ethiopians.com/abay/engin.html> (accessed 07 March 2008).

<sup>63</sup> Waterbury (n 1 above) 72

<sup>64</sup> n 43 above.

<sup>65</sup> n 9 above.

<sup>66</sup> n 41 above

<sup>67</sup> The 1959 agreement provides for a better water allocation for Sudan. It allocates 55.5 billion cubic meter of water to Egypt and 18.5 cubic meters of water to Sudan. It also provides for collective decisions and actions on Nile issues.

<sup>68</sup> n 9 above.

<sup>69</sup> The United States Bureau of Reclamation is an agency that oversees water resource management, specifically oversight, operation, or both, of water diversion, delivery, and storage, and hydroelectric power generation projects.

Country began to study the Nile River's potential for irrigation and hydroelectric power.<sup>70</sup> The study proposed a dam on Lake Tana on the Blue Nile.<sup>71</sup> Consequently, Ethiopia requested six billion cubic meters of water for irrigation.<sup>72</sup> This attempt was met with a serious threat of war from President Anwar Sadat of Egypt.<sup>73</sup> In spite of this, Ethiopia continued to claim its rights to use the Nile water and avoided any kind of participation in a basin-wide cooperation, which emanates from the 1959 agreement.<sup>74</sup>

The present and potential water conflicts on the Nile basin result from several issues including the increase in the need of food, demand for power and development in general caused by, *inter alia*, the rapid population growth in the region and global weather change.<sup>75</sup> Most riparian countries face the problem of recurrent drought and famine, which makes the use of every means to guarantee food security conclusive.<sup>76</sup>

In recent times the tensions and threats of war among some riparians still exists. For instance, in October 1991, Egyptian Defence Minister Lieutenant General Mohammed Hussein Tantawi remarked in Al Ahram<sup>77</sup> that 'his country would not hesitate to use force to defend its control of the Nile River, and predicted that future Middle East wars could result from water scarcity issues.'<sup>78</sup>

Moreover, the Camp David negotiations during 1978-9 between Egypt and Israel complicated the case among the riparians. In 1981, President Anwar Sadat allegedly offered to Israel 365 million cubic meters of the Nile water per year in exchange for the solution to the Palestinian problem and the liberation of Jerusalem.<sup>79</sup> However, this proposal was never implemented.<sup>80</sup> Ethiopia and Sudan strongly objected to the aforementioned proposal and according to the Sudan country paper presented to the Nile 2002 Conference in 1996,

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<sup>70</sup> Swain (n 28 above) 680.

<sup>71</sup> n 9 above.

<sup>72</sup> Swain (n 28 above) 680.

<sup>73</sup> n 9 above.

<sup>74</sup> Swain (n 28 above) 680.

<sup>75</sup> R Collins, *Smoothing the Waters: The Nile Conflict*, <http://repositories.cdlib.org/igcc/PB/PH11-2> (accessed on 25 March 2008)

<sup>76</sup> The National Inter-Press Service, *Dispute over the Nile river water gaining momentum 2004*, <http://www.tralac.org/scripts/nav.php?id=1> (accessed 25 March 2008).

<sup>77</sup> A weekly news paper which is published in Egypt since 1875.

<sup>78</sup> n 9 above.

<sup>79</sup> Swain (n 28 above) 683.

<sup>80</sup> As above.

the use of water of the Nile and other shared water resources should be exclusive right of the Co-riparian countries alone and no transfer should be permitted to any non-riparian country.<sup>81</sup>

After the Nile 2002 conference held in Addis Ababa in 1997, a letter of protest was sent by Ethiopia's Foreign Minister, Seyoum Mesfin, to Egypt, with copies to James Wolfensohn, the then President of the World Bank, Kofi Annan, the former Secretary-General of the UN, and Salim Ahmed Salim, the former Secretary General of the OAU now African Union (AU).<sup>82</sup> The letter stated that:

Ethiopia wishes to be on record as having made it unambiguously clear that it will not allow its share to the Nile waters to be affected by a *fait accomplis* such as the Toshka project, regarding which it was neither consulted nor alerted.<sup>83</sup>

A year later, at a meeting of the OAU in Addis Ababa, Deputy Foreign Minister of Ethiopia, Tekeda Alemu called for the rejection of the 1959 agreement.<sup>84</sup> Ethiopia also protested against the peace canal projects of 1979.<sup>85</sup>

In 2004, Ato Girma Birru, Ethiopian Minister of Trade and Industry said that 'Egypt has been pressuring international financial institutions to desist from assisting Ethiopia in carrying out development projects in the Nile basin.'<sup>86</sup> He also added that Egypt 'has used its influence to persuade the Arab world not to provide Ethiopia with any loans or grants for Nile water development.'<sup>87</sup> On the other hand, the Egyptian Foreign Minister Fayaza Abounaga indicated that 'Egypt is willing to provide technical assistance to Ethiopia on utilisation of Nile water resources.'<sup>88</sup> However, according to officials this offer is seen as an attempt to increase Egypt's influence in Ethiopia's efforts to develop its hydroelectric and irrigation projects on the Nile River.<sup>89</sup>

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<sup>81</sup> As above.

<sup>82</sup> Waterbury (n 1 above) 84-85.

<sup>83</sup> As above.

<sup>84</sup> As above.

<sup>85</sup> Waterbury (n 1 above) 85.

<sup>86</sup> n 76 above.

<sup>87</sup> As above.

<sup>88</sup> As above.

<sup>89</sup> As above .

Countries like Kenya, Tanzania and Uganda have signed a treaty obligation with Egypt and they need the consent of Egypt to use water from Lake Victoria for irrigation.<sup>90</sup> The situation in other riparians concerning the interest over the Nile as described by Alemu Senai<sup>91</sup> does not hold in recent times. For instance, in 2004 Kenyan Agriculture Minister Kipruto arap Kirwa mentioned the food shortage in the country and the problem of meeting the demand for food. He also said that 'Kenyans are today importing agricultural produce from Egypt as a result of their use of the Nile water.'<sup>92</sup> In addition, Member of Parliament Paul Muite in the Kenyan parliament said 'Why shouldn't we use the same water to grow fruits in our country?'<sup>93</sup> Because of the aforementioned crisis, Kenya is forced to reconsider its interest in the Nile. Consequently, the Assistant Minister for Foreign Affairs, Moses Wetang'ula said that Kenya considers the Nile Basin Treaty invalid and seeks a new arrangement.<sup>94</sup>

Egypt's Minister for Water Resources, Mahmoud Abu Zeid responded to this statement by announcing 'a declaration of war' against Egypt. Thus, Egypt threatened political and economic sanctions against Kenya.<sup>95</sup>

Similarly, in January 2004, Uganda's parliament proposed to revoke the treaty on the Nile River and adopt a new water sharing system. The idea forwarded by Uganda was to charge Egypt and Sudan for water use.<sup>96</sup> In April 2004, Uganda's president, Yoweri Museveni, called into question Egypt's monopolization of the Nile.<sup>97</sup>

In 2004, it was reported that Tanzania decided to go ahead with a project to extract water from Lake Victoria without the consent of Egypt, Kenya and Uganda.<sup>98</sup> In the same year, Tanzania's Deputy Permanent Secretary in the Ministry of Water and Livestock

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<sup>90</sup> n 76 above.

<sup>91</sup> n 56 above.

<sup>92</sup> C McGrath & S Inbaraj, Water wars loom along the Nile 2004, [http://www.news24.com/News24/Africa/News/0,6119,2-11-1447\\_1470431,00.htm](http://www.news24.com/News24/Africa/News/0,6119,2-11-1447_1470431,00.htm)(accessed 25 March 2008).

<sup>93</sup> As above.

<sup>94</sup> As above.

<sup>95</sup> n 76 above.

<sup>96</sup> As above.

<sup>97</sup> P Kagwanja 'Calming the Waters: The East African Community and Conflict over the Nile Resources', (2007) 3 *Journal of Eastern African Studies* 327.

<sup>98</sup> As above.



Development, Dr Nyamurunda, asserted that since independence Tanzania had held the position that the Nile Treaties were illegal.<sup>99</sup>

For a long time, the tensions were mostly among Egypt, Sudan and Ethiopia. However, the current socio-economic setting in the region changed the interests of all the riparians over the Nile and resulted in a demand for a new regime in the water use of the Nile. From these situations, it can be predicted that even those riparians that do not have an existing interest in the Nile will claim it in the near future. This is the reason why there should be a paradigm shift in the use of water and there should be a mechanism to solve the conflicts once and for all.

#### **2.4 Attempts made to solve conflicts among the Nile River riparian countries over the use of water**

The negotiations on the use of the Nile River started long ago but this study will consider the negotiations that gave rise to the 1959 agreement and onwards. Before concluding the 1959 agreement there were a chain of negotiations from 1956 to 1958 between Egypt and Sudan on the 'Full Utilization of the Nile'.<sup>100</sup> The problems with such negotiations were that the countries had very little concrete data.<sup>101</sup> The scanty, ambiguous and uncertain information they have did not avert the treaty from ratification and implementation.<sup>102</sup> The major problem of the treaty is that it only involved two riparians from the then nine riparian countries.<sup>103</sup>

In general, the Nile basin has been the subject of various levels of negotiation regimes in order to solve the tensions and conflicts.<sup>104</sup> According to Section 5 Article 3 of the 1959 Nile Water Agreement between Egypt and Sudan, the parties to the agreement should establish a Permanent Joint Technical Commission which would supervise all working arrangements, carry out hydrological studies, and fulfil other technical duties.<sup>105</sup> Informal talks began between the Commission, representing Egypt and Sudan, and the coordinating Nile Water Committee.<sup>106</sup> As a result, joint hydrological studies of the Great Lakes area were created

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<sup>99</sup> As above.

<sup>100</sup> Waterbury (n 1 above) 36.

<sup>101</sup> As above.

<sup>102</sup> As above.

<sup>103</sup> As above.

<sup>104</sup> Waterbury (n 1 above) 35.

<sup>105</sup> Sect 5 art 3 of the agreement between United Arab Republic and Sudan Agreement For Full Utilization of the Nile Waters Signed at Cairo, on 8 November 1959; in force 12 December 1959.

<sup>106</sup> The Nile Water Committee was created to represent the upstream riparians of Kenya, Tanzania and Uganda.

and Burundi, Rwanda, and Zaire later joined in this basin-wide cooperation. However, Ethiopia joined only as an observer.<sup>107</sup>

In 1967, the United Nations Development Program (UNDP) and the World Meteorological Organization (WMO) joined with the basin countries to launch the Hydromet Survey, which was completed in 1992. The aim of the survey is to evaluate catchments in the Great Lakes region and analyze the flows downstream.<sup>108</sup> Ethiopia refused to participate in the survey, which resulted in the limitation of the scope of the survey to only 15% of the Nile's flow at Aswan.<sup>109</sup> Bilateral moves between the downstream and upstream riparians also took place in 1991 and 1993, where Ethiopia signed agreements with Sudan and Egypt, respectively, to cooperate on the use of Nile waters.<sup>110</sup>

In 1986, water resource ministers from Egypt, the Sudan, Tanzania, Uganda, and Zaire which is now called DRC met in Bangkok and decided to promote and establish effective cooperation among riparian countries. Ethiopia was represented by its ambassador to France.<sup>111</sup> Further, UNDP sponsored efforts to bring about cooperation, including financial assistance for a fact-finding mission and a second meeting of the ministers were unsuccessful.<sup>112</sup>

In December 1992, the water resources ministers from the above five countries which met in Bangkok together with Rwanda created the Technical Committee for the Promotion of the Development and Environmental Protection of the Nile Basin (Tecconile) and mandate was extended to 1998.<sup>113</sup>

In the 1996 conference, Ethiopia and Egypt exchanged non-cooperative policy papers both asserting their rights to use Nile water.<sup>114</sup> Moreover, in the 2002 conference, during which representatives of Burundi, Eritrea, Ethiopia and Kenya attended as observers, the riparians met to exchange views and foster cooperation.<sup>115</sup>

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<sup>107</sup> n 9 above.

<sup>108</sup> As above.

<sup>109</sup> As above.

<sup>110</sup> As above.

<sup>111</sup> Swain (n 28 above) 690.

<sup>112</sup> As above.

<sup>113</sup> As above.

<sup>114</sup> n 9 above.

<sup>115</sup> As above.

Moreover, there were organizations among some riparians regarding, *inter alia*, economic cooperation on the basin, the construction of dams and hydroelectric power stations on the Nile River. For instance, the Kagera Basin Organization (KBO), which was first established by Rwanda, Burundi and Tanzania and then joined by Uganda, had the aim to finance and construct a dam and power station at Rusumo Falls.<sup>116</sup> The KBO ended with disappointment before achieving its objectives due to a lack of political will and funding.<sup>117</sup>

The most recent and relatively successful programme including all the riparians is the Nile Basin Initiative (NBI).<sup>118</sup> The initiative was officially launched in February 1999 with the general objective to provide a basin wide-cooperation framework among all the riparian countries to utilize the Nile water.<sup>119</sup> The NBI has designed and implemented various projects since 1999.<sup>120</sup> These projects focus on various issues ranging from capacity building to environmental issues, water utilization and development. The projects include the Nile Trans-boundary Environment Action Project (NTEAP), Socio-Economic Development and Benefit Sharing (SDBS), Confidence Building and Stakeholder Involvement (CBSI) Project, Water Resources Planning and Management (WRPM) Project, Applied Training Project (ATP), Regional Power Trade (RPT), Efficient Water Use for Agricultural Production (EWUAP), Shared Vision Program Coordination (SVP –C) Project, Eastern Nile Subsidiary Action Program (ENSAP) and Nile Equatorial Lakes Subsidiary Action Program (NELSAP).<sup>121</sup>

From these projects, the CBSI project is meant for coordinating the NBI activities at national level by working closely with the government. It focuses on awareness creation through networking, media and conferences.<sup>122</sup> It also seeks to lay the foundation for cooperation by helping to build relationships among everyone who has a stake in how water resources in their country are developed, allocated, and managed by including decision and policymakers;

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<sup>116</sup> Waterbury (n 1 above) 39.

<sup>117</sup> D Kaiza, Nile Basin Body Takes over Kagera Initiative, <http://www.nationaudio.com/News/EastAfrica/20082001/Maritime5.htm> (accessed 28 August 2008).

<sup>118</sup> The NBI incorporates all riparians except Eritrea which is an observer. NBI Countries, <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/EXTREGINI/EXTAFRNILEBASINI/0,,contentMDK:21074404~menuPK:2993405~pagePK:64168445~piPK:64168309~theSitePK:2959951,00.html> (accessed 28 August 2008)

<sup>119</sup> Nile Basin Initiative, Objectives, [http://www.nilebasin.org/index.php?option=com\\_content&task=view&id=13&Itemid=42](http://www.nilebasin.org/index.php?option=com_content&task=view&id=13&Itemid=42) (accessed 28 August 2008).

<sup>120</sup> Key Achievements of the NBI Projects, [http://www.nilebasin.org/index.php?option=com\\_content&task=view&id=13&Itemid=42](http://www.nilebasin.org/index.php?option=com_content&task=view&id=13&Itemid=42) (accessed 28 August 2008)

<sup>121</sup> As above.

<sup>122</sup> As above.

water, agricultural and energy engineers; farmers, fishermen, and other water users; NGOs and civil society groups within and across NBI countries.<sup>123</sup>

Despite these projects, the role of donors and funding organizations like the World Bank and the International Monetary Fund (IMF) play a major role in the success of the NBI. In various projects in Africa, the World Bank was unsuccessful.<sup>124</sup> Some attribute the failure to the World Bank and others blame the countries.<sup>125</sup> These organizations are far more than financial organizations. In one way or another, they influence development projects. This can be well illustrated by the Operational Policy (OP 7.50) of the World Bank. This policy applies to hydroelectric, irrigation, flood control, navigation, drainage, water and sewerage, industrial, and similar projects that involve the use or potential pollution of international waterways.<sup>126</sup> Further, the policy prohibits the assistance of the Bank to water resource development projects without the agreement of all the riparians.<sup>127</sup> The same provision provides that the bank will assist efforts to reach to a consensus. This might give the Bank leeway to influence the riparians to reach an agreement; for instance by using human rights. But at this point the question would be, is that the best interest of the World Bank or not? The interest of the Bank is the interest of those countries that have the biggest share. As far as interest in the Nile Basin is concerned countries like America, Canada and the European Union favor Egypt because of its strategic position to the Middle East.<sup>128</sup> In addition, the Bank barely refers to human rights in its initiatives and activities.<sup>129</sup> In particular, there is a recurring dissonance between what the Bank purports to be doing with respect to human rights and what it actually does or is able to do.<sup>130</sup>

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<sup>123</sup> Nile Basin Initiative, CBSI Project, <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/EXTREGINI/EXTAFRNILEBASINI/0,,contentMDK:21080203~isCURL:Y~menuPK:3427090~pagePK:64168445~piPK:64168309~theSitePK:2959951,00.html> (accessed 28 August 2008).

<sup>124</sup> n 43 above.

<sup>125</sup> As above.

<sup>126</sup> Sec 2(a), OP 7.50 - Projects on International Waterways, <http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/toc2/5F511C57E7F3A3DD8525672C007D07A2?OpenDocument> (accessed 05 September 2008)

<sup>127</sup> Sec 3, OP 7.50.

<sup>128</sup> n 43 above.

<sup>129</sup> D Kinley 'Human Rights and the World Bank: Practice, Politics, and Law' in A Palacio *The World Bank Legal Review* (2006) 360.

<sup>130</sup> As above.

OP 7.50 also provides the power of the Bank to appoint experts to examine the proposed projects in case of objections by other riparians after notification of the projects.<sup>131</sup> This section also gives the Bank a significant power to influence a proposed project.

In general, the OP 7.50 plays a major role in the implementation of the objectives of the NBI. The policy gives due concern to the consensus of the riparians which was very difficult to be achieved. It also favors and gives power to countries that had already established historical use rights on the river like Egypt and Sudan. The policy can be a great obstacle for those countries that design new projects on the Nile and seek financial support from the Bank. In the words of Milas:

the OP7.5 is at the heart of the NBI, and its preservation will function as an instrument of failure in the NBI agenda. Thus, the World Bank's own policies will restrict the realization of the NBI's objectives.<sup>132</sup>

## **2.5 The experience of other countries in solving disputes over water use of trans-boundary rivers**

On every continent, there are rivers that are shared by two or more countries, which raise various issues that are related to water use. The issues that are associated with water use may turn into an actual conflict if the river is located in a place where water resources are scarce. The Middle East is a good example of such a case where the Euphrates and the Tigris rivers created a conflicting interest between Turkey, Syria, Iran and Iraq; the Orontes River with the conflicting interest of Syria and Turkey; the Jordan River, with the Conflicting interest primarily between Israel, Jordan and the Palestine and secondly between Syria and Lebanon.<sup>133</sup> Conflicts may also arise as the result of the economic benefit of the river for irrigation and hydroelectric power generation, for instance the dispute between Hungary and Slovakia because of the project to construct a hydroelectric system on the River Danube.<sup>134</sup> Disputes can also be triggered by a scarcity caused by an environmental issue like in the case of River Rhine.<sup>135</sup> Tensions may also be the result of absence of legally binding agreements on the rivers such as in the Tigris-Euphrates Rivers, where Syria and Iran are

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<sup>131</sup> Sec 4, OP 7.50.

<sup>132</sup> n 43 above.

<sup>133</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in E H.P Brans et al (eds) *The Scarcity of Water* (1997) 137.

<sup>134</sup> A Kiss 'Legal Procedures Applicable to Interstate Conflicts on Water Scarcity: The Gabcikovo Case in' Brans et al (n 4 above) 67.

<sup>135</sup> A Kiss 'Legal Procedures Applicable to Interstate Conflicts on Water Scarcity: The Gabcikovo Case in' Brans et al (n 4 above) 63.

dependent on Turkey's good will because the only binding agreement is Turkey's oral commitment to discharge certain amount of water to the riparian countries.<sup>136</sup> However, this section does not intend to exhaustively consider the experiences of all the basins that have problems of conflict. Therefore, it particularly focuses on the water conflict between Israel, Jordan and the Palestine. This is because the Nile and the Jordan Rivers share some similar situations that gave rise to conflict such as population growth, need for irrigation and development and location of the river in a water scarce area. In some instances, the Nile river issues are considered as a Middle East problem.<sup>137</sup>

In the Middle East water resources are more important than anything else. Water, for instance, played a major role in the Six-Day War in 1967<sup>138</sup> and it also became a major agenda in various peace negotiations.<sup>139</sup>

Nowhere else in the world has water become as scarce so quickly as in the Middle East.<sup>140</sup> This is due to high population growth, the rise in the standard of living as the result of oil income, expansion of irrigation to meet the growing food demands, and to create job opportunities in the agriculture sector.<sup>141</sup>

There are some proposed strategies to solve the water problems in the region. These are an increase of water supply, a more efficient use of the existing amount of water and a decrease of demand and a more equitable division of the existing amount of water based on principles of international law.<sup>142</sup>

To increase water supply Israel uses many sophisticated technological methods such as cloud seeding stimulation of precipitation, desalination of brackish water and saline seawater.<sup>143</sup> However, this could be impossible for countries in the Nile Basin due to the

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<sup>136</sup> Kilot (n 22 above) 272.

<sup>137</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 137.

<sup>138</sup> As above.

<sup>139</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 154.

<sup>140</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 136.

<sup>141</sup> As above.

<sup>142</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 148.

<sup>143</sup> As above.

weak economies. Moreover, the water scarcity problem is not as severe as in the Middle East, to force countries to use alternative water resources other than the available fresh water.

The other mechanism is to increase efficiency through better irrigation techniques, enhance technical effectiveness with management of water loss and to use brackish water and re-use waste water.<sup>144</sup> The Israelis are the pioneers of drip and micro-irrigation,<sup>145</sup> which makes them, lead the way in the world in the application of efficient irrigation techniques.<sup>146</sup> This method of enhancing the efficiency of irrigation technique is a good experience that should be followed by countries especially with scarce water resources. Other methods such as desalination and re-use are very expensive to implement in countries with limited experts and money.

The last proposed strategy is equitable allocation of water based on international law and principles, which will be discussed in chapter three.

An informal working group comprising of water experts from Palestine and Israel developed a water distribution plan based on the principles of international law.<sup>147</sup> The working group gave absolute priority to the minimal water needs of the people.<sup>148</sup> Subsequently, another working group was establishing at the beginning of the peace negotiations in October 1991 in Madrid to negotiate the issue of water as part of multilateral negotiations.<sup>149</sup> Since then, the treaties and agreements which were signed have given much emphasis to water issues.<sup>150</sup> For instance, in the Treaty of Peace between the State of Israel and the Hashemite Kingdom of Jordan, water was given much attention<sup>151</sup> and the concepts of equity and efficiency in the use of water were incorporated.<sup>152</sup>

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<sup>144</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 150-151.

<sup>145</sup> Only 20 to 50% of water reaches the plant in surface irrigation, 60-80% reaches the plant by using overhead irrigation and 100% by using drip and micro irrigation.

<sup>146</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 150.

<sup>147</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 150.

<sup>148</sup> As above.

<sup>149</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 154.

<sup>150</sup> As above.

<sup>151</sup> Art 6 Treaty of Peace between the State of Israel and the Hashemite Kingdom of Jordan, Arava, 26 October 1994.

In conclusion, during the negotiations Israel emphasised on the increase in water supply whereas the Palestine focused on redistribution of water.<sup>153</sup> Even if the issue of water is given emphasis in the negotiations, there is still a problem of uneven distribution of water.<sup>154</sup> This is because of the power of Israel to secure its own water interests. As a result of this, large scale redistribution of water and equitable use according to international law and principles has not been possible.<sup>155</sup> The bargaining power to influence the negotiation regimes and securing unfair national interests over water use of trans-boundary rivers has also a human rights implications.

## 2.6 Conclusion

The Nile River is an important resource in Africa. It has been a cause of conflict in the region starting from the time of the Pharaohs, until present. The tensions range from verbal threats and declarations of war to the preparation of air raids and minor border conflicts.<sup>156</sup> The already existing problems aggravated by rapid population growth and global environmental changes make conflicts inevitable in the region. Those countries that seem to be less interested in using the Nile became very much involved in the efforts to create a new regime of water use in the Basin. For most countries in the Basin with recurrent and devastating drought and famine, using the Nile River to utilize their agricultural potential by using irrigation and other related methods is a necessity.

Such problems over the use of trans-boundary river are also prevalent in other parts of the world especially in the Middle East where water scarcity raised a major dispute among the riparian countries of the Jordan River.

In order to solve the water use problems and to promote basin-wide cooperation, various negotiations were made and some organizations were established among the riparians of the

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<sup>152</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 155.

<sup>153</sup> See the Treaty of Peace between the state of Israel and the Hashemite Kingdom of Jordan, 26 October 1994, Interim Agreement between Israel and the PLO, Washington, 24 September 1994, The Declaration on the Principles for Cooperation on Water-Related Matters and New and Additional Water Resources, Oslo, 13 February 1996.

<sup>154</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 157.

<sup>155</sup> As above.

<sup>156</sup> In 1994, Egypt planned and then cancelled an air raid on Khartoum.



Nile. The organizations such as the KBO ended with disappointment due to, *inter alia*, lack of political will and insufficient funds.<sup>157</sup> The negotiations also did not achieve their ends. Moreover, the riparian countries consider the Nile a national interest and no country is concerned to look at it from the people's right perspective.<sup>158</sup>

Currently, the NBI is doing a relatively good work to create basin-wide cooperation among the riparians. There are various projects underway but still the successes are not evident. However, the organization is by far better than its predecessors. For comprehensive effectiveness, the NBI should give due consideration to the needs of the people at a lower level. On top of that, Multinational Institutions like the World Bank and IMF play a paramount role in the success of the NBI. These institutions should also assist the efforts to bring about agreement on water use by using their influence.

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<sup>157</sup> The Kagera Basin organization was collapsed as the result of ill political will and unpaid debts amounting to \$4 million owed by the riparians.

<sup>158</sup> n 117 above.

## CHAPTER 3

### **A human rights approach as a mechanism to solving disputes over the use of trans-boundary rivers**

#### **3.1 Introduction**

The previous chapter established the disagreements between riparians in the river basins over the use of the trans-boundary rivers. It particularly considered the Nile river conflicts and efforts made to bring about agreements. However, the efforts made did not create any significant basin-wide cooperation and agreement on the water use of the Nile. To achieve cooperation and agreements on water use there should be alternative or additional mechanisms that can assist the existing means.

To that end, this chapter focuses on a human rights approach as a means of achieving a consensus among riparians. It gives emphasis to the rights to water and the environment. It also considers international law and principles that govern the water use of trans-boundary rivers, especially focuses on the 1997 Convention on the Non- navigational Uses of International Watercourses.

#### **3.2 A human rights approach and framework**

Human rights, even if they came to existence with the existence of human beings, have gained prominence after the WWII.<sup>159</sup> The human rights violations and atrocities committed during the WWII urged every country of the world to agree upon human rights norms.<sup>160</sup> These rights first emerged in the form of civil and political rights. Subsequently, the global political change and the disparity between societies in terms of economic gains bring about socio-economic rights.<sup>161</sup> Nevertheless, until now some countries still consider (Economic, Social and Cultural rights) ESC rights as separate rights with low applicability and enforcement.<sup>162</sup>

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<sup>159</sup> M Nowak *Introduction to the International Human Rights Regime* (2003) 21-23.

<sup>160</sup> As above.

<sup>161</sup> Nowak (n 159 above) 24.

<sup>162</sup> As above.

At present, it can be said that there is universal consensus about basic human rights norms and principles.<sup>163</sup> Many organizations including the UN and other non-governmental organizations (NGOs) are dedicated to upholding human rights in their agenda.<sup>164</sup> These organizations make efforts to solve problems from a rights perspective.<sup>165</sup> The activism of socio-economic rights<sup>166</sup> greatly involves a human rights approach, especially to solve problems like poverty, development, starvation, mal-nutrition, homelessness and other deprivations of basic needs of human beings.<sup>167</sup> Currently, a human rights approach is engaged in all socio-economic rights including the rights to water and the environment.<sup>168</sup>

There are some factors that facilitate the consideration of a human rights approach for socio-economic activism. The maturation of human right norms and the emergence of widespread poverty and inequality after the end of the Cold War are the major factors that contributed to the emergence of a human rights approach to socio-economic rights.<sup>169</sup> Many organizations at domestic, regional and international levels have emerged throughout the world with the aim of promoting human rights. The experiences they gained have helped them to acquire immense knowledge in analyzing and understanding international human rights standards and mechanisms<sup>170</sup> and to use them to address societal problems.<sup>171</sup> Thus, activists came with a distinction between the rights framework and approach. The rights framework comprises the holders of rights, the duty bearers, and international human rights instruments.<sup>172</sup> The holders of rights in this case are individuals or groups<sup>173</sup> and the duty bearers<sup>174</sup> are the states. Therefore, the rights framework provides that all individuals or

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<sup>163</sup> It should be noted that there is a disagreement on the universality and applicability of some rights on women, children, minorities and other groups as a result of religion, culture.

<sup>164</sup> Nowak (n 159 above) 75.

<sup>165</sup> As above.

<sup>166</sup> The term socio-economic rights here is used to refer to the rights whose purpose is to assure that human beings have the ability to obtain and maintain a minimum decent standard of living consistent with human dignity, quoted in F Viljoen *International Human Rights Law in Africa* (2007) 8.

<sup>167</sup> General Principles for ESC Rights Activism, <http://www1.umn.edu/humanrts/edumat/IHRIP/ripple/chapter1.html#emergence> (accessed June 10 2008).

<sup>168</sup> As above.

<sup>169</sup> As above.

<sup>170</sup> In the beginning experience and knowledge was primarily on Civil and Political rights.

<sup>171</sup> n 167 above.

<sup>172</sup> As above.

<sup>173</sup> Holders of rights can be one individual or groups of individuals such as indigenous people, people with disabilities, sexual minorities, children or women and so on.

<sup>174</sup> Moral duty bearers such as NGO's have also corresponding obligations but their duty is not as mandatory as that of the state.

groups are the holders of human rights and states have corresponding obligations to respect, promote, protect and fulfil these rights which are enshrined in international covenants, treaties, conventions, declarations, recommendations and national constitutional provisions on human rights.<sup>175</sup> Accordingly, the rights approach uses international human rights norms, principles and laws to hold governments accountable for their obligations.<sup>176</sup>

In addition, it is agreed that a human rights approach should include popular participation of the people, non-discrimination, empowerment of the poorest and the most disadvantaged groups and a clear connection between rights, duties and responsibilities.<sup>177</sup>

### 3.2.1 Advantages and disadvantages of a human rights approach

There are some advantages and disadvantages to using a human rights approach to a given problem. The advantages are as follows: first, human rights are strong claims which can narrow the gaps between absolute theoretical entitlements and the bureaucratic characters of state bodies.<sup>178</sup> Secondly, it may motivate an activism which is supported by NGOs and concerned individuals on a given issue.<sup>179</sup> Thirdly, it can create a theoretical link between issues at different levels viz national, regional and international and bring them under the same legal judgment.<sup>180</sup> Fourthly, the concept of human rights can be interpreted in a different way depending on the context, which gives a wider scope of protection.<sup>181</sup> Finally, the approach seeks the solutions of problems from the people themselves through participation giving due regard to the poor and the most disadvantaged group.<sup>182</sup>

In spite of these, some scholars are skeptical about the extent and strength of a human rights approach to address complex political and technical issues.<sup>183</sup> However, the concern of human rights approach is to narrow the differences and resolve the disputes among

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<sup>175</sup> n 167 above.

<sup>176</sup> As above.

<sup>177</sup> A Sitta The role of the right to development in the human rights framework for development 2.

<sup>178</sup> M Anderson 'Human Rights Approach to Environmental Protection: An Overview' in A Boyle & M Anderson (eds) *Human Rights Approaches to Environmental Protection* (1998) 21.

<sup>179</sup> M Anderson 'Human Rights Approach to Environmental Protection: An Overview' in Boyle & Anderson (n 178 above) 22.

<sup>180</sup> As above.

<sup>181</sup> M Anderson 'Human Rights Approach to Environmental Protection: An Overview' in Boyle & Anderson (n 178 above) 21-22.

<sup>182</sup> n 177 above.

<sup>183</sup> M Anderson 'Human Rights Approach to Environmental Protection: An Overview' in Boyle & Anderson (n 178 above) 22.

different groups. The subsequent technical issues are up to the respective professionals in the field.

### **3.3 Rights to water and environment in international and regional human rights instruments**

#### **3.3.1 Right to water**

The right to water is an important right for the enjoyment of other rights such as the right to life, dignity, adequate food, health, environment and development.<sup>184</sup> Therefore, when the right to water is considered, it affects all the rights that are directly or indirectly related to it.

In international human rights law, the right to water does not enjoy an expressed recognition except in a few documents, which is provided as the right to access to water.<sup>185</sup> Even in those documents, emphasis is given only to drinking water and water for domestic uses. However, the right to water is implicitly recognized in the right to life, the right to human dignity, the right to food, the right to a healthy environment, the right to a decent standard of living and the right to development.<sup>186</sup>

The right to water is expressly provided in Article 14(4) of the Convention on the Elimination of All Forms of Discrimination Against Women (1979), in Article 24(1) of the Convention on the Rights of the Child (1989), in Article 14 of the African Charter on the Rights and Welfare of the Child (1990). Nevertheless, these provisions provide the right only to the extent of drinking supply and domestic use.

In addition to the aforementioned provisions where the right to water is expressly mentioned, there are documents that implicitly provide for the right to water. For instance, the Declaration on the Right to Development (DRD), in Article 8 provides that:

States should undertake, at the national level, all necessary measures for the realization of the right to development and shall ensure, *inter alia*, equality of opportunity for all in their

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<sup>184</sup> C Dubreuil The Right to Water: from concept to implementation World Water Council 2006 4.

<sup>185</sup> A Kok & M Lanford 'The right to Water' in D Brand and C Heyns (eds) *Socio-Economic Rights in South Africa* (2005) 192.

<sup>186</sup> Dubreuil (n 184 above) 7.

access to basic resources [...]. Appropriate economic and social reforms should be carried out with a view to eradicating all social injustices.<sup>187</sup>

Hence, according to Gleick:

In interpreting Article 8 of the DRD, the United Nations explicitly includes water as a basic resource when it states that the persistent conditions of underdevelopment in which millions of humans are "denied access to such essentials as food, water, clothing, housing and medicine in adequate measure" represent a clear and flagrant "mass violation of human rights". At a minimum, this implies that nations should implement continued and strong efforts to progressively meet these needs to the extent of their available resources, as required by the ICESCR.<sup>188</sup>

In addition to the aforementioned legally non-binding document,<sup>189</sup> the Universal Declaration of Human Rights (UDHR),<sup>190</sup> in Article 25 provides that:

Everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing [...].

Realizing the above right cannot be achieved without a sufficient quantity and quality of water to maintain human health and wellbeing. Moreover, the UDHR also implies a need for water to grow sufficient food for an adequate standard of living.<sup>191</sup> Hence, an important difference can be made between the water to grow food and water required to support the health and wellbeing of individuals. The water that is needed to grow food is much higher in quantity and involves many technical matters whereas the water requirement of health and wellbeing is much smaller in quantity compared with the former.<sup>192</sup>

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<sup>187</sup> Art 8 Declaration on the Right to Development, Adopted by General Assembly Resolution 41/128 of the UN 4 December 1986.

<sup>188</sup> P H. Gleick The human right to water, 494, [http://webworld.unesco.org/water/wwap/pccp/cd/pdf/educational\\_tools/course\\_modules/reference\\_documents/issues/thehumanrighttowater.pdf](http://webworld.unesco.org/water/wwap/pccp/cd/pdf/educational_tools/course_modules/reference_documents/issues/thehumanrighttowater.pdf) (accessed 14 September 2008).

<sup>189</sup> The Declaration on the Right to Development has not been transformed into a binding treaty. Declarations are statements of intent and are not as such legally binding under international law, however they may evolve into customary international law and become legally binding documents, quoted in F Viljoen *International Human Rights Law in Africa* (2007) 28-29.

<sup>190</sup> It is generally accepted that some parts of the Universal Declaration of Human Rights attained the status of customary international law, quoted in F Viljoen *International Human Rights Law in Africa* (2007) 28.

<sup>191</sup> n 188 above.

<sup>192</sup> As above.

Likewise, the International Covenant on Economic, Social and Cultural Rights (ICESCR) is an important source of the right to water. Article 11(1) refers to the right implicitly and provides that:

The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, [...]. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international co-operation based on free consent.

Furthermore, the same article asserts that states parties to the Covenant recognizes everyone's right to be free from hunger and agree to take all appropriate measures individually and with international cooperation to improve production through the most efficient development and utilization of natural resources.<sup>193</sup>

The ICESCR imposes an obligation on states to fulfil the rights that are provided in the Covenant. According to its Article 2(1):

Each party to the Covenant undertakes to take steps, individually and through international assistance and cooperation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realisation of the rights recognised by the present Covenant by all appropriate means [...].

This article can be described as the 'linchpin' of the Covenant. It describes the duties imposed on State parties in realizing the rights in the Covenant.<sup>194</sup> This provision is very important to an understanding of both the substance and implementation of the Covenant.

To that end, the Committee on Economic, Social and Cultural Rights (the committee), adopts General Comments on the provisions of the Covenant to assist state parties in the implementation, promotion and interpretation of the rights that are provided in it.<sup>195</sup> Accordingly, the Committee adopted General Comment 15 on the right to water, where it is

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<sup>193</sup> Article 11(2) (a) International Covenant on Economic, Social and Cultural Rights (CESCR).

<sup>194</sup> M Craven, *The International Covenant on Economic, Social and Cultural Rights: A perspective of its development* (1995) 106.

<sup>195</sup> General Comments are non-binding statements by human rights treaty bodies. Their purpose is to give voice to their understanding of substantive treaty provisions. Being the product of compromise, treaty provisions are often formulated in vague and open-ended terms that need clarifications, quoted in F Viljoen *International Human Rights Law in Africa* (2007) 29.

given a wider scope of protection and recognition.<sup>196</sup> In addition to water for drinking and other domestic purposes, the General Comment recognizes other uses, such as water for food production, enjoyment of certain cultural practices and securing livelihood.<sup>197</sup> Moreover, the water for agricultural production is given much emphasis, and thus it was provided that priority should be given to the water resources required to prevent starvation and to meet the core obligations in each of the rights in the Covenant by giving due regard to disadvantaged and marginalized farmers to secure access to water resources for agriculture to realize the right to adequate food.<sup>198</sup> It also referred to Article 1 paragraph 2 of the Covenant, which provides for non-deprivation of means of subsistence, thus states parties to the Covenant should guarantee 'adequate access to water for subsistence farming and for securing their livelihoods.'<sup>199</sup> This interpretation of the provision is vital to those countries with recurrent drought and famine. It gives the right to utilize their water resources in general and rivers in particular, to fulfil their basic needs.

The Committee further considers international obligations as one mean for the realization of the right to water especially in poor countries and stipulates that:

To comply with their international obligations in relation to the right to water, States parties have to respect the enjoyment of the right in other countries. International cooperation requires States parties to refrain from actions that interfere, directly or indirectly, with the enjoyment of the right to water in other countries. Any activities undertaken within the State party's jurisdiction should not deprive another country of the ability to realize the right to water for persons in its jurisdiction.<sup>200</sup> [In addition,] states parties should refrain at all times from imposing embargoes or similar measures, that prevent the supply of water, as well as goods and services essential for securing the right to water. Water should never be used as an instrument of political and economic pressure.<sup>201</sup>

The above interpretation of the provision is important in the cases of trans-boundary rivers because it supports the cooperation and assistance between riparians. Especially in river basins that comprise countries with weak economies such as the Nile basin. In addition, it is particularly important to the peaceful cooperation among the riparians because it makes

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<sup>196</sup> General Comment No 15: The Right to Water, adopted by the Committee on Economic, Social and Cultural Rights Twenty-ninth session (2002).

<sup>197</sup> General Comment No. 15, para 6.

<sup>198</sup> As above.

<sup>199</sup> General Comment No. 15, para 7.

<sup>200</sup> General Comment No. 15 para 3.

<sup>201</sup> General Comment No.15, para 32.



interference on the enjoyment of the right and imposing embargo that prevents the supply of water as a violation of the Covenant.

There is also a need to help other states to realize the right to water, for example through provision of water resources, financial and technical assistance, and aid in a manner consistent with the Covenant, other human rights standards and culture.<sup>202</sup> The Committee imposes a special obligation on economically developed state parties to assist the poorer developing states.<sup>203</sup> Member states of organizations like the World Bank, IMF and other regional development banks should take steps to ensure the right to water, particularly by giving due concern to the right in their lending policies, credit agreements and other international measures.<sup>204</sup> Such obligations are also extended to the aforementioned organizations, UN agencies and other international organizations concerned with water.<sup>205</sup>

In spite of the fact that water is a source of life and an important means for the realization of socio-economic rights such as right to food, health, adequate standard of living and development, the scope of protection given to it in international human rights instruments is inadequate.<sup>206</sup> However, General Comment No. 15 can be taken as a good endeavour made by the Committee in widening the scope of protection and interpretation of the right to water even if it is not binding legal document.

In conclusion, the right to water does not imply the right to an unlimited quantity of water. Factors such as resource limitations, economy, politics and ecological constraints may limit the availability of water and its use. In developing and using water resources, priority has to be given to the fulfilment of basic human needs and the protection of the environment.<sup>207</sup>

### **3.3.2 Environmental rights**

The consideration of environmental issues from a human rights perspective has developed in recent years.<sup>208</sup> Particularly, the issue of environmental degradation and human rights was first raised at the UN conference on the Human Environment in 1972. In addition, in 1992 at

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<sup>202</sup> General Comment No 15, para 34.

<sup>203</sup> As above.

<sup>204</sup> General Comment No.15, para 36.

<sup>205</sup> General Comment No.15, para 60.

<sup>206</sup> A Kok & M Lanford 'The right to Water' in Brand & Heyns (n 185 above) 192.

<sup>207</sup> n 188 above.

<sup>208</sup> Human Rights and Environment, Human Rights Project Human Rights Concepts, Ideas and For a, University for Peace 2004.

Rio de Janeiro, the Second Environment Conference was held with the aim of assisting governments to 'rethink economic development and find ways to halt the destruction of irreplaceable natural resources and the pollution of the planet.'<sup>209</sup> The Conference came up with a number of agreements, out of which came with the Rio Declaration on Environment and Development which is an important one in relation to human rights.<sup>210</sup>

Environmental rights are provided in a number of international and regional human rights instruments. Among them, the ICESCR provides that state parties to the Covenant should recognize everyone's right to the enjoyment of the highest attainable standard of health and undertake to take appropriate steps to improve all aspects of the environment.<sup>211</sup> In addition, article 11(1) provides that everyone has the right to adequate standard of living and the states duty to fulfil and promote such right.

Further, the African Human Rights System promotes enhanced protection to the environmental rights. Article 24 of the African Charter on Human and Peoples' Rights (the Charter) provides that everyone has the right to a general satisfactory environment favourable to his/her development. The Charter generally stipulates that every member state of the OAU now the AU, must recognize and protect the rights and duties enshrined in the Charter and makes non-compliance a violation of the Charter.<sup>212</sup> Furthermore, the jurisprudence on the right to a healthy and satisfactory environment was established by the decision of the African Commission on Human and Peoples' Rights (the commission) in the case between *Social and Economic Rights Action Centre (SERAC) and Another v Nigeria*.<sup>213</sup> The Commission, in the *SERAC* case held that Article 24 imposes certain obligations on the government and requires states to take measures to prevent pollution and ecological degradation, to promote conservation, and to secure an ecological sustainable development and use of natural resources.<sup>214</sup>

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<sup>209</sup> As above.

<sup>210</sup> As above.

<sup>211</sup> Arts 12(1) and 2(b) CDESCR

<sup>212</sup> Arts 1 & 2 of the African Charter on Human and Peoples' Rights.

<sup>213</sup> *Social and Economic Rights Action Centre (SERAC) and Another v Nigeria (2001) AHRLR 60(ACHPR 2001)*.

<sup>214</sup> Para 52 *Social and Economic Rights Action Centre (SERAC) and Another v Nigeria (2001) AHRLR 60 (ACHPR 2001)*.

The African Convention on the Conservation of Nature and Natural Resources<sup>215</sup> also provides the obligations on states to adopt measures necessary to ensure conservation, utilization and development of soil, water, flora and fauna resources in accordance with scientific principles and with regard to the best interests of the people.<sup>216</sup>

In conclusion, due regard should be given to the environment during planning and implementations of various development projects to secure sustainable development and the wellbeing of the people. States are duty bound to respect the environmental rights of their people, which are provided in international and regional human rights instruments.

### **3.4 International principles and laws governing water use**

#### **3.4.1 International principles governing water use**

International principles and laws that govern the use of international rivers have developed quite recently with the primary concern of the problems that are related to navigation.<sup>217</sup> However, over time the problems that are associated with other uses such as building of dams, reservoirs and canals have proved to be as important as that of navigation.<sup>218</sup>

There are four opposing principles employed by different states. These are the principle of absolute territorial integrity, the principle of absolute territorial sovereignty (Harmon Doctrine<sup>219</sup>), the principle of limited territorial sovereignty and the principle of the community of basin states (Community of Interests).<sup>220</sup>

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<sup>215</sup> The convention was amended in 2003 but the amendment has never entered into force, quoted in C Heyns & M Killander *Compendium of Key human rights documents of the African Union* (2007) 80.

<sup>216</sup> Art 2 African Convention of Nature and Natural Resources September 1968.

<sup>217</sup> S Ahmed 'Principles and precedents in international law governing the sharing of Nile Waters' in P Howell & J Allan (eds) *The Nile Sharing a Scarce Resource: A historical and technical review of water management and of economic and legal issues* (1996) 351.

<sup>218</sup> As above.

<sup>219</sup> Named after the American Judge Harmon, who applied it for the first time in a dispute between the United States of America and Mexico over the Rio Grande River in 1895, quoted in S *El-Din Amer, The Law of water-Historical record*, (1997) 382, <http://ressources.ciheam.org/om/pdf/a31/CI971551.pdf>(accessed 10 August 2008).

<sup>220</sup> H Donkers 'Fresh Water as a Source of International Conflicts: The Water Conflicts between Israel, Jordan and the Palestine' in Brans et al (n 133 above) 152.

The principle of absolute territorial integrity stipulates that no single basin state may influence the quantity and quality of water. On the basis of this principle states may demand that an upstream state should not use the water if it interferes with the river water quantity or quality.<sup>221</sup> This principle favours downstream countries like Egypt.

The principle of absolute territorial sovereignty provides that a country may do what it wants with a trans-boundary river that passes through its territory.<sup>222</sup> This principle is advantageous to upstream countries like Ethiopia and Turkey. Until the mid of 19<sup>th</sup> century, this principle was dominant in governing an international river.<sup>223</sup> With the development of international law and international institutions, more attention is given to the rights over international rivers with corresponding obligations, which minimized the importance of absolute sovereignty over international rivers.<sup>224</sup>

The principle of limited territorial sovereignty asserts that a country may use the water in a reasonable manner, which would not create significant damage to other riparian countries.<sup>225</sup>

Finally, the principle of community of basin States, gives due regard to optimal use of water within the basin area of the river. This principle gives little concern to national interests and value cooperation. Thus the national boundaries of the riparians are ignored and the entire basin is considered as one economic and geographic unit.<sup>226</sup>

The International Law Society, on the other hand, after years of study reached a set of rules, which provide guidelines for the utilization, and administration of international rivers at Helsinki in 1966.<sup>227</sup> These rules give special emphasis to international rivers with 'no specific agreement or traditional norm of conduct' among riparians.<sup>228</sup> The rules provide for the utilization of international rivers for irrigation, navigation and transportation of goods and the

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<sup>221</sup> S El-Din Amer, *The Law of water-Historical record* (1997) 382, <http://ressources.ciheam.org/om/pdf/a31/CI971551.pdf>(accessed 10 August 2008).

<sup>222</sup> As above.

<sup>223</sup> As above.

<sup>224</sup> S Ahmed 'Principles and precedents in international law governing the sharing of Nile Waters' in Howell & Allan (n 217 above) 351.

<sup>225</sup> As above.

<sup>226</sup> n 221 above.

<sup>227</sup> As above.

<sup>228</sup> S Ahmed 'Principles and precedents in international law governing the sharing of Nile Waters' in Howell & Allan (n 217 above) 352.

problems of pollution.<sup>229</sup> The rules do not prohibit a riparian state from changing the flow of part of its water allocation to its own territory outside the basin.<sup>230</sup>

In general, the Helsinki rules provide for equity of distribution of water among riparians.<sup>231</sup> However, equity does not mean equal share, but rather fair share which is determined by topography of the basin, the size of the drainage area, the climatic condition affecting the basin, past and present water usage, economic and social needs and comparative alternative means, population, availability of other water resources, avoidance of undue waste and damage to other riparians.<sup>232</sup> In spite of these principles, the number of judicial court decisions, opinions and jurisprudence on international rivers is very limited.<sup>233</sup> However, the International Court of Arbitration and jurists try to cover the lacuna by resorting to the decisions of the Federal Court decisions in Switzerland, in United States and in Germany.<sup>234</sup>

Even though these rules are generally accepted,<sup>235</sup> they are legally non-binding in international law.<sup>236</sup> If the Helsinki rules are applied to the case of the Nile basin, Ethiopia, Sudan, and all the equatorial countries rank higher than Egypt on almost all criteria, entitling them to a larger portion of the Nile water.<sup>237</sup> However, this highlights the strong link between politics and international water conflicts, whereby the politically and economically dominant country generally prevails and controls an international water resource.<sup>238</sup> The country that enjoys the largest percentage of the water does not necessarily have to be the most

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<sup>229</sup> As above.

<sup>230</sup> S Ahmed 'Principles and precedents in international law governing the sharing of Nile Waters' in Howell & Allan (n 217 above) 353.

<sup>231</sup> Art 4, The Helsinki Rules on the Uses of the Waters of International Rivers, Adopted by the International Law Association at the 52nd conference, held at Helsinki in August 1966.

<sup>232</sup> Art 5 (n 231 above).

<sup>233</sup> S Ahmed 'Principles and precedents in international law governing the sharing of Nile Waters' in Howell & Allan (n 217 above) 353.

<sup>234</sup> A Kiss 'Legal Procedures Applicable to Interstate Conflicts on Water Scarcity: The Gabcikovo Case' in Brans et al (eds) (n 4 above) 62.

<sup>235</sup> The International of jurists supports equitable and reasonable use. This view is accepted before the International Court of Justice (ICJ) in accordance with Article 38(1) of the Statute of ICJ, which recognizes and accepts the opinions of jurists in the development of rules of international law.

<sup>236</sup> M El-Fadel (n 53 above) 113.

<sup>237</sup> As above.

<sup>238</sup> As above.

deserving, thus sacrificing the economic advancement, social development, and political stability of other countries in the Basin.<sup>239</sup>

### 3.4.2 International Instruments governing water use

There are a number of laws, declarations, and principles concerning international watercourses dating from the 1815 Vienna Convention up to the recent 1997 Convention on the Non-navigational Uses of International Watercourses.<sup>240</sup> However, most of them were concerned with navigation. The most recent universal instrument that provides for water use in general, excluding navigation is the 1997 Convention on the Non- navigational Uses of International Watercourses. The Convention has a human rights implication in the way that it provides for water for basic human needs. It stipulates that in cases of conflict in relation to use of international watercourses, due regard must be given to the 'vital human need.'<sup>241</sup>

On top of that, the Convention recognized the utilization of watercourses in a reasonable and equitable manner.<sup>242</sup> The factors that regulate equitable and reasonable use are mentioned in the same term as the Helsinki rules.<sup>243</sup> Likewise, it imposes an obligation on riparians to cooperate based on sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilization and adequate protection of the resource.<sup>244</sup> In the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses.<sup>245</sup> It also provides for the notification of planned projects, consultation, protection, preservation and management of the resource and dispute settlement mechanisms. This Convention is comprehensive and detailed, *vis-à-vis* other instruments concerning water.

There is also a regional instrument that deals with the use of the water resources, namely the African Convention on the Conservation of Nature and Natural Resources.<sup>246</sup> The Convention provides that where surface or underground water resources are shared by two or more States, they shall act in consultation and if the need arises they should set up inter-

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<sup>239</sup> As above.

<sup>240</sup> Sources of International Water Law, Development Law Service, FAO, Legal Office, Rome, <ftp://ftp.fao.org/docrep/fao/005/w9549e/w9549e00.pdf> (accessed 04 July 2008).

<sup>241</sup> Art 10(2) Convention on the Non- navigational Uses of International Watercourses (1997).

<sup>242</sup> Art 5 (n 241 above).

<sup>243</sup> Art 6 (n 241 above).

<sup>244</sup> Art 8 (n 241 above).

<sup>245</sup> Art 8(1) (n 241 above).

<sup>246</sup> African Convention on the Conservation of Nature and Natural Resources - Algiers, 15 September 1968.

State Commissions to study and resolve the problems arising from the joint water use and conservation.<sup>247</sup>

### 3.5 Conclusion

Recently, a human rights approach has been incorporated into various issues *viz* socio-economic problems, poverty, environment and development. Human rights activists' use a human rights approach to advocate for the aforementioned issues and to resolve the problems related to it.

One important means to realize socio-economic rights and the right to development is water. Rivers are one of the major sources of fresh water that should be utilized to realize the abovementioned rights. Accordingly, the right to water and access to water cannot have a comprehensive meaning unless it is considered with the water source.

The subject of trans-boundary rivers is highly related to the issues of water, food, poverty, environment, development and the corresponding rights as stipulated in international human rights instruments. Even if international law expressly or implicitly recognizes these higher norms of human rights, negotiators often neglect to bring them onto the table during negotiations and consultations that are associated with conflict over the use of trans-boundary rivers.

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<sup>247</sup> Art 5 (2) (n 246 above).

## CHAPTER 4

### Human rights in the context of the Nile River

#### 4.1 Introduction

The previous chapters established the problem of water conflict over trans-boundary rivers, efforts made to solve the problems of conflicts, the shortcomings of the efforts and introduced a human rights approach as an alternative or additional mechanism to bring about consensus among riparians on water use issues.

This chapter justifies why a human rights approach is necessary to solve the disputes over the use of trans-boundary rivers and how it can be used to bring about consensus among the riparians by analysing the problem over the use of the Nile River.

#### 4.2 Human rights in the context of the 1959 Nile Agreement between the Sudan and Egypt for Full Utilization of Nile waters

The 1959 Nile agreement was signed with the objective of getting full control and utilization of the Nile water.<sup>248</sup> The inclusion of Sudan in the agreement was because of the pressure from the sponsors of the Aswan High Dam project to secure water allocation for Sudan.<sup>249</sup> Before the conclusion of the agreement, there were various levels of negotiations between Egypt and Sudan to decide on the amount of water to be allocated to each of them.<sup>250</sup> At the beginning of the negotiations, both countries claimed a huge amount of water.<sup>251</sup> Ultimately, the 1959 Agreement for the Full Utilization of the Nile Waters was signed between Egypt and Sudan with neither the involvement nor the consent of any other riparian countries.<sup>252</sup>

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<sup>248</sup> See the Preamble of The agreement between United Arab Republic and Sudan Agreement For Full Utilization of the Nile Waters Signed at Cairo, on 8 November 1959; in force 12 December 1959.

<sup>249</sup> International Bank for Reconstruction and Development (IBRD) (the World Bank) sponsored the construction of the Aswan High Dam.

<sup>250</sup> n 62 above.

<sup>251</sup> Sudan claimed 44 billion cubic meters of the Nile to irrigate 2.22 million hectares and Egypt claimed more amount of water to irrigate 7.1 million hectares.

<sup>252</sup> n 62 above.



The agreement provides that the quantity of the average annual Nile flow to be about 84 billion cubic meters (milliards<sup>253</sup> cubic meters) measured at Aswan High Dam.<sup>254</sup> It allowed the entire average annual flow of the Nile to be shared between the Sudan and Egypt at 18.5 billion and 55.5 billion cubic meters, respectively.<sup>255</sup> Annual water loss due to evaporation and other factors were agreed to be about 10 billion cubic meters. This quantity would be deducted from the Nile waters before the share was assigned to Egypt and Sudan.<sup>256</sup> Sudan, in agreement with Egypt, would construct projects that would enhance the Nile flow by preventing evaporation losses in the Sudd swamps of the White Nile located in the southern Sudan.<sup>257</sup> The cost and benefit of the construction was to be divided equally between them.<sup>258</sup> If any claim arises from other riparians over the Nile, then both Sudan and Egypt would handle it.<sup>259</sup> Depending on the strength of the claim, if the Nile water has to be shared with another riparian state, then the allocated amount would be deducted equally from the Sudan's and Egypt's allocations measured at Aswan.<sup>260</sup> Consequently, the agreement granted Egypt the right to construct the Aswan High Dam, which could store the entire annual Nile River flow of the year, and Sudan to construct the Rosaries Dam<sup>261</sup> on the Blue Nile to develop irrigation and hydroelectric power generation until it fully utilized its Nile share.<sup>262</sup>

It is strange that the IBRD considered the rights of the Sudan on the Nile and ignored the rights of the other riparian countries. This agreement can be considered as the basis for Egypt's claim to historical water rights over other riparians, which creates difficulty in bringing about agreement on water use and basin-wide cooperation.<sup>263</sup>

The major weakness of the agreement is that it only involved two countries by ignoring the then seven riparians. All the claims and rights of other riparians over the Nile River were

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<sup>253</sup> Traditionally, annual Nile flows have been measured in thousands million cubic meters and expressed in 'Milliadrs'. More recent works refer to billion cubic meters per annum (billion m<sup>3</sup>) or m<sup>3</sup> × 10<sup>9</sup>.

<sup>254</sup> Sec 2 art 3 (n 248 above).

<sup>255</sup> Sec 2 art 4 (n 248 above).

<sup>256</sup> As above.

<sup>257</sup> The Sudd swamp is a vast swamp formed by the White Nile, in Southern Sudan. The Sudd area is one of the largest wetland areas in the world and the largest freshwater wetland in the Nile basin.

<sup>258</sup> Sec 3 (n 248 above).

<sup>259</sup> Sec 5 art 2(n 248 above).

<sup>260</sup> As above.

<sup>261</sup> Rosaries Dam was built on the Blue Nile in 1950's and it is an important source of hydropower and irrigation in Sudan.

<sup>262</sup> n 62 above.

<sup>263</sup> As above.

ignored. Thus, the agreement has resulted in the current conflicts among the riparian countries over the use of the Nile waters. It can be said that the agreement made the two countries the sole owners of the river. If a claim arises, only the two countries have the discretion to decide on it.<sup>264</sup>

Additionally, the agreement has no provision that deals with the human rights and needs of the people in other riparian countries. In addition, the agreement did not consider environmental rights generally. One reason for failing to consider human rights norms could be the maturation and acceptance of human rights norms and principles during the conclusion of the agreement. However, currently, human rights norms and principles are well developed and universally accepted compared to the 1950's. Therefore, there should be a way to include these norms and principles in the agreements and also to influence the applicability of the same in every issue related to the water use of trans-boundary rivers.

### 4.3 The human rights approach in the context of Nile Basin

Most countries in the Nile basin have the problem of extreme poverty and food insecurity.<sup>265</sup> The right to food, water, environment and other socio-economic rights of the people are at risk as the result of; *inter alia*, extreme poverty and lack of effective utilization of natural resources.<sup>266</sup> One of the major resources that can be used by these countries to achieve food security, water availability or development is the Nile River. However, as described in chapter two, the effective utilization of the Nile is problematic due to the lack of agreement on the use of water.

In the previous chapter, the advantages of the human rights approach were considered. Accordingly, human rights claims are strong claims which narrow the gap between the theoretical entitlements and bureaucratic nature of political bodies.<sup>267</sup> States consider the Nile River issues a matter of national interest.<sup>268</sup> All the attempts made before to create

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<sup>264</sup> Sec 5 art 2 (n 248 above).

<sup>265</sup> E Adly, Water and Food Security in the Nile Basin: the Perspective of Government and NGOs in the major Downstream Country Egypt [http://hexagon-series.org/pdf/Hague/Adly\\_Water\\_Food\\_Security.pdf](http://hexagon-series.org/pdf/Hague/Adly_Water_Food_Security.pdf) (accessed 15 September, 2008).

<sup>266</sup> All riparian countries except Egypt which ranks 112 among 177 countries are either in low human development ranking (Ethiopia, Eritrea, Tanzania, Rwanda, Burundi, and DR Congo) or at the bottom of medium human development ranking (Sudan, Uganda, Kenya). Human Development Index Ranking, 2007/2008, <http://hdr.undp.org/report>, (accessed on 24 September 2008).

<sup>267</sup> M Anderson 'Human Rights Approach to Environmental Protection: An Overview' in Boyle & Anderson (n 178 above) 21-22.

<sup>268</sup> n 117 above.

consensus failed due to, among other things, lack of political will, knowledge of the benefits but failure to value cooperation,<sup>269</sup> and failure of the political and diplomatic negotiations to win the claims of national interests by the riparians. However, the strength of human rights claims help to narrow the gap between the claims and interests of the riparians, as it seeks to achieve a common good for every person in the riparian countries. All the bureaucratic issues of politicians, like national interests, would have lesser meaning in the context of human rights.

It can be said that activism on the issues of utilization of natural resources are not as developed as other area of human rights activism.<sup>270</sup> One reason could be the lack of enough research in the area, which makes it untouchable for human rights activism, giving politicians the upper hand to deal with the problem by using their means. This has a negative impact in bringing about a solution to the problems, as the result of inadequacy of political means to solve some problems. Many human rights are violated, because of national interests and state sovereignty.<sup>271</sup> Owing to the maturation of human rights norms and principles, the significance of state sovereignty and national interests are decreasing. Activists played a major role in the efforts to minimize the value of absolute sovereignty and national interests.<sup>272</sup> In the same manner, if a human rights approach is used to solve the Nile problems, then many Civil Society Organizations (CSOs) and other concerned bodies would be motivated to contribute their expertise.

Currently, the NBI is doing a significant work in involving CSO in the Nile issues. For instance, the engagement and participation of CSOs in the development of the Nile basin have been facilitated through the CBSI<sup>273</sup> and Nile Basin Discourse (NBD).<sup>274</sup> The NBD has been established in each of the basin countries, to provide a venue for all the Nile's users to express their expectations and grievances. Through these forums, stakeholders can provide

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<sup>269</sup> Waterbury (n 1 above) 33.

<sup>270</sup> NGOs and other human rights defenders widely involve in conducting fact-finding missions, react to human rights violations through publicity, the rights vulnerable groups and so on. (Nowak (n 186 above) 257) Concerning issues related to natural resource wide concern is given to environmental issue, which may arise from the use of the resources but to the writer's knowledge, there is no activism on the right to use of natural resources.

<sup>271</sup> J Maogoto, *Sovereignty in Transition: Human Rights and International Justice*, <http://law.bepress.com/cgi/viewcontent.cgi?article=6238&context=expresso> (accessed 2 October 2008).

<sup>272</sup> Nowak (n 186 above) 257.

<sup>273</sup> n 123 above.

<sup>274</sup> n 8 above.

input into development projects along the river basin.<sup>275</sup> But still there is a lot to be done in such respect.

The Nile issues are not only domestic or regional, but also international. The region is considered as a strategic area, especially to those countries that have interests in the Middle East.<sup>276</sup> Instability in the region may harm international peace and security. As a result of this, the rich and powerful states may favour those countries that are located at a more strategic place. However, if human rights norms and principles are used, without being discriminated against based on benefits, the rights of the people in general would matter. This helps to judge the issue under the same legal and moral judgments without any bias.<sup>277</sup>

Finally, the problem of the Nile is dynamic in nature. Even if the main agenda is water use, over time other issues like environmental degradations have gained momentum.<sup>278</sup> Therefore, there is a need to have a system that has a more dynamic application to the changing situations. In such respect the concept of human rights are preeminent because rights can be interpreted in different ways depending on the context and problem.<sup>279</sup> Therefore, providing a wider scope of protection to a given problem makes a human rights approach the best mechanism to deal with issue like water use in the Nile Basin and elsewhere.

Despite these advantages of a HRA to solve practical problems, some scholars are doubtful of the ability of the approach in addressing complex political and technical issues.<sup>280</sup> However, a HRA is the means to solve the problems but not the end in itself. The main concern of this approach in such respect is to narrow and resolve the differences and disputes among riparians. Once agreement is reached the subsequent technical matters are up to the respective professionals on the field. Therefore, the shortcomings of the approach can be resolved by collaboration with water engineers, economists, politicians, policy makers and so on.

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<sup>275</sup> As above.

<sup>276</sup> L LaRouche, The Middle East as a Strategic Crossroad, [http://www.larouche.com/pr\\_lar/2002/020602\\_Zayed\\_speech.html](http://www.larouche.com/pr_lar/2002/020602_Zayed_speech.html)(accessed 27 October 2008).

<sup>277</sup> M Anderson 'Human Rights Approach to Environmental Protection: An Overview' in Boyle & Anderson (n 178 above) 22.

<sup>278</sup> M El-Fadel (n 53 above) 116.

<sup>279</sup> M Anderson 'Human Rights Approach to Environmental Protection: An Overview' in Boyle & Anderson (n 178 above) 21-22.

<sup>280</sup> M Anderson 'Human Rights Approach to Environmental Protection: An Overview' in Boyle & Anderson (n 178 above) 22.

#### **4.4 Obligations of States and other actors according to international human rights instruments in matters related to water use of the Nile River**

It is the writer's argument that the use of the Nile directly or indirectly affects the realization of some of the socio-economic rights such as right to food, water or development in all riparian states. Consequently, in order to realize the socio-economic rights of their people, the countries should reach a consensus on the water use of the river. If not, all the states are risking the rights of their people as well as the rights of others that live in the basin. The aforementioned obligation emanates from the ICESCR, which stipulates a state's obligation to fulfill the socio-economic rights over time with the maximum available resources and all the appropriate means including international assistance and cooperation.<sup>281</sup> In the context of Nile Basin, cooperation is a prerequisite for the realization of human rights in general and socio-economic rights in particular and human rights norms and principles can assist in facilitating and achieving cooperation.

As described in the previous chapter the right to water does not have adequate protection in international human rights instruments. Some instruments have explicit provisions and others have implicit recognitions. However, it can be said that these provisions are sufficient if they are considered together with General Comment No. 15 that provides for a wider scope of protection by giving a broad interpretations of the provisions of the ICESCR. The right to water to grow food supports the claims of the riparians that need the access to water for agricultural purposes. It also supports equitable and fair use of water as the result of non-discrimination in the entitlement of human rights to all people,<sup>282</sup> which can be extended to inhabitants in the basin.

Considering the Nile River as one means to realize the socio-economic rights of the people, the riparian states are duty bound independently to use the resource and fulfil the rights. They should also cooperate based on free will in order to realize such rights.<sup>283</sup> Nevertheless, it is the writer's contention that the concept of free will for cooperation might not be realistic in this context. Even if free will is very important and cooperation cannot be imposed between states, the nature of the resource and the entire dependency of one state on the river make cooperation free but mandatory. Refusal to cooperate may lead to a devastating result in the peace and development of the countries in the long run. At some

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<sup>281</sup> Art 2(1) CESCR.

<sup>282</sup> Craven (n 194 above) 153.

<sup>283</sup> Art 11(1) CESCR.

point those countries that were unable to use the resource might get the necessary means to develop it and this may cause an actual conflict.

In addition, the Declaration on the Right to Development (DRD), even if it is not binding, stipulates that states at the national level should make the necessary arrangements for the realization of the right to development.<sup>284</sup> In the interpretation of the declaration the UN expressly provided for those basic needs of human beings such as water and food.<sup>285</sup> The writer believes that this interpretation supports the claim for utilizing natural resources which may assist in fulfilling the socio-economic rights of the people.

The aforementioned binding and non-binding human rights instruments provide for the rights to water, food and all other socio-economic rights that must be fulfilled by states. The Nile has the potential to be one means for the realization of some socio-economic rights such as the right to food, right to water, the right to a decent standard of living, the right to a healthy environment and the right to development in the region. This resource can play a major role in helping states to discharge their international human rights obligations as stipulated in ICESCR and other human rights instruments. The only way to utilize this resource to the maximum of its potential is by reaching a consensus on water use.

#### **4.5 Environmental Rights and the Nile Basin**

Environmental problems in connection with the utilization of rivers are prevalent in most river basis of the world such as the Amazon River Basin where the construction of dams and reservoirs are destroying the rain forests, the Aral sea is dying as the result of irresponsible drawing of river water from Amu Daray and Syr Darya, which drain into the lake.<sup>286</sup> Until 1980's the River Rhine was subject to pollution coming from industrial waste.<sup>287</sup> Currently, the problem of pollution in the River Rhine was significantly reduced and solved due to the efforts made by riparians.

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<sup>284</sup> n 187 above.

<sup>285</sup> n 188 above.

<sup>286</sup> H Saeijs & M Berkel 'The Global Water Crisis: The Major Issue of the Twenty-first Century and Explosive problem' in E H.P Brans, et al (eds) *The Scarcity of Water* (1997) 9-11.

<sup>287</sup> A Kiss 'Legal Procedures Applicable to Interstate Conflicts on Water Scarcity: The Gabcikovo Case' in Brans et al (n 4 above) 63.

The Nile River Basin also faces enormous problems related to the environment.<sup>288</sup> In general there are land and water degradations, biodiversity loss and natural and man made disasters.<sup>289</sup> Land degradations include deforestation, erosion, river bank and shoreline degradation and loss of soil fertility.<sup>290</sup> The water is at risk as the result of siltation,<sup>291</sup> wetland destruction, nutrient loads, urban and rural wastes and diseases.<sup>292</sup> The birds, fishes, large animal species, exotic and weed species and domesticated plant species are lost.<sup>293</sup> There are recurrent floods and droughts caused by both man-made and natural causes.<sup>294</sup> The massive environmental degradations are caused by, *inter alia*, lack of adequate conservation mechanisms in the riparian countries and the construction of the Aswan Dam without adequate consideration of the long term impact on the environment.<sup>295</sup>

From the ongoing discussion it can be inferred that currently, the riparians that do not benefit from the Nile River wish to utilize the river for various economic activities such as irrigation and hydroelectric power generation. Building dams and reservoirs can be one of the mechanisms to pursue their interest.<sup>296</sup> However, dams and reservoirs have an adverse impact on the environment.<sup>297</sup> It is an undeniable fact that building a dam is crucial to fulfil the growing need for food, energy, development as the result of population growth and to enhance the quantity and availability of fresh water.<sup>298</sup> However, building a dam simply is not enough to bring about sustainable development and achieve food security. It should be built to higher standards, which is supported by appropriate planning that considers modern mechanism of conservation, with due regard to the local people and their environment.<sup>299</sup>

Moreover, as stipulated in the regional and international human rights instruments, every state that undertook to uphold the principle of human rights is duty bound to respect the environmental rights of its citizens and protect them from any harm that may be caused by environmental degradations as enshrined.

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<sup>288</sup> M El-Fadel (n 53 above) 116.

<sup>289</sup> As above.

<sup>290</sup> As above.

<sup>291</sup> Sand, mud, soil etc, which is carried in water and then settle at the bed in a river.

<sup>292</sup> M El-Fadel (n 53 above)116.

<sup>293</sup> As above.

<sup>294</sup> As above.

<sup>295</sup> M El-Fadel (n 53 above) 116.

<sup>296</sup> H Saeijs & M Berkel 'The Global Water Crisis: The Major Issue of the Twenty-first Century and Explosive problem' in Brans, et al (n 286 above) 9.

<sup>297</sup> As above.

<sup>298</sup> As above.

<sup>299</sup> n 3 above.

## **4.6 Conclusion**

Considering the issue of trans-boundary rivers from the people's rights perspective is advantageous in bringing about consensus among the conflicting interests of states. A human rights approach has an advantage over other methods because it has the ability to narrow the gap between differing interests as the result of the strength in the claims, it has the ability to catch the attentions of the moral duty bearers, it is the means to bring national, regional and international issues under the same judgement, it provides a wide scope of protection and solution to various problems and it seeks the solutions from the people at lower levels by popular participation. A human rights approach is also a better mechanism to influence states and other involved actors to stop the massive environmental degradations as a result of various projects over trans-boundary rivers.

In general, international human rights norms and principles supports an equitable and fair use of the waters of trans-boundary rivers by giving due consideration to the environment. Therefore, employing human rights principles and norms together with other negotiation tools would assist in reaching a consensus on the water use of trans-boundary rivers, enhance the protection of the environment and brings about sustainable development.



## **Chapter 5: Conclusions and Recommendations**

### **5.1 Conclusions**

This study has noted that there are disputes over the use of a shared river by taking the Nile basin as a case study. The conflict arises because of the scarce nature of the resource, the entire dependence of one or more riparian on the river, the desire of other riparians to be dependent on the resource and the lack of agreement on the use of water. In the study, the historical background of water use in the Nile Basin and its contribution to the current conflicts are considered. The failure of the efforts made to achieve cooperation is established by considering the negotiation regimes and organizations that were meant for facilitating basin-wide cooperation and agreement on water use. The experience of other countries in solving water use conflicts over trans-boundary rivers were briefly considered focusing on the Jordan River Basin, which primarily raises water use issues among Israel, Jordan and the Palestine.

This work examined various international and regional human rights instruments that are relevant to water use of trans-boundary rivers. Special emphasis was given to the rights to water and the environment. In addition, some international principles and laws that govern the water use of trans-boundary rivers were discussed.

The study reveals that when countries try to solve the problems related to water use, they employ various means including diplomacy, negotiation, political influence, arbitration and judicial settlements, however, these efforts fail to consider the rights and best interests of the people. Human rights of the people that live in the basin are not tabled during negotiations. The issues of environmental rights are given little focus. In the context of the Nile, the agreements made on the river are not compatible with international human rights norms and principles.

Finally, the study justified why human rights norms and principles should be used to resolve the conflicting interests of riparians over the use of trans-boundary rivers by specifically referring to the Nile River.

## 5.2 Recommendations

Despite all the efforts made to resolve the problems and bring about consensus on water use among riparians, the disputes still persist. It seems that the solution is very difficult to achieve, because the efforts were made a long time ago and there is no concrete agreement on the use of water that can be cited. Hence, there should be a paradigm shift in the methods that have been employed by the states and other actors.

In light of the above statement, if the following recommendations are effectively utilized then they can assist in bringing about agreement in the water use of the Nile and other rivers basins that have similar problems.

Trans-boundary rivers water use issues are highly politicised matters. Powerful states tend to influence negotiations using their economic, political and other influences. The political influence of Israel and Egypt are good example of such influence in their respective Basins. However, a human rights approach supports equitable and fair use of shared water resources, which gives an opportunity for weaker states to benefit from the shared resources.

Human rights norms and principles must be one part of the negotiation regimes. As described in the previous chapter the strength of human rights claims can assist in convincing the riparians to not only consider the political aspect of the problem, but also the societal benefits of reaching on an agreement. It also helps to see the issues under a single judgment rather than considering other factors like strategic advantage, bargaining power, economic strength and political influence. In addition, human rights provide a wider scope of protection, which results in a dynamic solution within the changing situation and problems such as environmental issues. Finally, human rights claims encourage an activism in the area, which facilitates the achievement of a solution in a shorter time. The issue of activism also raises the involvement of CSOs in trans-boundary river issues. CSOs played a paramount role in the world in bringing various complicated issues to lower levels *viz* farmers, fishers, community-based organizations and the people at large and achieve solutions. The people who own the river basins play critical roles in the success of any international agreement on such rivers, and thus inter-state negotiations should also include stakeholders beyond the national governments. The NBI started the work of involving CSOs and other stakeholders in the Nile issues. This effort made by NBI should be promoted and improved in the future and using human rights norms and principles play a major role in achieving the same because CSOs give more attention to human rights related issues.

Therefore, using the ample knowledge and experiences of such organizations will assist in achieving such end and an agreement on water use issue in the Nile and elsewhere.

Moreover, the existing water agreement on the Nile should be revised to include human rights norms and principles. These norms are also acceptable in international laws governing the use of trans-boundary watercourses. Further, organizations like the NBI must consider using these higher norms in planning and implementation of projects. Human rights principles and norms should also be assimilated in the work of policy makers, legislators and other professionals at national and regional levels, concerned with the issues of the Nile River. This will help to produce a comprehensive document that can be agreed on by all riparians and a sustainable development which incorporates the interests and rights of the people at large.

The establishment of special working groups on water use issues resulted in a commendable result in the water use negotiations over the Jordan River. This mechanism can also be adopted in the Nile water use issues and a special working group comprising of professionals such as human rights activists, international jurists, engineers, economists, policy makers and other relevant experts in the field, can be established to develop a fair, reasonable and equitable water use plan based on human rights principles and norms and international water laws and principles.

In addition, there should be a mechanism to enhance the existing amount of water by using various methods such as better irrigation techniques, methods that minimize the wastage of water and efficient and effective water planning systems. In such respect the methods employed by Israel to achieve efficiency in irrigated agriculture is a good example. These methods should also be accompanied by adequate techniques for environmental protection. A well established experience can be taken from the River Rhine, where efficient, effective and organized methods employed by the riparians resulted in a better protection and management of the environment.

**WORD COUNT-17987**

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