

Freedom Onuoha

# The State and Water Conflicts in Africa

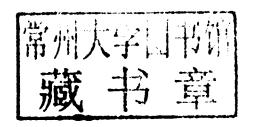
A Focus on Lake Chad (1960 - 2006)



# Freedom Onuoha

# The State and Water Conflicts in Africa

A Focus on Lake Chad (1960 - 2006)



LAP LAMBERT Academic Publishing

# Impressum/Imprint (nur für Deutschland/ only for Germany)

Bibliografische Information der Deutschen Nationalbibliothek: Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.d-nb.de abrufbar.

Alle in diesem Buch genannten Marken und Produktnamen unterliegen warenzeichen-, markenoder patentrechtlichem Schutz bzw. sind Warenzeichen oder eingetragene Warenzeichen der
jeweiligen Inhaber. Die Wiedergabe von Marken, Produktnamen, Gebrauchsnamen,
Handelsnamen, Warenbezeichnungen u.s.w. in diesem Werk berechtigt auch ohne besondere
Kennzeichnung nicht zu der Annahme, dass solche Namen im Sinne der Warenzeichen- und
Markenschutzgesetzgebung als frei zu betrachten wären und daher von jedermann benutzt
werden dürften.

Coverbild: www.ingimage.com

Verlag: LAP LAMBERT Academic Publishing AG & Co. KG Dudweiler Landstr. 99, 66123 Saarbrücken, Deutschland Telefon +49 681 3720-310, Telefax +49 681 3720-3109

Email: info@lap-publishing.com

Herstellung in Deutschland: Schaltungsdienst Lange o.H.G., Berlin Books on Demand GmbH, Norderstedt Reha GmbH, Saarbrücken Amazon Distribution GmbH, Leipzig

ISBN: 978-3-8383-8908-0

# Imprint (only for USA, GB)

Bibliographic information published by the Deutsche Nationalbibliothek: The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at http://dnb.d-nb.de.

Any brand names and product names mentioned in this book are subject to trademark, brand or patent protection and are trademarks or registered trademarks of their respective holders. The use of brand names, product names, common names, trade names, product descriptions etc. even without a particular marking in this works is in no way to be construed to mean that such names may be regarded as unrestricted in respect of trademark and brand protection legislation and could thus be used by anyone.

Cover image: www.ingimage.com

Publisher: LAP LAMBERT Academic Publishing AG & Co. KG Dudweiler Landstr. 99, 66123 Saarbrücken, Germany Phone +49 681 3720-310, Fax +49 681 3720-3109

Email: info@lap-publishing.com

Printed in the U.S.A.

Printed in the U.K. by (see last page)

ISBN: 978-3-8383-8908-0

Copyright © 2010 by the author and LAP LAMBERT Academic Publishing AG & Co. KG and licensors
All rights reserved. Saarbrücken 2010

# Freedom Onuoha

# The State and Water Conflicts in Africa

A Focus on Lake Chad (1960 - 2006)

**LAP LAMBERT Academic Publishing** 

# DEDICATION

This work is dedicated to my loving wife, Onuoha, Amarachi Rita.

#### ACKNOWLEDGEMENT

While I take full responsibility for weaknesses or strengths evident in this work, I would nonetheless like to express my profound indebtedness to individuals whose contributions made this work a lot easier. I am very thankful of the Almighty God for his grace and blessings. My parent, Mr. and Mrs. Eze I. N. Onuoha, deserve a special place in my heart, especially for their invaluable financial and moral supports which served as the pillars of my academic pursuit.

My brothers, Lofty and Clever as well as our only sister, Uzoamaka, proved very helpful when it comes to encouragement for me to continue my postgraduate programme even when my financial circumstances does not warrant such a herculean project.

This acknowledgment will be found wanting if my friends Ezirim Gerald and Attah Ikechukwu, *Nwanne onyene*, were not given their rightful places. Attah Ikechukuu, beyond routine friendly assistance, proved exceptionally helpful in printing this work. Mr Ezirim Gerald displayed an amazing capacity to bridge the distance separating me from my workplace at Abuja and University of Nigeria Nsukka (UNN) where I was doing my postgraduate programme. A number of other people remain to be thanked: Kevin Ezema, Ogbonna Omenuko, and Amaechi Onuzurike provided the necessary back up at Nsukka which I needed while I was trying to settle down at Abuja as a result of my relocation for the new job.

Next in the list of my creditors are my colleagues in the African Centre for Strategic Research and Studies (ACSRS), National Defence College, Abuja, as well as the staffs, particularly librarians of the following institutions: the Institute for Peace and Conflict Resolutions (Abuja), United Nations Office (Abuja), National Boundary

Commission (Abuja), Lake Chad River Development Authority (Maiduguri), and National Defence College Library (Abuja) who made it easier for me to access their rich library materials and internet services.

Finally, I will remain eternally grateful to Prof. Okechukwu Ibeanu and Prof Miriam Ikejiani-Clark for their academic support. While Prof. Ibeanu catalyzed my interest in academics as a life career, Prof Ikejiani, as my Supervisor, contributed enormously towards the successful completion of my MSc programme. Her ardent supervision and constructive suggestions contributed to the success of this work. She carefully proofread and perceptively proffered some far-reaching suggestions on every part of the research work, from the title page to the bibliography.

# TABLE OF CONTENT

Dedic	ation	1
Ackno	owledgement	3
Table	of Content.	5
List o	f Abbreviations	7
List of Tables and Figures		
CHA	PTER ONE: BACKGROUND TO THE STUDY	
1.1	Introduction	9
1.2	Statement of the Problem	12
1.3	Objective of Study	14
1.4	Significance of Study	15
1.5	Scope of Study	16
1.6	Literature Review	17
1.7	Theoretical Framework	30
1.8	Hypotheses	33
1.9	Methodology	34
1.10	Limitations of the Study	35
CHAI	PTER TWO: THE LAKE CHAD, ITS ENVIRONMENT AND SOCI	0
ECO	NOMIC IMPORTANCE	
2.1	Lake Chad; Physical, Political and Institutional Environment	37
2.2	Resource Potentials and Socio-Economic Livelihoods in the Lake Chad Area.	
23	Natural and Anthropogenic Factors affecting the Lake Chad	44

CHAPTER THREE: THE ENVIRONMENT OF WATER CONFLICT IN THE				
LAKE CHAD				
3.1	Understanding the Role of Water Scarcity in Interstate Conflicts in Lake Chad	54		
3.2	International Boundaries and the Incidence of Water Conflicts in Lake Chad	59		
3.3	Weak Institutional and Regulatory Mechanisms and Conflicts in Lake Chad	69		
CHAPTER FOUR: STRATEGIES FOR CONFLICT MANAGEMENT AND				
RESOLUTION IN THE LAKE CHAD BASIN				
4.1	Potentials for Cooperation in the Lake Chad Basin	71		
4.2	Strengthening of the LCBC to enhance Cooperation in the Basin	74		
4.3	Towards an Integrated Water Management Framework for the Lake Chad Basin	78		
CHAPTER FIVE; SUMMARY AND CONCLUSION				
5.1	Summary and Findings.	84		
5.2	Conclusion	82		
End	Endnotes			
Bibli	Bibliography9			

# LIST OF ABBREVIATIONS

AEO Annual Energy Outlook

**CBOs** 

BBC British Broadcasting Corporation

BICC Bonn International Centre Conversion

CSOs Civil Society Organizations

DEPI (UNEP) Division of Environment Policy Implementation

Community Based Organizations

DEWA Division of Early Warning and Assessment

DFID UK Department for International Development

EIA Environmental Impact Assessment
FAO Food and Agricultural Organization

FBOs Faith Based Organizations

GIWA Global International Waters Assessment
IRIN Integrated Regional Information Network

IUCN Integrated Union for the Conservation of Nature

LCBC Lake Chad Basin Commission

UNDP United Nations Development Programme
UNEP United Nations Environmental Programme

UNESCO United Nations education, Scientific and Cultural Organization

USAID United Stages Agency for International Development

WWF World Wildlife Fund

# LIST OF FIGURES AND TABLES

- Figure 1: The Hydrological and Conventional Basin of the Lake Chad
- Figure 2: Satellite Image of the Lake Chad in October 2001
- Figure 3: Direction of the Disappearance of Lake Chad
- Figure 4: Migration Pattern in Response to the Contraction of Lake Chad
- Figure 5: An Integrated Framework for Water Management in Lake Chad Basin
- Table 1: Population (in millions) of the Four Riparian States (1960 -2010)
- Table 2: Population growth in West Africa Region: 1975-1997, with Projection for the Year 2025
- Table 3: Stakeholders and their Interests in Water Resources Management

### CHAPTER ONE

#### BACKGROUND OF THE STUDY

### 1.1 Introduction

Water is perhaps the most strategic and precious resource on earth, critical to the survival of nations and their people. Indeed, it is not only the central resource upon which all biological life is predicated, but also of paramount significance for the societal metabolism<sup>1</sup>. Unlike oil and most other strategic resources, freshwater has no substitute in most of its uses. It is essential for growing food, manufacturing goods, safeguarding health and sustaining marine life. It is strategic to life, to social development, industrial production and to economic progress. It is needed for drinking and for sanitation; for agriculture and, via fishing, as a source of protein. It is a vehicle for transportation and communication among nations, a means of generating electricity, embellishes the environment and offers an outlet for recreation and tourism. It has been the wellspring of religion and culture<sup>2</sup>.

Water has, so far, not been treated as a scarce and valuable resource but to a great extent as a free gift of nature. Until recently, it seldom comes to mind that water has economic value which actually is overwhelming its social value. Its political and strategic value equally attracts marginal attention from scholars until recently. However a renewable but not infinite resource, freshwater is becoming increasingly scarce and a source of tension and conflicts within and between nations.

According to some observers, water resources have become strategic with supply limited in forms of quality and quantity. Since 1950, the renewable supply per person has

fallen by 58 per cent as world population has swelled from 2.5 billion to 6 billion in 1999. Hence, as the volume of freshwater supply diminishes, the premium placed on water resources suggests that providing for water needs and demands will never be free from politics<sup>3</sup>.

As demand for water hits the limit of finite supply, potential conflicts are brewing between nations that share transboundary freshwater course. Postal and Wolf<sup>4</sup> have observed that more than 50 countries on five continents might soon be spiraling towards disputes unless they move quickly to strike agreements on how to share the rivers that flow across international boundaries.

This unfolding potential for water conflicts have been attributed to several factors namely, the gradual diminishing of freshwater supply as a result of climatic impact; the internationalization of basin (from 224 international basins in 1978 to 263 basins in 2000); and the increasing per capita consumption of water as a result of population surge. This scarcity, some writers argue will translate into growing tension for water resources between cities and farms, between neighbouring states and provinces, and at times between and among nations that share transboundary watercourses. Consequently, national water scarcity could trigger off existing tensions between nations and lead to flare-ups of simmering international conflicts.

As water is becoming scarcer, other natural resources that depend on it are also experiencing decline in quantity and quality. Thus, the potential for water-related conflicts is increasing, particularly around internationally shared rivers and lakes. In the wake of these conflicts, academic interest in water resources as actual or potential sources of conflict has largely concentrated on the Middle East and North Africa. Arguably, these

regions are marked by combustible hydro-politics over such shared water resources as the Jordan, Tigris-Euphrates and Nile Rivers. In terms of such global hydro-politics, Sub-Saharan Africa has essentially remained at the margin of international concern.

Incidentally, of the known 263 international basins in the world, Africa alone accounts for 63 international river basins. In Africa, 60 per cent of the continent is covered by transboundary river basins. Every African country has at least one shared river. There are at least 34 rivers shared by two countries, and 28 shared by three or more countries. Ten of the international river basins (Congo, Limpopo, Niger, Nile Ogouve Okoavango, Orange, Senegae, Volta, and Zambezi) are shared by four or more African countries. According to Vermass<sup>5</sup>, more than two third of Africa's 60 river basin are shared by more than one country further fuelling potential clashes. It has been predicted that the main conflicts in Africa during the next 25 years could be over the most precious of commodities – water, as countries fight for access to scarce resources<sup>6</sup>. The potential for conflicts resulting from scarce water resources are likely in areas where rivers and lakes are shared by more than one country.

For many reasons, these water conflicts risks are evident in West Africa. First, West African countries are highly water interdependent; with the exception of the Cape Verde Island, each of the West African countries shares at least one of the regions 25 transboundary river basins. The Niger River basin is shared by 11 countries, the Senegal River by 8 countries, the Volta River by 6 countries and the Lake Chad by 4 countries. Second, climatic change and variability have resulted in severe decline in average annual rainfall and discharge in major river systems. Third, many countries have plans of increasing investment in large water infrastructure like dam with the anticipated result of

not only increasing water withdrawals but also radically changing natural allocation patterns between riparian countries<sup>7</sup>.

As available water in rivers and lakes diminish in quantity and degrade in quality, the supply of freshwater and its associated resources have also significantly decreased. The Nile delta and Lake Chad have been identified as the hardest hit in terms of this dramatic shrinkage. Thus, when countries rely on the same source of water to support their environments, sustain livelihoods and generate growth, transboundary water becomes not only a link between their citizens and their environments, but a source of friction in their international relations. For instance, if one state restricts availability or access of another or its nationals to such critical resource, this may led to increase competition among various users leading to tensions and conflicts among users and between riparian states that share such transboundary watercourses.

In the light of this background, this study attempts to examine the problems of diminishing transboundary water resources and the pervasiveness of conflicts over Lake Chad.

#### 1.2 Statement of Problem

Until recently, water resources as key elements in intrastate and interstate conflicts have scarcely received scholarly attention. With the diminution of water resources and increasing competition for scarce resources, scholars have begun to pay attention on the flashpoints of conflicts over water and its associated resources around the globe. Case studies exploring international water relations often focus on high-profile regions such as the Middle East and Asia. The role of water and its associated resources in the incidences of conflicts in Sub Saharan Africa has remained on the margin of

scholarly concerns, and where they exist at all, they focus on Southern and Northern Africa. Yet, actual and potentials water-related conflicts abound in West (Central) Africa where rivers and lakes are ghastly disappearing.

Satellite photographs taken by the UNEP<sup>8</sup> shows than more than 600 lakes in Africa have shrunk dramatically over the past decades. These lakes contain more aquatic biodiversity than any other lakes in the world. They are sources of scarce natural resources such as fisheries, water birds, shrimps, freshwater for consumption, and irrigation, and other marine resources that sustain the livelihood of the local inhabitants. Although these lakes hold about 30,000 cubic kilometers of water and yield 1.4 million tones of freshwater fish each year, they are among the most heavily exploited of all the continent's freshwater resources.<sup>9</sup>

In this light, Lake Chad in West Africa is of particular interest. The lake is shared by Cameroon, Chad, Niger, and Nigeria as the riparian states, which along with the Central African Republic (CAR) make up the Lake Chad Basin Commission (LCBC). Its basin extends over 967,000 km<sup>2</sup> and is home to about 37 million people. The size of the lake has continued to diminish over the past 40 years. According to Coe and Foley<sup>10</sup>, the size of the Lake Chad has gone from 25,000 km<sup>2</sup> to less than 1,500 km<sup>2</sup> between 1966 and 1997. It has fluctuated greatly during this period shrinking by up to 80 per cent in 1985, but reaching 1,900 km<sup>2</sup> once more in 2007.

As the lake shrinks and available supply of water resources diminishes, competition for water resources among the various users in the basin has significantly increased, leading to pockets of conflicts and clashes among the various users occasionally degenerating into interstate conflicts. At one point, the conflict is between

nationals of one state and security agents of another. At another point, the conflict is between riparians. In some occasions, the conflict is between and among pastoralists, fishermen, and farmers of different nationalities.

In spite of available academic work done on the role of scarcity of water resources in interstate conflicts in Africa, there is a serious dearth of scholarly investigation into the impact of water shortages on the emergence of social conflict in Lake Chad area. Yet, such conflicts manifest in the area and the potentials for future conflicts over the scarce water resources of the lake are anticipated to worsen in the near future. Against this backdrop, this study interrogates the following questions:

- Is there any relationship between natural and anthropogenic factors and the diminishing of the water resources of Lake Chad?
- 2. Is scarcity of water resources a necessary and sufficient factor for inter-state conflicts over Lake Chad; if not what are the critical intervening explanatory variables?
- 3. What strategies can most effectively and efficiently be used in managing the inter-state conflicts over water resources of Lake Chad?

# 1.3 Objective of Study

The main objective of the study is to examine the nature and dynamics of conflicts and cooperation over the water resources of the Lake Chad, particularly between riparian states. However, the specific objectives of the study are as follows:

a. To examine, if any, the relationship between natural and anthropogenic factors and the diminishing of the water resources of Lake Chad?