

**THE IMPACT OF SHARED NATURAL RESOURCES ON EAST AFRICA  
COMMUNITY. A CASE OF LAKE VICTORIA**

**BY**

**PETER KAMALINGIN BHATIA LABU**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS OF THE DEGREE OF MASTER OF ARTS IN INTERNATIONAL  
STUDIES TO THE INSTITUTE OF DIPLOMACY AND INTERNATIONAL STUDIES  
(IDIS), UNIVERSITY OF NAIROBI**

University of NAIROBI Library

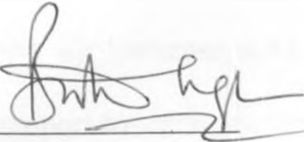


0389480 5

**NOVEMBER, 2012**

## Declaration

This research project is my original work and has not been presented to any other institution or university.

Signed 

Date 13/11/12

**Peter Kamalingin Bhatia Labu**

**R50/70608/2007**

This research project has been submitted for examination with our approval as the university supervisors.

Sign 

Date 21<sup>st</sup> NOV. 2012

**Dr Anita Kiamba**

**Institute of Diplomacy and International Studies (IDIS)**

## **Acknowledgement**

From the initial stages to the final draft of this project for the partial fulfillment of the Master of Arts in International Studies to the Institute of Diplomacy and International Studies (IDIS), I owe an immense debt of gratitude to my supervisor, Dr Anita Kiamba for her invaluable support towards this project. Her constructive criticism, careful guidance and timely have been very instrumental to the completion of this project in time.

I would also like to thank the individuals and agencies for availing the data I so much needed to complete this project within the time allocated to me. I must thank my wife Patricia for her supportive role and soft encouragement throughout the assignment. The IDIS class of 2007-2009 inspired me in different ways and shaped my interest in this study area. My brother Charles Kwemoi tirelessly reminded me of the urgency of this work. Finally, but most importantly, I sincerely thank the Almighty God for giving me the strength and providing means to undertake this study. To each of the above, I extend my deepest appreciation.

## **Dedication**

This research paper is lovingly dedicated to my parents Mzee Stanley Salimo Kamaligin and Mama Margaret both of whom have been my constant source of inspiration. They have given me the drive and discipline to tackle any task with enthusiasm, passion and patience. Without their love and support this project would not have been made possible.

## Abstract

The sources of conflict in Africa reflect its diversity and complexity. Some sources of conflict are purely internal; some reflect the dynamics of a particular sub-region, while others have important international dimension. Africa is unique among the developing world regions that all continental countries in Africa share one or more river or lake basins with their neighbours and all major river and lake basins in Africa are shared by two or more countries. The continent has over 80 major transboundary river and lake basins, and an equal number of ground water basins, some of which are the largest in the world in terms of their geographical extent

The research design used in this study was descriptive survey method. The study makes use of the random sampling method which is suitable in this context. Primary data and secondary data collection method was applied in this study. Data was collected via the use of questionnaires as an interview guide.

The study concludes important role that the Lake Victoria basin plays in the economies of Kenya, Tanzania, and Uganda, is significant in maintaining food and livelihood security. The impact of shared natural resource on east Africa community: a case of Lake Victoria. As the violence escalates in the sparsely populated pastoral areas; warfare and raiding have constant features in the lives of most pastoral peoples, but automatic weapons have revolutionized the intensity and deadlines of conflicts quite altered their nature

## Table of Content

Declaration.....	ii
Acknowledgement .....	iii
Dedication.....	iv
Abstract.....	v
List of Abbreviation.....	ix
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION .....</b>	<b>1</b>
1.1 Background of the study.....	1
1.2 Statement of the Problem.....	4
1.3 Objective of the Study .....	5
1.4 Literature review.....	6
1.4.1 Natural Resources Conflict.....	6
1.4.2 East African Community .....	7
1.5 Theoretical framework.....	16
1.6 Justification.....	18
1.6 Hypotheses.....	19
1.7 Methodology.....	19
1.8 Chapter Outline.....	21
<b>CHAPTER TWO.....</b>	<b>23</b>
<b>AN OVERVIEW OF NATURAL RESOURCES BASED CONFLICT.....</b>	<b>23</b>
1.1 Introduction.....	23
1.2 Natural Resources Conflict in Africa .....	23
1.3 International Legal Perspectives on shared water resources. ....	25
1.4 Settlements of Disputes .....	27
1.5 The Link between Natural Resources and Conflict.....	28
1.6 Poverty-environment linkages .....	29
1.7 Conclusion .....	32

<b>CHAPTER THREE</b> .....	<b>34</b>
<b>NATURAL MANAGEMENT IN EAST AFRICAN COMMUNITY (EAC) .....</b>	<b>34</b>
.1 Overview of East African Community (EAC) .....	34
.2 Legal Framework of EAC .....	39
.3 Institutional Structure.....	43
.4 Management of natural resource conflict in East Africa .....	46
<b>CHAPTER FOUR .....</b>	<b>50</b>
<b>REGIONAL INTERGRATION IN LAKE VICTORIA BASIN .....</b>	<b>50</b>
.1: Introduction .....	50
.2 Natural Resources Conflict Management in Lake Victoria Region .....	51
.3: Regional Integration as the Strengthening tool for conflict resolution in the Region.....	52
.4 Social Integration.....	53
4.5 Trade Integration.....	55
.6 Eco-Political Dimensions of Integration .....	60
.7 Challenges for Regional Integration.....	64
.8 Conclusion.....	65
<b>CHAPTER FIVE .....</b>	<b>66</b>
<b>AN ANALYSIS OF LAKE VICTORIA IN MANAGEMENT INTERVENTION .....</b>	<b>66</b>
.1 Introduction.....	66
.1.1. The Lake Victoria Region .....	69
.2 East African Community (EAC) .....	73
.3 Lake Victoria Basin Commission (LVBC).....	74
5.5 Impact of shared resource on conflict of East Africa community .....	77
5.5.1 Trade in the Lake Victoria Ports and Basin .....	81
5.5.2 Economic Importance of Lake Victoria.....	82
5.5.3 Trade Taking Place in Lake Victoria Basin .....	83
5.5.4 Trade in Kenya.....	84
5.5.5 Uganda’s Trade Using Lake Victoria .....	88
6 Policies, Laws, Regulations and Legal Frameworks under Lake Victoria.....	89

5.7 Risks That May Arise Due To Implementing Interventions Policies, Laws, Regulations and  
 Legal Frameworks .....93

5.8 Sustainability .....96

5.9 Conclusion .....97

**CHAPTER SIX .....99**

**CONCLUSION AND RECOMMENDATIONS.....99**

6.1 Recommendations.....105

Bibliography .....108



### List of Abbreviation

AGOA	African Growth and Opportunity Act
AU	African Union
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
GSP	Generalized System of Preferences
IAGAD	Inter Governmental Authority on Development
IOR-ARC	Indian Ocean Rim-Association for Regional Cooperation
LDCs	Least Developed Countries
NBI	Nile Basin Initiative
NRM	National Resistance Movement
RIFF	Regional Integration Facilitation Forum
SADC	Southern African Development Community
UEB	Uganda Electricity Board

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the study

Lake Victoria is considered as one of the most important shared natural resources by Kenya, Uganda and Tanzania. <sup>1</sup>It covers an area of about 68,800sq km and is shared by Kenya, Uganda and Tanzania. The Lake is a major source of water in the region. It receives in approximation eighty two percent of the water from precipitation directly falling on the lake surface with stream-flow and basin run off contributing to the water coverage. The vegetation over around the lake basin is comprised of savannah and wetlands<sup>2</sup>. Its biodiversity and ecosystem provide a wide range of species of aquatic life, plant and forest cover. Beyond the symbolic significance, the Lake is a resource of great socio-economic potential. Covering an area of 69,000 sq. km, it is the second largest fresh water body in the world after Lake Superior (Great Lakes of North America). It is also the source of the Nile. The Lake Victoria catchment area covers 193,000 sq. km in Uganda, Kenya and Tanzania as well as parts of Rwanda and Burundi<sup>3</sup>.

The basin has a population of approximately thirty three million people who directly exploit these natural resources to sustain their livelihoods. Activities such as agriculture and livestock production, hydro-power generation, forestry, fisheries, wildlife and tourism, and

---

Worthington & E. B. Worthington (1933). *The inland waters of Africa: the result of two expeditions to the Great Lakes of Kenya and Uganda, with accounts of their biology, native tribes and development*. London: MacMillan.

Geoffrey Fryer & T. D. Iles (1972). *The Cichlid Fishes of the Great Lakes of Africa*. Edinburgh: Oliver Boyd.

Beauchamp (1954). Fishery research in the lakes of East Africa. *East African Agricultural Journal* 19 (1): 203-207.

mining constitute major sources of income and employment to the population within the basin. These activities are supported by well laid out transport and communication network<sup>4</sup>.

The Lake region is characterized by poverty, political instability, rapid population growth and environmental degradation. People living around the Lake are some of the poorest despite the fact that the lake resources around them benefit many countries through fish exportation. There are many factors known and unknown that can cause water conflicts. For example, a conflict over land as in the Mau forest of Kenya and the resultant environmental degradation directly affect the amount and quality of flow into the lake. All these activities impinge on the lake resources in one way or another. For instance, excessive fishing has led to the depletion of fish stocks<sup>5</sup>. These trends, however, are only symptoms of broader social, economic and developmental dislocations. Over-fishing and the use of damaging or illegal fishing gear is only part a reflection of the failure of centralized management strategies on the Lake. The trends described above represent a grave threat to the sustainability of Lake Victoria's fisheries. The deteriorating security situation on the lake poses serious threats to the fisheries, fishermen, fishing communities and the lake environment as a whole.

Conflict of international shared water resources, which is highly political in its nature, is presently the subject of a considerable international debate, 25 September 2012 – The United Nations should consider the views of regional organizations when it comes to resolving conflicts, Zanzibar's President, Hifikepunye Pohamba, told the General Assembly's high-level debate, commending the role played by African organizations in settling disputes on the continent. In

---

Worthington & E. B. Worthington (1933). *The inland waters of Africa: the result of two expeditions to the Great Lakes of Kenya and Uganda, with accounts of their biology, native tribes and development*. London: MacMillan.

Chiwa, and G. Tungu. (2005). *Nutrient input into Lake Victoria from atmosphere deposition: the case of phosphorus*. Pg 703-702. In LVEMP 2005, knowledge and experience gained from managing the Lake Victoria ecosystem EAC/WB/GEF, 725p.

February 2011, the UN General Assembly decided to proclaim 2013 International Year of Water Cooperation. The Nile basin countries recognised the need to take concrete steps to realize the development potential of the Nile. The Nile Basin riparian countries agreed in 1999 to establish the Nile Basin Initiative (NBI) to provide an agreed basin-wide framework for the utilisation of the Nile River Basin resources to fight poverty and promote socio-economic development in the Nile countries.<sup>6</sup>

Studies in environmental security have identified rivers and fresh water scarcity as being capable of invoking social tension to cause international conflicts<sup>7</sup>. The Eastern Africa Region is currently facing conflicts like the Darfur conflict in Sudan, Tana Delta in Kenya, and civil war in Democratic Republic of Congo, many of which have been attributed to scarcity of natural resources. In terms of shared waterways, the three countries (Kenya, Uganda and Tanzania) share Lake Victoria which provides a huge water mass for inland transportation. Besides its socio-economic uses, Lake Victoria is a symbol of the strong unity that the three EAC economies are striving to achieve. With increased economic integration, it is anticipated that Lake Victoria will handle higher volumes of cargo. The Lake also possesses potential for investment in fishing<sup>8</sup>, tourism, water and energy and is therefore of crucial importance to the region.

---

Carlson, Ingvar 1999. *National Sovereignty and International Watercourses*. High level Panel Debate at the 9th Stockholm Water Symposium, SIWI. Stockholm. Mr. Carlson was Prime Minister of Sweden during the period between 1986 and 1995.

Lipiatou, E., Hecky, R.E., Eisenreich, S.J., Lockhart, L., and Wilkison, P. 1996. Recent Ecosystem changes in Lake Victoria reflected in sedimentary natural rocks and anthropogenic organic compounds. Johnson, T.C. and Odada, E. [eds]. *The limnology, climatology and paleoclimatology of the East African lakes*. Gordon Uganda. *J. Fish Biol.*37:55-63.

Fishing is an important resource of Lake Victoria. Annual earnings from fishing are estimated at US \$ 10 million per year (EAC official website [www.eac.int](http://www.eac.int)).

## 2 Statement of the Problem

The critical and multi-faceted role of the Lake as an important economic resource, the source of much of the region's water supplies, and the ultimate sink for the increasing volumes of waste and erosion material that are generated in the catchments, has created a close linkage between environmental conditions in the Lake basin and issues of human poverty and socio-economic development in the region. In recognition of this linkage, the East African Community<sup>9</sup> (EAC) has taken steps to establish the necessary framework to reverse the deteriorating conditions in the Lake, promote a more sustainable approach to the management and development of the resources in the basin and enhance the socio-economic development of the people living in the Lake Victoria Region<sup>10</sup>.

Roberts argues that the world's freshwater resources are under increasing pressure. Growth in population, increased economic activity and improved standards of living lead to increased competition for and conflicts over the limited fresh-water resource.<sup>11</sup> A combination of social inequity, economic marginalization and lack of poverty alleviation programmes also force people living in extreme poverty to overexploit soil and forestry resources, which often results in negative impacts on water resources. Lack of pollution control measures further degrades water sources<sup>12</sup> increasing potential renewable fresh water resources conflict.

Kenya, Uganda and Tanzania has experienced increased pressure on available water resources. In recent decades, the degradation of aquatic resource base has intensified the struggle for water. This is because of increased human activities including: deforestation, soil erosion,

---

EAC (2004); The Vision and Strategy Framework for the Management and Development of the Lake Victoria Basin

East African Community (2003), Protocol on Sustainable Development of the Lake Victoria Basin. Ibid., p.57.

Paul Roberts., 'Integrated Water Resource Management', (Oxford ; Oxford press, 2005), p.56

domestic and industrial pollution, among others. These are some of the factors that have contributed to the decline of water catchment capacity and led to more severe flooding and drought conditions. Coupled with the phenomenon of global warming, the unavailability of water in the Eastern African region is growing at an alarming rate. The dwindling water resource in the region, the growing population, the increased demand and uses of renewable water resources are intensifying competition, conflicts, inequalities and under-development.

For the past 30 years, Lake Victoria has been under considerable environmental pressure from a variety of interlinked human activities, including over-fishing, destructive fishing practices, pollution from human and industrial activities, siltation from the erosion of deforested watersheds and enhanced urban runoff with high sediment loads and large volumes of waste products. The sources of pollution are many, and include, untreated sewage, human and animal waste discharged into rivers and drainage channels, maritime transport waste and direct contamination of lake water by human activities on the shore line. The researcher therefore sought to identify the principle of equitable and reasonable utilization of the waters of Lake Victoria which has been the main objective of Kenya, Uganda and Tanzania.

### **3 Objective of the Study**

The principle of equitable and reasonable utilization of the waters of the Lake Victoria has been the main objective of the East African Community. Therefore the study seeks to determine the impact of shared resource on East Africa community a case of Lake Vitoria: The study will also answer the following objectives;

1. To investigate the impact of shared resource on conflict of East Africa community
2. To determine the influence of the impact of shared resource on the livelihood of Kenya, Tanzania and Uganda residents.

## 1.4 Literature review

The literature review is organized to four main themes that form the proposal and the analysis of the case study where the impact of shared resource on conflict, the influence of the impact of shared resource on domestic and health issues and international organization intervention on shared resource outcome in East Africa Community. The focus of the review is to gain theoretical information that will guide the case study. Conflict in most cases narrows down to various issues that lead to hostile attitudes between parties with varying interests whether individual, group or between countries. In east Africa for instance which has had most of its states rocked by conflict, several factors are constant and common in almost all cases as stated Adedeji.<sup>13</sup>

### 1.4.1 Natural Resources Conflict

Although the causes of conflicts are multilayered, natural resources have been observed to cause conflicts in society particularly in situations where groups compete for possession of the same resources; and where such resources are not fairly distributed or are not enough to go round. Gleick argues that competing actors interests over a finite quantity of resources lead to unavoidable conflicts, varying from mere verbal confrontation to actual armed engagement.<sup>14</sup>

Wolf states that under certain circumstances, the struggle over limited natural resources can lead to a series of arrangements beneficial for all involved parties which consequently promotes collaboration and peace building.<sup>15</sup> This argument brings out the view over the

---

<sup>13</sup> Adedeji. A.,1999. *Comprehending and mastering African conflicts, the search for sustainable peace and good governance* , London: Zed Books, ed p 23

<sup>14</sup> P.H.Gleick, *Water and Conflict I, Fresh Water Resources and International Security* (International Security 18, 1993), pp. 79 - 112.

<sup>15</sup> A.T. Wolf, *Conflict and Cooperation along International Water Ways* (Water Policy 1, 1998), pp. 251-65.

correlation between conflict and natural resources. Environmental resources especially cropland, freshwater, fisheries and forests are vital for life. Moreover, many poor people in less developed countries are directly dependent on such resources as their primary source of income and / or heat their homes, feed their families and so forth. In principle these finite resources are naturally renewable and if properly managed they should secure future well-being. But the renewal process depends on a fragile balance that is now being disturbed and will be even more seriously disrupted in the future<sup>16</sup>.

Charles-Philippe and Jean-Francois argue that demographic growth and high per capita consumption are increasing the demand for environmental resources<sup>17</sup>. Hence environmental depletion and degradation are reducing both the quantity and quality of renewable resources by the ever increasing soil erosion, desertification and salinization of freshwater and environmental pollution. In other words the resources are limited and the needs and desires are unlimited. Charles-Philippe and Jean-Francois further state that environmental scarcity is not a fatality or a curse but can be increased or reduced through social and technical ingenuity. Many less developed countries are experiencing structural market failures, intense social friction, and shortage of human and financial capital and hence environmental scarcity hampers economic productivity, spawns mass migrations and may increase conflict.

#### **1.4.2 East African Community**

In 1977, the East African Community collapsed after ten years. Causes for the collapse included demands by Kenya for more seats than Uganda and Tanzania in decision-making organs, disagreements with Ugandan dictator Idi Amin, and the disparate economic systems of

---

<sup>16</sup> P. Wallerstein, *Understanding Conflict Resolution*, (London: Sage, 2007), p. 34.

<sup>17</sup> D. Charles-Philippe and G. Jean-Francois, *Natural Resources, as Source of Conflict?* (International Journal, Vol 62, Natural Resources and Conflict, 2006/2007), pp. 5 - 17.



socialism in Tanzania and capitalism in Kenya.<sup>18</sup> The three member states lost over sixty years of co-operation and the benefits of economies of scale, though some Kenyan government officials celebrated the collapse with champagne. Each of the former member states had to embark, at great expense and at lower efficiency, upon the establishment of services and industries that had previously been provided at the Community level<sup>19</sup>.

There are multiple causes and dynamics in every conflict. Meaningful peace building and conflict resolution must start with a detailed analysis of the causes of conflict and the specific conditions of a certain country or region. Conflict mapping and analysis is the first step towards understanding and managing conflict. Peace, security and development are also inextricably interlinked with regional integration and cooperation. While regional integration can contribute to economic development, regional cooperation is prerequisite to the attainment of, as well as dependent upon, peace and security<sup>20</sup>. As neither the causes nor the consequences of violent conflict are bound by national borders, there is broad consensus that a regional approach is essential to effectively ensure global security. Regional integration organisations have proven their potential as foundations for durable peace, long-term stability, economic growth, sustainable development and democratic consolidation

Kenya, Tanzania and Uganda have had a history of co-operation dating back to the early 20th century, including the customs union between Kenya and Uganda in 1917, which the then Tanganyika joined in 1927, the East African High Commission (1948–1961), the East African Common Services Organisation (1961–1967) and the East African Community (1967–1977)<sup>21</sup>.

---

<sup>18</sup> East African trade zone off to creaky start, *Christian Science Monitor*, 9 March 2006

<sup>19</sup> EAC News (2001) issue 8 march

<sup>20</sup> P.H.Gleick, Water and Conflict I, Fresh Water Resources and International Security (*International Security* 18, 1993), pp. 79 - 112.

<sup>21</sup> EAC Secretariat (2002), *The Treaty for the Establishment of the EAC*, Arusha, EAC secretariat.

Inter-territorial co-operation between the Kenya Colony, the Uganda Protectorate and the Tanganyika Territory was first formalised in 1948 by the East African High Commission<sup>22</sup>. The dwindling water resources present another form of conflict at the household level. Gender and vulnerability assessments of Lake Victoria revealed that due to the amount of time that women take at the water sources, conflicts emerge between husbands and wives.<sup>23</sup> Women walk up to 10 km one way, daily, in search of water for domestic use. The water in rural areas is mainly obtained from shallow wells dug on dry riverbeds and most water sources are often unprotected and open to contamination.

Since 1960s, the lake environment and its natural resources have come under severe stress as a result of multiple activities arising from the human population in the basin, which has been growing at 6%, the highest growth rate in Africa<sup>24</sup>. The increasing urbanization, industrialization, poverty among the lake basin communities, coupled with poorly regulated development and lack of enforcement of existing legislation have resulted in imprudent patterns in land use practices that cause soil erosion, exploitative and non-sustainable use of fishery resources, wetland degradation, deforestation, discharge of untreated industrial and municipal solid and liquid wastes.<sup>25</sup> These continuing trends have resulted in serious environmental problems, the most obvious ones being: deterioration of water quality resulting from untreated municipal and industrial wastes; loss of biodiversity; water hyacinth infestation; change in fish biomass; inappropriate land use systems including cultivation on marginal areas, overgrazing and deforestation; encroachment of wetlands; poor sanitary conditions in lake side communities.

---

<sup>22</sup> East African trade zone off to creaky start, *Christian Science Monitor*, 9 March 2006

<sup>23</sup> Wekesa, Gladys (2010). Ministry of Water, Interview, 14 July, 201, Nairobi, Kenya.

<sup>24</sup> Lowe-McConnell R. H. (1994). "The changing ecosystem of Lake Victoria, East Africa". *Freshwater Vol. 4*, PP 76-89.

<sup>25</sup> Water - Related conflicts in the Eastern African Region. IPSTC, 23, September, 2010.

These multi-social activities and the rapid increase in populations of the riparian communities show that the Lake itself is not the source of the observed problems, rather the problems arise from human activities in the surrounding catchments.

More than half of the lake basin population is living on an income of less than 1 USD per day and relying heavily on subsistence production. There is high-level of illiteracy, inappropriate skills for production and income generation activities, and lack of socio-economic incentives to meet the challenges of management and development<sup>26</sup>.

Since 2003, a number of Kenyan fishermen have been arrested and their boats and equipment confiscated by either Tanzanian or Ugandan authorities for illegally crossing the common borders. The latest incident happened when about 400 Kenyan fishermen were kicked out of Migingo Island by Ugandan authorities<sup>27</sup>. This Island is claimed by both Uganda and Kenya. Unfortunately, many of the fishermen are not even aware of where the boundaries are until they have been arrested. This incident has exacerbated the already strained relations between the two countries. The Kenyan fishermen have appealed to their political leaders to intervene, some even threatening violence. Tensions in fishing communities at the borders should never be taken lightly given their potential to escalate into conflicts between neighbouring countries or even internationalized conflict. To the fishermen, what is important is the availability of the fishing grounds and the amount of fish they get from there. Consequently, tensions like the one in Migingo have a serious economic bearing on the region. Inadequate communication and ignorance of fisheries laws regulating the access to fishing grounds could be a major cause of conflict. The fishermen on both sides of Kenya and Uganda have disparities in

---

<sup>26</sup> EAC Secretariat (2002), *The Treaty for the Establishment of the EAC*, Arusha, EAC secretariat.

<sup>27</sup> Nyaoro, John, Director, Water Resources Management, Ministry of Water, Personal Interview, 25th June, 2010.

income. Such can lead to smuggling of fish or illegal activities in fishing which can cause conflict<sup>28</sup>.

According to Nyaoro, "fishing in Lake Victoria has known no peace in the recent past with the recurring boundary disputes on the Lake." This is threatening diplomatic ties among the three riparian states of East Africa as stated by Nyaoro<sup>29</sup>. A case in point is in August 2003 when Kenyan and Ugandan delegates embroiled in a diplomatic showdown over the fate of some 92 Kenyan fishermen arrested for fishing on the Ugandan side of the Lake (Vitalis Omondi, 15. September, *Daily Nation*). The bone of contention was (and still remains) the ownership and the use of the resources of the Lake. During an interview of fishermen on the Kenyan side of the Lake, the main fear was the harassment by neighboring countries' authorities. One fisherman lamented, "They (Ugandan authorities) keep arresting us constantly, and confiscating our fishing gear". This is adversely affecting 54,000 fishermen on the Kenyan side, who are forced to operate within a 6% stretch of Lake Victoria. This, in turn, forces Kenyans to overfish in the breeding areas or use fishing gears that are not recommended.

Water hyacinth is a dreaded weed which has been inflicting Lake Victoria for a long time and keeps coming back. The water hyacinth escaped from an ornamental pond in Rwanda into River Kagera, which flows into a tributary of Lake Victoria as stated by Vidaeus and Scheider. The weed was introduced from River Kagera into the Ugandan side of the lake in 1988, into the Tanzanian side of the lake in 1990 and into the Kenyan side of the lake in 1992. Because of its quick spread across the lake, the weed was considered a great threat to the life forms of the lake

---

<sup>28</sup> D. Charles-Philippe and G. Jean-Francois, Natural Resources, as Source of Conflict?( *International Journal*, Vol 62, Natural Resources and Conflict, 2006/2007), pp. 5 - 17.

<sup>29</sup> Nyaoro, John, Director, Water Resources Management, Ministry of Water, Personal Interview, 25th June, 2010.

and those who depend on it<sup>30</sup>. The nature and negative impacts of the water hyacinth created an urgent need to manage it.

This exotic weed adversely impacted on the biological diversity, fish breeding, access to fishermen's landing sites, water supply, lake transport, and hydro-power generation<sup>31</sup>. The weed also provides suitable habitats for vectors of various human diseases (for example malaria). In addition, due to its high rate of evapotranspiration, the water hyacinth causes drying up of the riparian wetland zones, thus enabling non-wetland species to invade the area. The water hyacinth blocks access to the fishing grounds and the more it spreads, the more the food security in the region is threatened. Due to its rapid growth in the lake and due to its movement from one side of the Lake to the other, it interferes with the water transport system. When interviewed, Mr. Obiero Onganga, the Executive Director of OSIENALA<sup>32</sup> described the weed as deadly and a cause of serious havoc in the lake. It does not only threaten Lake Victoria but its biodiversity as well.

To curb its menace, numerous efforts and projects have been employed by the three East African countries including mechanical, biological, and manual. The fact that the weed keeps resurfacing on the Lake indicates that none of these methods have been effective in the long run. Africa's largest fresh water body, Lake Victoria may soon lose what remains of its capacity to support life as the dreaded water hyacinth makes a slow but sure return. The waterweed, which has been slowly spreading over the Lake, has now become more complex, alarming water experts. Omarr Wadda, the coordinator for the Uganda-Egypt Aquatic Weed Control project was

---

<sup>30</sup> Bhagwati, J. (1993). "Regionalism and multilateralism: an overview". In J. de Melo and A. Panagariya (1993) (eds). *New dimensions in regional integration*. Cambridge University Press for CEPR.

<sup>31</sup> Mumma, Albert, (2010). Director, Water Services Regulatory Board, Environmental Lawyer,

<sup>32</sup> OSIENALA is in Dholuo language: "Osiepe Nam Lolwe Gi Aluora Ne" and it means "Friends of the Lake"

also quoted as saying that “It will not be easy to eradicate the weed once it has covered a considerable part of the Lake.

In 2004, Tanzania had already made clear its intention to build a pipeline to extract drinking water from Lake Victoria: the *Shinyanga* project. The main objective was to supply water to semi-arid regions of Mwanza and Shinyanga from Lake Victoria, apparently following pressure from local politicians. The project was launched in 2005, with a total cost estimated at TSH 85.1 billion (\$ 85.1 million) (*Daily Nation*, 25, February, 2005). The start of this project was a sign that Tanzania had lost patience with talks involving Kenya, Uganda and Egypt over the validity of the two Nile Agreements (1929<sup>33</sup> and 1959<sup>34</sup> treaties). Tanzania indicated that the water from this project would be used mainly for domestic purposes, so that the flow to Egypt would not be interfered with in any way. Initially, the water project is meant to benefit 420,000 people, but this number is expected to rise to 940,000 in the next 20 years<sup>35</sup>. Apart from the *Shinyanga* and *Kahama* towns, some 54 villages situated along the pipeline will benefit from the project, according to Edward Lowassa, the then Minister for Water and Livestock Development.

Due to Kenya’s dry conditions the majority of its citizens in the dryer parts of the country go thirsty and millions others are threatened by starvation although the country shares a part of Lake Victoria<sup>36</sup>. According to the Kenya National Water Master Plan, the country has an irrigation potential of 180,000 hectares but only 6,000 ha is being irrigated. Liberalization of the use of Lake Victoria would make it easy for the country to generate more hydroelectric power.

---

<sup>33</sup> Dahilon, (2003), This Agreement was drawn up between Egypt and Great Britain, which also represented British former territories of Sudan, Uganda, Kenya, and Tanzania. This agreement gave Egypt “full utilization of the Nile waters,”

<sup>34</sup> This agreement apportioned the total annual discharge of the main Nile, as measured at Aswan, i.e. 74 billion m<sup>3</sup>, between Egypt and Sudan. Egypt was allotted 55.5 billion m<sup>3</sup>, while the Sudan was allowed to use the remaining 18.5 billion m<sup>3</sup>.

<sup>35</sup> *The East African*, February, (9-15, 2004).

<sup>36</sup> *The Standard*, January, (17, 2005)

Furthermore, in addition to seasonal flooding around Lake Victoria, water taps often run dry in towns by the shores of Lake Victoria and there are calls to draw more fresh water from the lake to meet the increasing demand<sup>37</sup>. Martha Karua, the then Minister for Water Development(Kenya) revealed that there were plans to scale up the flood control programme as part of the development of the Lake Basin<sup>38</sup>. Other projects planned for expansion cover agriculture, fisheries, irrigation, water supply and sanitation<sup>39</sup>. This is the main reason why Kenya joined the other countries, Rwanda, Ethiopia, DRC and Tanzania, in signing the New Nile Treaty in May, 2010. In signing this treaty, Kenya argued that the treaty would further allow the building of dams on rivers around Lake Victoria which would be a more long-term solution to floods as dykes had proved ineffective in controlling water. Besides Uganda, Kenya is also one of the countries who have been demanding that the Egyptian Government should compensate it for the suffering Kenyans have gone through after being denied the use of the Nile.

The three East African countries, especially Kenya and Uganda, have faced severe droughts on several occasions. These have led to water scarcity which in turn has led to conflicts. Currently some residents around Lake Victoria have started cultivating on the shores of the Lake after the water level had receded to an 80-year low, resulting in the creation of wetlands and some dry land. The Lake has fallen by two and half metres and the shoreline in some places has retreated by about half a kilometre before the long-awaited rainy season began around Lake Victoria and south-western Uganda. So far, the Lake Victoria water level has dropped further to

---

<sup>37</sup> Godana, Bonaya, Adhie, 1985. Africa's Shared Water Resources: Legal and Institutional Aspects of the Nile, Niger and Senegal River Systems. London : Pinter : Boulder : Rienner. p.11, 21.

<sup>38</sup> *Daily Nation*, March, (12, 2004)

<sup>39</sup> D. Charles-Philippe and G. Jean-Francois, Natural Resources, as Source of Conflict?( *International Journal*, Vol 62, Natural Resources and Conflict, 2006/2007), pp. 5 - 17.

the lowest level of 1,133.66 metres since the 1923 level of 1,133. 19 metres, surpassing the 1961 level, and is still going down<sup>40</sup>.

Uganda's priorities lie with hydropower development, where they have a great potential at a number of sites of the proposed dams at *Bujagali* and *Karuma*. Over the years, water levels on Lake Victoria have fallen alarmingly, resulting in both lower electricity production and power rationing in Uganda. Explanations for the fall have largely focused on the use of water by the power sector but while this may play a role, there is a great deal of evidence pointing towards a long-term problem<sup>41</sup>. Water levels are falling in many lakes across the Region and apart from the obvious devastating environmental impact, East African economies could also be affected by electricity shortages and unusable port facilities. Despite its huge potential, hydroelectric power in East Africa continues to be erratic largely because it depends on capricious seasonal rainfall<sup>42</sup>.

An environmental NGO, the International Rivers Network, claimed in February, (2006) that Uganda had been taking 55% more water from Lake Victoria than agreed under the existing legal framework. Rising demand for electricity has certainly increased the pressure on the country's hydroelectric facilities and the NGO claimed that this accounted for around half the reduction in the Lake Victoria water level, which has reached its lowest since the 1920s. It is claimed that the recurrent drought in this region is responsible for the other 50%. Blackouts have become a daily occurrence in the capital, Kampala. In 2004, during a National Resistance Movement (NRM) day victory parade, thousands among the audience jeered to register their dissatisfaction on the matter in front of President Yoweri Museveni and other dignitaries. With

---

<sup>40</sup> Godana, Bonaya, Adhie, 1985. *Africa's Shared Water Resources: Legal and Institutional Aspects of the Nile, Niger and Senegal River Systems*. London : Pinter : Boulder : Rienner. p.11, 21.

<sup>41</sup> Lowe-McConnell R. H. (1994). "The changing ecosystem of Lake Victoria, East Africa". *Freshwater Forum* 4 (2): 76-89.

<sup>42</sup> Ibid.



consumption outstripping production, a scheduled timetable of 'load shedding' was put in operation since September 2004, that sees neighborhoods having their electricity cut off every other day for as long as 24 hours at a time . Uganda is undoubtedly the key to a strong power sector in East Africa. It has exported power to Kenya since colonial times and the Uganda Electricity Board (UEB) plans to increase exports to Kenya, Rwanda and Tanzania over the next decade<sup>43</sup>. Rwanda's Electrogaz already imports 12.5 megawatts (mw) of its required 37.5mw from the UEB. Despite this, Uganda itself continues to suffer power rationing, mainly because of its reliance upon seasonal rainfall for its hydroelectric production (HEP).

For President Museveni, speaking at the NRM Day parade, 'there is little doubt as to where the blame for power shortages lies: with international donors'. President Museveni blamed the World Bank which he claimed was preventing Uganda from constructing the two dams that he claimed are required to solve the problem. Because of the Nile treaties, donor agencies like the World Bank insist that the funding of any major project along River Nile will only be done with the consensus of all the Nile member countries. Despite these restrictions, Museveni, in October 2004, during the same parade indicated that Uganda would go ahead with the project, with or without the approval of international donors<sup>44</sup>.

### 1.5 Theoretical framework

Human needs is a grand theory that provides an important conceptual tool that not only connects and addresses human needs on all levels but also recognizes the existence of negotiable and nonnegotiable issues. Scholars like Burton argue that needs, unlike interests, cannot be

---

<sup>43</sup> Godana, Bonaya, Adhie, 1985. *Africa's Shared Water Resources: Legal and Institutional Aspects of the Nile, Niger and Senegal River Systems*. London : Pinter : Boulder : Rienner. p.11, 21.

<sup>44</sup> Bhagwati, J. (1993). "Regionalism and multilateralism: an overview". In J. de Melo and A. Panagariya (1993) (eds). *New dimensions in regional integration*. Cambridge University Press for CEPR.

traded, suppressed, or bargained for.<sup>45</sup> Rather, human needs should be negotiated to arrive at consensus based solutions. This study will concentrate on the impact of shared natural resource on east Africa community: a case of lake Victoria. These needs include the primary needs for survival, security and recognition. The great promise of human needs theory, in Burton's view, was that it would provide a relatively objective basis and has a wide applicability. It lends itself well in restorative justice structures and can be applied at all levels of society, for intra- and interpersonal conflict, inter-group conflict and in an international setting. In a world context where differences are accentuated, human needs theory attempts to unify human beings from different regions and cultures, creating a common understanding of who we are and how others need and feel the same way we do.<sup>46</sup> Sandra Marker notes that human needs theory points out that human needs are non-negotiable.<sup>47</sup> Thus, the human needs approach makes a case for turning away from traditional negotiation models that do not take into account non-negotiable issues. According to Burton<sup>48</sup> conflict resolution means terminating conflict by methods that are analytical and that get to the root of the problem. Conflict resolution, as opposed to mere management or settlement points, offers an outcome that, in view of the parties involved, is a permanent solution to a problem. The study was then explained by the two theories environmental conflict theory. The environmental conflict school concerns the supposed links between demographics, resource availability, and violence.

---

<sup>45</sup> Burton, John 1990. *Conflict: Resolution and Prevention*. New York: St. Martins Press.p.39

<sup>46</sup> See Rubenstein, Richard E. and Crocker, Jarle 1993. "Challenging Huntington," *Foreign Policy*, Spring 1994

<sup>47</sup> In Sandra Marker, 'What Human Needs Are? In *Beyond Intractability*', August 2003,

<[http://www.beyondintractability.org/m/human\\_needs.jsp](http://www.beyondintractability.org/m/human_needs.jsp)>

<sup>48</sup> *Conflict Resolution, Theory and Practice*, Manchester University Press, 1993

## 1.6 Justification

The purpose of this study. The impact of shared natural resource on east Africa community: a case of Lake Victoria. As the violence escalates in the sparsely populated pastoral areas; warfare and raiding have constant features in the lives of most pastoral peoples, but automatic weapons have revolutionized the intensity and deadlines of conflicts quite altered their nature.

Therefore the importance of this research cannot be overemphasized. The study is critical for both academic and policy community. For the academic community, the study will add to the body of knowledge on the subject of Pastoral and resource conflicts.

Furthermore, the study will contribute towards a better understanding of the conflicts and their management. Secondly the study will form a basis for future research. As the researcher will rely on the scholarly works of other scholars, this work will also enrich the literature on the study area of Pastoral conflicts and the contested natural reasons, which will be a reference in the future by other scholars who aspire to explore this field further.

For the policy community, the study will propose a set of recommendations. African policymakers are often only marginally aware of the conundrum dimensions of natural resource conflicts, but there is a gap in their mutual understanding of conflict management institutions, their resilience and vulnerability to socio economic and administrative transformations. The study findings will therefore be useful also for policymakers on this issue in natural resource conflicts. The security agents may use the findings of the study to draft policy papers which can tackle the issue in the region..

The findings of the study may also be used by the government agencies to draft policies on the best ways to combat the security threats posed by natural resource based conflicts in East Africa. The recommendations from the study might be useful in ending the and or transforming natural resource conflicts by creating alternative sources of livelihood.

## 1.6 Hypotheses

- i. The influence of the impact of shared resource on domestic and health issues of East Africa community
- ii. The international intervention on shared resource outcome

## 1.7 Methodology

The research design used in this study was descriptive survey method. This method is preferred because it allows for prudent comparison of the research findings.<sup>49</sup> The qualitative design chosen for this research is theory grounded, or natural inquiry. Grounded theory research unfolds and emerges empirically from the data and is more responsive to contextual values rather than researcher values. According to Cooper and Schindler, descriptive statistics discover and measure cause and effect relationships among variables. The study uses a descriptive design because it enables the researcher to collect in-depth information about the population being studied.

The study makes use of the random sampling method which is suitable in this context. According to Jankowicz, surveys are particularly useful when you want to contact relatively

---

<sup>49</sup> Cooper D. R. and P. S. Schindler 2000, *Research Methods* (7th ed. New York: Irwin/McGraw-Hill, 2000) p 112

large numbers of people to obtain data on the same issue or issues, often by posing the same questions to all.<sup>50</sup>

The sampling design is a fundamental part of data collection for scientifically or socially based decision making. A well-developed sampling design plays a critical role in ensuring that data is sufficient to draw the right conclusions. A sound, socially or scientific based decision must be based on accurate information. The handling method and the representation of the data should correspond to the objective of the study. The sampling design will indicate the number of samples taken and will also identify the particular samples (for example, the ministries where particular views of the samples were collected). Along with this information, the sampling design will also include an explanation and justification for the number and responses of the samples.<sup>51</sup>

Primary data and secondary data collection method was applied in this study. Data was collected via the use of questionnaires as an interview guide. A structured questionnaire was administered; the questions were in close and open-ended format and will be based on the research objectives. An interview guide is the preferred mode of data collection as it allows for the collection of a lot of data over a short period of time and with minimal interruption to the respondents schedules<sup>52</sup>. The study will also rely on secondary data such as text books, journals, and academic papers that are to be found in the University of Nairobi and other libraries.

The target group will be concentrated in a well-known accessible location or be reachable through email for purposes of data collection. This allows for easy distribution and collection of the interview guide by the researcher. The interview guide will be distributed by the researcher

---

<sup>50</sup> Jankowicz A. D., *Research Projects* (6th ed. London: Thomson Learning, 2002) p 87

<sup>51</sup> Cooper D. R. and P. S. Schindler 2000, *Research Methods* (7th ed. New York: Irwin/McGraw-Hill, 2000) p 112

<sup>52</sup> ibis p 112

through hand-delivery or email requests. Due to the fact that the respondents are in easily accessible locations within Nairobi, the two methods will suffice to distribute and subsequently receive back the questionnaire; the use of email will help to save time.

## **1.8 Chapter Outline**

### **Chapter one: Introduction**

Chapter one provides an introduction to the research study, the background to the study, the research problem; the statement of the problem; the research objectives, the literature review, hypotheses and research methodology.

### **Chapter Two: an overview of natural resources based conflicts**

The previous chapter discusses about natural resources as sources of conflicts. It also gives the objectives of the study and a brief outline of causes of natural resources conflict as argued by the various scholars. The chapter outlines the justification of the study, the methodology to be used and the theoretical framework. This chapter examines the natural resource based conflict in Africa and the conceptual analysis. This is achieved by focusing on causes of conflicts that occur in Africa as a result of natural resources; intrastate conflicts; the interplay between natural resources; environment and conflict and the link between resources and conflict.

### **Chapter Three: Natural Resources Management in East Africa Community**

This chapter will look at East Africa as a long history of regional integration. Its legal framework and institutional structures and how they govern the shared resources

### **Chapter Four: Regional integration in Lake Victoria basin.**

This chapter will show case the livelihood of people living along the Lake Victoria region on their economical, environment, social way of life

### **Chapter Five: An analysis of Lake Victoria in management intervention**

This chapter will involve preparations of research questionnaires in line with the subject of study. It will also involve administration and analysis of the questionnaires and interviews.

### **Chapter 6: Conclusions and Recommendations**

This chapter will present the research findings from the sample population and present analysis.

It will look at whether this research approves or disapproves the hypothesis.

## CHAPTER TWO

### AN OVERVIEW OF NATURAL RESOURCES BASED CONFLICT

#### 2.1 Introduction

The previous chapter discusses about natural resources as sources of conflicts. It also gives the objectives of the study and a brief outline of causes of natural resources conflict as argued by the various scholars. The chapter outlines the justification of the study, the methodology to be used and the theoretical framework.

This chapter examines the natural resource based conflict in Africa specifically water and the conceptual analysis. This is achieved by focusing on causes of conflicts that occur in Africa as a result of natural resources; intrastate conflicts; the interplay between natural resources; environment and conflict and the link between resources and conflict.

#### 2.2 Natural Resources Conflict in Africa

The sources of conflict in Africa reflect its diversity and complexity. Some sources of conflict are purely internal; some reflect the dynamics of a particular sub-region, while others have important international dimensions. Despite these differences the sources of conflict in Africa are predominately resources based.

Natural resources have always been linked to conflicts both directly or indirectly. The control over valuable renewable and non-renewable natural resources has induced acute conflicts.<sup>53</sup> The underlying causes of this resources conflict are poverty, the policy choice that states have pursued over the years and the inefficiency of institutional frameworks for management of the resources, and where they exist, and the lack of conflict resolution and

---

<sup>53</sup> L.K.Jackson and P Pradubraj, Introduction, Environmental conflict in the Asia-Pacific, op cit. pp. 1 -11.



prevention mechanisms.<sup>54</sup> Resource based conflicts have always been explained in terms of scarcity which views the conflicts as borne out of struggle for the scarce resources, often induced by population pressure.

According to Klare, the past decade has seen scholars and policy makers focus on the economic dimensions of contemporary armed conflict and have made a prompt consideration on conflict promoting aspects of resource abundance.<sup>55</sup> Klare further argues that civil wars in Africa have been identified with an emerging economic resource based model of armed conflict. The conceptual framework used not only examines the interrelationship between economic and political causes but also integrated complementary state - centric and rebel centric theories regarding economic predation, kleptocracy, political protest and weak states.

Naylor argues that in most parts of Africa, natural resource based conflicts are characterized by violence and like other social activities, wars require financial and other resources to proceed, a fact that has been used to explain many intrastate conflicts in Africa.<sup>56</sup> Botha states that the underlying historical causes for conflict attributed to domestic grievances or circumstances that may prompt warfare are conflict over natural resources which cause instability as in the DRC, Angola, Sudan and Liberia and religion as a political tool in mobilizing warfare as in Sudan where Muslims and Christians are involved in conflict.<sup>57</sup>

---

<sup>54</sup> <sup>54</sup> L.K.Jackson and P Pradubraj, Introduction, Environmental conflict in the Asia-Pacific, op cit, pp. 1 - 11.

<sup>55</sup> M. Klare, Resource Wars, The New Landscape of Global. New York,(Metropolitan Books, 2001), p. 43.

<sup>56</sup> R.T. Naylor, Economic Warfare, Sanctions, Embargo Busting and their Human Cost. (Boston: Northern University Press, 2000), p. 18.

<sup>57</sup> A. Botha, Relationship between Africa and International Terrorist, Causes and Linkages (Tswalu:

### 2.3 International Legal Perspectives on shared water resources.

The various uses to which the shared waters of international river basins are put create problems of both technical and juridical nature<sup>58</sup>. Traditionally, international water law recognizes five main theories that attempt to define and delineate the rights of basin states to use water from a shared river system<sup>59</sup>. These are:

*The theory of absolute territorial sovereignty.* According to this theory, a state, as 'master of its territory', may adopt in regard to watercourse within its national territory all measures deemed suitable to its national interest, irrespective of their effects beyond its borders (Menon, 1975). In other words, a state can do as it pleases and is entitled to do as it chooses with its waters within boundaries ignoring the effects of its actions on neighboring states. Obviously, this theory is favorable to upper basin state. Downstream states have always opposed the absolute territorial sovereignty doctrine, which is never implemented in any water treaty.

*The theory of absolute territorial integrity.* This theory, which is also known as the theory of natural flow of river, is the direct opposite of that of absolute territorial sovereignty. It espouses the old common law doctrine of water rights whereby a lower riparian (basin state) claims the right to the continued, uninterrupted (or natural) flow and unaltered condition of the water from the territory of the upper riparian state Godana<sup>60</sup>. According to this theory, a riparian state may not proceed with the harnessing of a section of an international waterway traversing its territory if it is of a nature to cause injury to the interests of other basin States. This theory is thus favourable to the lower-basin state(s) and awards 'a veritable right of veto to downstream states'.

---

<sup>58</sup> Godana, Bonaya, Adhie, 1985. Africa's Shared Water Resources: Legal and Institutional Aspects of the Nile. Niger and Senegal River Systems. London : Pinter : Boulder : Rienner. p.11, 21.

<sup>59</sup> Markakis, John, 1998. Resource Conflict in the Horn of Africa. PRI International Peace Research Institute, Oslo. SAGE Publications. p. 33, 36, 69, 72, 73.

<sup>60</sup> Godana, Bonaya, Adhie, 1985. Africa's Shared Water Resources: Legal and Institutional Aspects of the Nile, Niger and Senegal River Systems. London : Pinter : Boulder : Rienner. p.11, 21.

The *theory of limited territorial sovereignty and of limited territorial integrity* in practice complementary and even identical. Therefore they can be considered together. They consist in the assertion that every state is free to use the waters flowing on its territory, on condition that such utilization in no way prejudices the territory or interests of other states. Permitting use of rivers as far as no harm is done to other riparian States; these theories are where the concept of reasonable use originated<sup>61</sup>. In an attempt to advance and improve on the doctrine of limited territorial sovereignty and integrity, this theory insists on a 'community approach'. This approach suggests that all basin states have a common interest in developing the basin. Under this theory, state boundaries should be ignored and drainage basin is regarded as an economic and geographic unit. This doctrine represents a more balanced approach that seeks to contribute to the joint development of riparian states within a shared basin through equitable division and sharing of benefits<sup>62</sup>.

Each of these theories reflect different historical and judicial approaches to solving the problems experienced by riparian States and also reflect an important change from rights to ownership of water, to one which strives to ensure that the interests of all parties are met equitably and effeciently. As international law as an instrument of regulations on the transboundary freshwater issues is at present inconclusive and weak<sup>63</sup>. Management of international river basins might be possible only if the affected and concerned countries accept the limitation to their sovereignty over the common water resources. It requires mutual

---

<sup>61</sup> Falkenmark, Malin, 1997. Meeting Water Requirement of an Expanding World. Philosophical Transactions of the Royal Society Biological Scieinces. vol 352. The Royal Soceity, London. pp.929.

<sup>62</sup> Ong'or, D. O., Ogwae, T.A., Omondi, M.O and Kapiyo, R. J (2001). Community conservation initiatives towards livelihood security in the lake Victoria Basin: Issues, problems and opportunities. *A proceedings report*; Uhai Lake Forum

<sup>63</sup> Delli Priscoli, Jerome, (1998). Water and civilization: Conflict, cooperation and the roots of a new eco-realism. Proceedings of the Eighth Stockholm World Water Symposium, 10-13 August 1998, Stockholm, Sweden. 17 pp 88

agreement to define this limitation<sup>64</sup>. This is, of course, the obstacle, which can hinder the development of a partnership between the riparian states.

Law is an instrument that can be used to smooth out conflicts of interest generated, for instance, in the sharing of water resources. However, the utilization and management of shared river is subject not only to man-made laws but also the natural laws, which does not recognize the political and geographical boundaries. In order to form a framework for cooperation, States sharing water need first to settle their inter-State dispute over the water in question on a legal basis. The absence of formal political agreements contributes to this problem. On the other hand, since each river basin is unique, with its own economic, geographical, ecological and political variables, no comprehensive system of rigid rules can anticipate adequately the variations from one basin to another.

#### **2.4 Settlements of Disputes**

When countries disagree over the way in which water resources of an international river basin should be utilized, they have to resort to some disputes settlement procedures. So, before parties or countries sharing a water system go into a conflict, which may from water security problem lead to a national security problem, there are three main procedures and methods used to find a solution to the problem<sup>65</sup>. These are (1) negotiation and consultation; (2) mediation and conciliation; and (3) arbitration and adjudication. Dispute over shared water bodies can normally arise at least under two different circumstances, one can be riparian states that have never entered

---

<sup>64</sup> Ong'or, D. O., Ogwae, T.A., Omondi, M.O and Kapiyo, R. J (2001). Community conservation initiatives towards livelihood security in the lake Victoria Basin: Issues, problems and opportunities. *A proceedings report*; Uhai Lake Forum

<sup>65</sup> Carlson, Ingvar 1999. National Sovereignty and International Watercourses. High level Panel Debate at the 9th Stockholm Water Symposium, SIWI. Stockholm. Mr. Carlson was Prime Minister of Sweden during the period between 1986 and 1995.

a treaty or agreement, while the other can be an existing agreement which can not provide a binding decision to problem in dispute.

The UN Convention is however an international framework instrument, which may apply in the absence of agreement over shared freshwaters. Cooperation through joint mechanism in the form of commission is a vital necessity if the aims are to achieve equitable, reasonable and non-harmful utilization of the international watercourse<sup>66</sup>.

## 2.5 The Link between Natural Resources and Conflict

Conflict can be violent or non-violent, the former being associated with the use of force as a means to an end while the later involves peaceful negotiation between conflicting groups.<sup>67</sup> Galtung argues that conflict occurs where there is injustice in the structural system and because one party has organizational structures in place while the other party does not making it weaker and more vulnerable to violence and conflict. It is the deep rooted structural anomalies that are responsible for conflict rather than the subjective elements in the nature of the relationship.<sup>68</sup>

Keen explains that in Africa, countries that are faced by specific environmental circumstances, scarcity or abundance are often unable to address the problem of resource management without using violence<sup>69</sup>. He states that violent distributional struggle over the abundant resource results from a debilitating effect on economies and governing institutions. This violence can therefore be viewed as a means through which groups create and sustain profitable patterns of resource exploitation and wealth distribution. He opines that the nature of

---

<sup>66</sup> Falkenmark, Malin, 1997. Meeting Water Requirement of an Expanding World. *Philosophical Transactions of the Royal Society Biological Sciences*. vol 352. The Royal Society, London. pp.929.

<sup>67</sup> Peace, Conflict and Governance, Taking it Global, 2008

<sup>68</sup> J. Galtung, Violence, Peace and Peace Research, *Journal of Peace Research*, Volume 3, 2003), p. 68.

<sup>69</sup> D. Keen, The Economic Functions of Violence in Civil Wars (Adelphi Papers, No 320, Routledge,

violence will change if resources involve production or extraction of subterranean minerals where violence will take the form of a battle for territorial or state control.

Wallerstein states that apart from depending on the actions of actors, conflict depends on incompatibilities and is formed in three parts namely ,incompatibility, actions and actors.<sup>83</sup> Conflict is therefore a social situation in which a minimum of two actors or parties strive to acquire at the same moment in time an available set of scarce resources<sup>70</sup>.

## 2.6 Poverty-environment linkages

Poor people rely more heavily and directly on local natural resources for their livelihoods than other socio-economic groups due to lack of alternative livelihood options accessible to them. The population of LVB is primarily rural with majority heavily dependent on agriculture and livestock husbandry for their livelihood. Water availability largely determines when and where development can take place. Majority of the rural poor who practice rainfed agriculture live in fear of delayed or failed rains. Access to surface or groundwater is therefore of paramount importance and may be determined by how rights to land are contested and exercised. Effective development and management of water and other resources is therefore necessary for sustainable growth and poverty reduction in the Lake Victoria basin<sup>71</sup>.

The local communities in the lake region face serious threats to their livelihood due to a number of factors and processes including abuse of resources and environmental degradation, rapid population growth, economic liberalization, HIV/AIDS and poor health, poor governance, unfair resource distribution and gender discrimination. Abuse of resources has taken the form of

---

<sup>70</sup> P. Wallerstein, *Understanding Conflict Resolution*, (London: Sage, 2007), p. 34.

<sup>71</sup> Rugalema G (1999). It is not only the loss of labour: HIV/AIDS, loss of household assets and household livelihood in Bukoba District, Tanzania in: Mutangadura, G; Jackson H and Mukurazita, (Eds). *AIDS and African Smallholder Agriculture*. Southern African Aids Information Dissemination Service (SAFAIDS), Harare.

deforestation and pollution of the river waters .<sup>72</sup>Flooding during the rainy seasons, inadequate access to irrigation and drinking water, rapid population growth, prevalence of weeds such as water hyacinth on the lake and poor governance continue to affect inhabitants of this region contributing to the state of general poverty in the region.

Ability to capture the benefits of water either directly or indirectly may greatly improve welfare and income of the households within the basin. Many poor people around the lake use poor quality water that negatively affects their health and welfare. Investing in more reliable, higher quality, and more conveniently located domestic water or more reliable irrigation can quickly and significantly improve the lives of the poor<sup>73</sup>.

The poor are disproportionately affected by the high variability in the availability of water, as they are the most vulnerable to water related hazards such floods, droughts and pollution because of where they live (e.g. slums and hillsides), their limited access to appropriate technology, and other factors. Thompson et al found that 'unimproved water sources' (such as pans and springs) tend to be highly seasonal, leaving households prone to water shortages during certain times of the year<sup>74</sup>. Vulnerability can undermine efforts to break the poverty trap and push even the not so poor into destitution by destroying their livelihood through shocks. Hazards including floods and drought can be a formidable source of vulnerability to the poor as they destroy crops, property and life. Better water management can reduce vulnerability of rural production systems through ameliorating the impact of uneven rainfall distribution (e.g. through better water storage) and

---

<sup>72</sup> Ong'or, D. O., Ogwae, T.A., Omondi, M.O and Kapiyo, R. J (2001). Community conservation initiatives towards livelihood security in the lake Victoria Basin: Issues, problems and opportunities. *A proceedings report*; Uhai Lake Forum.

<sup>73</sup> Sokile, C. and van Koppen, B. (2004) Local Water Rights and Local Water User Entities: the Unsung Heroines to Water Resource Management in Tanzania.

<sup>74</sup> Thomson, J., Porras I T, Wood, E., Tumwine, J K., Mujwahuzi, M R, Katui-Katua, M and Johnstone, N (2001). Waiting at the tap: Changes in urban water use in East Africa over three decades. IIED

providing protection against hazards (e.g. through flood protection or pollution control) and can also indirectly provide more secure livelihoods<sup>75</sup>.

But the contribution of water resources to sustainable livelihoods depends on how it is accessed and managed which may be influenced by the laws and policies. Degradation of natural resources that adversely affects livelihoods not only results from improper use of resources but from poor policies as well. Within the basin, agriculture has been given prominence over other forms of land use to the extent that areas that have been traditionally used by pastoralists are being subdivided and taken over by the farming communities as stated by Mwangi<sup>76</sup>. Pastoral areas have been converted to wheat growing zones in both Kenya and Tanzania. These lands were formerly held communally and ensured the survival of pastoral groups in water deficit areas.

Women are the main managers of many water resources; face the burdens of fetching water for use in the home and of coping when there is not enough water for domestic needs. Empowering them is critical to achieving more focused and effective water management that will benefit many other aspects of life. Women typically develop and maintain rural water supplies as an integral part of their agricultural and domestic management responsibilities. Maganga's Valuing water as a commodity to be put to productive use tends to minimize the interests of women in water resources management because most financially productive uses of water which can be quantified are in irrigation, livestock and industry -all areas which provide cash output and are

---

<sup>75</sup> Ong'or, D. O., Ogwae, T.A., Omondi, M.O and Kapiyo, R. J (2001). Community conservation initiatives towards livelihood security in the lake Victoria Basin: Issues, problems and opportunities. *A proceedings report*; Uhai Lake Forum.

<sup>76</sup> Mwangi, E (2003). The Transformation of property rights in Kenya's Maasailand: Triggers and Motivations. *Paper presented at the 7<sup>th</sup> Annual Conference of the International Society for the New Institutional Economics*, September 11-13, Budapest, Hungary.



mainly managed by men<sup>77</sup>. Other important water uses including washing children, clothes and health benefits are not 'valued' and difficult to quantify in financial terms. Providing water at a fee might limit women's usage since they generally have less access to cash than men. Privatization and valuing of water as a commodity and selling to whoever can afford may disadvantage women and other marginalized groups further.

## 2.7 Conclusion

Broad conceptions of conflicts recognise that in all social contexts, conflicts stem from incompatible goals and differences over access and control of valuable resources such as water, oil and mining of minerals such as diamonds. Given their ubiquity and universality, conflicts, however, can be creative and constructive, forcing the construction of institutions to manage the efficient and orderly allocation of resources while also minimising incompatible objectives. Conflict mitigation institutions are also necessary to reduce violent conflicts, which epitomise the destructive and extreme forms of competition<sup>78</sup>

Natural resources often express the need for more participation in decision-making and resource management. Community-based and collaborative management approaches are often used as a solution. This involves joint decision making by key stakeholders including government, communities, NGOs and the private sector over natural resource access and use. The parties negotiate, define and guarantee among themselves the sharing of management functions, entitlements and responsibilities for a given territory or set of natural resources. Although individual stakeholders may have different interests, the fundamental assumption is

---

<sup>77</sup> Maganga, F. 2002 Incorporating Customary Laws in Implementation of IWRM: Some Insights from Rufiji River Basin, Tanzania. *Paper presented at 3<sup>rd</sup> WaterNet Symposium, 'Water Demand Management for Sustainable Development'*, Dar es Salaam, 30-31<sup>st</sup> October 2002

<sup>78</sup> Castro, P. (2001). Indigenous people and co-management: implications for conflict management. *Environmental Science Policy* 4: 229–239.

that sharing authority and decision-making (what is known as rational discourse) will enhance the process of resource management, making it more responsive to users. The process of decentralization and the underlying concept of subsidiarity offer important opportunities to improve political stability and empower local communities.

Finally, even where resource rights are clarified and collaborative management systems are in place, disagreement over access, management objectives and information can emerge. In this regard, building local-level capacity for conflict management and dispute resolution is often a key need. While most communities have some capacity for formal or informal conflict management, many disputes remain unresolved because the mechanisms in place to manage them are inadequate, or because the parties in conflict do not have the skills needed to negotiate effectively. This is especially true of multi stakeholder conflicts and those where accessibility is an issue for politically or socially marginalized groups and remote communities because of cost, distance or language barriers. Some form of capacity-building for local stakeholders is therefore needed as part of conflict prevention strategies.

## CHAPTER THREE

### NATURAL MANAGEMENT IN EAST AFRICAN COMMUNITY (EAC)

#### 3.1 Overview of East African Community (EAC)

Kenya and Uganda first formed a customs union in 1917, which the then Tanganyika (Tanzania without Zanzibar) joined in 1927. Subsequently, the three countries had close economic relationships in the East African High Commission (1948-61); the East African Common Services Organization (1961-67); the East African Community (1967-77); and the East African Cooperation (1993-99).<sup>79</sup> The East African Community (EAC) is the regional intergovernmental organization of the Republics of Burundi, Kenya, Rwanda, Uganda and the United Republic of Tanzania with its Headquarters in Arusha, Tanzania. The Treaty for Establishment of the East African Community was signed on 30th November 1999 and entered into force on 7th July 2000 following its ratification by the Original 3 Partner States – Kenya, Uganda and Tanzania. The Republic of Rwanda and the Republic of Burundi acceded to the EAC Treaty on 18th June 2007 and became full Members of the Community with effect from 1st July 2007<sup>80</sup>.

East Africa is credited with one of the longest experiences in regional integration. As early as 1900, Kenya and Uganda operated a Customs Union, which was later joined by Tanzania, the then Tanganyika, in 1922. More elaborate regional integration arrangements in East Africa have included the East African High Commission (1948-1961), the East African Common Services Organization (1961-1967) and the former East African Community which

---

<sup>79</sup> International Monetary Fund (2005).

<sup>80</sup> EAC (2007) *Secretariat, Protocol on the Establishment of the EAC Custom Union*, Arusha, EAC secretariat.

lasted from 1967 to 1977<sup>81</sup>. The collapse of the former East African Community in 1977 dealt a major blow to the East African region and was widely regretted, particularly so since the former Community had made great strides and was considered the world's model of successful regional integration and development. At its height, the East African Community was, in all but name, a federal government. The former Community operated the common services of over thirty institutions, including the four major corporations - East African Railways, East African Harbours, East African Posts and Telecommunications and the East African Airways besides a formidable array of joint research institutions.

The (current) Treaty for the Establishment of the East African Community (EAC) was signed on 30 November 1999, and entered into force on 7 July 2000. The present EAC has its origins in the Mediation Agreement for Division of Assets and Liabilities of the original EAC, which collapsed for a variety of political and economic reasons in 1977<sup>82</sup>. In that Mediation Agreement, signed on 14 May 1984, Kenya, Tanzania, and Uganda agreed to explore areas of future cooperation, and to make concrete arrangements for such cooperation. Subsequent meetings of the three Heads of State led to the signing of the Agreement for the Establishment of the Permanent Tripartite Commission (PTC) for East African Cooperation on 30 November 1993. Full fledged cooperation started on 14 March 1996 when the Secretariat of the PTC was launched at the headquarters of the EAC in Arusha, Tanzania.<sup>83</sup>

In addition to the EAC, Kenya, Tanzania, and Uganda are also members of the African Economic Community (AEC), the African Union (AU), and the Regional Integration Facilitation Forum (RIFF), and participate in different regional trade agreements. Kenya and Uganda are

---

<sup>81</sup> EAC (2004); The Vision and Strategy Framework for the Management and Development of the Lake Victoria Basin

<sup>82</sup> EAC (2004), *Protocol on the Establishment of the EAC Custom Union*, Arusha, EAC secretariat.

<sup>83</sup> East African Community Secretariat online information. Available at: [www.eac.int/history.htm](http://www.eac.int/history.htm).

members of the Inter Governmental Authority on Development (IGAD), and the Common Market for Eastern and Southern Africa (COMESA); Tanzania is considering re-entering COMESA after its withdrawal in 2000. Kenya and Tanzania participate in the Indian Ocean Rim-Association for Regional Cooperation (IOR-ARC). Unlike Kenya and Uganda, Tanzania is member of the Southern African Development Community (SADC). This overlapping membership poses certain difficulties for the EAC members, mainly because of differences in, *inter alia*, origin criteria, and intra-regional trade liberalization scenarios under the various agreements<sup>84</sup>.

Under the EAC, each member is free to negotiate new bilateral trade agreements, subject to notification to the other two members. Only Kenya has signed bilateral trade agreements. EAC members are also eligible for non-reciprocal preferential treatment under the Generalized System of Preferences (GSP); the Cotonou Agreement with the EC; and the U.S. African Growth and Opportunity Act (AGOA). As least developed countries (LDCs), Tanzania and Uganda are eligible for the Everything-but-Arms (EBA) initiative of the EC; Kenya is not. Tanzania is a signatory to the Agreement on the Global System of Trade Preferences among Developing Countries (GSTP); Kenya and Uganda are not<sup>85</sup>.

In 1977, the East African Community collapsed after ten years. Causes for the collapse included demands by Kenya for more seats than Uganda and Tanzania in decision-making organs, disagreements with Ugandan dictator Idi Amin, and the disparate economic systems of socialism in Tanzania and capitalism in Kenya.<sup>86</sup> The three member states lost over sixty years of

---

<sup>84</sup> EAC (2004); The Vision and Strategy Framework for the Management and Development of the Lake Victoria Basin

<sup>85</sup> EAC (2004) *Secretariat, Protocol on the Establishment of the EAC Custom Union*, Arusha. EAC secretariat.

<sup>86</sup> East African trade zone off to creaky start, *Christian Science Monitor*, 9 March 2006

co-operation and the benefits of economies of scale, though some Kenyan government officials celebrated the collapse with champagne. Each of the former member states had to embark, at great expense and at lower efficiency, upon the establishment of services and industries that had previously been provided at the Community level<sup>87</sup>.

Later, former Presidents Moi of Kenya, Mwinyi of Tanzania, and Museveni of Uganda signed the Treaty for East African Co-operation in Arusha, Tanzania, on 30 November 1993, and established a Tri-partite Commission for Co-operation. A process of re-integration was embarked on involving tripartite programmes of co-operation in political, economic, social and cultural fields, research and technology, defence, security, legal and judicial affairs<sup>88</sup>.

The East African Community was finally revived on November 30, 1999, when the Treaty for its re-establishment was signed. It came into force on July 7, 2000, twenty-three years after the total collapse of the defunct erstwhile Community and its organs. A customs union was signed in March 2004 which commenced on January 1, 2005; Kenya, the region's largest exporter, continued to pay duties on goods entering the other four countries on a declining scale until 2010. A common system of tariffs will apply to goods imported from third-party countries<sup>89</sup>.

There are multiple causes and dynamics in every conflict. Meaningful peace building and conflict resolution must start with a detailed analysis of the causes of conflict and the specific conditions of a certain country or region. Conflict mapping and analysis is the first step towards understanding and managing conflict. Peace, security and development are also inextricably

---

<sup>87</sup> EAC News (2001) issue 8 march

<sup>88</sup> EAC (2004) *Secretariat, Protocol on the Establishment of the EAC Custom Union*, Arusha, EAC secretariat.

<sup>89</sup> David Booth, Diana Cammack, Thomas Kibua and Josaphat Kwek (2007) *East African integration: How can it contribute to East African*

interlinked with regional integration and cooperation. While regional integration can contribute to economic development, regional cooperation is prerequisite to the attainment of, as well as dependent upon, peace and security. As neither the causes nor the consequences of violent conflict are bound by national borders, there is broad consensus that a regional approach is essential to effectively ensure global security. Regional integration organisations have proven their potential as foundations for durable peace, long-term stability, economic growth, sustainable development and democratic consolidation

According to the East African Community Treaty (2001), the EAC intends to achieve a political federation starting with a common market and a monetary union<sup>90</sup>. Therefore at the moment, the cooperation between the three East African countries can be categorised as being in a state of becoming, which in the long run is aimed at achieving a political federation (Mukandala, 2000). Common Market Protocol was signed on 20<sup>th</sup> November 2009, March 2004 March 2004 Customs union protocol was signed by the three head of states of Kenya, Uganda and Tanzania

In other words, the integration process in East Africa is to be achieved incrementally. The argument has always been whether the logical conclusion of any integration process is political or economic unity

During the early stages of its evolution, integration unfolded as a peace-building process by re-creating regional interdependences, expanding across issue areas, and increasing the number of participating countries. As there cannot be peace without justice the major milestone reached by the EAC Regional integration was in the 30<sup>th</sup> November 2001<sup>91</sup>. According to (EAC News 2001). According to (EAC secretariat 2001), it also shows the critical importance of the

---

<sup>90</sup> EAC News (2001) issue 8 march.

<sup>91</sup> East African Community Facts and Figures – 2001

EAC regional integration as an agent of peace building and conflict resolution by arguing that trans-border trade is back in full swing and smugglers have been replaced by legitimate traders due to the introduction of the Common passport. The EAC has great challenges of insecurity of insecurity and conflicts and the only way to tackle these challenges is through is through the EAC<sup>92</sup>.

### 3.2 Legal Framework of EAC

The EAC's legal framework consists mainly of: the Treaty for the Establishment of the EAC; the 2001-05 EAC Development Strategy; the EAC Protocol; and the EAC Customs Management Act. The key objective of the EAC is to develop policies aimed at widening and deepening cooperation in all fields for the mutual benefit of its members (Article 5 of the EAC Treaty). The EAC is thus to be an economic area (including customs and monetary unions, with harmonized macroeconomic policies, and ultimately a political federation), although no timetable has been established.<sup>93</sup>

The EAC's specific objectives include: (a) promoting sustainable growth and equitable development for its members, including rational use of the region's natural resources and protection of the environment; (b) strengthening and consolidating the long-standing political, economic, social, cultural, and traditional ties of its members; (c) enhancing the participation of the private sector and civil society; (d) mainstreaming gender in all its programmes and enhancing the role of women in development; (e) promoting good governance, including adherence to the principles of democratic rules of law, accountability, transparency, social

---

<sup>92</sup> EAC Secretariat (2000), *The Treaty for the Establishment of the EAC*, Arusha, EAC secretariat.

<sup>93</sup> The Committee on Fast Tracking East African Federation, established on 26 November 2004, is examining ways and means to expedite the process of EAC integration so that a political federation is achieved as quickly as possible (*The Community*, Issue 3, June 2005).



justice, equal opportunities, and gender equality; and (f) facilitating peace and stability within the region.

The 2001-05 EAC Development Strategy identifies twelve areas of cooperation: macroeconomic policies, including monetary and fiscal; trade liberalization and development; promotion of key economic sectors (i.e. agriculture and food security, investment and industrial development, tourism and wildlife, and environment and natural resources); infrastructure and supportive services; human resource development, science, and technology; social sectors, immigration, and labour policies; legal and judicial affairs; political matters, including peace, security, and defence; broad participation of women, private sector and civil society; relations with other regional and international organizations (e.g. The Common Market for Eastern and Central Africa, COMESA, Southern Africa Development Corporation, SADC); institutional arrangements at the level of member states and the EAC Secretariat; and managing distribution of benefits and costs as a cross-cutting issue.<sup>94</sup> The 2006-10 EAC Development Strategy is currently in draft format and is expected to be adopted at the end of 2006.

Under the Protocol on the Establishment of the EAC Customs Union (Article 3), the objectives of the customs union are: further liberalization of intra-regional trade in goods on the basis of mutually beneficial trade arrangements among member states; promotion of efficiency in production within the EAC; enhancement of domestic, cross-border and foreign investment in the EAC; and promotion of economic development and diversification in industrialization in the EAC. The Protocol's Annexes I to IX are on: common external tariff (CET); internal tariffs; rules of origin; anti-dumping measures; subsidies and countervailing measures; safeguards; export processing zones; free port operations; and dispute settlement mechanism.

---

<sup>94</sup> East African Community Secretariat online information. Available at: [www.eac.int/strategy.htm](http://www.eac.int/strategy.htm).

In accordance with provisions of Article 75 of the EAC Treaty, the Protocol provides for: asymmetry in the liberalization of intra-EAC trade; elimination of internal tariffs and other charges of equivalent effect; elimination of non-tariff barriers; establishment of a CET; rules of origin; anti-dumping measures; subsidies and countervailing duties; security and other restrictions to trade; competition; drawback, refund, and remission of duties and taxes; customs cooperation; re-export of goods; simplification and harmonization of trade documentation and procedures; exemption regimes; harmonized commodity description and coding system; and freeports.<sup>95</sup> However, EAC members have not yet fully implemented some of these provisions. Areas still to be harmonized are internal taxes, customs procedures, other duties and charges on imports, and fees on production. The EAC certificate of origin is not yet operational; the COMESA certificate is currently used.

Under the Protocol, the customs union is to be established progressively over five years from the entry into force of the Protocol, which was signed on 2 March 2004, and entered into force on 1 January 2005. The EAC CET, adopted as from 2005, has three bands (0, 10%, and 25%), although rates above 25% apply to a number of "sensitive" products (Chapter III(3)(i)). EAC members are to review the maximum rate of the CET after 1 January 2010.<sup>96</sup>

The free-trade area component of the EAC customs union is yet to be established. Trade in goods between Tanzania and Uganda, as well as imports from Tanzania and Uganda to Kenya, has been duty free since 1 January 2005, while goods from Kenya to Tanzania and Uganda are under either Category A (for immediate duty-free treatment) or Category B (gradual tariff reduction). Internal tariffs on Category B goods (some 880 tariff lines at the HS six-digit level in

---

<sup>95</sup> Article 2 of the Protocol.

<sup>96</sup> Article 12 of the Protocol. However, the Council of Ministers of the EAC is mandated to review the CET structure, and approve measures to remedy any adverse effects, on any member state, induced by the implementation of the CET or, by exceptional circumstances.

the case of Tanzania, and some 443 lines in the case of Uganda), specified in Annex II of the Protocol, are to be phased out as follows: a 10% tariff rate in 2005; 8% in 2006; 6% in 2007; 4% in 2008; 2% in 2009; and zero thereafter.<sup>97</sup>

The EAC Customs Management Act was enacted on 16 December 2004. It governs the administration of customs, including administrative and operational matters. According to the Act, the day-to-day operations of customs, including collection of revenue, will continue to be managed and administered by the respective national revenue authorities. The revenue authorities in each member state, in conjunction with the ministries responsible for EAC affairs, Finance, Trade and Industry, are responsible for the gradual establishment of the EAC customs union. EAC negotiations on trade in services are to commence in 2006 as part of the EAC common market. Burundi and Rwanda have applied to join the EAC, and high-level negotiations on their accession are advanced. They are expected to become EAC members before the end of 2006. Many reasons have been cited for the collapse of the Community, among them structural problems which impinged on the management of the common services; inadequate involvement of the people in the decision-making processes; lack of compensatory mechanisms for addressing inequalities in the sharing of the costs and benefits of integration; ideological differences, vested interests and lack of vision on the part of some leaders.

---

<sup>97</sup> Internal tariffs must not exceed the CET on any of the specified products (Article 11 of the Protocol). The EAC Council may decide, at any time, that tariff rates may be reduced more rapidly or abolished earlier than provided for by the schedule.

### 3.3 Institutional Structure

The main institutions of the EAC are: the Summit of Heads of State and/or Government; Council of Ministers; Coordination Committee; sectoral committees; East African Court of Justice; East African Legislative Assembly; and the Secretariat. In addition, Article 24 of the Protocol established the EAC Committee on Trade Remedies to handle: rules of origin; contingency trade remedies; dispute settlement mechanism; and any other matter referred to the Committee by the Council. The EAC has the following autonomous institutions: Lake Victoria Development Programme<sup>98</sup>; the East African Development Bank (EADB)<sup>99</sup>; Lake Victoria Fisheries Organization (LVFO)<sup>100</sup>; and the Inter-University Council for East Africa (IUCEA).<sup>101</sup> The Summit is responsible for, *inter alia*: the overall policy direction and functioning of the EAC; considering the annual progress reports and other reports submitted to it by the Council; and reviewing the state of peace, security, and good governance within the EAC, and the progress achieved towards the establishment of a political federation. Subject to the Treaty, the Summit may delegate the exercise of any of its functions to one of its members, to the Council or to the Secretary General. The Summit meets at least once a year, and may hold extraordinary meetings at the request of any member. It is chaired in turn by each member state for one year. The decisions of the Summit are taken by consensus.

---

<sup>98</sup> The Lake Victoria Development Programme, established in 2001, provides a mechanism for coordinating the various interventions on the lake and its basin, and serves as a centre for promotion of investments and information sharing.

<sup>99</sup> The EADB was first established in 1967 under the former East African Community. Following the break up of the EAC in 1977, the Bank was re-established under its own Charter in 1980.

<sup>100</sup> *ibid*

<sup>101</sup> Article 12 of the Protocol. However, the Council of Ministers of the EAC is mandated to review the CET structure, and approve measures to remedy any adverse effects, on any member state, induced by the implementation of the CET or, by exceptional circumstances

The Council of Ministers is the main policy decision-making institution. It initiates and submits bills to the Assembly; gives directions to the member States and to all other organs of the EAC other than the Summit, Court, and the Assembly; makes regulations, issues directives, takes decisions, and gives opinions in accordance with the provisions of the Treaty; considers the budget; submits annual progress reports to the Summit, for which it prepares the meetings agendas; establishes sectoral committees provided for by the Treaty; and implements the decisions and directives of the Summit. The Council consists of ministers responsible for regional cooperation and any other ministers members may designate. It meets twice a year, immediately after the Summit, or at the request of a member state or the chairperson of the Council. It is chaired in turn by a minister of each member state. The decisions of the Council are taken by consensus<sup>102</sup>.

The Coordination Committee (CC) is responsible for regional cooperation and coordinates the activities of the sectoral committees. It also, *inter alia*, submits reports and recommendations to the Council either on its own initiative or upon the Council's request; implements the decisions of the Council; receives and considers reports by the sectoral committees; and may request a sectoral committee to investigate any particular matter. The CC consists of the permanent secretaries responsible for regional cooperation and any other permanent secretaries members may designate. It meets at least twice a year (before the meetings of the Council), and may hold extraordinary meetings at the request of the chairperson of the Committee. It is chaired in turn by a permanent secretary from each Member State.

---

<sup>102</sup> Article 12 of the Protocol. However, the Council of Ministers of the EAC is mandated to review the CET structure, and approve measures to remedy any adverse effects, on any member state, induced by the implementation of the CET or, by exceptional circumstances

The sectoral committees formulate programmes and monitor their implementation. They meet as often as necessary and are responsible for setting out sectoral priorities; and submit, from time to time, sectoral reports and recommendations to the CC. The CC recommends to the Council the composition of the sectoral committees.

The East African Court of Justice, established under Article 9 of the Treaty, ensures that EAC law is interpreted and implemented in line with the Treaty. The Court has jurisdiction to hear and determine disputes between member states on the interpretation and application of the Treaty (if the dispute is submitted to it under a special agreement), and between the Community and its employees. The Court became operational on 30 November 2001, and is temporarily located in Arusha, until the Summit determines its permanent seat. The six judges, two from each member, are appointed by the Summit from among sitting judges of any national court of judicature or from recognized jurists, while the Registrar is appointed by the Council.

The East African Legislative Assembly provides a democratic forum for debate. It has a watchdog function, and ultimately is responsible for the legislative process. The Assembly interacts with the national assemblies of member states on EAC matters; debates and approves the EAC budget; considers annual reports, annual audit reports, and any other reports referred to it by the Council; makes recommendations to the Council on the implementation of the Treaty; and recommends to the Council the appointment of the Clerk and other officers. The Assembly has 27 elected members, and five *ex-officio* members consisting of the three ministers for regional cooperation, the Secretary General and the Counsel to the Community.

The Secretariat, based in Arusha, is the executive organ of the EAC. As the guardian of the Treaty, it ensures that regulations and directives adopted by the Council are properly implemented. It is responsible for: the day-to-day administration of the Treaty; coordinating

and monitoring the implementation of Council and Community decisions; arranging meetings, disseminating information, and keeping minutes of meetings of the EAC institutions (it is the depository of all records of EAC); assisting in the harmonization of national policies and strategies of member states in so far as they relate to EAC; and assisting in the negotiation of trade agreements with third parties. The Secretariat is headed by a Secretary General, who is a citizen of a member State, and serves a fixed five-year term. The core budget of the Secretariat is funded by equal contributions from the member states.

### **3.4 Management of natural resource conflict in East Africa**

Each of the countries that comprise the Eastern Africa region, has had a political history with significant implications for natural resource management. Indeed, natural resource issues have been central to the history of the countries discussed here. Some of the situations arising from this history have to a large extent engendered conflicts that are relevant to community forestry.

Conflict has been acknowledged as an integral part of the process of human interaction<sup>103</sup>. With respect to natural resources, conflict is bound to arise from competing demands placed on resources by different claimants. Even within a cohesive community of people, conflict may arise over resources as population increases causing demand to exceed supply. Moreover, in Eastern Africa, with its diversity of tribes each with its own culture, a major source of conflict is the ethnic diversity of resource users, which has implications for resource demands.

Political changes resulting from the democratisation process that has swept across the region and the continent have brought new opportunities for the empowerment of civil society.

---

<sup>103</sup> Christine Pendzich, Gary Thomas and Tim Wohlgenat, *The Role of Alternative Conflict Management in Community Forestry*, RESOLVE and FAO (1994), p. 1

Community-based associations are being reactivated all over the region, with a commitment to empowering the local communities to participate effectively in the decision-making process relative to their governance. Though they are not strictly speaking resource management associations, these community-based civil organisations are bound to get involved in resource management issues at the local level.

Legal systems and institutions introduced during the colonial era have become formal structures governing resource management in most of Eastern Africa, their traditional counterparts continue to operate both formally and informally. In Kenya, Uganda, and Tanzania, recognition is given to customary law in the statute books, although in practice the governments and the courts have tended to ignore the customary laws and to institutionalise the imported law. This is virtually inevitable given the limitations on the applicability of customary law<sup>104</sup>. There appears to be a tacit understanding at the formal governmental levels, in all the three former colonies, that the evolution of these societies is from traditional systems to imported, formalised systems. So, even where customary laws are applied, this is done as a temporary measure pending the adoption of statutory systems.

Nevertheless, in most of rural Eastern Africa, the vast majority of people continue to relate with each other and with their natural resource base on the basis of customary laws and norms<sup>105</sup>. Access to natural resources in these rural areas is governed by customary rules applied by traditional institutions, even though the statute books provide a different basis for such rights founded on the regime of property laws that were imposed by the colonial system. This legal

---

<sup>104</sup> Okoth-Ogendo, *Tenants of the Crown : Evolution of Agrarian Law and Institutions in Kenya*, ACTS Press, Nairobi, 1991

<sup>105</sup> Ghai and J.P.W.B. McAuslan, *Public Law and Political Change in Kenya: A Study of the Legal Framework of Government from Colonial Times to the Present*, Oxford University Press, Nairobi, 1970, Chapters 1 and 3.



environment creates an abiding conflict situation that is both institutional and systemic. The customary legal arrangement has its own institutional resource management framework that allocates resources, settles disputes when they occur, exacts penalties and inflicts punishment on offenders, and otherwise governs the resource use. It is a framework that is not necessarily within the formal statutory system, and which, in certain instances, is informed by ideals that are contradictory to ideals that are the basis of the formal system. The traditional framework derives its legitimacy not from the policy and legislative actions of the governments, but from the customary norms of traditional society. The sanctions applied within this framework are equally legitimated not by the formal structures of government but by the same customary norms and beliefs. Given the political systems discussed above, these legitimisation processes that exist outside the formal policy and legal framework are bound to be a source of serious conflicts.

Water is a major natural resource in Eastern Africa. The Nile, Lake Victoria, the Indian Ocean, and a host of rivers and lakes provide a steady supply of this resource in the area. Conflict situations relative to water arise because of competing demands for the resource by different persons and sectors of the economy. Apart from domestic or household use, water is important for the provision of hydroelectric power, for industrial and domestic effluent treatment, for transportation, and as a source of fish and other aquatic life used and traded as food<sup>106</sup>. The realisation of these competing demands create competition and therefore conflicts between the various claimants. Such conflicts arise both within and across sectors. For example, government funded hydroelectric power projects and irrigation schemes may affect the flow of water and the availability of fish thereby impacting on the sources of food, trade and livelihood for local peoples. Elsewhere an industrialist discharging toxic effluent into the lake may thereby

---

<sup>106</sup> Calestous Juma, Albert Mwangi and Cleophas Torori, *Kenya Natural Resource Management Assessment, Vol. 2: Policies, Institutions and Capabilities*, USAID KENYA, Nairobi, 1995

adversely affect the fish life which another industrialist uses as raw materials in a fish processing plant<sup>107</sup>.

---

<sup>107</sup> Kenneth Kakuru, Benedict Mutyaba, Brian Rohan and Anne Ziebarth, *Roles and Best Practices of the Central Government of Uganda in Environmental Management*, World Resources Institute, Washington, 1995

## CHAPTER FOUR

### REGIONAL INTERGRATION IN LAKE VICTORIA BASIN

#### 4.1: Introduction

Lake Victoria is the second largest freshwater body on earth and the most productive freshwater fishery in Africa. The lake is also the ancestral home to one of the most biodiverse “superflock” of Haplochromine cichlid fish species and one of the most densely human populated regions on earth. Bordered by Kenya, Tanzania, and Uganda in East Africa, Lake Victoria plays a vital role in supporting tens of millions of people living around its shores. While the lake holds extraordinary biological, economic, and social significance, the decision to introduce the voracious, carnivorous Nile perch (*Lates niloticus*) made by the British Colonial Administration in 1954, violently restructured the aquatic ecosystem and the fishing way of life<sup>108</sup> in the Lake Victoria Basin (LVB). The Colonial era introduction of the invasive Nile perch (*Lates niloticus*) in the 1950's, combined with the introduction of industrialized fish processing in the 1980's, rapidly altered socio-ecological systems throughout the LVB. The introduction and commercial harvesting of the Nile perch, subsequent human population growth, and the looming problems of climate change continue to compromise the health of this socio-ecological system. While the Nile perch trade provides much needed foreign currency to these three exporting nations, the increased fishing pressure on wild stocks, driven by global demand and the subsequent influx of industrial fishing technology, compromises the long term sustainability of wild fish populations, food security and sovereignty, the fishing way of life, and fishing in local places around the lake.

---

<sup>108</sup> “The fishing way of life” refers to the livelihoods and practices of fishermen, processors, traders, baiters, net repairers and all other individuals involved in the artisanal fishing sector.

## 4.2 Natural Resources Conflict Management in Lake Victoria Region

The term conflict is often used to refer to armed conflict.<sup>109</sup> Mwangiru defines conflict in reference to the existence and pursuance of incompatible goals by two or more parties.<sup>110</sup> Burton makes a distinction between disputes that are over interests and conflicts from those that are over values.<sup>111</sup> He also observes that conflicts of interests can be negotiated, mediated or subjected to judicial determination while conflicts involving needs, values and identity can not be subject to compromise. Mwangiru concurs with Burton's definition about conflicts involving values, wants and interests.<sup>112</sup> 'Conflict' has been perceived differently by diverse scholars. There are those who view conflict to be subjective. To them, for a conflict to exist, it has to be dysfunctional and its effects must be felt by the parties.<sup>113</sup>

The genealogy and dimension of conflicts in Africa are complex and varied. Mitchell observes that a conflict arises when two or more parties have incompatible goals<sup>114</sup>. The root causes of the conflict in Africa are believed to be grounded in its history, its formation and characteristics. Koffi Anan has stated that the construction and nature of the state in Africa, which is rooted in the pedigree, tend toward the institutionalization of ethnic entitlements, rights and privileges which has created differentiated and unequal status of citizenships<sup>115</sup>.

Water is essential indeed crucial vital strategic natural resources for all economies. Every country's drinking water supply, food production, energy supply, and consequently, industrial

---

<sup>109</sup> W. Zartman, *Ripe for Resolution: Conflict and intervention in Africa*, New York: Oxford University Press, 1985, page 8.

<sup>110</sup> M. Mwangiru, *Conflict: Theory, Processes and Institutions of Management*, op. Cit.

<sup>111</sup> J. W. Burton, "World Society and Human Needs" in I. Margot and A. J. R. Groom (eds.)

<sup>112</sup> M. Mwangiru, *The international Management of Internal Conflicts in Africa*, Uganda Mediation, 1985, op. cit. p. 28.

<sup>113</sup> K. Webb, "Structural Violence and Definition of Conflict", *World Encyclopedia of Peace*, Vol. 2, Oxford Pergamon Press, 1986, pp. 431-434.

<sup>114</sup> C. R. Mitchell, *The Structure Of International Conflict*, (London: Macmillan, 1998), P15-25

<sup>115</sup> A. Kofi, *Causes of Conflict in Africa*, UN secretary General Report, (New York: 1998), P113.

development hinge on water availability. The resource is very essential for healthy human living conditions and sound ecosystem.

Africa is unique among the developing world regions that all continental countries in Africa share one or more river or lake basins with their neighbours and all major river and lake basins in Africa are shared by two or more countries. The continent has over 80 major transboundary river and lake basins, and an equal number of ground water basins, some of which are the largest in the world in terms of their geographical extent. Some basins are shared by as many as ten countries, and each of the ten major basins are shared by more than four countries. The political boundaries of fourteen countries fall almost entirely within the catchment and drainage areas of one or more transboundary river basins. These rivers and lakes in combination with some large aquifers located in Africa, offer a great opportunity for developing and sharing the full potential of water resources of the region for personal and household needs, hydropower generation, agriculture and aqua-culture production, navigation industrialization and several other societal needs<sup>116</sup>.

#### **4.3: Regional Integration as the Strengthening tool for conflict resolution in the Region**

One of the major advantages of regional integration is the strengthening of peace and security in a given region as stated by John<sup>117</sup>. The more nations interact with each other in pursuit of common goals, the less likely they are to engage in armed conflict against each other. Moreover, as regional groupings, they have more capacity than individual states to deal effectively with internal conflicts, which are more frequent in Africa than interstate conflicts. Thus, the current EAC security agenda stands to benefit positively from the historical

---

<sup>116</sup> M. Mutagamba, *on Africa's River and Lake Basin Organization*, (Uganda, Volume one, May 2007)

<sup>117</sup> John, C (1997), "Regional Integration is not Enough", *Quarterly Review*, Centre for Research into Economics and Finance in Southern Africa, London School of Economics (April).

reconstruction of the pan-African project under the African Union. For instance in 2002, the Organization of African Unity (OAU) was transformed into the African Union. Symbolically, this was a major step forward in the unification project that pan-African thinkers and activists had advocated throughout the twentieth century. Prominent black intellectuals like Alexander Crummell, Edward Wilmot Blyden and Henry McNeal Turner were already formulating pan-African ideas during the nineteenth century.<sup>118</sup>

#### 4.4 Social Integration

As noted in the foregoing, economic integration is couched under the Customs Union. This therefore explains the need to promote and reinforce all factors which could encourage harmonious socio-economic development of all states within a community aspiring to be integrated socio-economically. In light of this, the general conclusion which could be inferred from an examination of this theory in practice is that economic integration may not be advantageous in developing regions/ sub-regions which do not have the preconditions of the theoretical requirements. According to Haas<sup>119</sup> quoted in Nye<sup>120</sup>: "it is dangerous to claim validity for the 'European theory' in societies which do not reproduce the physical conditions, ideologies, class structure, group relations and practical traditions and institutions of contemporary Western Europe."

---

<sup>118</sup> Ihonvbere (ed) *The Political Economy of Crisis and Underdevelopment in Africa: Selected Works of Claude Ake*. Lagos, JAD Publishers Ltd.

<sup>119</sup> Haas, Ernst B. (1958), *The Uniting of Europe: Political, Social, and Economic Forces 1950-1957*. Stanford: Stanford University Press.

<sup>120</sup> Nye, J.S. (1963); East African Economic Integration; "Journal of Modern African Studies, vol. 1 No. 4 PP 475 - 502.

Assessing this view in later years, Edozien and Osagie in conformity with the proposition of Singer<sup>121</sup> specify the preconditions for economic integration which deal specifically with those required for the African union. In fact, the preconditions emerged from a comparative analysis of the differences between the relatively successful Central American Common Markets and those of the less successful East African Economic Communities.<sup>122</sup>

The union must be made up of countries of similar socio-economic importance/status to avoid the fear of possible dominance - in religion, wealth, size, population etc. The size of each of the members of the union must not be so large as to permit any one of them independently to contemplate an essentially national policy of industrialization as an alternative to regional coordination. critical examination of these preconditions shows that they are indeed appropriate and desirable for the African region often defined as a region aspiring for collective socio-economic development in social, cultural diversity, physical and religious matters.

Incidentally, the role of social/cultural/physical/religious diversity in the effectiveness of economic integration could be perceived from two different dimensions. Firstly, under a positive situation where the diversity creates a situation of a healthy rivalry among the member states. This would culminate in a realistic application of the theory of comparative advantage for the derivation of the benefits of trade creation. Secondly, under a negative situation, peculiar with African countries, the situation of diversity breeds the emergence of hatred, fear of domination

---

<sup>121</sup> Singer, H.W. (1967): 'Preconditions for Regional Economic Integration; International Development Review, IX September pp 19-20.

<sup>122</sup> Edozien, E. C. & Osagie, E. (1982): Economic Integration of West Africa; Ibadan University Press.

and difficulty in surrendering the assumed hard won political sovereignty under an eco-political union<sup>123</sup>.

At the household level, the Nile perch fishery excluded women and children from the nutritional and economic value of the fishery, while encouraging the spread of the AIDS virus to households around the LVB. Most scholarly and professional inquiry into the human dimensions of the Nile perch fishery has glossed over the impacts of gender inequality in the fishery as a whole, focusing instead on gender-neutral analysis of the aggregate socio-economic impacts of the Nile perch fishery at regional scales. While this literature sheds much needed light on the negative macro-level impacts of the transition from a subsistence fishery to an export-oriented one, it obscures the Nile perch's role in igniting domestic violence through nutritional and economic exclusion and the spread of disease at the household level<sup>124</sup>.

At the beginning of the Nile perch boom of the 1980s, before the spread of the AIDS virus and industrial fish processing, in cities like Mwanza, Tanzania, the Nile perch was celebrated by fisherfolk as a *mkombozi*, or a savior. Today, for many women and children in fishing communities in the LVB, the Nile perch remains a budging-eyed curse.

#### 4.5 Trade Integration

The Lake bestrides Kenya, Uganda and Tanzania as a symbol of their natural and lasting unity. Beyond the symbolic significance, the Lake is a resource of great socio-economic potential. Covering an area of 69,000Km<sup>2</sup>, it is the second largest fresh water body in the world after Lake Superior in North America. It is the source of the Nile. The Lake Victoria catchments area covers 193,000Km<sup>2</sup> in Uganda, Kenya and Tanzania as well as parts of Rwanda and Burundi. This area,

<sup>123</sup> Singer, H.W. (1967): 'Preconditions for Regional Economic Integration; International Development Review, IX September pp 19-20.

<sup>124</sup> Wu, I (2005) 'Trade agreements as self protection', Review of International Economics, 13:3, 472- 84, Oxford: Blackwell Publishing.



invariably described as the Lake Victoria Basin and the East African Lake Region, is the size of an average African country with a population of over 30 million and a gross economic product of USD5 billion<sup>125</sup>.

Economic Integration' connotes a process of economic development which involves the elimination of discriminatory barriers among economic units of national state. For easy operational community arrangements, such economic units are expected notably to be units within a regional/sub-regional setting, African, European, West African, East African and Central African settings. Put simply, economic integration in an economic region involves pure economic and political unification, eco-political cooperation and free trade areas (Nwabuzor, 1982).

Economic integration as an eco-political concept draws largely from international (trade) relations theory which is informed by the "Customs Union Theory", proposed by Wu and enlarged subsequently by Lipsey<sup>126</sup>. In this regard, economic integration culminating in the formation of economic community is practically a fusion of national market aimed at economic development via the elimination of discriminatory barriers and the incorporation of cooperative arrangements among economic units of a regional/sub-regional economic grouping.

The trade taking place through Lake Victoria shows a high value of exports compared to imports. In some years, imports are a quarter of exports. This reflects the significance of the lake as an exporting port especially for fish exported to Europe. Imports mainly petroleum products and other household items are equally important<sup>127</sup>. Transit trade and re-export is also significant

---

<sup>125</sup> East Africa report, (2011)

<sup>126</sup> Wu, L (2005) 'Trade agreements as self protection', *Review of International Economics*, 13:3, 472– 84, Oxford: Blackwell Publishing.

<sup>127</sup> Singer, H.W. (1967): 'Preconditions for Regional Economic Integration; *International Development Review*, IX September pp 19-20.

especially from Kenya

Lake Victoria Basin's potential lies in many areas including the opportunities for investing in fisheries, tourism, transport and communications, water and energy, agriculture, trade and industry. Considering the whole basin, the potential is further extended to cover the abundant natural resources in wildlife, forestry, minerals and fertile soils.

Fishery, an important resource of the Lake, is one of the most prolific and productive inland fisheries in Africa. At one time it harboured over 500 endemic fish species. The current annual catch from the Lake is estimated at 500,000 metric tons of fish equivalent to 1,500 metric tons daily. Earnings from the Lake's fish catch in the region are at USD400 million per year or slightly over USD1 million per day<sup>128</sup>.

Lake Victoria's significance arises from the following values: Largest inland water fishing sanctuary. Major inland water transport linkage for the five East African Countries: three countries are directly linked by the Lake (Kenya, Uganda and Tanzania) while two (Rwanda and Burundi) use the lake for transport purposes. Besides the Five East African Community members, other countries of the neighbourhood region also use the Lake and the Basin for exporting and importing and most importantly for transit trade. Democratic Republic of Congo, South Sudan and to some extent Zambia, also use the Lake. A source of water for domestic, industrial and commercial purposes. Major reservoir for hydroelectric power generation. Major climate modulator in the region. Rich in biodiversity, agriculture activities and industrial activities especially related to fish such as fish processing<sup>129</sup>.

The Lake Victoria fishery has come under increasing pressure in the last two decades.

---

<sup>128</sup> Ibid

<sup>129</sup> Dollar, David (1992) 'Outward-Oriented Developing Economies Really Do Grow More Rapidly: Evidence from 95 LDCs, 1976-85', *Economic Development and Cultural Change*, 523-544

Fish production was at its peak in the early 1990s, and currently there is a downward trend of most species. Despite this, there is a great demand for Lake Victoria fish, chiefly Nile perch (*Lates niloticus*) and 'dagaa' (*Rastrineobola argentea*), in the export market and for domestic consumption<sup>130</sup>. The present situation is as a result of the tremendous commercial transformation that fishery at Lake Victoria has undergone in 20 years. That is from a local-based subsistence fishery before 1980, to one dominated by fish processing factories funded by international sources aiming at enhancing fish exports from East Africa to the developed world, so as to earn more foreign exchange. This takes place against a backdrop of a protein-starved local community whose livelihood depends on the lake. In the past, international trade on fisheries was taken for granted as a means to tackle poverty and food insecurity for fish dependent communities. That idea has, however, been challenged in the last few years as researches explore the benefits of global fish trade vis-à-vis the costs, in relation to food insecurity and environmental implications.

Due to the large investment already made in industrial fish processing, exports should continue. However, the quantities of exportable fish must be limited to ensure sustainable fisheries and reconciliation with the local subsistence income. While Lake Victoria has suffered from water residing to critical low levels affecting many activities, it is important as inland water is used for fishing, transportation and other types of commerce.

It is important to recognise that each of the above ranking economic integrative arrangements constitutes an experiment which is representative of a differential level of eco-political and social commitment, consequent upon some socio-politically advantageous net assessment of the attendant losses in sovereignty over these important economic decisions.

---

<sup>130</sup> Wu, I (2005) 'Trade agreements as self protection', *Review of International Economics*, 13:3, 472– 84, Oxford: Blackwell Publishing.

Theoretically and empirically, the main concern of the theory of economic integration is the gains and changes from the isolation approach in development efforts to the collective and cooperative regional arrangements<sup>131</sup>. The efficacy of this arrangement is couched under international (trade) relations theory as earlier noted. <sup>132</sup>However, the relevant aspect of that theory which informs the establishment of African, European and American economic communities, also as earlier noted, is the "Customs Union Theory" which proposes trade creation among member - states based on comparative cost advantages.

Whereas, the Customs Union Theory seems to have underpinned the cooperative and collective economic arrangements among the nations within an eco-political region/sub-region in both the developed and developing nations alike, nonetheless, its adoption in different zones tends to focus on divergent goals<sup>133</sup>. In Africa quite unlike Europe, the overriding necessity to accelerate, foster and encourage the socio-economic development of African countries was seen as major development priorities at independence<sup>134</sup>. This therefore explains the need for the promotion of harmonious economic development of the region and the subsequent call for effective regional/sub-regional economic cooperation via the elimination of all types of obstacles to the free movement of goods/services and factors of production. In this regard. African regional groupings are couched under the efficacy of the theory of Customs Union focussed on

---

<sup>131</sup> Hafner-Burton, E. and Montgomery, A. (2005) 'War, trade and envy: why trade agreements don't always keep the peace', presented at the International Studies Association Annual Conference, Honolulu, Hawaii.

<sup>132</sup> Viner, J. (1950): *The Custom Union Issue: The Carnegies Endowment for International Peace*, New York.

<sup>133</sup> Melucci, cited in: Guibernau, Montserrat. *Nationalisms. The Nation-State and Nationalism in the 20<sup>th</sup> Century*. Cambridge: Polity Press, 1996, p. 75.

<sup>134</sup> *Economic Community of West African States (ECOWAS)*," M.A Thesis, The Norman Paterson School of International Affairs, Carleton University, Ottawa.

trade liberalisation and its attendant benefits and also collective self-reliance, within the scope of economic prosperity.

#### **4.6 Eco-Political Dimensions of Integration**

Given the foregoing preambles, the history of political and economic integration in Africa dated the pre-colonial era. During this period, a number of kingdoms which extended over territories covering the present date independent African States were in existence.<sup>135</sup> The culture of the people of these kingdoms were relatively well integrated to allow some limited trade and free movement of factors of production among themselves. Nevertheless, the colonisation of the African States during the 19th century can be regarded as the background to current historic and economic integration efforts in Africa. That is, the colonial governments in West, Central, East, and Southern Africa attempted regional integration through free trade, common currencies and services. For instance, in West African British colonies, there was free movement of factors of production among member states (Nigeria, Gold Coast now (Ghana), Gambia and Seirra Leone). Also, in West African French colonies, the countries were geographically contiguous and were administered as a Federation with common currency.

In the same vein, the Belgian colonies in Central African States introduced some measure of economic integration which included free movement of factors of production. In East Africa, the British colonies introduced the same currency and common services in the British East African colonies. Similarly, a custom union was established between the Union of South Africa, and the British protectorates of Botswana, Swaziland and Lesotho. Moreover, the British colonies in Zambia, Zimbabwe and Malawi attempted bringing about considerable economic

---

<sup>135</sup> Diejomaoh, V. P. (1983) "The Economic Integration Process in Africa: Experience, Problems and Prospects" A paper delivered at the International Economic Association. 7<sup>th</sup> World Congress on Structural Change. Economic Interdependence and World Development Madrid Spain.

integration among those countries. The Portuguese colonies of Mozambique, Angola, Guinea-Bissau and Cape Verde were integrated into the Portuguese economy. In the same fashion, the North African French colonies attempted regional integration of Tunisia, Libya, Algeria and Morocco during the colonial times<sup>136</sup>.

However, the attainment of independence by many of the African States during the 1950s and early 1960s downsized the efforts of the colonial governments in bringing about economic integration in Africa perhaps, due to the difficulty of surrendering the respective countries' sovereignty. In actual fact, one of the reasons for the collapse of economic integration in Africa after political independence was that the colonial governments did not have any meaningful programme of development for countries that were economically integrated under their rule. Moreover, studies by Diejomaoh, and Lavergne, have shown that the development that was achieved in some few centres such as Dakar, Abidjan, Brazzaville in the case of the French, Nairobi and its environs, and Rhodesia in the case of the British were to benefit the colonial administrations<sup>137</sup>.

In spite of the above shortcomings, a number of the independent African countries, benefiting from the colonial heritage, tried to come together and form a truly economic co-operation and integration among themselves. For instance, in West Africa, the newly independent French speaking countries, using the previous colonial administrations structure, formed the West African Customs Union (UDAC) which eventually transformed into West

---

<sup>136</sup> Mytelka, L.K (1973) "The Salience of Gains in Third World Integrative Systems", *World Politics*, 25 (2), pp.236-250.

<sup>137</sup> Diejomaoh, V. P. (1983) "The Economic Integration Process in Africa: Experience, Problems and Prospects" A paper delivered at the International Economic Association. 7<sup>th</sup> World Congress on Structural Change. Economic Interdependence and World Development Madrid Spain.

African Economic Community (CEAO) in 1970 in order to make it equitable<sup>138</sup>. In the same vein, the four French speaking independent states in central Africa, using the common-services and arrangement structure of the previous colonies of Chad, Central African Republic, Gabon and Congo, formed a Custom Union in 1959. In 1964, Cameroon joined the group to form African Economic and Custom (UDEAC) Union<sup>139</sup>. Despite the initial misunderstanding within the group, UDEAC is regarded as one of the longest surviving Customs Union in Africa. Modifying the integrative arrangements under colonial rule, the Treaty for East African Co-operation (EAC) was developed in 1967 by the independent states of Kenya, Tanzania and Uganda. The Treaty was expected to provide a transfer tax to indigent states among the group on one hand, while the East African Development Bank was to ensure a balanced development among the states on the other hand. Nevertheless, attempts by the United Nations (UN) Economic Commission for Africa to expand the scope of the EAC to embrace the independent states of Zambia, Burundi and Rwanda in the 1960s failed<sup>140</sup>. In Southern Africa, there was little prospect for economic integration during the 1960s due to the armed struggle for independence in Mozambique, Angola, and Zimbabwe. Also, in both West African States (Cote D'Ivoire, Guinea, Liberia and Sierra-Leone) and North African States (Egypt and Sudan), efforts at forming economic integration during the 1960s did not succeed due to political disagreements between independent states forming the blocks.

From the foregoing, it can be seen that in spite of the high spirits of many of the Independent African States to form economic integration groupings in the 1960s, their efforts did

---

<sup>138</sup> Lavergne, R(1997) Regional Integration and Cooperation in West Africa. A Multi-dimensional Perspective. Africa World Press, Inc.

<sup>139</sup> UN (1986) Current Problems of Economic Integration. The Problems of Promoting and Financing Integration Projects. United Nations (UN) Conference on Trade and Development. Geneva.

<sup>140</sup> Nye, J.S. (1963): East African Economic Integration; "Journal of Modern African Studies, vol. 1 No. 4 PP 475 - 502.

not receive 100 per cent success. This was largely due to the unsettled political and economic climates of many Independent African States during the period. Also, the import substitution, trade and exchange control and inward looking policy adopted by many of the Independent African States during the 1960s were constraints to regional integration. Moreover, the political instability in the form of military coups and civil wars in many of these independent colonies created constraints which obstructed the effectiveness of economic groupings for economic integration in Africa

However, regional co-operative efforts are now gaining a new impetus in Africa. <sup>141</sup>The first formal moves toward regional integration in Africa was articulated in the establishment of the United Nations Economic Commission for Africa (ECA) in 1956, the African Development Bank (ADB) in 1963 and the Organisation of African Unity (OAU) in 1963. The emergence of these important institutions coupled with the recent world democratisation, liberalisation and globalization have informed African States of the importance of regional integration towards achieving political and economic stability as well as rapid industrial development of their states. In addition, Africans today are well aware of the challenges facing them and have started tackling them in terms of regional cooperation. For instance, the armed conflicts in some of the African societies are being attended to through regional and sub-regional co-operative organisations such as ECOMOG, Inter-Governmental Authority on Development (IGAD), etc. Also, the issue of democratisation of African states have taken the root.

In actual fact, the notion of good governance has assumed a central position in the discussions of Africa's democratisation process. Although, corruption and nepotism have played

---

<sup>141</sup> UN (1986) Current Problems of Economic Integration. The Problems of Promoting and Financing Integration Projects. United Nations (UN) Conference on Trade and Development. Geneva.



a destructive role in many of the African societies in the past, these issues are currently being attended to by many of the African Governments. Moreover, policy stability and harmonisation that can lead to rapid development are now being taken into consideration. In short many African societies have now realised that apart from economic gains from democratisation alongside liberalisation and globalisation, there are increasing political gains that can be achieved toward regional integration in terms of political stability of member states. Also, regional integration has been seen by many Independent African States as impetus to possible solution to the continent's deep and prolonged economic and social crisis.

#### **4.7 Challenges for Regional Integration**

The basic objectives that have underpinned the pursuit of regional integration are to merge economies, integrate them, and, as a derivative, thus form a monetary union. This requires a harmonisation of economic policies, to pave way for merger, hence convergence. Other derivatives of integration objectives are the enlargement and diversification of market size, and tapping of related opportunities and the promotion of intra-regional trade and free movement of the factors of production, which also results in stronger member states' bargaining position in relation to other regional and international blocs and the fostering of socio-economic progress, political stability, as well as peace and security.

The varying emphasis placed on the objectives for the different African regional blocs is influenced by the specific stage of development of the integration process, including the expected benefits and costs<sup>142</sup>. Given the fragmented and small sizes of its low-income economies, Africa needs to competitively participate in multilateralism from a regionalized

---

<sup>142</sup> Jenkins, C (2001), "Integration and Cooperation in Southern Africa", OECD Development Centre Technical Paper # 172 (March).

standpoint, to negotiate more effectively for international market access and ward off marginalisation and unfair competition in the global arena<sup>143</sup>.

#### 4.8 Conclusion

This perspective takes as its point of departure the symbiotic relationship between Lake Victoria and the wider integration process in EAC. The conflict dynamic that emerges from this perspective focus is firstly the need for the Lake Victoria region to obtain its political legitimacy from the incumbent, national, political structures; and secondly on how the conflict configurations in a number of key sectors are directly linked to the lake region through geographic functional proximity, or indirectly through their role in the wider regional integration process.

One of the major reasons for the failure of previous attempts to further integrate the East African countries can be found in the economic sector. Differences in the approach to market economy, comparative advantages in industrial sectors, and access to natural resources created an asymmetry in the economic sector, which blocked further integration. Two areas stand at the core of EAC's economic integration: monetary and financial policy coordination; taxation and trade tariffs. The potential for conflicts in relation to these areas lies in the dilemma that both progress and status quo will create winners and losers. In its simplest form the dilemma looks like this: Meeting the macro-economic goals set for regional harmonisation implies a price to be paid in terms of less focus on other macro-economic priorities (such as social services and employment): Not meeting the macro-economic goals means losing out on the benefits of increased regional economic interaction.

---

<sup>141</sup> Onwuka, I Ralph (1982) *Development and Integration in West Africa: The Case of the Economic*

## CHAPTER FIVE

### AN ANALYSIS OF LAKE VICTORIA IN MANAGEMENT INTERVENTION

#### 5.1 Introduction

The Lake Victoria Basin is the world's second largest lake, and the largest freshwater body on the African continent. Home to an estimated 30 million people, with an average population density of 550 persons per km<sup>2</sup>, it is one of the most densely populated rural regions on earth<sup>144</sup>.

Lake Victoria is a critical resource for the people of East Africa, yet due to massive neglect by the national governments of Kenya, Uganda, and Tanzania this region suffers today from systematic underdevelopment of political, economic, financial, and health infrastructures. The Lake Victoria Basin faces complex environmental, socioeconomic, geo-political, and technological innovations challenges that need to be addressed in order to achieve sustainable development. In response to these challenges, various interventions have been initiated by the riparian countries, with the support of development partners through bilateral and multilateral arrangements<sup>145</sup>. The first phase of the Lake Victoria Environmental Management Project was one of such interventions whose objectives were to; maximize sustainable benefits to riparian communities by using resources within the Basin; conserve biodiversity and genetic resources for the benefit of the riparian communities; and to harmonise national management programmes in order to reverse environmental degradation trends in the region. The project was implemented by then three East African Partner States.

---

<sup>144</sup> UN-HABITAT, 2006. Lake Victoria Region Water and Sanitation Initiative - Strategic Environmental Assessment for 15 towns in the Lake Victoria Basin in Kenya, Uganda and Tanzania, Unpublished.

<sup>145</sup> Article 12 of the Protocol. However, the Council of Ministers of the EAC is mandated to review the CET structure, and approve measures to remedy any adverse effects, on any member state, induced by the implementation of the CET or, by exceptional circumstances

The Lake Victoria region, with an estimated population of 30 Million people sharing common socioeconomic activities, cultures and social interactions, is severely affected by the AIDS pandemic and encompasses some of the worst hit districts in the EAC region (Kenya, Tanzania and Uganda, Rwanda and Burundi). Reasons for the region's vulnerability are complex, including population mobility, poverty, gender inequality, as well as various socio-cultural practices. Lake Victoria Region is highly urbanized and faced with high mobile communities (from rural to urban as well as urban to urban) in search of economic opportunities.

Lake Victoria with its shared natural resources straddles vast swathes of the EAC region. The lake is shared with varying portions in Tanzania, Kenya and Uganda. While Rwanda and Burundi lack waterfronts on the lake, they fall within its wider drainage basin, and are linked to it by the Kagera River, one of the major tributaries to the lake<sup>146</sup>.

The world's second largest fresh water lake is indispensable to the region in many ways: fishing a major source of exports revenue for the three Partner States and subsistence for many communities living on the shorelines. The lake also provides water for irrigation and power generation in addition to being a major transport route ever since the completion of the Kenya-Uganda railway in 1901. But the Community also faces a twin pronged challenge of investing in and conserving the lake's resources for the sake of posterity<sup>147</sup>.

On investment, Lake Victoria has a vast but untapped transport potential in addition to a worrying safety and security record. The lake also lacks ring-roads which can facilitate the transportation of fish and tourism on its shores. Many Kenyans from the lake shores especially

---

<sup>146</sup> UN-HABITAT, 2004, Environmental Assessment Requirements: A Guide for UNHABITAT Supported Activities, UN-HABITAT.

<sup>147</sup> East African community regional plan of action for the prevention and control of human and animal transboundary diseases in east africa: 2007 – 2012, (approved 2007)

those in their 40s and 50s talk with nostalgia of how they hitched a ride on one or more of the steamers that plied the lake in the 1960s through to the 1970s. For this generation, this was a pleasurable and unforgettable experience.

In the fishing sector, investment will be critical in the construction of fish processing factories and cooling plants for preserving fish. Fishermen on the lake have over the decades been hostage to capricious middlemen who take advantage of fish being highly perishable to purchase the commodity at very low prices.

The lake also has numerous unexploited tourism resources courtesy of its many picturesque beaches, wildlife, water sports and islands. The tourist attractions remain under utilised because of poor or no marketing and lack of requisite transport facilities such as roads and airstrips. There is a glaring shortage of hotel capacity in the region<sup>148</sup>.

However, for all the beauty and utility that Lake Victoria Basin has bestowed on the region, it faces many threats. These include reduced fish stocks due to unsustainable fishing methods, declining water levels, water hyacinth clogging the lake, insecurity due to piracy and absence of disaster response mechanisms, plus pollution occasioned by the disposal of industrial effluent and raw sewage into the lake. The elimination of these threats requires a coordinated response by the Partner States.

Other shared natural resources within the Lake Basin are wildlife and ecosystems such as the Mau Forest, Mt Elgon Forest, Mara River and the Kagera River Basin<sup>149</sup>. The freedom of movement of persons as enshrined in the protocol may well have been borrowed from the

---

<sup>148</sup> Article 12 of the Protocol. However, the Council of Ministers of the EAC is mandated to review the CET structure, and approve measures to remedy any adverse effects, on any member state, induced by the implementation of the CET or, by exceptional circumstances

<sup>149</sup> East African community regional plan of action for the prevention and control of human and animal transboundary diseases in east africa: 2007 – 2012, (approved 2007)

wildebeest, which cross the Mara River on the Kenya-Tanzania border in an annual ritual now dubbed the “Eighth Wonder of the World,” a tourist attraction in its own right.

It is notable that the Lake Victoria Basin Commission (LVBC), an institution of the EAC, has already invested in a number of projects aimed at conserving and managing the shared natural resources for the benefit of all the Partner States<sup>150</sup>. These flagship projects include the Lake Victoria Environmental Management Project II, Mount Elgon Regional Ecosystem Programme, Trans-Boundary Water for Biodiversity and Human Health in the Mara River Basin, and the Maritime Communications for Safety on Lake Victoria Project, among other initiatives. For these projects to succeed, the LVBC must ensure that these projects have a benefits component for the communities in their catchment. Sourcing investment for and prioritising conservation of natural resources in the Lake Basin is mandatory because they hold the key to mitigating the negative effects of climate change and boosting food security in East Africa<sup>151</sup>.

### 5.1.1. The Lake Victoria Region

One of the most important shared natural resources of the East African Community countries, The Lake bestrides Kenya, Uganda and Tanzania as a symbol of their natural and lasting unity. Beyond the symbolic significance, the Lake is a resource of great socio-economic potential. Covering an area of 69,000 sq. km, it is the second largest fresh water body in the world after Lake Superior. It is also the source of the Nile. The Lake Victoria catchment area covers 193,000 sq. km in Uganda, Kenya and Tanzania as well as parts of Rwanda and Burundi<sup>152</sup>.

---

<sup>150</sup> Thiaw, Ibrahim, (2012). *Director, Division of Environment Policy Implementation*, UNEP.

<sup>151</sup> UN-HABITAT, 2004, *Environmental Assessment Requirements: A Guide for UNHABITAT Supported Activities*, UN-HABITAT.

<sup>152</sup> Thiaw, Ibrahim, (2010). *Director, Division of Environment Policy Implementation*, UNEP.

Despite the extraordinary natural endorsements and rich cultural history within this region, its people face considerable challenges<sup>153</sup>. Today, the Lake region is characterized by poverty, instability, rapid population growth and environmental degradation. People living around the Lake are the poorest despite the fact that the lake resources around them benefit many countries through fish exportation. There are many factors known and unknown that can cause water conflicts. For example, a conflict over land as in the Mau forest of Kenya and the resultant environmental degradation directly affect the amount and quality of flow into the lake. All these activities impinge on the lake resources in one way or another. For instance, excessive fishing has led to the depletion of fish stocks<sup>154</sup>. These trends, however, are only symptoms of broader social, economic and developmental dislocations. Over-fishing and the use of damaging or illegal fishing gear is only in part a reflection of the failure of centralized management strategies on the Lake. The trends described above represent a grave threat to the sustainability of Lake Victoria's fisheries. The deteriorating security situation on the lake poses serious threats to the fisheries, fishermen, fishing communities and the lake environment as a whole.

#### Water-related conflicts within the East Africa Region

##### 5.1.2. The Migingo question

Kenya and Uganda have recently laid claim on Migingo, a tiny islet of Lake Victoria, which has been described variously as 'a rock', 'one hectare of land floating on Lake Victoria' and a 'hostile rock without vegetation'. Both countries claim that Migingo is part of their territory, Uganda based on colonial maps and Kenya on the basis of the same colonial maps and

---

<sup>153</sup> Ashok, S. (2002). *The Nile River Basin Initiative: Too Many Cooks, Too Little Broth*. SAIS Review, Vol. XXII, No. 2, pp. 93-308.

<sup>154</sup> Water - Related conflicts in the Eastern African Region. IPSTC, 23, September, 2010.

the further claim that the island is inhabited by members of a Kenyan community, the Luo. One hundred and forty million Kenyan shillings (US\$2 million) have been allocated for the process of 'surveying' to determine the actual ownership of the island. Without going into the merits of expending this colossal amount of funds – which arguably could have found a better use in meeting the dire needs the post-electoral displacements in Kenya – I will attempt to shed light on the international law issues that this dispute raises<sup>155</sup>.

Since 2003, a number of Kenyan fishermen have been arrested and their boats and equipment confiscated by either Tanzanian or Ugandan authorities for «illegally crossing the common borders<sup>156</sup>. The latest incident happened when about 400 Kenyan fishermen were kicked out of Migingo island by Ugandan authorities. This island is claimed by both Uganda and Kenya. Unfortunately, many of the fishermen are not even aware of where the boundaries are until they have been arrested. This incident has exacerbated the already strained relations between the two countries. The Kenyan fishermen have appealed to their political leaders to intervene, some even threatening violence. Tensions in fishing communities at the borders should never be taken lightly given their potential to escalate into conflicts between neighbouring countries or even internationalized conflict. To the fishermen, what is important is the availability of the fishing grounds and the amount of fish they get from there. Consequently, tensions like the one in Migingo have a serious economic bearing on the region. Inadequate communication and ignorance of fisheries laws regulating the access to fishing grounds could be a major cause of conflict. The fishermen on both sides of Kenya and Uganda have disparities in

---

<sup>155</sup> Kaka, Ali (2012). *Regional Director, International Union for Conservation of Nature (IUCN)*,

<sup>156</sup> Nyaoro, John, Director, *Water Resources Management, Ministry of Water, Personal Interview*, 25th June, 2012.



income. Such can lead to smuggling of fish or illegal activities in fishing which can cause conflict<sup>157</sup>.

The controversy over East Africa's Migingo Island in Lake Victoria between Kenya and Uganda came to the fore in March and April 2009 amidst claims that Uganda had taken ownership of the island which is about one hectare. Though the island is largely rocky, it is endowed with fish and Kenya benefits more from the fishing activities there. Therefore in view of the ownership conflict at hand, the two countries have seen it fit to use diplomacy to resolve the conflict instead of military action<sup>158</sup>. A renowned Ugandan History and International Relations expert Professor Pontian Godfrey Okoth, also share the same view. He says that diplomacy is the best option that Kenya can take because it benefits a lot from Uganda in terms of trade and commerce, transportation, education opportunities and employment among others. Kenya and Uganda also collaborates on both regional security and global political issues<sup>159</sup>. They therefore need each other and issues that strain relations between the two countries can be resolved diplomatically<sup>160</sup>. On international law perspective, the real ownership of Migingo Island was to be determined by a joint survey based on the colonial maps since all African states respect colonial borders which the Organization of African Unity had embedded in its charter and which the African Union has provided for in Article 4(b) of its Constitutive Act.

If Migingo is Kenyan territory, Uganda will have violated the principle of respect for territorial integrity provided for in article 2(4) of the Charter of the United Nations and article III paragraph 3 of the OAU charter. Either way, Okoth says, one of the two states will have transgressed

---

<sup>157</sup> *ibid*

<sup>158</sup> Water - *Related conflicts in the Eastern African Region*. IPSTC, 23, September, 2010.

<sup>159</sup> Kaka, Ali (2012). *Regional Director, International Union for Conservation of Nature (IUCN)*,

<sup>160</sup> Lotodo, Augustine. Member of Parliament. EAC Legislative Assembly. Workshop on Water - *Related conflicts in the Eastern African Region*. IPSTC, 23, September, 2012.

international law. In addition, Uganda's actions hoisting its flag, collecting rent, deploying military police and taxing the inhabitants' amounts to acts of aggression in international law. Okoth and other scholars challenge East African Community to mediate and resolve the conflict peacefully since international law cherishes peaceful means of conflict resolution. So far, diplomatic forays, discussions in various fora and index show that the island might be in Kenya. Tanzania has 48 per cent of the lake; Uganda 46 per cent and Kenya 6 per cent. Though Kenya benefits more from Migingo fishing than Uganda, the two countries cannot afford to engage in a military conflict since Uganda is Kenya's major trading partner in the World. What remains now is for the joint border survey to be completed so as to resolve the matter conclusively<sup>161</sup>.

The Migingo dispute started with Uganda wanting to control the spillover of Kenyan fishermen into its territory<sup>162</sup>. Uganda protects her fishing grounds dearly and it exports a lot of fish to the European Union countries. Kenya's Prime Minister Mr. Raila Odinga and Foreign Affairs Minister Mr. Moses Wetangula have spearheaded the settlement of the island ownership conflict. The Ugandan government has also been cooperative in the survey work which is guided mostly by the colonial maps and literature<sup>163</sup>.

## 5.2 East African Community (EAC)

The treaty establishing the EAC obliges the three partner countries (Kenya, Tanzania and Uganda) to coordinate and harmonize their policies on sustainable use of the Lake Victoria Basin and to negotiate as a bloc on issues relating to the basin. The treaty also commits the states to increase investment in the field of energy, transport, communication, forestry, tourism,

---

<sup>161</sup> Kaka, Ali (2010). *Regional Director, International Union for Conservation of Nature (IUCN)*.

<sup>162</sup> Nyaoro, John, Director, *Water Resources Management, Ministry of Water, Personal Interview, 25th June, 2012.*

<sup>163</sup> Lotodo, Augustine. Member of Parliament, EAC Legislative Assembly. *Workshop on Water - Related conflicts in the Eastern African Region. IPSTC, 23, September, 2012.*

agriculture, fisheries, livestock, mining and other areas of social economic development to stimulate development and eradicate poverty in the basin. Achieving these objectives requires a massive use of the waters of the Lake and its rivers, which has direct implications for relations with Egypt. The policy position is further elaborated by the 'Protocol for Sustainable Development of the Lake Victoria Basin' of 29 November 2003, recognized Lake Victoria Basin as 'an economic growth zone' which is connected to the larger Nile River Basin. 'In view of the relationship between the Lake Victoria Basin and the Nile River Basin,' the Protocol stipulates, 'the partner (EAC) states shall cooperate with other interested parties, regional or international bodies and programmes and in so doing, partner states shall negotiate as a bloc'. Climate change has emerged as a major threat to sustainable development and has been recognized as a regional challenge in East Africa. The East Africa Community secretariat has therefore set up a regional advisory group comprised of representatives of partner-states to support consolidation of a regional position on climate change and develop over-see the development of a Climate Change Master Plan for East Africa.

### **5.3 Lake Victoria Basin Commission (LVBC)**

The LVBC serves as an overall institution for the management of issues related to the Lake Victoria Basin. The East African Community (EAC) established the Lake Victoria Development Programme in 2001 (which was taken over by LVBC), as a mechanism for coordinating the various interventions on the Lake and its Basin; and serving as a centre for promotion of investments and information sharing among the various stakeholders<sup>164</sup>. EAC had also designated Lake Victoria and its Basin as an "area of common economic interest" and a "regional economic growth zone" to be developed jointly by the Partner States (Kenya, Uganda

---

<sup>164</sup> Lotodo, Augustine. Member of Parliament, EAC Legislative Assembly. Workshop on Water - *Related conflicts in the Eastern African Region*. IPSTC, 23, September, 2012.

and Tanzania). This programme was the driving force for turning the Lake Victoria Basin into a real economic growth zone. The Commission is focusing on harmonization of policies and laws on the management of the environment in the Lake and its catchment area; continuation of the environmental management of the Lake, including control and eradication of the water hyacinth; management and conservation of aquatic resources, including fisheries; economic activities in the development of fishing, industry, agriculture and tourism; and development of infrastructure, including revamping the transport system on and around the Lake.

East African Community (EAC) Partner States have resolved to promote investment as a way of addressing the effects of environmental degradation in the Lake Victoria Basin. Ministers from the EAC Partner States attending the 9th Meeting of the Sectoral Council of Ministers for the Lake Victoria Basin that was held in Kisumu from August 22-26, 2011 at the same time said that improvement in the livelihoods of communities residing in the basin would boost economic growth in the Basin<sup>165</sup>.

The Ministers who were speaking at the forum that was organised by the Lake Victoria Basin Commission (LVBC) observed that environmental conservation could make significant contributions to socioeconomic growth and regional integration in the Basin, which has a population of 40 million.

The Ministers from Burundi, Kenya, Rwanda, Tanzania and Uganda identified decline in water quality, climate change and food insecurity, high prevalence of waterborne diseases, insecurity and political instability as some of the problems that could be attributed to poor natural resource management in the Basin.

---

<sup>165</sup> Nyaoro, John, Director, *Water Resources Management, Ministry of Water, Personal Interview*, 25th June, 2012

They pledged their support for the LVBC's trans-boundary programmes and projects which they said had been designed to contribute to economic growth, regional cooperation and peace in East Africa<sup>166</sup>. Speaking at the forum, Tanzania's Minister of State for Environment, Dr Terezya Huvisa, emphasised the need for the Partner States to support the trans-boundary projects in the Lake Basin. "We need to improve the management of our shared water resources in order to contribute towards the management of our shared resources in order to contribute towards poverty eradication, increase food security, and protection of the environment and the basin ecosystems," Dr Huvisa said. "The Lake Victoria Basin water resources have potential for promoting regional cooperation, social and economic development through advances in environmental conservation, food production, power production and transportation,<sup>167</sup>" she added. Dr Huvisa said that despite the numerous resources at their disposal, Basin communities continue to face considerable challenges triggered by poverty, political instability and environmental degradation. "The growing population is also constantly exerting pressure on the scarce water resources. Wetlands are being reclaimed for agriculture due to the increasing population of arable land. Water quality continues to decline due to poor watershed management and invasive weeds continue to destroy our water bodies,"

The Minister said that water-borne diseases were on the rise resulting in high infant mortality, adding that the increasing uncertainty of rainfall was also affecting not only the already scarce water resources but also the backbone of EAC economies which are agro-based<sup>168</sup>. "Tanzania will cooperate with the LVBC Secretariat and the other Partner States to

---

<sup>166</sup> UN-HABITAT, 2004, Environmental Assessment Requirements: A Guide for UNHABITAT Supported Activities, UN-HABITAT.

<sup>167</sup> Dr Huvisa, *Personal Interview on the impact of shared natural resources on east africa community*, 25th June, 2012.

<sup>168</sup> *Ibid*, 2012.

ensure the smooth implementation of projects and programmes in order to enhance our efforts for the sustainable management, equitable utilisation and development of shared water resources in the basin,” said Dr Huvisa.

Kenya’s Assistant Minister for EAC Peter Munya who led the Kenyan delegation to the forum, said the high prevalence of poverty coupled with environmental degradation in the region had resulted in unnecessary competition for resources and insecurity<sup>169</sup>.

Munya said it was the responsibility of governments in conjunction with other stakeholders in the region to formulate policies that would lead to increased opportunities and political stability in East Africa. “The Government of Kenya recognises the significant contribution of environmental conservation and protection to socioeconomic growth and regional integration. In that regard, deliberate efforts are being made to address the challenges that have caused much destruction of our forests, particularly, the Mau Forest Complex, a significant water tower draining into Lake Victoria<sup>170</sup>,”

### **5.5 Impact of shared resource on conflict of East Africa community**

Lake Victoria Basin (LVB) is among the most affected shared resources that are negatively impacting on development goals of the five EAC Partner States. For example among the negative impacts faced by the Partner States are higher disease index which burden health care services for the over 35 million people as well as reducing biodiversity services in the region. The current regional arrangements that has brought the Lake Victoria Basin Commission on board has made it easier and more suitable for the development of harmonized regional standards including those for regulating effluents standards into water bodies and sewers before

---

<sup>169</sup> Assistant Minister for EAC Peter Munya, *Personal Interview on the impact of shared natural resources on east africa community*, 25th June, 2012.

<sup>170</sup> Munya, *Personal Interview on the impact of shared natural resources on east Africa community*, 25th June, 2012.

entering into major shares resources such as Lake Victoria<sup>171</sup>. In developing the harmonized effluents standards we consider other issues such as regulatory approaches. These are in two categories traditional forms (command and control) and economic incentives techniques (economic instruments)

The Lake Victoria Basin was designated an important Economic Growth Zone of the East African Community. The Lake is a transboundary and the most important shared resource of the five East African Community Partner States. The Basin is estimated to cover over 193,000 square kilometres and boasts of a market potential of over 38 million people, with an estimated annual GDP of US\$ 40 billion and a wealth of resources of economic importance<sup>172</sup>. This compares well with the overall EAC with a population of about 126.6 million and a GDP of US\$ 73 billion<sup>173</sup>.

Despite the abundance of resources in the basin, poverty remains high. This calls for increased synergies and cooperation towards achievement of the Lake Victoria Basin shared vision of a “prosperous population living in a sustainably managed environment providing equitable benefits and opportunities”. The Capacity to increase production and income is achievable, with availability of required skills, appropriate technology, support services and infrastructure to enhance productivity and equitable access to markets. The signing of the Common Market Protocol provides an opportunity to enhance the vibrancy of this Economic Growth Zone.

---

<sup>171</sup> Lotodo, Augustine. Member of Parliament, EAC Legislative Assembly. Workshop on Water - Related conflicts in the Eastern African Region. IPSTC, 23, September, 2012.

<sup>172</sup> Munya, *Personal Interview* on the impact of shared natural resources on east Africa community, 25th June, 2012.

<sup>173</sup> Lake Victoria Basin Investment Forum mwanza, United Republic Of Tanzania , “Realising Socio-Economic Benefits from Investing in the Lake Victoria Basin” 5<sup>th</sup> – 8<sup>th</sup> DECEMBER, 2010

During the 3<sup>rd</sup> EAC Investment Conference held in Kampala, Uganda in April 2010, it was realised that although the Lake Victoria Basin has been designated as a regional Economic Growth Zone to be exploited in a coordinated manner, much remains to be done to sensitise investors to flood the basin and exploit its potential. It is in line with this observation that the Lake Victoria Basin Commission has organised the first Lake Victoria Basin Investment Forum, with the aim of bringing together investors and potential investors within and outside the Basin. The Forum shall also offer an interactive opportunity for the investors to reflect and realign themselves to the already operational East African Community Common Market Protocol. The Forum shall be held at the Malaika Beach Resort in Mwanza, United Republic of Tanzania from 5<sup>th</sup> to 8<sup>th</sup> December 2010. About 1,000 business and government leaders from the region and beyond are expected at the conference<sup>174</sup>.

East Africa remains a rapidly growing economy, well noted to-date as part of the greater Africa that is in the middle of the strongest economic recovery in over 40 years. The total Foreign Direct Investment (FDI) has exponentially increased in the last decade. According to the 2006 statistics, the countries that make up the EAC had attained the following FDI flows: Kenya above US\$ 50million; Uganda US\$ 200 million; Tanzania US\$ 300 million, Burundi US\$ 300 million and Rwanda US\$ 400 million. The region has been acclaimed as one of the fastest reforming regions in the world in terms of doing business by internationally recognised institutions like the World Bank and UNCTAD (UNCTAD, 1999). The five EAC Partner States (Republics of Rwanda, Burundi, Kenya, Uganda and United Republic of Tanzania) are striving

---

<sup>174</sup> EAC (2004) *Secretariat, Protocol on the Establishment of the EAC Custom Union*, Arusha, EAC secretariat.



to be an international investment hub, implementing policies and development strategies that are anchored on comparative advantages<sup>175</sup>.

An overview of the socio-economic, natural resources and infrastructure status in the Lake Victoria Basin reveals that significant potential exists in nearly all sectors of the local economy<sup>176</sup>. The basin boasts of a market potential of 38 million people, from whom surplus labour force, both skilled and unskilled, is strategically connected to the external market. Regionally and internationally, the growing intra- and inter-state connectivity through roads, rail, air and water makes the region ideal for investment in terms of its links with the rest of the world. The full implementation of the Treaty for the Establishment of the East African Community Articles on a Customs Union and a Common Market, respectively, will in due course enhance the vibrancy of this market. Furthermore, the Treaty provides for the harmonisation of rules and regulations governing the exploitation of natural resources within the five EAC Partner States, a move that will invigorate cross-border activities in natural resources management and development. There are opportunities for investment in diverse areas such as infrastructure, agriculture, Tourism Development and Marketing Development and Marketing, human resources development, industry, mining, commerce and the services sectors.

In order to utilise the available opportunities in the region, a number of strategies have been proposed. These interventions are considered at two levels; (i) Policy interventions to create a conducive environment for Private Sector investment, industrial growth, trade and commerce

---

<sup>175</sup> Lake Victoria Basin Investment Forum mwanza, 2010, see PP 69

<sup>176</sup> Munya, *Personal Interview* on the impact of shared natural resources on east Africa community, 25th June, 2012.

in the region; and (ii) Private sector roles in investment trade and commerce, and the type of support required meeting the needs of investors<sup>177</sup>.

With the coming into effect of the East African Common Market, and the continuous harmonisation of their business laws, systems and administrative structures, the EAC Partner States aim to enhance more trade and investment among themselves and internationally. The Customs Union has already registered improved trade and investment among Partner States. With the Common Market giving more freedom to investors and service providers, the stage is set for more wealth creation. This will improve the region's competitiveness, ability to penetrate global markets and enhance increased intra-regional trade. It is anticipated that investments in the basin will flourish as investors reap the benefits of the economies of scale derived from the larger single market<sup>178</sup>.

The EAC has a deliberate strategy targeting key areas for development in the Basin and building on its profile as one market, one investment destination. This is considered a critical and important base as the community moves towards a fully integrated regional economic community, where goods, labour and services move freely without borders. It is also considered that the Lake Victoria Basin itself, with a population of over 38 million people, form a huge market that cannot be ignored as the region aims at becoming the "business destination of Choice" of East Africa<sup>179</sup>.

### 5.5.1 Trade in the Lake Victoria Ports and Basin

---

<sup>177</sup> Munya, *Personal Interview* on the impact of shared natural resources on east Africa community, 25th June, 2012.

<sup>178</sup> Munya, *Personal Interview* on the impact of shared natural resources on east Africa community, 25th June, 2012.

<sup>179</sup> Ibid

Lake Victoria, located at the heart of East Africa, is considered one of the most important shared natural resources of the East African Community. The Lake bestrides Kenya, Uganda and Tanzania as a symbol of their natural and lasting unity. Beyond the symbolic significance, the Lake is a resource of great socio-economic potential. Covering an area of 69,000Km<sup>2</sup>, it is the second largest fresh water body in the world after Lake Superior. It is the source of the Nile.

The Lake Victoria catchments area covers 193,000Km<sup>2</sup> in Uganda, Kenya and Tanzania as well as parts of Rwanda and Burundi. This area, invariably described as the Lake Victoria Basin and the East African Lake Region, is the size of an average African country with a population of over 30 million and a gross economic product of USD5 billion<sup>180</sup>.

**Figure 1: Area of Lake Victoria basin in East African Countries**

The table below shows how the three East African countries share Lake Victoria basin in percentages and kilometers.

Country	Lake surface		Catchments area		Lake shoreline	
	Km	%	Km	%	Km	%
Tanzania	33,756	49%	79,570	44%	1150	33%
Uganda	31,001	45	28,857	15.9	1750	50
Kenya	4,113	6	38,913	21.5	550	17

Source, East Africa Corporation on Natural resources, Arusha, (2010)

### 5.5.2 Economic Importance of Lake Victoria

<sup>180</sup> EAC (2007) *Secretariat, Protocol on the Establishment of the EAC Custom Union*, Arusha, EAC secretariat.

Lake Victoria Basin's potential lies in many areas including the opportunities for investing in fisheries, tourism, transport and communications, water and energy, agriculture, trade and industry. Considering the whole basin, the potential is further extended to cover the abundant natural resources in wildlife, forestry, minerals and fertile soils<sup>181</sup>.

Fishery, an important resource of the Lake, is one of the most prolific and productive inland fisheries in Africa. At one time it harboured over 500 endemic fish species. The current annual catch from the Lake is estimated at 500,000 metric tons of fish equivalent to 1,500 metric tons daily. Earnings from the Lake's fish catch in the region are at USD400 million per year or slightly over USD1 million per day<sup>182</sup>.

Lake Victoria's significance arises from the following values: Largest inland water fishing sanctuary. Major inland water transport linkage for the five East African Countries: three countries are directly linked by the Lake (Kenya, Uganda and Tanzania) while two (Rwanda and Burundi) use the lake for transport purposes<sup>183</sup>. Besides the Five East African Community members, other countries of the neighbourhood region also use the Lake and the Basin for exporting and importing and most importantly for transit trade. Democratic Republic of Congo, South Sudan and to some extent Zambia, also use the Lake.

### **5.5.3 Trade Taking Place in Lake Victoria Basin**

The trade taking place through Lake Victoria shows a high value of exports compared to imports. In some years, imports are a quarter of exports. This reflects the significance of the lake as an exporting port especially for fish exported to Europe. Imports mainly petroleum products

---

<sup>181</sup> Dr Huvisa, *Personal Interview* on the impact of shared natural resources on east africa community, 25th June, 2012.

<sup>182</sup> Lake Victoria Basin Ports and Commission, *East Africa Community*, (2011)

<sup>183</sup> Kenya Bureau of Standards. Specification for drinking water. Part 1. The requirements for drinking and containerized drinking water (First Revision, 2011) Kenya Environmental

and other household items are equally important. Transit trade and re-export is also significant especially from Kenya. Kenya and Uganda have recently laid claim on Migingo, a tiny islet of Lake Victoria, which has been described variously as 'a rock', 'one hectare of land floating on Lake Victoria' and a 'hostile rock without vegetation'.

**Table 2: Total East Africa trade through Lake Victoria (million USD)**

Table 2 below shows contribution of Lake Victoria to East Africa trade

	2004	2005	2006	2007
Exports	533.27	635.19	681.10	579.53
Imports	70.64	151.55	126.93	192.13

Source, Ministry of Trade, Kenya, (2010).

Lake Victoria is mainly used by Uganda and Tanzania, for imports and exports. Goods from the port of Mombasa and Dar saalam. Port of Kisumu is used to transport goods to port of Mwanza exports to Europe is transported via the same port.

#### 5.5.4 Trade in Kenya

Trade taking place in Lake Victoria basin uses the port of Kisumu. The port has an economic importance to not only Eastern Kenya but also other parts of the region. The trade data in this section is on Kisumu. The data encompasses trade using the waters of Lake Victoria, and other routes leading and passing through Kisumu station<sup>184</sup>.

Lake Victoria is very important for trade between Kenya and its neighbouring countries such as Tanzania, Uganda, Rwanda, Burundi, and Democratic Republic of Congo among others. Kisumu port plays a crucial role for this trade, although trade using other modes of transport

<sup>184</sup> Kenya Bureau of Standards. Specification for drinking water. Part 1. The requirements for drinking and containerized drinking water (First Revision, 2011)

other than vessels through Kisumu has also been captured<sup>185</sup>. There are important vessels that ply to and from Kisumu which include Kamongo, Harambee, Delmaskenya, Munanka among others. However, data shows that other modes of transport (road, airways and railway) are quite important for Kisumu. This report captures the transactions of the Lake and the importance of Lake Victoria as a basin<sup>186</sup>.

As a station, Kisumu is quite important for transit trade in the East African region and beyond. The largest destination of re-exports passing through Kisumu is Uganda, followed by Tanzania, Democratic Republic of Congo, and then Rwanda. The highest destination of exports through Kisumu is Uganda, followed by Tanzania, Democratic Republic of Congo, then India. However, exports are considerably lower than re-export except for the year 2005 (Table 3). This shows that Kisumu is an important linkage to the landlocked neighbouring countries of Kenya, and it serves the Lake Victoria region.

**Table 3: Total trade through Kisumu port in million USD (2005-2010)**

Table 3 below shows Kenya Total trade through Kisumu port in million USD (2004-2007)

Year	2005	2006	2008	2010
Exports	7.06	45.72	8.9	7.57
Imports	1.81	2.97	6.06	9.33

Source, Ministry of Trade, Kenya, (2010).

Our source of data indicates that data collection and compilation for the year 2004 was not as good as the subsequent years where data capture improved. Therefore, 2004 is an outlier indicating perhaps the problems with capturing of data hence the distortions. Nevertheless, in

<sup>185</sup> Ministry of Planning and National Development Republic of Kenya. (1993). Kisumu District Development Plan 2005–2015.

<sup>186</sup> *ibid.*

terms of direction of trade, the countries that feature as top destinations for exports and re-exports, and origin for imports are quite consistent with the direction trade for Kenya takes. In 2005, the data indicates that exports through Kisumu were quite high, nearly USD50 million. The countries of destination were mainly those neighbouring the Lake; the highest destination being Uganda<sup>187</sup>. This is consistent with overall trade between the two countries; Kenya has been for many years one source of Uganda's imports. The imports are mainly petroleum products followed by iron steel. Consumer products such as cereals and other light consumer goods are also imported. Tanzania, Democratic Republic of Congo, Rwanda and Burundi are the top markets for Kenya's exports. Countries such as Britain, Italy, USA and Hong Kong are also important markets. In the same year (2005), imports recorded at the Kisumu station were to the tune of USD3 million while re-exports were about USD8 million. Imports are mainly from developed countries such as Denmark, but Tanzania ranks second as a source of import. This can be explained by the closeness of the two countries and the interconnectedness of the economies around the Lake. Many of those living around the lake use it as a source of livelihood. For re-exports, the countries of destination are the landlocked Uganda, Rwanda, Democratic Republic of Congo, Burundi and also Tanzania and Zambia. The main products for re-export are the petroleum products followed by agricultural inputs such as fertilizers and spare parts for agricultural machines. Cotton lint is also traded especially from Tanzania. Imports include car tyres and tubes, music systems, VCDs, satellite dishes, vehicles, cameras, dagaa, cotton seed cake, textile materials, farm implements among other consumer goods<sup>188</sup>.

---

<sup>187</sup> Lotodo, Augustine. Member of Parliament, EAC Legislative Assembly. Workshop on Water - *Related conflicts in the Eastern African Region*. IPSTC, 23, September, 2012.

<sup>188</sup> Lotodo, Augustine. Member of Parliament, EAC Legislative Assembly. Workshop on Water - *Related conflicts in the Eastern African Region*. IPSTC, 23, September, 2012.

**Table 4: Imports to Tanzania through Tanzania's Lake Victoria Ports in millions**

S/N	Station	2004	2005	2006	2007	2006
1	Bukoba Lake Port	0.19	0.29 - - -			
2	Musoma Lake Port	1.84	10.94	19.09	10.52	8.27
3	Mwanza Lake Port	43.41	57.22	63.42	76.05	150.69
4	<b>Total</b>	45.44	68.46	92.51	81.57	155.96
5	Growth rate %		<b>50.65</b>	<b>35.14</b>	<b>-11.82</b>	<b>91.19</b>

Source, Ministry of Trade, Kenya, (2010).

Exports using the Musoma port increased between 2005 and 2006 by 93 per cent but dropped in 2007 by over 100 per cent. This might be due to drought which befell the region reducing water levels of the Lake and thus affecting economic activities such as fishing negatively. Mwanza port too shows an increase of exports throughout the period although the increase is not that high. Mwanza port is the most important for Tanzania trade through Lake Victoria taking an average of 70 per cent for exports and over 88 per cent of imports. In summary, Mwanza port is the main window of Tanzania in the Lake Victoria. In addition to the main ports (Mwanza, Musoma and Bukoba), there are other ports including private ones which include Mwaloni port, Nyamirembe port, Kemondo port, Shirati port and Muleba port.

On the import side, we also find that Bukoba lake port ceased recording exports for the years 2005, 2006 and 2007. The Tanzania's imports through Musoma port increased dramatically in 2005 compared to 2004 but declined afterwards. Mwanza port is the most



important port and imports coming through it have increased drastically, nearly doubling, between 2006 and 2007<sup>189</sup>.

### 5.5.5 Uganda's Trade Using Lake Victoria

The Uganda port is currently under the Rift Valley Railways and not Uganda Railways Corporation. The vessels that plied the port in 2004 were MV Umoja, MV Kaawa, MV Kabalega and MV Pamba. The products/goods which were traded in 2004 include maize, beans, cotton seed cake, cement, building materials (plates, angle bars, wire mess. nets, steel bars, and poles) and mukwano products which included foodstuffs and manufactured goods<sup>190</sup>.

The trade between Port Bell and Jinja port, Kisumu port and Mwanza port in terms of tons was as follows in 2004: Jinja Port – Port Bell (39, 902), Kisumu Port - Port Bell (62,841), Mwanza Port – Port Bell (256,31). In total there were 359,315 tons. Out of the total tonnage by route, imports accounted for 287,921 tons and exports 71,394 tons.

**Table 5: Ugandan trade using Lake Victoria**

Exports			
2007	2008	2009	2010
48,091.48	29,147,776.94	111,713,924.86	7,660,617.00
Imports			
367,547.20	59,070,679.70	59,294,124.65	34,836,704.62

Source, Ministry of Trade, Kenya, (2010).

The data indicates quite a hefty sum of imports including transit goods using Lake Victoria. Trend analysis shows that imports increased dramatically between 2004 and 2005 but

<sup>189</sup> Lake Victoria Basin Ports and Commission, *East Africa Community*, (2011)

<sup>190</sup> EAC (1999); The Treaty for the Establishment of the East African Community, East African Community (2003), Protocol on Sustainable Development of the Lake Victoria Basin.

dropped in 2006 and 2007. However, even with the drop in the import figures, it is apparent that Lake Victoria plays a very significant role in trading and other economic activities of Uganda. On exports, the figures recorded increased in 2004 and 2005 but dropped as from 2006. Overall, trade transacted using Lake Victoria in Uganda was quite high and significant<sup>191</sup>.

The top imported commodity for 2004 was broken rice amounting to 188,458.24 which is about half of the value of all imports. For the year 2005, the highest commodity traded was wheat amounting to 20,959,474.14 about 38 per cent. In 2006 and 2007, it was once again wheat amounting to 22,518,319.2 which was about 57 per cent and 20,331,491.11 about 81.6 per cent respectively. The data for Uganda include only those commodities that were transported by water.

#### **5.6 Policies, Laws, Regulations and Legal Frameworks under Lake Victoria.**

The Government of Uganda has put considerable efforts in ensuring that major national policies reflected in the Poverty Eradication Action Plan (PEAP) and its planned successor, the National Development Plan (NDP); the Plan for Modernization of Agriculture (PMA), the Social Development Sector Strategic Plan (SDIP) and the decentralization and good governance programmes take into account environmental sustainability as a priority. These laws and policies aim at ensuring that socio-economic development is sustainable and does not destroy natural resources have been put in place. Similarly, a number of interventions, key among which are the multi-institutional Water Policy Committee (WPC) and the Water and Environment Sector Working Group (WESWG) that provide policy and technical guidance for all sector development activities have been established to achieve this objective<sup>192</sup>.

---

<sup>191</sup> EAC (1999); The Treaty for the Establishment of the East African Community, East African Community (2003), Protocol on Sustainable Development of the Lake Victoria Basin.

<sup>192</sup> EAC (2009); The Treaty for the Establishment of the East African Community,

The key elements in the existing policy and legislation framework for Water and Environmental Management in Uganda are the Constitution of the Republic of Uganda, 1995, the National Environment Management Policy, 1994, the National Environment Act, Water Action Plan, 1994, the Water Act, 2000, the National Water and Sewerage Corporation Act of 1995, the National Water Policy, 1999, Public Health Act, Cap. 281 of 2000, National Wetland Policy, the Local Governments Act, 1997, Land Act (1998), the Uganda Wildlife Act, Cap 2000, International treaties, Regulatory and Economic Instruments, Constrains/Gap in the legal and policy framework, Institutional Framework, the Fish Act, National Fisheries Policy (NFP) and 2003, Guidelines for Beach Management Units (BMUs) in Uganda. Explicitly stated in each one of these are the provisions for the protection of water resources, protection and preservation of the environment and allows for measures to promote good water management to prevent or minimize damage or destruction to water resources resulting from pollution and other causes. In this section we review only those policies and institutional framework relevant to water and sanitation that are of interest to this report.

The National Environment Act Cap 153 appoints the National Environment Management Authority (NEMA) as a principal agency for management of the environment and includes amongst its functions the integration of all environmental concerns in overall national planning. It also empowers NEMA to establish environmental standards (e.g. Water Quality Standards, Effluent Standards) and other standards which have a bearing on water quality management. Control of waste discharges into the environment including the powers relate to the issuing, renewal and cancellation of water abstraction and wastewater discharge permits and easements has been delegated by NEMA to Directorate of Water Development (DWRN) by an instrument

of 1999<sup>193</sup>. Pollution control comprises functions such as water quality management, regulation and standards setting, on-site sanitation, collection and treatment of domestic and industrial waste discharges and each function requires appropriate institutional arrangement for effective management. The Water Action Plan (WAP), 1994 provides a comprehensive framework for the development and management of water resources in Uganda. It sets out the principles, strategies, process, products, institutional and management structures and management functions, and targets for an action plan<sup>194</sup>.

Kenya has enacted the Water Act 2002 as a guiding principle and regulatory mechanism to ensure proper and safe water use and its protection and set up the Water Resources Management Authority (WRMA) as a lead institution in this regard. Part II, section 18 of the Act, provides for national monitoring and information system on water resources and sub-section 3 allows WRMA to demand from any person or institution, specified information, documents, samples or materials on water resources. The Act vests the rights of all water to the state, and the power for the control of all bodies of water with the Minister who has powers for i) Provision of conservation of water and ii) Appointment and use of water resources. According to the Act, pollution of any water course is an offence and the Act also prohibits whoever throws, conveys, cause or permits throwing of rubbish, dirt, refuse, effluent, trade waste to any water. Section 76 states that no person shall discharge any trade effluent from trade premises into licensed sewers without the consent of the licensee upon application indicating the nature and composition of

---

<sup>193</sup> Lotodo, Augustine. Member of Parliament, EAC Legislative Assembly. Workshop on Water - *Related conflicts in the Eastern African Region*. IPSTC, 23, September, 2012.

<sup>194</sup> Water Action Plan (WAP), 1994

effluent, maximum quality anticipated, flow rate of the effluent and any other information deemed necessary<sup>195</sup>.

The provisions regarding sanitation Sections 115 and 116 which require that Local Authorities take all lawful, necessary and reasonably practicable measures to maintain their jurisdiction clean and sanitary to prevent occurrence of nuisance or condition liable to be injurious or dangerous to human health<sup>196</sup>. Such nuisance or conditions are defined under section 118 as waste pipes, sewers, drainers or refuse pits in such state, situated or constructed as in the opinion of the medical officer of health to be offensive or injurious to health. Any noxious matter or wastewater flowing or discharged from any premises into the public street or into the gutter or side channel or watercourse, irrigation channel, or bed not approved for discharge is also deemed as nuisance.

In Tanzania the water regulations and legal framework for water resources are guided by the Water Supply and Sanitation Act No. 12 enacted in May 2009. The Act outlines the responsibilities of government authorities involved in the water sector, establishes Water Supply and Sanitation Authorities as commercial entities and allows for their clustering where this leads to improved commercial viability<sup>197</sup>. It also provides for the registration and operation of Community Owned Water Supply Organizations and regulates the appointment of board members. The Ministry of Water (MoW) is the agency responsible for overall WSDP policy setting, co-ordination, monitoring, evaluation and regulating community water supplies and Ministry of Health and Social Welfare coordinates promotion of hygiene and sanitation. The Water Sector Development Program (WSDP) has transferred responsibilities for service

---

<sup>195</sup> Eastern Africa regional harmonization of livestock identification and traceability systems, iss/mifugo project, may 2010

<sup>196</sup> The Public Health Act (Cap. 242, Part IX)

<sup>197</sup> Water Supply and Sanitation Act No. 12

provision to Local Government Authorities (LGAs). However, in the case of water utilization and control of water pollution, at least six different laws have relevance. These include: The Constitution of the United Republic of Tanzania 1977; The Water Resources Management Act, 2009, No. 11 of 2009; The Water Resources Management (Water abstraction, Use and Discharge) Regulations, 2010; The Water Supply and Sanitation Act, No 12 of 2009 and; The Environmental Management Act No. 20 of 2004 and; Tanzania Bureau of Standards Act. In Tanzania there are specific requirements for ensuring compliance and efficiency in effluents management. Issuance of Water Rights (WRs) has been put in place and part of the function is assisting the government in regulating water pollution.

#### **5.7 Risks That May Arise Due To Implementing Interventions Policies, Laws, Regulations and Legal Frameworks**

Success of the proposed interventions critically depends on the commitment of the five countries of the Basin to the proposed collaborative/cooperative institutional frameworks; and to achieving the objectives of the second phase of the Lake Victoria Environmental Management Project. Factors such as political instability, poverty and diseases might pose a great risk to realization of proposed mitigation measures identified in the RTDA<sup>198</sup>. The commitment is intimately related to political stability and other factors, and, therefore, it becomes a crucial and important element of the proposed interventions to have success and tangible benefits. The emphasis on regional cooperation and the collaborative efforts that have been made resulting into the preparation and ownership of this RTDA are powerful instruments for not only achieving the

---

<sup>198</sup> Lotodo, Augustine. Member of Parliament, EAC Legislative Assembly. Workshop on Water - Related conflicts in the Eastern African Region. IPSTC, 23, September, 2012.

desired objectives but also for accomplishing the long-term trust and understanding among all players<sup>199</sup>.

This is an area of crucial importance in the successful implementation of programs and projects in the region because successes of programs are highly dependent on good governance, transparency and accountability. The absence of these elements poses a risk to implementation of programs. It is, therefore, imperative that the riparian countries of the Basin remain committed to good governance, transparency and accountability for the successes of the proposed mitigation measures in the RTDA.

A strong regional coordination mechanism by the LVBC is crucial to the successful implementation of the proposed mitigation measures in the RTDA. Therefore, there is need to strengthen the LVBC and other relevant institutions so as to realize the Basin's objectives and mitigation measures proposed in the RTDA<sup>200</sup>. The presence of able regional institutions is important. For instance, LVBC is responsible for the enhancement and coordination of the harmonization of policies and regulations to enable effective management of transboundary issues within the Basin.

The RTDA identified that all the five countries, in one way or another, face institutional capacity constraints and this poses a risk to the implementation of mitigation measures in the RTDA. This calls for a need to also strengthen the national coordination units.

Constraints to remedial action include Government policies that inadequately address environmental challenges and trans-boundary issues/threats. Regional frameworks and standards

---

<sup>199</sup> Lotodo, Augustine. Member of Parliament, EAC Legislative Assembly. Workshop on Water - *Related conflicts in the Eastern African Region*. IPSTC, 23, September, 2012.

<sup>200</sup> Eastern Africa regional harmonization of livestock identification and traceability systems, iss/inifugo project, may 2010

are also inadequate. The enforcement mechanisms for Government regulations are also weak posing a risk to the implementation of proposed mitigation measures. Therefore, the planned transformation of the Protocol to an act by the Partner States will greatly enhance this process.

Occasionally manifested by droughts, floods and global warming phenomenon poses a high risk to the implementation of the mitigation measures. This calls for a joint concerted effort in the establishment of an early warning and monitoring system, data collection and information sharing and the implementation of integrated watershed management plans such as Integrated Water Resources Management (IWRMs).

The EAC Partner States currently finance the recurrent costs of the EAC Secretariat, including the Lake Victoria Basin Commission. The success of this initiative is pegged on the assumptions that Partner States will continue to adequately finance the proposed interventions. If Partner States will fail to contribute financial resources and support regional initiatives, then proposed interventions in the RTDA are risked<sup>201</sup>.

In recent years, the Great Lakes Region had been daunted by incidences of insecurity giving rise to civil strife and wars. The region is, however, gradually becoming stable and peaceful. The accession of the States of Burundi and Rwanda into the East African Community will consolidate the emerging peaceful and stability situation. There are currently political efforts within the Great Lakes Region to put in place mechanisms for addressing conflicts. However, should instability become prevalent, then there is a risk of all the partners becoming unable to implement the interventions proposed in the RTDA.

---

<sup>201</sup> Eastern Africa regional harmonization of livestock identification and traceability systems, iss/mifugo project, may 2010



## 5.8 Sustainability

The success of these interventions requires that high-level commitment both at national and regional level be maintained. The programme is fully integrated into the existing development programmes and national and regional institutional framework<sup>202</sup>.

The Participating Governments should see the proposed interventions as offering the possibility of moving beyond isolated planning and unilateral actions, in a non-cooperative and possibly confrontational setting, towards cooperative development planning in the utilization of trans-boundary resources seeking “win-win” opportunities in the spirit of equitable utilization and benefit sharing<sup>203</sup>.

Through the participatory process of project design, so far, every effort has been made to ensure that the people of the five countries genuinely own the proposed interventions. Local communities, NGOs and the Private Sector have been engaged in the national and local consultations underlying the RTDA and this, therefore, indicate their commitment and ownership of the project. The spirit should continue during implementation.

Another important concern is whether the project outcomes will, indeed, result in tangible benefits for local communities. The project, primarily, targets the local communities, who are the major beneficiaries, as a potential incentive for participation, continuity and sustainability.

Some projects will entail costs beyond their life-span and where this is the case, mechanisms for long-term sustainable financing should be explored and piloted during implementation of the project. It is expected that, where the project has led to tangible benefits

---

<sup>202</sup> Dr Huvisa, *Personal Interview on the impact of shared natural resources on east africa community*, 25th June, 2012.

<sup>203</sup> SIDA. 2004. *Strategic conflict analysis: Lake Victoria region*.

on the ground, costs are likely to be covered by the beneficiaries of the project<sup>204</sup>. Other potential innovative strategies to be tested by the Basin countries could include user fee for ecosystem services and the operationalisation of the Fish Levy Trust in Uganda, Kenya and Tanzania.

Project sustainability will also depend on maintaining and strengthening the growing regional cooperation among the Basin countries. The accession of the States of Burundi and Rwanda into the East African Community, with effect from July 2007, should be seen as strength towards jointly and sustainably managing the Basin and its resources.

## 5.9 Conclusion

An important role that the Lake Victoria basin plays in the economies of Kenya, Tanzania, and Uganda, is significant in maintaining food and livelihood security. It is therefore imperative that the nations manage fish stocks to ensure their continued sustainable use<sup>205</sup>. This will not be possible without first harmonizing the legal structures that govern fishing in the lake, as the current lack of statutory unity is among the primary contributors to overfishing and related conflicts. Although Kenya, Tanzania, and Uganda have agreed to open access for fishermen, meaning that each nation allows fishermen from all nations to fish in their territory provided they follow the applicable local laws, as of 2005, rules controlling catch sizes and allowable equipment, such as net size, had not been standardized. This led to several highly publicized cases where Working fishermen of one country were arrested by the authorities of another for invalidating their fishing permits by breaking the local fishing laws. The lack of harmonization also poses problems for sustainability because the danger of overfishing is greatest in the waters

---

<sup>204</sup> SIDA. 2004. Strategic conflict analysis: Lake Victoria region.

<sup>205</sup> Lotodo, Augustine. Member of Parliament. EAC Legislative Assembly. Workshop on Water - Related conflicts in the Eastern African Region. IPSITC, 23, September, 2012.

belonging to the government with the weakest laws. A population decrease in one part of the lake can have repercussions for the species across the entire lake<sup>206</sup>.

---

<sup>206</sup> SIDA. 2004. Strategic conflict analysis: Lake Victoria region.

## CHAPTER SIX

### CONCLUSION AND RECOMMENDATIONS

There are missing data and information gaps; mismanagement of environmental threats emanating from human activities and also weaknesses in the existing institutions in the overall management of the Basin natural resources; and, therefore, it can be concluded as follows: For a permanent solution and bringing to halt the problem of data scarcity in the region, there is need to effectively plan and improve data collection regarding water quantity, water pollution, watershed and general environment, policy, laws and institutional capacities, as well on the financing mechanisms for the projects; There is need to strengthen, monitor and control of anthropogenic activities in the Basin that are the root cause of loss of important ecosystems; public awareness programs geared to sensitize public on the ongoing environmental destruction; encourage regional interventions and incorporation of harmonized principles, policies, strategies, laws and other agreements into national legislation to enhance enforcement; and increasing environmental education and awareness among communities; There is need to strengthen regional institutions, and in particularly LVBC, to enhance the coordination and harmonization of policies and regulations for effective management of transboundary issues in the Basin, and, lastly but not least, Partner States should continue availing financial resources and support regional initiatives and proposed interventions in the RTDA<sup>207</sup>.

On realising that identified threats and challenges make Lake Victoria Basin ecosystem fragile and constrain its development, the EAC Secretariat and people from Partner States appreciate the immense potential for a healthy and sustainable socio-economic and

---

<sup>207</sup> EAC (1999); The Treaty for the Establishment of the East African Community, East African Community (2003), Protocol on Sustainable Development of the Lake Victoria Basin.

environmental development of Lake Victoria Basin. To tap this great potential, combined thoughts and integrated management of common resources across sectors and national boundaries is necessary. This led to the initiation and development of a shared vision and strategy for the management and development of the Lake Victoria Basin.

The shared vision has five pillars referred to as policy areas with clear sector strategies, and indicators of achievements. In each of these policy areas, there are sector visions, strategies, cross-cutting issues and indicators. These will serve as a guide to the people in determining their own specific strategies, objectives, and indicators for any development project in the region. The policy area visions act as a bridge between the identified threats and challenges and the aspirations of the people which they described as follows: The success of achieving the stakeholders' aspirations under this policy area is hinged on the harmonization, coordination and enforcement of policies and legislative frameworks to support the conservation and management of the ecosystems, natural resources and environment and encouraging collaboration with and promotion of participation and investment by the public, civil society and private sectors. The ultimate objective of this policy area is attainment of "A prosperous livelihood and enhanced management of ecosystems, natural resources and clean and healthy environment"<sup>208</sup>.

The team examined all the existing standards on effluents in the region. It was observed that out of the 5 partner states Kenya, Tanzania and Rwanda had developed effluents national standards and associated regulations for industrial and municipal effluents discharges into open water bodies and public sewers. Uganda had not developed such standards while Burundi used WHO standards focusing on domestic and industrial discharges. regulatory frameworks currently used for monitoring and enforcing the existing standards in Kenya do not seriously take into

---

<sup>208</sup> EAC (1999); The Treaty for the Establishment of the East African Community, East African Community (2003), Protocol on Sustainable Development of the Lake Victoria Basin.

account current and future threats to the environment including increased use, declining quality as a result of anthropogenic sources of pollution, climate change and escalating demands due to population growth. Identifying the threats will enable prioritising implementation of options. This has not been done as it is not reflected in the current laws and regulations of municipal and industrial effluent standards (both in direct regulation /command and control and economic instruments techniques making use of economic incentives).

This assessment concludes that within the partner states only Tanzania and Kenya have established standards for industrial and municipal effluents. Uganda has established monitoring mechanism for effluents entering into water BOD5ies but has not developed national standards. Rwanda and Burundi monitor effluents based on domestic and industrial WHO effluent standards for both water quality and effluents standards. Although the different partner states have evolved their policies and institutional arrangements for management of water and effluents standards, the EAC and the creation of LVBC has made it necessary and easier for the partner states to engage in developing new policies and institutional arrangements in this process of harmonization. This situation provides greater opportunities for them to harmonize policies, laws and regulations to support management of water quality and effluents being discharged into a common resource such as Lake Victoria and its river networks. Some important challenges that need to be addressed to enable efficient and timely implementation of these harmonized standards include the need to agree on the proposed harmonized standards; ensure that the various national and regional stakeholders are made aware of the harmonized standards and their importance; sufficient policy and institutional arrangements are in place internalized and acceptable to major stakeholders. The issues of effluents management are not considered

seriously by the various municipalities and industries around the lake. Some have neither effluents treatments systems nor good monitoring and enforcement arrangements,

The aim of this project was to establish a database for trade taking place in Lake Victoria and its basin. The study has established that Lake Victoria is a very important port for trade in and out of the region. The areas around the lake are very much interlinked and trading is very intensive. For example, North Western Tanzania source most of the goods from Kenya. Uganda trade depends almost entirely on the Lake. Other countries that depend on the Lake are Rwanda and Burundi in terms of transit goods and re-exports. Even Democratic Republic of Congo uses the Lake for imports and transit goods.

Goods that are traded across the Lake reflect its diversity in economic activities such as fishing, industries, agriculture among others. The good transport system makes for example, trade between Kagera region and Uganda to flourish. On the other hand, trade between the regions of Mara in Tanzania using Kisumu town are quite high. Given that Kenya is more industrialized compared to other countries of the region, consumer goods are exported from Kenya to the region while agricultural goods are imported from for example Tanzania.

The capacity of the communities to increase production and income is achievable if there is availability of the required skills, appropriate technology, support services and infrastructure to enhance productivity and equitable access to markets<sup>209</sup>. The realization of the full potential of community capacity is based on gender responsive planning for equitable distribution of resources. The ultimate objective of this policy area is to ensure that ‘Resources are sustainably and equitably utilized for increased income and poverty reduction in the Lake basin’

---

<sup>209</sup> EAC (2004); The Vision and Strategy Framework for the Management and Development of the Lake Victoria Basin

Improved living conditions will be achieved if the basic social infrastructure is rehabilitated and maintained. Increased access to and improved services with food and nutrition security and free of HIV/AIDS will enable the communities to lead a good quality of life. The ultimate objective of this policy area is to ensure that “A healthy, well educated society with high quality of life, and well developed infrastructure” is attained

Analysis on country by country basis reveals that for Kenya, Kisumu is a very important port and station for intra EAC trade. Kisumu is a connecting station for Kenya’s trade with North Western Tanzania, Uganda, and to a lesser extent Rwanda and Burundi especially for re-export of petroleum products such as fuel oil and diesel. Other important products include light consumer goods such as milk and milk products, confectionaries, fruits, vegetables, cotton seed cake, spares and other machinery related products. For the years of analyses, data indicates that a lot of business is transacted using the Kisumu port and station<sup>210</sup>.

For Tanzania, trade using Lake Victoria originates, is destined and transported using three ports including Mwanza, Musoma and Bukoba port. Among the three ports, Mwanza is the largest and the busiest. Fishing activities are very prominent but also the region has some important industries, agriculture activities, mining and animal husbandry. Tanzania trade shows a higher volume of exports compared to imports. However, Lake Basin is notorious for informal trade especially in petroleum products and thus imports are very much under captured and hence are undervalued. Uganda data indicates a hefty sum of imports including transit goods using Lake Victoria. Trend analyses show that imports increased dramatically from 2004 to 2005 but subsequently the figure dropped in 2006 and 2007. However, even with the drop in the import figures, it is apparent that Lake Victoria plays a very significant role in trading and other

---

<sup>210</sup> EAC (2004); The Vision and Strategy Framework for the Management and Development of the Lake Victoria Basin



economic activities of Uganda. The exports record a significant jump between 2004 and 2005 but dropped as from 2006<sup>211</sup>.

### **Nature of Water- Related Conflicts**

Eastern Africa has experienced increased pressure on available water resources. In recent decades, the degradation of aquatic resource base has intensified the struggle for water. This is because of increased human activities including: deforestation, soil erosion, domestic and industrial pollution, among others. These are some of the factors that have contributed to the decline of water catchment capacity and led to more severe flooding and drought conditions. Coupled with the phenomenon of global warming, the unavailability of water in the Eastern African region is growing at an alarming rate. The dwindling water resource in the region, the growing population, the increased demand and uses of renewable water resources are intensifying competition, conflicts, inequalities and under-development.

The influence of the impact of shared resource on domestic and health issues of East Africa community, from the study the Lake region is characterized by poverty, instability, rapid population growth and environmental degradation. People living around the Lake are the poorest despite the fact that the lake resources around them benefit many countries through fish exportation. Time taken by husband fishing or when they are arrested due to the conflict lead to domestic violence. Pollution by of feeders rivers or deforestation like in the mao will affect the mara river which sustains wildlife in Serengeti national park. Contamination of feeders rivers upstream will like to health problems like diseases, human and animals poisoning.

---

<sup>211</sup> EAC (2004); The Vision and Strategy Framework for the Management and Development of the Lake Victoria Basin

## 6.1 Recommendations

The following mitigation measures are recommended from this RTDA, based on the six thematic areas: A successful intervention should aim to improve land use management by designing and implementing integrated watershed management, developing capacity in land use planning, massive tree planting and protection, controlling livestock overstocking and encouraging private public sector partnership.

Active community participation programme to enhance environmental management should be put in place, which shall include among others strengthening, monitoring and control of human activities causing the loss of important ecosystems within the Basin; carrying out public awareness on trans-boundary environmental issues; incorporation of regionally harmonized principles, policies, strategies, laws and other agreements into national legislation to enhance enforcement; and increasing environmental education and awareness among communities.

Local Authorities and inhabitants should be encouraged to practice proper management of wetlands by promotion of wise use strategies, conducting a detailed assessment of wetlands in the Basin, protection of critical wetlands and creating awareness on values of wetlands for water treatment.

Fisher folks and other interested beneficiaries should be encouraged to sustain fisheries activities by promoting all user friendly practices, harmonizing fishing regulations among the riparian countries; reviewing and controlling open access fishing, strengthening enforcement of agreed and harmonized regulations, strengthening co-management through Beach Management

Units (BMU), protection of breeding and promoting appropriate aquaculture species and systems<sup>212</sup>.

Countries should conserve biodiversity through development and implementation of national and regional biodiversity strategies including species specific action plans; putting in place mechanisms for prevention of adverse human activities on sensitive areas and to reduce impacts of agriculture grazing and hunting practices including bush fires<sup>213</sup>.

From the study it became apparent that there are trade related problems faced by Lake Victoria which include: Smuggling and under invoicing which might be caused by lack of trust in authorities, tax evasion, and lack of knowledge that some imports are not charged taxes at EAC levels. Awareness exercises need to be undertaken around the Lake. Transport problems due to lack of sufficient vessels and other means. A conducive environment should be created to attract private investors in the area who can provide vessels. Lack of data base. There should be continuous data collection by EAC. Other activities need to be introduced as it seems some of the ports are deserted leaving the residents hopeless<sup>214</sup>.

In order to bring to steady state and improve Water Quality there should be harmonization of water quality management legislation to address trans-boundary issues; investment in efficient solid, liquid and urban waste management schemes, cleaner production technologies; developing planning capacity of Local Government and subjecting all development plans, programs, projects and budgets to Environmental Impact Assessment (EIA) procedures before implementation.

---

<sup>212</sup> EAC (2004); *The Vision and Strategy Framework for the Management and Development of the Lake Victoria Basin*

<sup>213</sup> EAC Secretariat (2000), *The Treaty for the Establishment of the E.A.C.*, Arusha, EAC secretariat.

<sup>214</sup> *ibid*

Water security and proper decision on water distribution requires ample and correct Water Quantity information which should be gathered from regular and continuous data collection on climate, hydrology, inflows, outflows and water balance in the riparian countries; standardization of data collection equipment and instruments to ensure data uniformity; collection of more data on water circulation so as to understand fully the dynamics within the Lake; reviewing and strengthening of existing Regional River/Lake Basin Agreements; monitoring the water quantity, quality and utilization in major rivers; construction of water reservoirs, dams and flood protection devices along flood prone rivers.

Regarding Policy, Laws and Institutions there should be a formulation and implementation of an Integrated Lake Basin Resources Management Plan; harmonization of existing Policies, Laws and Institutional frameworks and mandates to facilitate sharing of information and data; strengthening of regional and national government policies and management procedures; expansion of areas of international and regional cooperation, including technology transfer, personnel and information exchange; development of regional policies that addresses various sectors; and encouraging sharing of research data and information within the Basin.

## Bibliography

- Adedeji. A., 1999. *Comprehending and mastering African conflicts, the search for sustainable peace and good governance*, London: Zed Books. ed p 23
- Arthur L. Stinchcombe, *Constructing Social Theories* (New York: Harcourt, Brace and World, 1968), pp. 32.
- Beauchamp (1954). "Fishery research in the lakes of East Africa". *East African Agricultural Journal* 19 (4): 203–207.
- Bhagwati, J. (1993). "Regionalism and multilateralism: an overview". In J. de Melo and A. Panagariya (1993) (eds). *New dimensions in regional integration*. Cambridge University Press for CEPR.
- Boyd, G. (1984). *Regionalism and Global Security* Lexington: Lexington
- Cooper D. R. and P. S. Schindler 2000, *Research Methods* (7th ed. New York: Irwin/McGraw-Hill, 2000) p 112
- Dahilon, (2003), This Agreement was drawn up between Egypt and Great Britain, which also represented British former territories of Sudan, Uganda, Kenya, and Tanzania. This agreement gave Egypt "full utilization of the Nile waters,"
- David Booth, Diana Cammack, Thomas Kibua and Josaphat Kwek (2007) *East African integration: How can it contribute to East African*
- Diejomaoh, V. P. (1983) "The Economic Integration Process in Africa: Experience, Problems and Prospects" A paper delivered at the International Economic Association, 7<sup>th</sup> World Congress on Structural Change, Economic Interdependence and World Development Madrid Spain.

- Dollar, David (1992) 'Outward-Oriented Developing Economies Really Do Grow More Rapidly: Evidence from 95 LDCs, 1976-85', *Economic Development and Cultural Change*, 523-544
- East African Community Facts and Figures – 2001
- East African Community Secretariat online information. Available at: [www.eac.int/history.htm](http://www.eac.int/history.htm).
- East African Community Secretariat online information. Available at: [www.eac.int/strategy.htm](http://www.eac.int/strategy.htm).
- Edozien, E. C. & Osagie, E. (1982): *Economic Integration of West Africa*; Ibadan University Press.
- Fawcett L. and Hurrell A, (eds.) (1995), *Regionalism in World Politics*, Oxford, Oxford University Press.
- Geoffrey Fryer & T. D. Iles (1972). *The Cichlid Fishes of the Great Lakes of Africa*. Edinburgh: Oliver & Boyd.
- Graham M. (1929). *A report on the fishing survey of Lake Victoria 1927–1928 and Appendices*. London: Crown Agents for the Colonies
- Hafner-Burton, E. and Montgomery, A. (2005) 'War, trade and envy: why trade agreements don't always keep the peace', presented at the International Studies Association Annual Conference, Honolulu, Hawaii.
- J. W. Burton, "World Society and Human Needs" in I. Margot and A. J. R. Groom (eds.)
- Jankowicz A. D., *Research Projects* (6th ed. London: Thomson Learning, 2002) p 87
- Jaroslav Tir and Paul F. Diehl (1998), "Demographic Pressure and Interstate Conflict: Linking Population Growth and Density to Militarized Disputes and Wars, 1930-89". *Journal of Peace Research*, 35, p. 322.

- Jenkins, C (2001), "Integration and Cooperation in Southern Africa", OECD Development Centre Technical Paper # 172 (March).
- John, C (1997), "Regional Integration is not Enough", Quarterly Review. Centre for Research into Economics and Finance in Southern Africa, London School of Economics (April).
- K. Webb, "Structural Violence and Definition of Conflict", World Encyclopedia of Peace, Vol. 2, Oxford Pergamon Press, 1986, pp. 431-434.
- Lavergne, R(1997) Regional Integration and Cooperation in West Africa. A Multi-dimensional Perspective. Africa World Press, Inc.
- Lipiatou, E., Hecky, R.E., Eisenreich, S.J., Lockhart, L., and Wilkenson, P. 1996. Recent Ecosystem changes in Lake Victoria reflected in sedimentary natural rocks and anthropogenic organic compounds. In. Johnson, T.C. and Odada, E. [eds]. The limnology, climatology and paleoclimatology of the East African lakes. Gordon Uganda. J. Fish Biol.37:55-63.
- Lowe-McConnell R. H. (1994). "The changing ecosystem of Lake Victoria, East Africa". *Freshwater Forum* 4 (2): 76-89.
- M. Mwangi, Conflict: Theory, Processes and Institutions of Management, op. Cit.
- M. Mwangi, *The international Management of Internal Conflicts in Africa*, Uganda Mediation. 1985, op. cit. p. 28.
- Machiwa, and G. Tungu. 2005. Nutrient input into Lake Victoria from atmosphere deposition: the case of phosphorus. Pg 703-702. In LVEMP 2005, knowledge and experience gained from managing the Lake Victoria ecosystem EAC/WB/GEF, 725p.
- Melucci, cited in: Guibernau, Montserrat. Nationalisms. *The Nation-State and Nationalism in the 20<sup>th</sup> Century*. Cambridge: Polity Press. 1996, p. 75.

- Mumma, Albert, (2010). Director, Water Services Regulatory Board. Environmental Lawyer,
- Mytelka, L.K (1973) “*The Salience of Gains in Third World Integrative Systems*”. *World Politics*, 25 (2), pp.236-250.
- Nyaoro, John, Director, Water Resources Management, Ministry of Water, Personal Interview, 25th June, 2010.
- Nye, J.S. (1963): East African Economic Integration; “*Journal of Modern African Studies*, vol. 1 No. 4 PP 475 - 502.
- Onwuka, I Ralph (1982) *Development and Integration in West Africa: The Case of the Economic* OSIENALA is in Dholuo language: “Osiepe Nam Lolwe Gi Aluora Ne” and it means “Friends of the Lake”
- Singer, H.W. (1967): ‘Preconditions for Regional Economic Integration; *International Development Review*, IX September pp 19-20.
- UN (1986) Current Problems of Economic Integration. The Problems of Promoting and Financing Integration Projects. United Nations (UN) Conference on Trade and Development. Geneva.
- Viner, J. (1950): *The Custom Union Issue: The Carnegies Endowment for International Peace*. New York.
- W. Zartman, *Ripe for Resolution: Conflict and intervention in Africa*. New York: Oxford University Press, 1985, page 8.
- Water - Related conflicts in the Eastern African Region. IPSTC, 23, September, 2010.
- Wekesa, Gladys (2010). Ministry of Water, Personal Interview, 14 July, 201. Nairobi, Kenya.
- WHO, 1996: Kenya, Tanzania and Uganda: Lake Victoria Environmental Management Project. GEF Documentation Report No. 15541 – ARF.



Worthington & E. B. Worthington (1933). *The inland waters of Africa: the result of two expeditions to the Great Lakes of Kenya and Uganda, with accounts of their biology, native tribes and development*. London: MacMillan.

Worthington & E. B. Worthington (1933). *The inland waters of Africa: the result of two expeditions to the Great Lakes of Kenya and Uganda, with accounts of their biology, native tribes and development*. London: MacMillan.

Wu, I (2005) 'Trade agreements as self protection', *Review of International Economics*, 13:3, 472– 84, Oxford: Blackwell Publishing.

## INTERVIEW GUIDE FOR LAKE VICTORIA BASIN

1. Which resources in Africa do you consider scarce?
2. What policies are policy makers focusing on the economic dimensions of contemporary armed conflict which have made a prompt consideration on conflict promoting aspects of resource abundance?
3. What are the International Legal Perspectives on shared waters?
4. What Law is instrument that can be used to smooth out conflicts of interest generated, for instance, in the sharing of water resources?
5. What mechanisms are used to Settle Disputes and Conflict Resolutions?
6. What is the Link between Resources and Conflict?
7. What is the role of UN on water resources conflict?
8. What are Poverty-environment linkages in shared water resources in the East Africa Region?
9. How do countries in the upper Nile affect the control of Lake Victoria as a source of River Nile?
10. Are the East Africa countries (Kenya, Uganda & Tanzania) consulted when formulating policies relating to the management of Lake Victoria?
11. It is documented that the only thing that will lead Egypt to war is the breach of water treaty of 1959, how has the East Africa countries tried to utilise the resources without provoking conflict?
12. What are the serious threats local communities in the lake region face?

13. How can the local community or the East Africa region capture the benefits of the shared water either directly or indirectly to improve their welfare and income in or outside the basin?

## **ACTS**

THE EAST AFRICAN COMMUNITY STANDARDIZATION, QUALITY ASSURANCE, METROLOGY AND TESTING ACT, 2006

## **CHARTERS**

MINISTRY OF EAST AFRICAN COMMUNITY SERVICE CHARTER 2008

## **REPORTS**

EASTERN AFRICA REGIONAL INTEGRATION STRATEGY PAPER 2011 – 2015

East African Integration Dynamics of Equity in Trade. Education, Media and Labour 2011

EAC (2004) *Secretariat, Protocol on the Establishment of the EAC Custom Union*, Arusha, EAC secretariat.

EAC (2004); *The Vision and Strategy Framework for the Management and Development of the Lake Victoria Basin*

EAC (2007) *Secretariat, Protocol on the Establishment of the EAC Custom Union*, Arusha, EAC secretariat.

EAC Secretariat (2000), *The Treaty for the Establishment of the EAC*. Arusha, EAC secretariat.

EAC Secretariat (2002), *The Treaty for the Establishment of the EAC*. Arusha, EAC secretariat.

EAC Secretariat (2002), *The Treaty for the Establishment of the EAC*. Arusha, EAC secretariat.

East African Community (2003), *Protocol on Sustainable Development of the Lake Victoria Basin*.