The elaboration of appropriate legislation and institutional framework to address inland waterway transport on Lake Victoria: the case of Uganda

Rossette Katungye Nyirinkindi

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THE ELABORATION OF APPROPRIATE LEGISLATION AND INSTITUTIONAL FRAMEWORK TO ADDRESS INLAND WATERWAY TRANSPORT ON LAKE VICTORIA: THE CASE OF UGANDA

By

ROSSETTE KATUNGYE NYIRINKINDI

The Republic of Uganda

A Dissertation submitted to the World Maritime University in partial fulfilment of the requirements for the Award of the Degree of

MASTER OF SCIENCE

in

GENERAL MARITIME ADMINISTRATION & ENVIRONMENT PROTECTION

1997

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DECLARATION

I certify that all material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

Signature: ____________________________
Date: 10/10/99

Supervised by:
Professor T. Sampson,
Professor,
World Maritime University.

Assessed by:
Professor G. Plant
Professor,
World Maritime University.

Co-assessed by:
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It would be unworthy of me not to pay special tribute to my mother, Mrs. Catherine Nyirinkindi, my brother, Emmanuel Nyirinkindi, his wife Alex, and my uncle, Mr. Patrick Buhenga, for their moral support without which, I have no doubt, I would have performed poorly in my studies. My three year old daughter, Vanessa Ninsiima, initially suffered anguish at my departure but these four excellent people did every thing they could, and succeeded in giving her the very best that I could have wished for. I am sure Vanessa will one day appreciate my having to undertake this programme even at the pain of being separated from her for a year.

I shall always feel deeply honoured that, initially, the University and later on CIDA, chose to sponsor me for this course. My gratitude to them is heartfelt.

I would like to convey my deepest gratitude to the following officers: Mr. G. Wandera, Acting Chief Planner, Ministry of Works, Transport and Communications (Uganda); Prof. C. O. Okidi, Task Manager UNEP/UNDP Joint Project on Environmental Laws and Institutions in Africa (UNEP, Kenya); Ms Beatrice Adimola, Education Officer, and Ms Judith Obitre-Gama, legal officer, both of NEMA (Uganda) who promptly availed to me information and advice when I requested for it. I discovered that this is a rare quality.

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I also wish to especially thank my Course Professor and dissertation supervisor, Pof. Ted Sampson, from whom I have gained an invaluable wealth of knowledge. I feel privileged to have been his student.

To my Church fellowship, friends and colleagues, especially Mr. and Mrs. Mbone Mboneko, Susan Wangechi-Eklöw, Mrs Cecilia Denne, and my good friend Norma Niklasson, who made the hours away from home tolerable, the least I can do is to say “thank you”. To those that I have inadvertently forgotten to mention I can only apologise. To my countrymen who may chance to read this I quote our National motto “For God and my Country”. Almost all of my education was made possible by the Ugandan taxpayers’ contributions. I owe them an acknowledgement.
Title of Dissertation: The Elaboration of Appropriate Legislation and Institutional Framework to Address Inland Water Transport on Lake Victoria: The Case of Uganda.

Degree: MSc.

The dissertation focuses on the legal and institutional framework governing inland water transport (hereinafter referred to as IWT) on Lake Victoria based on a historical, geopolitical and economic perspective. It encompasses the inadequacies manifested in said framework. Reference is made to relevant national and regional policies. Diverse issues are addressed. They include, inter alia, environment degradation and protection; economic viability of international transport on the Lake; commercialisation or privatisation of the fleet and port infrastructure; prioritisation of regional co-operation; emergency/disaster preparedness; comprehensive regional contingency plans; certification of seafarers and ship surveys; management processes; institutional and legal reform. This list is by no means exhaustive, it is merely indicative. Wherever applicable, comparisons and resultant analyses will be made to existing examples of successful management of IWT and how such successes can be incorporated in the case of Uganda.

Initiatives undertaken by Government both at the local and regional level to address existing problems will be analysed. Those undertaken by the East African Co-operation Secretariat will be emphasised. The latter has brought a glimmer of hope towards the realisation of the sustainable development of IWT on Lake Victoria.

No doubt an efficient and sustainable system shall reap great economic dividends, not only for Uganda, but also the entire Lake Victoria Basin, since it will not only provide the cheapest means for transporting goods within the Basin, but will also act as an incentive or stimulant for increased production.

Hence, the author endeavours to proffer pragmatic recommendations that will be easy to implement and enforce despite the fiscal constraints faced by Uganda. These emphasise the need to have proactive rather than reactive approaches whilst striking a balance between environment protection and development.
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<tr>
<td>ADB</td>
<td>African Development Bank</td>
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<td>ADF</td>
<td>African Development Fund</td>
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</tr>
<tr>
<td>CBR</td>
<td>Congo (Zaire), Burundi, Rwanda</td>
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<td>CEGPL</td>
<td>Communauté Economique des Payes des Grand Lacs (Economic Community for the Great Lakes Countries)</td>
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<tr>
<td>COMESA</td>
<td>Common Market for Eastern and Southern Africa</td>
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<td>CP</td>
<td>Contingency Plans</td>
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<tr>
<td>DMI</td>
<td>Dar Es Salaam Maritime Institute</td>
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<tr>
<td>EAC</td>
<td>East Africa Community</td>
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<td>EACA</td>
<td>East Africa Co-operation Agreement</td>
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<td>EACM</td>
<td>East Africa Common Market</td>
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<tr>
<td>EACS</td>
<td>East African Co-operation Secretariat</td>
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<td>EAR &amp;H Co.</td>
<td>East African Railways and Harbours Corporation</td>
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<tr>
<td>ECOWAS</td>
<td>Economic Community for West African States</td>
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<td>ECE</td>
<td>Economic Commission for Europe</td>
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<tr>
<td>EEC</td>
<td>European Economic Community</td>
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<td>ERO</td>
<td>Emergency Response Operations</td>
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<tr>
<td>GLC</td>
<td>Great Lakes Corporation</td>
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<td>GLCMC</td>
<td>Great Lakes Cargo Marketing Corporation</td>
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<tr>
<td>ICD</td>
<td>Inland Container Depot</td>
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<td>ICS</td>
<td>Incident Command Structure</td>
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<tr>
<td>IDA</td>
<td>International Development Agency</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>KBO</td>
<td>Kagera River Basin Organisation</td>
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<tr>
<td>KPA</td>
<td>Kenya Ports Authority</td>
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<td>KPC</td>
<td>Kenya Pipeline Corporation</td>
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<tr>
<td>KRC</td>
<td>Kenya Railways Corporation</td>
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<tr>
<td>LEGICO</td>
<td>(EA) Legislative Council</td>
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<tr>
<td>LLCs</td>
<td>Land Locked Countries</td>
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<td>LVEMP</td>
<td>Lake Victoria Environment Management Programme</td>
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<tr>
<td>MEPD</td>
<td>Ministry of Economic Planning and Development</td>
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<td>MOE</td>
<td>Ministry of Environment</td>
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<td>MOFA</td>
<td>Ministry of Foreign Affairs</td>
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<tr>
<td>MOT</td>
<td>Ministry of Works, Transport and Communications</td>
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<tr>
<td>NAFTA</td>
<td>North America Free Trade Agreement</td>
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<td>NCTA</td>
<td>Northern Corridor Transit Agreement</td>
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<td>NEMA</td>
<td>National Environment Management Authority</td>
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<tr>
<td>NGO</td>
<td>Non-governmental Organisation</td>
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<tr>
<td>PERD</td>
<td>Public Enterprises Reform and Divestiture (Unit)</td>
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<td>PMU</td>
<td>Privatisation Monitoring Unit</td>
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<td>PTA</td>
<td>Preferential Treaty Agreement</td>
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<td>RCTD</td>
<td>Road Customs Transit Document</td>
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<td>SADC</td>
<td>Southern Africa Development Co-operation</td>
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<tr>
<td>SAPS</td>
<td>Structural Adjustments Programme</td>
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<tr>
<td>SLSAC</td>
<td>St. Lawrence Seaway Authority of Canada</td>
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<td>SLSDC</td>
<td>St. Lawrence Seaway Development Corporation</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>STCW</td>
<td>Convention on Standards of Training, Certification and Watchkeeping for Seafarers</td>
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<tr>
<td>THA</td>
<td>Tanzania Harbours Authority</td>
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<tr>
<td>TRC</td>
<td>Tanzania Railways Corporation</td>
<td></td>
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<tr>
<td>UNCED</td>
<td>United Nations Conference on Environment and Development</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
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<tr>
<td>URC</td>
<td>Uganda Railways Corporation</td>
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<td>UIA</td>
<td>Uganda Investment Authority</td>
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<td>URA</td>
<td>Uganda Revenue Authority</td>
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<td>ZBR</td>
<td>Zaire (now Congo), Burundi, Rwanda</td>
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OVERVIEW OF UGANDA
OVERVIEW OF UGANDA
Source: Ministry of Works, Transport and Communications Uganda
CHAPTER ONE

THE OVERALL PERSPECTIVE

1.1 INTRODUCTION

Uganda is a landlocked country. It straddles the Equator between 4° North and 1° South stretching from 29.5° - 35° West. Its area of 236,000 sq. km is composed of 194,000 sq. km of open water and 7674 sq. km of permanent swamp. Uganda is known as the "land of lakes." Other than Lake Victoria which is the focus of the dissertation, there are the following lakes: L.Albert, L.Mburo, L.Edward, L.George, L.Kwania, L.Kyoga, L.Bunyonyi, and L.Bisina. They are used by the local people for recreation, fishing, transportation of passengers, goods and live animals using small boats and canoes. The fresh water lakes also act as a supply of drinking water for the people and livestock and also for communal bathing and washing.

Lake Victoria is the largest water lake in all of Africa. It is the second largest fresh water lake in the world, the first being Lake Superior. It covers a total area of 68,800 sq. km and falls within the geographical areas of Kenya, Uganda and Tanzania. It is situated on the equator and forms the chief reservoir of the River Nile at Jinja. The Kagera River, which is the largest and most important as the Lake's affluent, rises East of Lake Kivu and enters the west side of Lake Victoria just north of latitude 1° S. A number of short rivers also drain into the Lake on its southern shore. The Nile is its only outlet. The Lake Victoria region is the most fertile and most densely populated region in Africa.
Appendix 1 shows the number of vessels sailing on its waters and it is quite a sizeable fleet consisting of more than 50 vessels of various types and sizes. It is important to ensure that the activities arising from running this fleet do not impact negatively on the Lake e.g. by pollution from oil spills or dumping of ship generated wastes. This is crucial because not only does the Lake provide the water supply of the people living around it but it is also an important source of fish stocks both for domestic consumption and export as well as being a vital habitat for aquatic flora and fauna. It is imperative that IWT (Inland waterway transport) on the Lake is managed in a sustainable manner and in compliance with the international laws governing shared natural resources.

The current operations on Lake Victoria in Uganda are managed by the Marine (sic) Services Department of Uganda Railways Corporation (URC) which is a parastatal that is answerable to the parent Ministry of Works, Transport and Communications (hereinafter referred to as MOT). URC derives its legal base from the URC Decree of 1977.

1.2 INTERNATIONAL TRAFFIC CORRIDORS

Mombasa and Dar-Es Salaam provide access to the sea for the land-locked countries of Uganda, and CBR (denoting Rwanda, Burundi and the Kivu Province of Congo - formerly Zaire). All the traffic between Mombasa and its hinterland is regulated by the Northern Corridor Transit Agreement signed by Kenya, Uganda, Rwanda and Burundi. Three basic routes connect Mombasa to the said land locked countries and these are: the road route via Kampala, serving Uganda and CBR; the road route via Mwanza serving the CBR; and the combined rail/lake route serving Uganda. The Dar Es Salaam Corridor has five basic routes connecting it with the landlocked countries and these are: the rail/lake route via Kigoma, serving the CBR; the lake route via Nyamirembe Port serving the CBR; the lake/river route via Kagitumba serving
Uganda and the CBR; the road route via Arusha serving the CBR and the Lake route via Bukakata Port serving the CBR. Please refer to Map 2 depicting the designated ports on Lake Victoria.

The degree to which a particular transit route will be used depends on the physical conditions of infrastructure, efficiency and monetary costs involved. A summary of the physical conditions including distance, state of repair, and available infrastructure of all the transit routes is contained in Appendix 2.

1.3 METHODOLOGY

1.3.1 CHAPTER TWO: POTENTIAL OF INTERNATIONAL TRAFFIC ON LAKE VICTORIA

The discussion in this chapter is focused on the existing fleet capacity, logistics and Uganda's economic potential, not only to influence, but to capture and sustain a sizeable market for her trade using the Lake Victoria transport system. In view of the emerging trade blocs like the North America Free Trade Area (NAFTA), and the European Union (EU) which are increasingly engaging in intra regional trade, it can be reasonably argued that Uganda shall find it more difficult to maintain its market links in Europe and the USA which happen to be its major export consumers. Therefore there is a need to evolve new strategies, and some of these will inevitably include regional economic integration so as to provide critical mass and resultant economies of scale. This is no doubt a formidable task but it is by no means an impossible one as the author tries herein to substantiate. In fact, most African countries have awakened to face the challenge on how to articulate policies, strategies, and institutional arrangements that will effectively tap opportunities whilst minimising the threats that may be brought about by the globalisation process.
1.3.2 CHAPTER THREE: INSTITUTIONAL CAPACITY

In this chapter the author outlines the various managerial problems hampering the effective and efficient running of the IWT, e.g. the often poorly paid, ill-trained, inadequately equipped and poorly motivated work force, as well as the impact of the IWT section having such a low key profile and receiving very weak institutional support from its parent Ministry. The author strives to show that this is a complete misconstruing of priorities. Effective transport and communication are key sectors in the economic development process of any nation and these must be enhanced rather than curtailed or hindered.

The author advocates a need to revise the present system of allowing so many line ministries to handle the various aspects of IWT as there is a tendency to handle issues in a disintegrated and inconsistent manner, which sometimes leads to duplication of tasks carried out and overlaps in administration. Often responsibilities are scattered so it is difficult to pinpoint or apportion blame when something wrong occurs. It is also a source of many continuous conflicts.

There is need to have a revolutionary re-orientation of the current civil service bureaucracy. Consequently, the author argues the case for either the divestiture of the URC or the deregulation of lake services. In the alternative the author will try to show that there is a need for a re-organised IWT department with its own degree of autonomy separate from the URC and reporting only to the MOT.

This is in line with the author's belief that all developments at the national level should be managed with greater attention being paid to macro-economic stability and market orientation, thus allowing the private sector to be the most significant economic players.

The reformation process proposed by the author will necessitate both the eradication of bureaucratic management processes and the elaboration of uncomplicated procedures in work schedules that need minimum supervision or surveillance.
1.3.3 CHAPTER FOUR: LEGAL CONSIDERATIONS

In an attempt to comprehensively cover the topic, the author first of all highlights the inadequacies in the existing national legislation. The author then proceeds to illustrate how legislation is not only scattered in other laws, but also that it is limited in scope and is poorly enforced most of the time. The reader will be informed of current limitations to the enforcement of existing laws and regulations regarding IWT as well as the inadequacies of the provisions to govern such transport. In dealing with this, the attention of the reader is drawn to the failure of the laws to address international issues of concern like environmental impacts of oil pollution, dumping, the safety of life of both crew and passengers, the carriage of dangerous goods and search and rescue operations etc.

The reader will be informed of the bilateral and regional agreements drawn to address problems in the governance of lake services. However these are often impeded as only a limited number of the measures advocated therein are adopted into the national laws. Furthermore, in practice, even those measures that are implemented are not done to the degree envisaged in the said agreements.

Wherever applicable the author tries to make a comparative analysis with existing regulations governing IWT elsewhere, e.g. on the Great Lakes of North America. The study also refers to international laws governing shared natural resources.

1.3.4 CHAPTER FIVE: EAST AFRICAN CO-OPERATION, THE WAY FORWARD

In this chapter the author informs the reader on the bilateral, sub-regional as well as regional, efforts that have been initiated to address some of the problems discussed in the previous chapters. Emphasis is drawn to those initiated under the auspices of the East African Co-operation Agreement (EACA) and co-ordinated by the East African
Co-operation Secretariat (EACS). The discussions entail how successful these have been or have the potential to be as well as an examination of some of the constraints impeding their success.

The other regional efforts that are discussed include those of the Preferential Trade Area (PTA), COMESA, and the UNEP/UNDP Joint Project on Environmental Law and Institutions in Africa.

1.3.5 CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

In arriving at the recommendations the author shows that nothing short of comprehensive and properly co-ordinated polices that embrace a holistic approach will redress the situation. The framework should be formulated in such a way to provide an inbuilt mechanism that will allow a realistic implementation and operational process without compromising the basic principles of efficiency and effectiveness. Holistic policy initiatives that are both innovative and pragmatic are needed. In articulating the policy initiatives the author hopes to draw inspiration from two quotations the first one being that "...competition and efficiency yes, but not at all costs: they have to lead to a better life for the citizen" and the second is "Development that does not improve the lives of the great masses of the poor has no soul...development that impoverishes the environment has no vision".

There is no doubt that the challenge is rather daunting but if the right measures are taken a step at a time then there need not be a major revolution. In fact, given the Ugandan fiscal constraints, it would be more prudent to effect the changes in manageable phases and gradual time frames.

In the final analysis, the author hopes to achieve the objective of elaborating a sound legal and institutional framework together with commercially viable reforms and instruments to facilitate the development of an efficient IWT system.
1.4 Difficulties Encountered in Field Research and Writing

Having obtained invaluable guidance from the supervisor, Professor Sampson, on how to proceed with the writing of the dissertation, the author feels that the scope of some of the analyses was negatively affected by an inability to conduct field research in Uganda taking into account the proffered guidance. The author was confined to data obtained prior to arriving in Sweden. Attempts to supplement this by writing to relevant institutions yielded no results and this has impeded the author’s ability to discuss some pertinent issues. For instance the author was advised that it would be best to portray the potential of IWT services on Lake Victoria by making projections on how an increase of such services would impact on the economic growth of the Lake Victoria Basin. The author repeatedly wrote to relevant ministries for relevant data and statistics to no avail. This proved to be a handicap.

Another problem faced is that the author was unable to obtain statistics for the years from 1991-1997 from the Ministry of Works, Transport and Communications because the officer who could have availed them to the author was abroad attending international meetings.

On the whole, the author handled a multiplicity of issues, and for the sake of clarity as well as a desire to “write within context”, made many cross references in individual chapters. It is hoped that this will not be construed as repetition of issues.
CHAPTER TWO

POTENTIAL OF INTERNATIONAL TRAFFIC ON LAKE VICTORIA

2.1 INTRODUCTION

The East African States would make considerable savings on transportation costs if they could integrate inland water transport with the rail and road network systems. However, a lot has been written on multi-modal transport including Mboneko's dissertation. Hence the author shall confine the scope of the discussion, as much as possible, to the significance of an improved efficient and effective IWT system on Lake Victoria both from a regional perspective and from the vantage point of Uganda.

A major obstacle to the economic growth of the Eastern Africa LLCs (land locked countries) of Uganda, Rwanda and Burundi, is the lack of efficient routes to the sea which has resulted in high inland road and rail transportation costs for the export and imports of the said countries. However with an efficiently managed IWT system and sufficient political and economic co-operation from the East African States, as well as the Kagera Basin States of Rwanda and Burundi, the author strongly believes that this handicap could become a part of our history to be seen only on the records kept in the national archives. Alas, this is bound to take a while but the potential certainly exists especially taking into account the recent changes discussed in Chapter Five. The said States could take their cue from success stories like the case of North America where industrial growth was greatly enhanced by the development of its
waterways and harbours. The developments encouraged trading centres to sprout up to exploit the transportation and distribution of raw materials from the areas of production to areas of consumption and industrial processing through cheap waterways' transportation.

2.2 STRATEGIC GEO-POLITICAL POSITION OF UGANDA IN THE REGION

Uganda is very strategically located next to the landlocked countries of Rwanda, Burundi, Zaire and southern Sudan. Most of Rwanda and Burundi's exports and imports are channelled through Uganda which forms a major part of the Northern Corridor. In the last decade Uganda has emerged as the tacit leader in the region. Its President, Yoweri Museveni is regarded as the most outstanding leader in the region who "has received international acclaim for his successes on several fronts in changing the fortunes of his beleaguered country". This image is further enhanced by Uganda's fast rising economic strength whereby both Uganda and Ghana were officially declared by the World Bank in 1997 to have the fastest growing economies in Africa. According to World Bank estimates Uganda's GNP in real terms expanded by an annual average of 3.0% in 1985-95. Over the same period GDP increased in real terms by an annual average of 3.8%. By 1994, GDP had grown by 7.4% from 4.5% in 1992. In 1995 the economy grew by an unprecedented 8% and inflation dropped to 5% from a high of 250% in 1987 and since 1992 it has attracted US $ 200 million in foreign investments testifying to its economic power. In fact this was evidenced at an investors forum organised by UNIDO on behalf of the Common Market for the Eastern and Southern Africa States (COMESA) and Uganda was the target of more than half of all the investment dollars promised at the forum with US $ 167 million relegated to 30 possible projects in Uganda. Uganda has a capacity to engage in trade within the region. The economy is agrarian based and as the Minister for Agriculture and Veterinary Services, Hon. John
Nasaasira has aptly said “(it) will remain an agricultural economy for a long time to come because (Uganda’s) comparative advantage lies in the soil.” In fact agrarian economies are not necessarily as disadvantaged as some world trade trends would portray. According to a World Bank report\textsuperscript{ix} successful commodity-reliant countries outperformed manufacturers-exporting developing countries in terms of both growth and integration over the past 10 years. The same report goes on to say that intra trade on developing country trade has flourished averaging 12% annual growth in normal dollar terms during 1985-94, and was “even more buoyant than the 10% annual growth in the developing country trade with OECD countries during this period”.

More than 75% of the land is available for agriculture. Although most of countries in this region engage in similar production experience has shown that with disruptions in food production due to wars and droughts there will always be a demand for agricultural products which Uganda happens to grow in abundance. This was the conclusion also drawn by one World Report which reported that:

“the wealth of Uganda’s land has long been its greatest strength. Its status in the hinterland and reliable rainfall provide it with the opportunity to supply food cheaply to several of its neighbours, one of whom in any given year can be expected to be undergoing a drought.”\textsuperscript{x}

2.2.1 ACCESS TO A REGIONAL MARKET

The region covering Uganda, Kenya, Tanzania, Burundi and Rwanda has a combined population of 100 million people\textsuperscript{xi} whereas the entire COMESA region covers over 300 million people according to facts released by Uganda Investment Authority (UIA). COMESA was created in 1993 and is the transformation of the Preferential Trade Area (PTA) formed in 1981. It was created with the objective of enhancing economic co-operation and integration through the provision of trade liberalisation, thereby facilitating free movement of people, capital and goods in the COMESA sub-
region. It has 23 member countries, namely, Angola, Burundi, Comoros, Djibouti, Ethiopia, Eritrea, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, Somalia, Sudan, Swaziland, Tanzania, Uganda, Zaire, Zambia and Zimbabwe. (Please refer to Map 1)

Using the Lake Victoria to optimal levels in conjunction with the road and rail network Uganda could penetrate an even larger market created by the COMESA member states as well as the Economic Community of the Great Lakes Countries (CEPGL) which embraces Zaire, by carefully planning her routes from Port Bell in Uganda to Bukoba or Mwanza in Tanzania which cargo would then be transhipped to the mentioned region via Lake Tanganyika. Lake Tanganyika is shared amongst Tanzania, Zambia, Zaire and Burundi where each of these countries operates its own fleet with the major ports being Bujumbura (Burundi), Kigoma (Tanzania) and Kalemi (Zaire). In June 1996, in order to encourage trade in the COMESA region Uganda implemented an 80% tariff reduction on trade with other COMESA member States. Furthermore in April 1997 the three East African States signed an agreement that ended double taxation in the region so as to harmonise cooperation in the region.

Kenya is already an important trading partner supplying 20% of the total of Uganda’s imports which include mostly manufactured household goods and processed foodstuffs whilst Uganda in turn supplies Kenya with agricultural products especially food supplies like maize, beans and Soya beans.

The Lake Victoria region is very fertile with a favourable amount of well distributed rainfall and rich soils so a lot of the food grown there. This could either be shipped to Kisumu for the Kenyan market or to Mwanza for the Tanzanian market or even for onward transmission to areas of need like the war-torn Burundi, Rwanda and Zaire.

Uganda could tap the Zambian market, which constantly experiences food shortages, especially the staple food maize which grows in abundance in Uganda using the Tanzania-Zambia Railway (TAZARA). Tazara runs from the seaport of Dar Es Salaam through Mbeya to the Zambian town of Kapiri Moshie and then joins the
Zambian track to Lusaka and Ndola. It could then be exploited as a transit route to South Africa. Recently, Uganda signed bilateral agreements with South Africa on double taxation and the provision of reciprocal protection of investments. Last year South Africa exported goods worth 95 million rand to Uganda and imported Ugandan goods worth 5.5 million rand. The goods that are not airlifted pass through the Southern and Central Corridors of which Tazara Railway plays a major role.

Whilst planning for the neighbouring market it is important to remember that the economy relies heavily upon small holding peasant production of basic cash crops therefore it is important that they be availed the cheapest means of transport. Given this, and the fact that the Lake Victoria environs are some of the most fertile in Uganda, lake transport could best be exploited if well organised and strategically situated collection centres could be set up for the produce in readiness for shipment. The Sese Islands found on Lake Victoria produce vast amounts of food which they transport to Nakiwogo, Entebbe, using small boats and canoes. However according to a feasibility study done by Government, if the Islanders are assured of a larger market using a fairly big barge that could make about three return ships on a daily basis they would be in position to meet the demand for the availed transport.\textsuperscript{xii} The \textit{Mv Barbus} used to serve this route from the Bukakata Pier but ceased to do so a couple of years ago.

The importance of establishing a ready market cannot be over stressed. The major destination for Uganda’s exports are the industrialised economies. With the emergence of trading blocs like NAFTA and the EEC which are progressively engaged in intra-regional trade it is debatable whether Uganda shall continue to enjoy access to these markets. (Some of the destinations for Uganda’s exports include the Netherlands- 22\% of total, France- 13\%, UK- 11\%, and USA- 8\%.

Sometimes, in pursuit of national interests, developing countries engage in inappropriate competition for overseas markets instead of promoting each other’s economies. This lamentable practice has been underscored by UNCTAD thus:
"unlike in Europe, where there is a large volume of intra-regional trade and where land locked and coastal States each have a mutual stake in efficient transit systems, the structure of both the LLDC’s and the coastal transit States is strongly oriented towards the overseas market and sources of supply."

In view of the prevailing trend of regional economic integration and the attendant concept of optimised logistics the author believes that the East African countries should rationalise their economic policies to exploit modern trade practices. Co-operation should be based on common major goals and the development of the region as a whole while concurrently providing for fair competition among them on a commercial basis.

2.1.2 THE RWANDA AND BURUNDI FACTOR

Whilst drawing her policies to improve the efficiency of IWT Uganda should carefully consider the role of Rwanda and Burundi in that strategy. About 75% of Rwanda’s imports and 80% of her exports enroute to, and from Mombasa Port, transit through Uganda. It is cheaper and faster than those channelled through to Dar Es Salaam which is said to involve “a slow and often unreliable TRC”

Even though Burundi has a freeport (Bujumbura Port) on Lake Tanganyika connecting it to Tanzania, it still utilises the Northern Corridor as well as the services of Lake Victoria because of some bottlenecks like poor road network and lack of adequate facilities to handle its cargo in Tanzania. Another reason for Burundi’s increasing reliance on the Northern Corridor in preference to the Central Corridor is attributed to the fact that not only does the former provide roads that are easily accessible but that Mombasa has established marketing channels for commodities like coffee and tea which comprise the bulk of Burundi’s export trade." Furthermore, Lake Victoria has the facilities to serve both Corridors unlike Lake Tanganyika which only serves the Central Corridor.
As a result of the war Rwanda and Burundi have experienced serious declines in food production. In 1993 there was such a terrible food shortage in Rwanda that emergency food had to be flown in by international donors from the neighbouring countries of Kenya and Uganda to avert national starvation. By July 1993 the agricultural sector was in extreme crisis and the majority of the country’s livestock had disappeared. A joint FAO/WFP report estimated that that the food production in Burundi 1994 amounted to 54% of the 1993 yield and the support systems for agriculture were destroyed.

Apart from the war situation, Burundi’s coffee and food production has always been very susceptible to climatic hazards. Also due to a high population density land available for agriculture has become more and more scarce over the years leading to nutritional deficiencies amongst the populace.

Furthermore, both the Rwanda and Burundi Governments have stated a policy to increase the number of access routes in the three Corridors i.e. the Northern, Central and Southern Corridors. Both Governments singled out the Northern Corridor as being the most convenient and expedient and hence, currently use it to carry about half of their exports.\textsuperscript{xvi}

To show how strategic transit corridors are, after the military take-over in Burundi the leaders of the East and Central African countries of Tanzania, Kenya, Uganda, Zaire, Rwanda and Ethiopia at their Summit in Arusha on 31\textsuperscript{st} July 1996, imposed economic sanctions on Burundi. They were aimed at compelling the junta to reinstall the democratically elected government that had been deposed. The sanctions banned the passage of Burundi’s exports and imports through their territories. In addition the leaders agreed to prohibit the issuance of permits to foreign airlines to overfly their airspace on the way from or to Burundi. This had the desired effect of gradually compelling President Buyoya to comply with some of the major conditions attached to the lifting of the sanctions.
2.2.3 THE KENYA PIPELINE FACTOR

The Kenya Pipeline Company (KPC) operates a pipeline from Mombasa to Kisumu on L. Victoria, as well as Eldoret in western Kenya bordering on Uganda. Kenya has been very anxious to see Uganda extend the pipeline from Eldoret to a centre in Uganda and has prohibited the transfer of oil by road from Mombasa because it claims that its roads have been heavily damaged as an earlier result of too much traffic by heavy duty long distance haulage trucks. However after carrying out a couple of feasibility studies and cost-benefit analyses Uganda has deliberately postponed making a decision on the proposed extension because in its view the benefits to be realised in both the short and long term periods do not justify the enormous costs involved. Currently all the oil used by Uganda, and that in transit for Rwanda and Burundi, is transported by road from the Kenyan border of Eldoret. Uganda should learn from the Kenya's experience that heavy trucks ruin road surfaces. It should take advantage of the Kisumu pipeline which is strategically located right inside Kisumu Port on Lake Victoria to tranship all oil and oil products. Use of the pipeline might also curtail the current problem of rampant siphoning of oil when transported by road as there will be less access to unscrupulous members of the public.

2.2.4 IMPACT OF THE DIVERSIFICATION OF THE EXPORT BASE

Agriculture is the most important sector accounting for more than 90% of the country’s export earnings and contributing about 54% of the GDP, and employing almost 80% of the country’s labour force. Rainfall is a major factor in agriculture and it is greatest around Lake Victoria and the mountains. Uganda's largest export commodity is Coffee. She is the 5th largest producer of coffee in the world and her crop of the robusta strain comprises about 75% of the
Most of the country's coffee comes from the Lake Victoria region.

Uganda has, for the last decade, been trying to diversify her export base by adding non traditional cash crops like maize beans, soybeans, sesame seed and sunflower seed to the traditional cash-crops like coffee, tea, cotton and tobacco. Coffee used to be the dominant cash crop bringing in about 95% of the foreign exchange earned from the export of agricultural goods and was followed by cotton tobacco and timber. However under the diversification policy growth rates from the non coffee exports will shift the proportion of export revenue to less than 40%. This can be deduced from the statistics provided in Appendix 3. The export of non traditional crops had increased by 24 % in the mid-90's. The success of this system can be evidenced further thus- in 1994 maize which was once a neglected subsistence crop became Uganda's third largest source of foreign exchange. Overall exports of non traditional cash crops had increased by 24% in 1994. The said policy has led to a high demand for crops especially from the neighbouring countries like Kenya who produce yields more expensively as they have to use large amounts of imported fertilisers and Uganda practices organic farming due to her rich soils and good climatic conditions. The figures below exemplify some of the increases.

**TABLE I: Impact of diversification of crops**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize</td>
<td>567,000</td>
<td>706,000</td>
<td>576,000</td>
<td>800,000</td>
</tr>
<tr>
<td>Sorghum</td>
<td>363,000</td>
<td>375,000</td>
<td>383,000</td>
<td>390,000</td>
</tr>
<tr>
<td>Dry beans</td>
<td>383,000</td>
<td>402,000</td>
<td>442,000</td>
<td>459,000</td>
</tr>
<tr>
<td>Millet</td>
<td>576,000</td>
<td>634,000</td>
<td>610,000</td>
<td>695,000</td>
</tr>
<tr>
<td>Groundnuts</td>
<td>144,000</td>
<td>147,000</td>
<td>150,000</td>
<td>161,000</td>
</tr>
<tr>
<td>Soya beans</td>
<td>53,000</td>
<td>65,000</td>
<td>75,000</td>
<td>78,000</td>
</tr>
</tbody>
</table>

source: Ministry of Agriculture and Veterinary Services 1995
In addition to the above, there has also been a marked increase in the traditional cash crops. Tea production rose from 17 million kilograms to 20 million kilograms last year and BAT (British-American Tobacco) in Uganda is aiming to export tobacco worth $24 million by 1988 i.e. about 17,000 tons. The World Bank and the IMF are funding a US $34 million programme to boost cotton output to an annual 300,000 bales by the turn of the century from the current production of 110,000 bales.**

Although strategic food stocks were declared to be low by Government in 1992, the local people continued to sell a lot of their agricultural yields especially to Rwanda, Zaire and Sudan which were experiencing political unrest. They also exported this to Kenya which was experiencing an acute shortage as it had been seriously affected by protracted drought prompting the President to set up a National Disaster Fund to alleviate the food shortage problems in major parts of Kenya.

In addition to the agricultural crops, Uganda is blessed with many lakes and rivers. In 1998 an Italian company developed an integrated fisheries centre at Masese, Jinja. The centre specialises in smoked and dried Tilapia and Nile Perch both for export and domestic consumption. There are many other small-scale exporters of fish and all these could benefit from a wider market through the provision of an efficient and inexpensive water transport system.

Early this year, Uganda held its first international symposium on mining prospects in the country. Government unveiled its plan to revive the mining industry in Uganda and has targeted the Kilembe Copper Mines, the Kikagati and Mwirasandu mines and the Kirwa and Bjordal mines. It informed the participants that substantial gold deposits had been identified in Karamoja near Zaire and that a Canadian company, Barrif Resources Ltd had entered into a joint venture with Kasese Cobalt Company to inject $110 million for setting up a cobalt plant. The Government also identified the following minerals as existing in substantial amounts for exploitation- chromate, columbite tantalite, iron ore, tin, tungsten, limestone, kaolin, marble, gypsum and glass sand.
Timber used to be a major export commodity but since 1991 Government placed a total ban on its export in an effort to practice sustainable development so as to protect the future rejuvenation of the forests. Even the timber used for domestic consumption is very strictly controlled.

It is estimated that as a result of this policy exports will continue to grow at an average of 12% for the decade. Please refer to Appendix 3 which has a table that depicts this projected growth.

2.3 COMPETITIVENESS OF INLAND WATERWAY TRANSPORT

The competitiveness of water transport increases with the distance involved. The costs of IWT infrastructure puts it in a more favourable position than rail or road transport as initial investment costs are to a large extent limited to navigation aids and terminal facilities whereas road transport costs depend on the length of haul, size, weight of consignment, road condition, route chosen and the number of border post crossings. The high fixed cost of element of railways requires a certain length of haul to make it a competitive alternative. Road transport is cost-effective over a short distance but expensive over a long distance. Calculations show that a large diesel truck can move one tonne for 50 miles using one gallon of fuel whereas an inland waterways barge can haul the same tonnage for well over 500 miles for the same amount of fuel. Businessmen have gained some measure of confidence in Lake transport and freight traffic steadily rose from 362,000 tons to 800,000 tons in 1994 with an expected projection of 1 million tons in 1995. The Government should exploit the risen interest by making IWT more viable and effective.

2.3.1 FACTORS AFFECTING CHOICE OF TRANSPORT

The government is to successfully entice cargo owners to revert to the use of water transport it must appreciate the dynamics that govern the choice of using one mode
Below are some more general problems that have contributed to make the inland water transport system less competitive than the other modes of transport:

- Lack of expertise in shipping management which has resulted in poor management of the inland water services hence earning it a poor reputation;
- Because Uganda is an LLC, the need for training in matters related water-borne transport has not been considered to be a priority nor has it been a significant part of the economic activities. This has sometimes led to the manning of the vessels by crew that are not suitably qualified or having off-shore management personnel that are not highly qualified;
- URC personnel have been reported in the Press as being very inefficient due to lack of training and financial motivation;
- Frequent breakdown of equipment;
- Lack of adequate port handling facilities;
- Inadequate telecommunications networking linking the customs offices and other customs posts;
- Overmanning of the ports yet the output produced is poor;
- Persistent late submission or incorrectly filled out documentation or pertinent information relating to the cargo and/or the vessel which results in delay in handling cargo or unnecessary hold-ups;
- Poor dissemination of information to Port users;
- Lack of discipline in meeting time schedules when setting out to sail. This not only upsets the shippers and their planning but also interferes with the passengers' programmes.

The impact of the above issues will be dealt in depth in the next chapter.

2.3.2 RAIL TRANSPORT

The rail transport has been the cheapest form of transport but this has been plagued by numerous problems like insufficient wagons, poor reputation for handling of
cargo and allegations of massive pilferage's of goods and siphoning of fuel carried in transit.

Although Uganda has increased its rail wagon fleet, maintenance standards continue to deteriorate leading to a substantial decline on the quality of services rendered by the rail transport system. Most railway tracks in Uganda have deteriorated so badly that they need major reballasting and this is very expensive making investment in lake transport an attractive alternative as it is cheaper. Between 1991 and 1992 only 50% of all the mainline locomotives were available for use at any given time while less than 50% of the shunting locomotives were available. The situation is not that much different today. Tanzania seems to have fared no better as its overall locomotive availability in 1992 was only 47% compared to 51% in 1991. It has a track record of excessive idle time spent waiting for connections, long detention of trains due to accidents and poor track conditions. Whilst the freight tonnage carried on the rails has declined IWT tonnage has increased threefold during the same period. This has been also strongly influenced by the growing significance of the rail/lake route via Mwanza to Uganda.

On the global scene, the developed world has decreased to a large extent the use of rail transportation of cargo. The length of rail networks has declined sharply as a result of this policy. In the US, France and Britain the decline was up to 30% and in Germany it dropped by as much as 50%. In contrast, the freight traffic rose by more than 50% in these countries in the same period.

It is not the author's intention to dismiss the importance of a functioning and well organised rail net work system. Rather, the emphasis should be to focus on the creation of a more cost-effective and sustainably managed IWT system that will be a cheaper and better alternative to the rail networks. In fact the latter, provided that it is well organised, would then serve as a viable complement to transport the goods ferried on Lake Victoria. As a matter of fact this was given thoughtful consideration when the members of the Kagera Basin Authority (KBA) comprising of Uganda, Tanzania, Burundi, and Rwanda proposed a new rail network to link all the four
countries. They commissioned a feasibility study to be carried out. The Study recommended the linking of the Kagera region to the former East African railway system at Buhanga on the Kasese-Kampala line in Uganda, which forms a part of the Northern Corridor, and another connection was planned to intersect the Bukoba-Kemendo Bay wagon Ferry in Tanzania. Unfortunately, due to the escalation of wars in this area the plan was never implemented.

The main railway line in Uganda runs from Tororo through Kasese to Kampala and the Northwest line runs from Tororo to Arua. This is very vital because these areas produce various cash crops as well as food crops which could then be transported by rail directly to Port Bell for onward shipment to Uganda’s trading partners in the region via Lake Victoria.

2.3.3 CREATION OF EMPLOYMENT OPPORTUNITIES.

Lake transport can contribute to the national economy through the creation of job opportunities in addition to the facilitation of the production and distribution of goods and passenger transport. If an aggressive campaign is embarked on to enhance IWT, there would be more jobs for the stevedores, clerks, and masons for building the new office spaces required as well as managerial and technical jobs for all manner of staff. Furthermore, an increase in the volume of cargo being transhipped would have the ripple effect on the secondary economic activities so more jobs would be created in the agricultural sector to meet the rising demand. As pointed out by one Professor Goss, the economic function of the improvement of a port is to increase the producers' surplus of those who originate the exports passing through it and to increase the consumers' surplus of those who ultimately consume them with the end result being increased production and consumption and the indirect effect of job creation to meet the demands exerted by these increases.
2.4 ASSESSING CAPACITY

2.4.1 INVENTORY

The three East African states' parastatals i.e. Uganda Railways Corporation, Tanzania Railways Corporation and Kenya Railways Corporation, own 90% of the fleet of passenger vessels, railway wagon ferries, Ro/Ro ferries, cargo ships and barges on Lake Victoria. The remaining 10% is owned by private shipping companies the largest share of which is owned by one German, Mr Klaus Gaetje based in Tanzania. The total fleet owned by the aforementioned parastatals consists of 37 vessels of various types and sizes. Out of these Uganda owns 7 sailing units to wit:-

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of pieces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railway wagon ferries</td>
<td>three</td>
</tr>
<tr>
<td>Minor combined pass/cargo ship</td>
<td>one</td>
</tr>
<tr>
<td>Minor cargo vessel</td>
<td>one</td>
</tr>
<tr>
<td>Service launch</td>
<td>one</td>
</tr>
<tr>
<td>Floating dock</td>
<td>one</td>
</tr>
</tbody>
</table>

The three railway wagon ferries are *Mv Pamba*, *Mv Kaawa* and *Mv Kabalega*. They were constructed in 1985, 1984 and 1982 respectively. They are all built using the same specifications and yard. A dry dock was constructed at Port Bell in which the three ferries and a service launch were assembled from prefabricated sections shipped from Belgium and assembled by the Belgian Shipbuilders Corporation.

Below are some salient details obtained from surveys conducted by URC and since the ferries are similar and the problems besetting them not being much different the example of *Mv Pamba* will be used as an indicative illustration.

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1 More specific details of the vessels are provided in appendix 1
**M/V PAMBA**

**TYPE:** double screw M/V wagon ferry  
**LAST SURVEY:** 18th June 1991  
**CONSTRUCTED AT:** Port Bell, Uganda  
**YARD:** NV Belgian shipbuilders’ Corporation.  
**SPEED:** Approximately 13 knots  
**CAPACITY:** 22 wagons of 56t on 4 rail tracks or 44 single wagons, total payload of approx. 850t equal to a maximum payload of each wagon of 39t.  
**CREW:** 24  
**PASSENGERS:** 0  
**GENERAL CONDITION:** Good  
**STEERING ENGINE ROOM:** During the survey the bottom was found to be filled with water up to under the floor. This was attributed to a leaky stern tube.  
**HULL:** In very good condition except it had not been docked for bottom paint etc. for a long time.  
**ENGINE ROOM:** Generally well kept. However several pumps were found to be leaky at the shaft stuffing boxes and spare parts like filters, nozzles etc. were absent. It was noted that the engine crew were faced with a difficulty to maintain the starting batteries for the main and auxiliary engines.  
**MAIN ENGINE:** Generally in good condition except for problems at the fuel oil nozzles due to lack of filtering the oil.  
**PROPELLER FRONT:** In good condition except for a leak in one of the stern tube stuffing boxes.  
**BILGE/BALLAST** Okay except shaft stuffing boxes on the two pumps which...
SYSTEM: should have been replaced but were not done so for lack of adequate funds.

HEELING SYSTEM: This was constructed for the loading and unloading of the wagons and it has three electrically driven heeling pumps. It is in good condition.

SUNDRY SYSTEMS: Generally okay except for the bow propeller which was not working. The deck machinery and steering engines were in good condition.

ELECTRICAL SYSTEM: Okay. However there are no harbour nor emergency diesel Aggregate fitted.

ACCOMMODATION: The accommodation facilities are centred on boat and wheel house deck. They are fitted exclusively for the crew. The accommodation facilities are not up to normal ships’ standard but there is room for a limited number (10) for passengers if the need for them arises. However it is widely alleged that more passengers than that are often allowed on board in contravention of the regulations. There are a total of 15 cabins and three messes. All the water from the toilets is flushed overboard.

ELECTRONICS: These include 1 pc radar, 1 pc echo sounder, 1 pc short-wave radio and 1 pc intercom plant.

FIRE-FIGHTING APPLIANCES: Includes 1 pc CO₂ plant covering main and auxiliary engine room, 1pc diesel driven emergency fire pump, 2 pcs 25 kg powder extinguishers each place in an engine room, and sundry powder extinguishers and fire lockers. However, there are no fire hoses and nozzles. The powder extinguishers had lost pressure and were hence useless.

LIFE-SAVING EQUIPMENT: Found to generally deficient. There were no life vests and no fixed rafts (originally 26 of these had been fitted with a
capacity for 4-6 persons. Even the MOB work boat was missing. At the time of the survey a 12 feet dingy was in use and this was unsuitable because it was originally designed for shallow streams.

LIFE TIME: the survey concluded that with proper maintenance and rehabilitation there is no reason why *Mv Pamba* should not operate for the next 40 years.

The surveyors were of the view that a double electronically driven hydraulic unit should have been used for the running of the steering engine in order to be independent of the revolutions on the main engine.

There are three other smaller vessels that specialise in carrying passengers and these are *Mv Barbus*, *Mv Muvule* and *Mv Mwanga*. *Mv Barbus* is a single screw passenger and cargo vessel for Lake Victoria. It was built in 1940 and subsequently rebuilt in 1984 by NV Belgian Shipbuilders Corporation. It has capacity for 12 crew and 150 passengers and can carry cargo of approximately 20 tons. It has accommodation facilities for 16 first class passengers and 134 third class passengers. The condition of accommodation is generally very poor. The sanitary system is heavily utilised and the third class toilets are in a deplorable state. There is no hydrophone system. There are also no fire-fighting and life saving equipment. The author believes that this is a very alarming situation in view of the hygiene and safety of both the passengers and crew as well as safety of the vessel in case of an accident or an outbreak of fire. If its hull, main engines and other equipment are restored to full working capacity (which they are not at the moment) then 10 years is a fair estimate of its future life expectancy according to the surveyor’s report.

*Mv Muvule* has almost the same specifications as *Mv Barbus*. It was constructed in 1937 and was rebuilt in 1984 by the aforementioned Belgian yard. It is generally in fair working condition technically speaking. It has an additional life span expectation of 10-15 years. Its condition is better than all the other vessels. It has a capacity for 6 crew and cargo of about 130 tons.
Mv Mwanga is a single screw launch built in 1983. Its speed averages 11-12 knots and can accommodate 4 crew and up to 10 passengers. The accommodation was found to be worse than that of Mv Pamba. Other than that it is in fairly good condition and has a further life span of 40 years or more if well maintained. This vessel is laid up for most of the time in Port Bell.

There is a floating dock built in 1980 by the Furlton Marine NV Building Yard. It is constructed with 16 pieces of separate pontoons connected by side houses along the length of the floating dock. It is currently used as a working pontoon for the construction of the link span at Port Bell.

The facts revealed by the survey indicate that indeed the potential for transportation of increased volume of cargo exists but there must be serious steps taken to address all the leaking, missing and/or malfunctioning equipment because this could not only jeopardise the life of the crew but also the passengers where applicable and could lead to the loss or contamination of cargo in the case of the leaking floors, and the absence of life jackets and life boats could, and indeed has, led to the death of many innocent lives that could have been prevented or mitigated. This will be discussed further in the next three chapters.

The generally poor operating and physical conditions of the vessels resulting from their being irregularly maintained or inspected affects their reliability of the services to be rendered and poses the question of whether they can provide a sufficient ability to respond to the expectations and needs of the potential clients.

2.4.2 ADEQUACY OF CURRENT TRAFFIC ROUTES

All three wagon ferries ply between Jinja in Uganda, Kisumu in Kenya and both Bukoba and Mwanza in Tanzania. They ferry rail wagons, bulk cargo and on rare occasions passengers to and fro. The minor combined passenger/cargo ships carry both passengers and private cars and this is supposed to be regulated by special dispensation.
It has been proposed that one of the wagon ferries should be converted to carry lorries and up to 50 passengers in cabins. This will enable Government to assess whether there is a viable need to expand this service.

Since there is a proposal to carry oil from the Kisumu oil pipeline to Port Bell, Uganda as well as transit oil cargo destined for Burundi and Rwanda, the Government of Uganda should consider buying some new oil barges to cover the generated demand. Both Kenya and Tanzania possess a couple of oil barges but these are considered to be nearing their economic life span.

2.4.3 UNDER-UTILISED CAPACITY

Each wagon ferry can carry 22 forty ton wagons per trip giving 80% load factor. In 1990 freight carried by the ferries amounted to 240,450 tonnes of which 42% was exports and 58% imports. 226,301 tonnes were shipped via Kisumu and 114,249 tonnes via Mwanza. By 1993 Mv Pamba had performed 10911 operational hours whilst Mv Kaawa had 11800 operational hours and Mv Kabalega had 13,500 hours. According to URC officials this shows that the ferries are under-utilised because this corresponds to an average of only 2000 hours of annual service per ferry yet a similar type of ferry if efficiently run can produce approximately 4000 hours annually. Furthermore, URC's policy to shift the bulk of cargo handled by it to rail transport has created a reduction on cargo movement on Lake Victoria and a commensurate excess in carrying capacity.

In the month of October 1991 total earnings of passenger voyages was Uganda shillings (Ushs) 2,3777,600 yet the fuel costs amounted to Ushs 5, 940,000 in the same month (please refer to Table 2).\textsuperscript{xviii} This depicts a substantial monetary loss and evidences poor management. This is in sharp contrast to Uganda Airlines which experienced a 20% growth rate with passengers increasing from 110,000 in 1991 to 300,000 in 1996. This is above the global average growth rate of air passengers which is only 7%\textsuperscript{xxix}. 
Table 2 Examples of URC passenger traffic on Lake Victoria

<table>
<thead>
<tr>
<th></th>
<th>October 1991</th>
<th>November 1991</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11 voyages</td>
<td>11 voyages</td>
</tr>
<tr>
<td><strong>Outbound incl. inter island pax.</strong></td>
<td>330 pax</td>
<td>186 pax</td>
</tr>
<tr>
<td><strong>Inbound include. inter island pax</strong></td>
<td>284 pax</td>
<td>499 pax</td>
</tr>
<tr>
<td><strong>total pax</strong></td>
<td>614 pax</td>
<td>685 pax</td>
</tr>
<tr>
<td><strong>Total earnings U Shillings</strong></td>
<td>2,377,600.00</td>
<td>2,926,675.00</td>
</tr>
</tbody>
</table>

source: Ministry of Works Transport and Communications

It is apparent that there is excess capacity on the wagon ferries operating on Lake Victoria. If renovated with appropriate facilities the ferries can carry more passengers and general cargo. Government needs to pursue a more efficient and cost-effective IWT system so as solicit a wider port and transport clientele including tourists.

2.5 PORTS, INFRASTRUCTURE AND HANDLING EQUIPMENT

The following are the existing or potential new traffic nodes that have been identified as transit corridors:-

- Uganda: Jinja Pier
  - Port Bell
  - Bukakata landing Pier
- Kenya: Kisumu Port
- Tanzania: Mwanza Port (North and South)
  - Kemondo Bay
  - Musoma Port
  - Nyamirembe Pier

\[2\] All the information in the next two sections is obtained from a special EACS report.
All these, except for Bukakata, provide quay and safe mooring facilities for all, including the biggest vessels operating on the Lake. The ports were designed as links between rail, road and inland waterways in the three countries.

2.5.1 MWANZA NORTH PORT

It serves conventional passenger traffic and, to a lesser degree, cargo. There exists a passenger route to Port Bell in Uganda. The Port is situated next to the town centre and all road traffic between the Port and national road works has to pass through the town. There is a railway station connecting the Port with the main rail station and main line. Unfortunately these excellent sounding facilities have acquired a reputation for being in a general state of disarray but the Tanzanian Government has embarked on a comprehensive programme to address the situation and is said to have already made a lot of progress in this area.

For cargo handling the Port has a mobile crane of 10t but it is in a general state of disuse. No other cargo handling equipment is present in the port.

2.5.2 MWANZA SOUTH PORT

This is the commercial port used for handling cargo. It has a wagon ferry berth and ship repair facilities comprising of two floating docks. International traffic is constituted by the wagon ferry route connecting Mwanza with either Port Bell or Kisumu.

2.5.3 KISUMU PORT

Kisumu Port has an Inland Container Depot (ICD) with very modern facilities but this is really under utilised. Other facilities include:

- a rail wagon ferry berth 18 m wide with a 28 m link span;
• a wharf of 333 m with cranes;
• a railway yard to serve the wharf;
• a dry dock with capacity to take vessels up to 1,600 GRT; and
• a repair dockyard supporting the dry dock.

2.5.4 JINJA PIER

This is an international passenger and cargo route. It has good berthing facilities. The storage facilities are in poor shape with no refrigeration facilities. The cargo handling facilities are in a general state of disrepair. Port Bell has a floating dock capacity of 2100t. It also has a railway yard capable of accommodating a load of ferry wagon and it has a station with a capacity for 210 wagons.

2.6 AUXILIARY SERVICES AND FACILITIES

2.6.1 REPAIR AND MAINTENANCE

There are three state owned repair and newbuilding ship yards located at Port Bell, Mwanza and Kisumu. There is also privately owned steel boatyard i.e. the Pasiansi Boat Yard in Mwanza. There are too, some minor private boat builders' yards which build and repair small fishing vessels and dhows for private boat owners.

A) PORT BELL

The yard at Port Bell is basically commissioned with the task of maintaining the six vessels owned by URC although it handles a lot of other commercial work. It is equipped with a combined engine, blacksmith, and joiner’s workshop. It has great potential and has already proved to be of great economic value. Built in 1980, it has housed the building of four vessels delivered by the Belgian Shipbuilding
Corporation i.e. *Mv Pamba, Mv Kabalega, Mv Mwanga* and *Mv Kaawa*. The floating
dock was also constructed in this yard. Recently the yard was charged with major
construction work for the building of a new link span for URC.

However, there is a clear need for refurbishment of equipment and the upgrading of
qualified staff as expressed in the report. Despite several visits to the MOT the author
could not establish the qualifications of the personnel working in this work shop and
whether the Government had trained any Ugandans in specialised shipbuilding
techniques after the Belgian shipbuilders departure.

B) THE MARINES’ REPAIR-MAINTENANCE NEWSHIPBUILDING YARD
AT MWANZA.

It is well organised with good workshop facilities. It is capable of carrying out repairs
and maintenance work as well as major reconstruction and shipbuilding which Port
Bell is presently incapacitated to do at an internationally accepted standard. Like Port
Bell it also has a proven record of new shipbuilding. With appropriated technological
assistance from Belgium it built *Mv Serengeti* and the floating dock. It also renovated
and constructed *Mv Victoria* and *Mv Umoja* respectively. It is equipped with a
mechanical workshop, carpenters workshop, diesel workshop, electrical and
 electronic workshop as well as stores for spare parts.

The Dutch Government has given technical assistance through DANEN Shipyard to
provide technical and expert assistance to build a series of vessels so as to boost the
transport system on Lake Victoria as well as creating employment. Under this plan
the following vessels will be constructed:-

- one passenger and cargo boat with a capacity for 30-60 passenger
- a small freighter for approximately 40 TDW for a private owner
- two fishing vessels approximately 24 feet and
- one Ro/Ro ferry 45m long for Mr. Klaus Gaetje.
C) PANSIASI BOAT YARD

It is located 4 km north of Mwanza. It has no facilities for the building of major vessels but is ideal for the construction of smaller passenger and cargo vessels.

D) KENYA RAILWAYS, MARINES REPAIR, MAINTENANCE AND NEW SHIP BUILDING YARD AT KISUMU

It has similar facilities to the URC and TRC one mentioned above. Most of the old vessels servicing Lake Victoria were built in this yard. However the last newbuilding Mv Uhuru was last done in 1967. It has a work force of about 200 men who are mostly idle. Since both URC and TRC have their own repair and service facilities they rarely use those offered at the Kisumu yard whereas this used to be the principal yard for all vessels belonging to the defunct East African Railways and Harbours Company (EARH&Co).

The yard has a dry dock with docking facilities up to approximately 95 m.o.a, two slipways, a construction department, a machine shop, an electric workshop, carpenters' workshops. The latter produce furniture for the Kisumu head office and the surplus is sold on the open market. In the author's view this is very enterprising and could be emulated by the others as it is not only a good source of income to the KRC but it also occupies the workers who would otherwise be idle when there is no routine work being commissioned. It also enables the tools and machinery to be utilised instead of lying in disuse. There is also a tailoring shop for sewing hatch awnings, upholstery and life saving equipment. There is a smithy too although this has been rendered almost obsolete with most of the work being done in the construction shop.

A report written by the Danish International Development Agency (DANIDA) for the attention of the Government of Uganda through the MOT in 1992 made the following observations:-
• For optimal use, the three East African states should consider the fact that the yard at Kisumu has the most central position and the best fitting out especially for new shipbuilding. The latter might no longer be the case with all the funds and technical equipment and expertise that has been injected into Port Mwanza. It has adequate transport facilities to bring steel sections and other project goods from Mombasa. The author feels that this recommendation has political and economic implications for the other two States and must be discussed at the regional level.

• There is over capacity for docking facilities especially for big vessels with 2 floating docks and one dry dock. There is a need to rationalise this so as to limit maintenance costs. The Government must study this to see if it is a valid observation so as to take the necessary steps if so required depending on its findings.

• Although Mwanza shipyard has been modernised it still faces difficulty with transport facilities particularly in the case of transporting major steel sections.

• Port Bell in comparison with the other three Ports is poorly equipped. The existing yard facilities should either be improved to enable major repair and construction works or it should just operate on principles of comparative advantage and limit itself to carrying out minor maintenance an repair works. In the author's view, unless it can operate optimally there is no good reason why the major work should not be shifted either to Mwanza or Kisumu.

2.6.2 DREDGING EQUIPMENT

These are generally lacking in the Lake Victoria region yet they are vital for clearing the harbour and sailing routes do to the hydrographical nature of the lake. URC does not own any deepening machines although some experts have expressed concern for the need to deepen the ship lane to Port Bell. (See Section 5.16 infra)
TRC have constructed an ingenuous dredge by fitting a 6 inch sand pipe on to an old barge. The dredge is run by a diesel engine and is built in such a way to make it possible to suck while dragging. *Mv Linda* is used to move the dredge barge. Although the barge has worked well on minor jobs it has no capacity for larger deepening tasks.

KRC has an old steam digging machine built during the First World War, that is operational. The digger is used for deepening Kisumu harbour and sailing routes. It is doubtful whether it has the capacity to serve the other ports in terms of operational costs taking into account its age and technical condition.

According to the latest information obtained by the author, Tanzania has decided to invest in US$ 35 million worth of dredging equipment to enhance her berthing facilities at Dar es Salaam. Once purchased these could prove to be an opportune boost for Lake Victoria once the necessary lease arrangements are made.

### 2.4.3 NAVIGATIONAL AIDS AND COMMUNICATION SYSTEMS

Lake Victoria was thoroughly surveyed by the British colonialists during the period from 1890-1906. Nautical charts were consequently prepared and printed by the Hydrographical Office of the British Admiralty in 1902 and 1908. Subsequent corrections and reprints were made up to 1956. Since then no real effort has been made to survey the lake yet the navigable waters of Lake Victoria are extensively used by fishermen, traders, travellers and shippers alike. The Lake has areas of shallow waters, numerous low-lying islands, submerged rocks and shoals. It is often subjected to unpredictable thunderstorms and squalls.

A) NAUTICAL CHARTS AND SAILING DIRECTIONS

The British charts are still in use in conjunction with a Pilot handbook published in 1972 which consists of sailing directions between all relevant ports on Lake Victoria.
A need for a new survey and adjustments to charts, etc. has been voiced by the East African Co-operation Secretariat especially given the fact that the topology of the lake is likely to have changed over all the years.

B) BUOYS AND BEACONS

During the first half of the century a comprehensive system of buoys (about 20 of them) was erected by the Lake Steamer Co. on islands, reefs and prominent points around the lake as an aid to shipping. However, with the wars that have characterised Uganda's history and the break up of the EAC in 1977, the system ceased to operate. KRC notably tried to maintain them but they too lapsed into negligence. The steel has been consistently vandalised by the villagers. Every time the government tries to replace it they promptly steal it. Both Uganda and Tanzania with the help of donor funding are in the process of installing a self-contained solar power system. The batteries have proved to be a constant source of vandalism from the villagers to the frustration of Government.

Tanzania had 14 buoys and beacons which are now out of operation. The government has given up on trying to replace the expensive parts vandalised. They have instead resorted to the use of other equipment like double radar sets, echo sounders, and satellite position systems on board the vessels. However this leaves private operators especially the small-scale dhow operators uncatered for yet they are taxpayers. This has made the Tanzanian Government to consider using the existing buoys and beacons as dumb navigation marks, painted with fluorescent paint for search light reflection.

C) COMMUNICATION SYSTEMS

Radio communication was installed by the EARH&Co in the early 60s. The frequencies then in use are still operational. They are widely used for ship to ship or
ship to shore communication by vessels belonging to the three Railway Corporations. All the parastatal vessels and regional port control stations communicate inter-regionally on this frequency by means of a short-wave SSB radio which is not used by the private operators. If the traffic on Lake Victoria were to increase substantially there would be a need to install uniform communications procedures and frequency selection. Furthermore the current modes do not meet the internationally accepted appointment of channels for certain operations. It would be prudent to base the regional radio communications system on HF and VHF radio frequencies.

2.7 OBSERVATIONS

As can be deduced from the facts hitherto adduced, there is indeed a great potential for international transport on Lake Victoria. However, the Government of Uganda in partnership with her East African neighbours, needs to exploit the IWT system by making it competitive in comparison to the other available modes of transport especially the rail and road transport. It has to bring the services of IWT to a level where the commercial viability is optimised whilst still meeting both the passengers and the cargo owners need for an efficient and inexpensive transport mode. The ultimate goal should be to provide excellent services at least cost. The increasing number of tourists visiting Uganda should also be taken into consideration when making strategic plans for expanding the clientele. There might well exist a potential for the purchase or newbuilding of suitable cruise ferries.

The current problems of lack of maintenance of port facilities, unsatisfactory and unreliable vessel schedules as well as the inadequate and poorly maintained auxiliary services and navigational aids that compromise the safety of crew, cargo and passengers need to be addressed. A tenable transport system should ideally be one of first choice and not of last resort.
3.1. EVOLUTION OF URC

In 1948 the then Kenya Railways, Uganda Railways and Harbours as well as the Tanganyika Railways and Port Services amalgamated under the aegis of the East Africa Community (EAC) to form the East African Railways and Harbours Company (EAR&H Co). The latter was responsible for the administration of services and facilities relating to rail, road, and inland waterways. It was bound by law to conduct its business according to commercial principles and it enjoyed extensive rights and unfettered privileges in the territories falling within its jurisdiction. The management of railways and water transport was undertaken by the traffic department of the EAR&H Co from the headquarters in Nairobi. When the three East African States gained independence in the early 60s they maintained this status quo. In 1977 the EAC broke up and the EAR&H Co was disbanded. Each State then formed its own parastatal to manage both rail and lake services. Kenya which had played a controlling role in the EAR&H Co got the "lions share" comprising of the major part of the workshops, stocks of spare parts, training institutions and also to a greater degree trained personnel. It vested the acquired property in the Kenya Railways Corporation (KRC). URC and Tanzania Railways Corporation (TRC) had to almost begin from scratch to organise their own management structures and to establish
auxiliary services. One of the side effects of the break-up of the EAC was the loss of economies of scale and consolidation of expertise resulting in the subsequent fall in the quality of services and instability of tariffs.

At first URC was greatly incapacitated because not only had it inherited just a small portion of the EAR&H Co property but being land locked it had paid scant attention to the training of its nationals in marine related affairs. To compound an already bad situation Uganda was gripped in the throes of total anarchy under the dictatorship regime of Idi Amin (from January 1971-1977). URC, like most government bodies at the time suffered from mismanagement and inadequate funding. There was a massive brain drain leading to a scarcity of skilled manpower and supervisory planning capacity. As reported to the UN by the Minister for Trade and Industry, pervasive insecurity of life, property and employment led to a culture of corruption. It also led to limited operations and maintenance due to scarcity of resources and a high cost of supplies as a result of high inflation (rated at 250 %).

In 1993, assisted by soft loans from the Belgian Government, URC was able to rise from the doldrums by building a floating dock and three wagon ferries. The loan also enabled URC to rehabilitate the small vessels in its tiny fleet and to acquire a small service and inspection launch. Bilateral agreements between URC and KRC as well as URC and TRC were signed in 1983 and 1985 respectively. These culminated in the international operation of ferries between Jinja-Mwanza, and Jinja-Kisumu and gradually expanded to include the current routes discussed in Chapter 1 (see S 1.1)

3.2 ORGANISATION

Despite the fact that lake traffic is by far the largest single mode of transport for Uganda's imports and exports, as evidenced overpage in Table 3, URC allots more prominence to the rail sector and the economic soundness of this must be questioned.
Rail operations and marine operations are not separated. Furthermore the IWT Services section in URC is operated as a non-autonomous and non self-accounting section. Failure to separate marine and rail services has led to a lack of distinction between costs and revenues for each sector. The management structure renders decision making to be highly centralised. It has also resulted in unnecessary losses since there are many loop holes created by such a method of management and the inevitable lack of distinction of roles which leads to less transparency and accountability. The Tanzanian Railways Corporation (TRC) also had a similar predicament. In May 1991 Tanzania approved the decentralisation of the marine division under the leadership of a Marine Division Manager. The latter was charged with ensuring the efficient and profitable running of Marine Division of the TRC as a commercial and self-sustaining entity, operating to achieve strategic objectives.

3.3 PERSONNEL

There is problem of staffing especially in the case of skilled deck officers and engineers. URC has only 9 navigators and 11 marine engineers in its employment and in one departmental assessment report it was noted that these are too few to man all the vessels. Lack of adequate crew means that currently it is not possible to man and operate all the vessels simultaneously let alone operate with double crews. As a result those employed tend to be overworked yet fatigue has been attributed to being the main cause of casualties on ships. There is also a pronounced shortage of personnel with legal or specialised qualifications in the area of marketing and human resource development. On the whole there is a general lack of recruitment processes
and allegations have been made (to the Commission of Inquiry mentioned in S 3.6 infra) that even those recruited are done so on a basis of nepotism or ethnical background and without transparency.

3.4 TRAINING

As mentioned earlier, there is a marked absence of maritime culture. There are no regulations for the training and certification of Marine officers. The training of deck officers and marine engineers is generally carried out from the Marine School in Kisumu based on examinations conducted by the Kenya Ports Authority while the training of lower cadres is done on the basis of “on-the-job training”. There is no training programme for subjects like port operations, cargo handling and administrative functions related to IWT. The ratings are also not taught basic skills for fire-fighting, first aid and survival in open waters.

In his dissertation on Proposals for improving the performance of shipping services on Lake Malawi, Likukuta urges that when considering entry qualifications for cadets, age and education should play a critical role. He recommends that cadets must have a minimum of secondary school education and should preferably be young (about 16-18 years so that they graduate at 18-21 years of age). He believes that this would enable government to recover training costs as they are likely to serve for a longer sailing period and to withstand the rigours of seafaring.

3.5 SALARIES AND INCENTIVES

Like the salaries of most government employees, the wages are generally too low to sustain a family without additional sources of income yet they handle large sums of money and yield considerable power over shippers as they control the documentation and transportation of all cargo passing through the Lake. The combination of poor remuneration of staff who have authority and power over needed transport routes
along with a responsibility for large amounts of public revenue provides a sure recipe for corruption and embezzlement. All allowances are uniform and there is no recognition paid to the specialised nature of work of any kind reducing the potential to increase productivity through incentives. Furthermore, promotions (as is the case in the Civil Service) are very rare and there is no distinct policy for considering such. They are viewed as gifts bestowed on the chosen few rather than a recognition of ones merit. All this has led to the creation of a poorly motivated workforce.

3.6 CORRUPTION

A World Bank economist, Peter Langseth, commented that “Uganda is an African trailblazer in government reforms, attacking corruption and focusing on service delivery and results orientation.” Whereas this can sincerely be said to be true as far as other sectors are concerned the same cannot be applied to the case of URC. There are too few officials handling too much work at a fairly poor remuneration in a business where they handle large amounts of government money. They also handle a lot of documentation for cargo which has to be filled out by the shippers and processed by the officials. Processing of documents becomes tedious and time consuming in view of the volume of documents needed for both customs and URC records and the fact that the officers are few and demotivated by the factors hitherto mentioned. This has encouraged corruptive tendencies whereby shippers pay “KK” (kitu kidogo) a local jargon for a bribe meaning “something small”. This bribe is aimed at the “encouraging” officers to accelerate the processing of one’s documents and can entail the customs official not examining the documents as required. Ensuring compliance with regulations becomes secondary to the officer’s self aggrandisement.

In December 1996, repeated reports of escalating and unabated corruption within URC in the press headlines prompted Parliament to appoint an inquiry into the alleged mismanagement and corruption. This was handled by the Parliamentary
Probe Committee, chaired by one of the most vocal MPs Hon. James Mwandha. Among the people summoned by the committee were the Prime Minister, Hon. Kintu Musoke, the Finance Minister, Hon Mayanja Nkangi, and the former Transport Minister, Hon. Kirunda Kivejinja. It provoked a lot of acrimony and at one time threatened to become a political time bomb with several ministers becoming embroiled in the controversy. At one point proceedings of the Probe Committee appeared to be doomed to abort as powerful political figures flexed their political clout but there ensued such a hue and public outcry that the inquiry sessions had to continue but were henceforth held in camera. The inquiry wound up in mid-April 1997 and the results are yet to be released.

3.7 SAFETY OF PASSENGERS

The author noted that URC does not adhere to the legal limits of the number of passengers to be carried nor does it require a manifest of all passengers onboard to be maintained. Neither does it address the issue of the limit to the amount of luggage to be carried by each passenger. This is a serious omission in the author's view because too many small pieces of “hand luggage” are allowed on board and they are not safely stowed away by the vessel operators. There is often a lack of clear documentation on how much luggage is loaded on the slip and this can create an overloading hazard as well as hampering movement in case of a need to evacuate passengers in the event of an emergency.

As noted in Chapter Two (see s 2.4.1) most of the vessels are not equipped with life vests nor do they have adequate life boats. Statistics obtained from the Uganda Police and various reports in the Ugandan newspaper, The New Vision, show that all the 184 people reported to have died in Uganda's part of Lake Victoria in 1996 did not have life vests.

In case of an accident URC does not have any search and rescue mechanism nor equipment in place. Recovery of bodies is conducted without any diving equipment
and it can take up to three weeks to recover bodies. Any real efforts for search and rescue are provided by local people and even these are negligible. Moreover superstition among the lake people has it that an accident in which people die is seen as a sacrifice to appease the angry “lake gods” (“Lubaale we Nyanja” so they can refuse to rescue the victims as has been the case on Lake Victoria.

In a related topic when over 800 people died on the Tanzanian vessel M/V Bukooba that sank in Lake Victoria in May 1996, it was revealed that although the legal capacity was a maximum of 424 persons, at the time of the accident there were over 1000 passengers. Furthermore the lifejackets on board were too few and pandemonium broke out when the panic stricken passengers fought for them. Some passengers were trapped alive for hours and only 300 of the 800 corpses could be retrieved due to lack of diving and cutting equipment. Over 25 navy divers had to be flown in from South Africa and when these proved to be inadequate more were flown in from Norway and Belgium. One survivor reported that the crew failed to handle the panic stricken passengers and the Master himself was so gripped by panic that he failed to give the distress signal. The accident was reported by local fishing vessels from Uganda. He further reported that prior to the accident the worried passengers had noticed that the ferry was overcrowded as well as overloaded with cargo and luggage. The vessel was visibly swaying so the passengers decided to throw some of the ships’ cargo overboard but the crew threatened to throw them in the Lake if they did so.

Similarly in the Kenyan tragedy aboard the Mtongwe Ferry, which is managed by the KRC, a mere fortnight before the Mv Bukooba tragedy, an excess of double the permitted capacity of 150 passengers died when the ferry capsized. There was no record of the number of passengers who had boarded the ferry and the life jackets were less than 30. It took weeks to recover the bulk of the dead due to lack of equipment.

These cases underscore the need for the setting up of search and rescue services on the Lake and to have trained divers and relevant equipment.
3.8 SEAWORTHINESS OF VESSELS, CERTIFICATION OF SAFE MANNING

As shown in the previous chapter the seaworthiness of some of the vessels is rather questionable. To compound this problem there are no regular surveys carried out nor seaworthiness certificates issued by Government. Government must address this anomaly. URC should also ensure that all seafarers, especially the Masters of the ships are competent to man the vessels. The criteria for certification could be aligned to the standards set out in the STCW 1995 Convention.

3.9 INSURANCE

Uganda's fleet is insured on the London market by Lloyds and the Institute of London Underwriters. The insurance does not cover liabilities for passengers and cargo. There are obvious problems for such an arrangement. The first is that, with all the foreign exchange problems a Third World country like Uganda is bound to face, there are likely, as is indeed the case, to be delays in paying the premiums. In view of the fact that there are thriving insurance companies not only in Uganda but also in neighbouring Kenya, it is difficult to justify such an arrangement. Perhaps Government may point out in its defence that local insurance companies are very bureaucratic and recovering refunds can be a painfully slow and protracted ordeal. The plight of African States on the insurance of their vessels has been discussed at length by Moune's dissertation on Marine cargo insurance operational practice problems in Cameroon.\textsuperscript{xxxvii}

3.10 CHANGE OF MANAGEMENT TECHNIQUES

"Experience has shown that whether a resource rich endowment promotes economic growth depends not so much on the resources themselves but on how they are valued,
used and managed through existing economic policies and institutions. Conversely this is true for URC which has a fairly sizeable fleet but has so far not managed it wisely and has therefore not realised its full potential as was evidenced in Chapter II. In the same chapter it was also apparent that there was no proper and regular maintenance of ports and facilities (they are perpetually in a poor state of repair) yet URC is blessed with the fact that the port structures are solid and not vulnerable to corrosion as Lake Victoria is a fresh water lake. There is a clear need for management to be overhauled so as to tackle the problems of services on Lake Victoria. A well managed institution should have capacity and financial resilience. It must foster accountability, transparency and equity with employees being given the opportunity to participate in decision making. URC is now under public scrutiny as a result of the aforementioned Inquiry and needs to pay heed to these principles.

The situation of mis-management is not peculiar to URC since similar shortcomings exist in Malawi as discussed by Likukuta et al, and Chisale’s dissertation, *A macro economic evaluation for cost effective transportation in Malawi*. Chisale points out that managerial staff should be creative and motivated if lake services are to be improved. Like the author, he too believes that the poor performance in Lake services are to a greater extent the result of inadequacy of trained personnel rather than factors like ageing fleet, and lack of facilities. He goes on to say that rail and water transport should be run separately to enable policy makers to identify the relevant performance indicators in a rational manner. Critical information would then be handled separately for analysis. He concludes that the quality of shipping services has a great impact on its demand. The author agrees with these assessments.

### 3.12 NEED TO INCORPORATE ENVIRONMENTAL STRATEGIES.

While conducting field research, the author noted that neither MOT nor URC have a specific strategy to incorporate principles of environmental management in their transport systems. If they are to achieve sustainable development then this must be
redressed because sustainable development requires the integration of environment and development. This is elaborated very clearly in Our common Future, where it has been rightly said that “environment and development are not separate challenges, they are inexorably linked.” It is also articulated by Principle 4 of the Rio Declaration that “in order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it. This is further clarified in paragraph 6 of the Copenhagen Declaration thus- “economic development, social development, and environment protection are interdependent and mutually reinforcing components of sustainable development, which in turn is the framework for achieving a higher quality of life for all people.”

Hence decision making should take into account the environmental dimensions of proposed economic actions. In so doing, it is desirable to include long term strategies that include the use of environmental and social impact assessments, risk analysis, cost-benefit analysis, and natural resources accounting.

3.12 DIVESTITURE

The present trend of global economic liberalisation dictates that the market mechanisms play the leading role in the development process. It is now evident that Governments, be it in the Developed World or elsewhere are ill-suited to engage in business and thier role is increasingly being whittled to that of maintaining law and order, providing basic infrastructure and creating an enabling environment through policy frameworks for the development and expansion of the private sector. The Government of Uganda is cognisant of this economic reality to a great degree. Hence, Uganda has embarked on a bold economic strategy of divestiture whereby reform programmes have slashed government employment by half, reduced the number of ministries by a third, and the armed forces by 30%.” These are indicative of Government’s commitment to engage in open market economic policies.
According to the Privatisation Monitoring Unit (PMU) there is a process under way for Government to transfer the existing public enterprises to the private sector. A Public Enterprises Reform and Divestiture (PERD) Statute was enacted in 1993 which sets out a three tiered approach to state owned businesses wherefore full state control or majority share holdings will be retained by Government in some cases while only minority shares will be retained in other enterprises. Already 67 out of the 140 State enterprises have been divested with Government hoping to divest itself of another 45 by the end of this year.

The move from centralised control economies to a free market is always a relief to the tax payer and can only reap benefits for the economy (except for the few cases where issues of security or strategic country positions are concerned). Government admitted that it is incapable of running business ventures and almost all the parastatals in Uganda proved to be such a financial drain on the Government’s resources which had to constantly inject capital and subsidies to bail them out of financial embarrassment. The need to divest was aptly summed by the Secretary to Treasury, Mr. Emmanuel Mutebile-Tumusiime, when he said that “Government has neither the resources nor the ability to do business”.

In the divestiture programme Government has adopted two basic policy objectives in relation to public enterprises and these are:-

1) to reduce the direct role of Government in the economy and to promote a correspondingly greater role for the private sector.

2) to improve the efficiency and performance of the public enterprises that will remain under the ownership and control of the government.

However, the Lake Victoria services are unlikely to be privatised. Government has shown a reluctance to privatise these services as it deems them to be a strategic resource. In a situation where the enterprise being divested of is of such nature that such divestiture will create a private monopoly then it is inadvisable to do so. If the Government does privatise then it should put in place regulatory controls to ensure that some benefits are dissipated to the public especially in view of the fact that the
tax payer has been responsible for the building of the port which has been serving for
the common good.

3.13 COMMERCIAL ALTERNATIVES TO DIVESTITURE

3.13.1 LEASING

In the likely event that the lake services remain under Government management, then
Government should think of leasing some portions of the ports so as to generate
lucrative income. This might attract some private money to be injected in the
improvement of the super-structure and infrastructure so as to foster competitiveness.
The Government of Uganda offers very attractive incentives to investors which,
according to the Uganda Investment Authority (UIA), include the following:-

- Tax holidays of between three and six years in proportion of the investment;
- exemption of corporate tax, withholding tax and tax on dividends;
- Duty free imports of project related machinery and other capital goods,
- Authorisation to repatriate funds for payment in foreign currency of dividends,
  loans, interest; and
- Work permits are arranged for foreign personnel if local skilled workers are not
  available.

Furthermore, the liberalised foreign exchange market allows investors to transact
business in anyone of several authorised foreign currencies at the unified interbank
foreign exchange rates.

3.13.2 SHIPPING POOL ARRANGEMENT

Another alternative is for Uganda to enter into a shipping pool with her East African
partners, Kenya and Tanzania, so as to exploit the commercial benefits of such a
scheme and off-set the under-utilised capacity of her vessels. A shipping pool is an
arrangement that entails the placing of a collection of similar type vessels e.g. wagon ferries, belonging to two or more owners under one administration. The latter is charged with the commercial management of the vessels which are henceforth treated as one fleet. The earnings therefrom are pooled and distributed to each individual owner using an agreed weighting system. The administration would be treated as an executive body acting on the directions of the three states. It would be responsible for the marketing, sales promotion, chartering and all contracts, scheduling of voyages and deployment of vessels as well as all the administrative and financial management of a commercial nature on behalf of the pool members. The ultimate aim would be to optimise the utilisation and profit of the fleet and the Management would need a comprehensive networking mechanism with the relevant railway corporations, trucking companies, and all clientele, including pertinent parastatals not only within the pool member countries but also Congo-Kinshasa, Burundi and Rwanda and even Malawi. Policy issues would be the prerogative of the pool members. Such policy issues would include assessment and mode of financial contributions, profit sharing, port operations, levies, freight and tariffs based on recommendations by the administration.

3.14 TRANSPORT ON THE GREAT LAKES

The author shall draw upon the experience of the management of transport on the Great Lakes in a general fashion to show some strategies employed by the Great Lakes' States to render it as commercially viable as possible so that any Ugandan policy maker reading this dissertation can have some useful insights. Together the Great Lakes in North America constitute the largest body of fresh water in the world. They are a shared resource for Canada and the United States. The costs and benefits of facilities jointly used for navigation and power are assigned on the basis of 29% to the US and 71% to Canada. They are connected to Buffalo by the
Hudson River, New York by the Erie Canal and to Europe by the St. Lawrence Seaway, so transportation involves both national and international trade.

3.14.1 STRATEGIES USED TO CREATE BETTER EFFICIENCY

Over the years increased Seaway capacity was achieved by initiating the following strategies:

1. A special US federal agency, The St. Lawrence Seaway Development Corporation (SLSDC) was created to deal with the St. Lawrence Seaway. It was established in 1958 as an autonomous government corporation. It works with its Canadian counterpart, the St. Lawrence Seaway Authority of Canada. Together the two bodies promote the use of the Seaway by providing vessel movement data, furnishing statistical and technical information, conducting economic impact assessment studies concerning the Seaway, investigating competitive rate structures, providing market information to ports and exploring potential sources of new cargo development.

2. Although the annual number of vessels transiting in the first year of the Seaway did not change much, cargo tonnage between Lake Ontario and Montreal increased from 20.5 million in 1959 to 49.2 million by 1966 as a result of replacement of smaller vessels with larger and more economically efficient vessels. When cargo movement is concentrated into fewer vessels it results in greater efficiency in transiting as there are fewer transits yet with increased tonnage per ship per transit.

3. Use of television monitors and computers for advance assignment of time slots making traffic control more efficient.

4. In 1983 there was a drive to have a more aggressive strategy hence the establishment of the Great Lakes Cargo Marketing Corporation (GLCMC) to enhance the duties of the above mentioned bodies. However, it did not survive
long as it was wrought with devastating power struggles and was subsequently dissolved in mid 1984.

5. Following the demise of the GLCMC the Great Lakes Task Force (GLTF) was formed as a coalition of diverse groups. It combined labour, port, industrial, and state government interests. It addressed broad economic development issues pertinent to the region.

6. Soon after its establishment the Great Lakes Commission (hereinafter referred to as the Commission) was created. It is a member of the GLTF and consists of representatives of the eight States bordering the Great Lakes. The Commission was a culmination of the member States’ desire to promote their joint interests in the Lakes. It is fact finding and advisory in nature and is neither action oriented nor does it pursue specific marketing objectives.

7. Soon after this the Great Lakes Maritime Forum and The Congress on the Economic Future of the Great Lakes States were formed to augment the GLC and the GLTF.

8. Privatisation /deregulation of ports was considered a high priority so most ports are owned and maintained by individuals. This was initiated by the enactment of the US Staggers Rail Act Of 1980 and the (US) Motor Carrier Act which aimed at deregulating all modes of transport to make fares/freight more competitive.

9. Rendering handling facilities more capital intensive to increase the speed of cargo e.g. through policies like making all bulk carriers to be self-unloading and having their own conveyer belts for discharging. The old ships were retrofitted with self-unloading equipment. The objective of port installations is to secure the fastest possible turn around of both vessels and cargoes at the lowest possible cost. To succeed, terminal efficiency is crucial. However, large capital investments can only be justified if ports and terminals can generate sufficient and regular traffic.

10. In addition to self-unloaders, bulk cargo handling is largely automated through conveyors, gravity spouts and other continuos flow devises.
11. A new telex data service "Night Cast" was initiated to enable ships to make their presence and capabilities known to the ports and terminals by nightly transmissions.

It would appear that the creation of so many bodies could offset a proliferating fragmentation or duplication of issues. However, one must concede that their objectives were based on sound economic principles which URC would benefit from implementing in its management scheme so as to make Uganda's ports competitive. This could be pursued at a regional level to make it more versatile.

4.14.3 AN ANALOGY

The need to promote and market the services and facilities of Lake Victoria, especially once they are adequately refurbished and updated cannot be overemphasised. Such a scheme would assist in the designing, development and implementation of marketing and sales programmes to preserve and increase the volumes of cargoes imported and exported through Lake Victoria.

Regarding marketing, Chisale et al, has the following useful suggestions:

a) A market research section must be developed within the Lake Services department and it should analyse existing information and data on main trade routes, type of cargo and volumes of cargo transported, shippers, market shares and costs and market trends of exports and imports. These would form the basis of policy decisions.

b) Close co-operation is needed between the shippers and forwarders. Consultations should be held regularly especially regarding freight and the quality of services. Information on freight rates must be readily available to everyone desiring it. The ultimate aim of shipping should be to meet the customers needs with qualitative services.

The author agrees with the recommendations advocated by Chisaale especially when coupled with those espoused in the Canadian strategies (refer to S. 13.13 supra).
CHAPTER FOUR

LEGAL CONSIDERATIONS

4.1 BACKGROUND

The Government of Uganda has enacted not less than 60 statutes governing various aspects of natural resources management and protection of the environment. Furthermore it has developed more than 60 instruments to support the Statutes, resulting in a multiplicity of legislation with more or less as many ministry departments, institutions and authorities to implement and enforce them. For instance the issue of water pollution is handled by not less than nine authorities as evidenced below:-

1) Directorate of Water Development (DWD) which deals with water quality and water supply by undertaking the development and management of such.

2) National Water and Sewerage Corporation (NWSC) which is responsible for waste water disposal services, treatment of waste and provision of water supply in major urban areas.

3) Both the Ministry of Health and the Public Institute of Health which handle provision of safe sanitation facilities and safe drinking water.

4) Ministry of Works, Transport and Communications dealing with transportation and any construction of infrastructure on the lake.
5) Ministry of Lands, Housing and Urban Development which is responsible for land use planning and settlement patterns, both of which have an impact on the use of water resources as well as port infrastructure.

6) The Uganda Fisheries Department in the Ministry of Agriculture and Animal Husbandry.

7) Ministry of Local Government which is responsible for providing guidelines and enforcing proper procedures for emptying septic tanks, and disposal of waste in general.

8) Department of Environment Protection which deals with monitoring of pollution and environment conservation.

9) The Parliamentary Committee on Environment Management.

This duplication of roles has invariably led to a multitude of problems like:

a) Lack of homogeneity in the implementation of existing legislation;

b) Lack of co-ordination as most laws have evolved along sectoral lines and are thus compartmentalised in nature;

c) Poor implementation due to laws being compartmentalised.

d) With such compartmentalisation, difficulty for the Ministry of Natural resources to fulfil its mandate in environmental governance;

e) Sectoral approaches to environmental issues having led to increased bureaucratic tendencies in such management;

f) Inadequate communication between the planners and the implementors at the grassroots;

g) Some areas not being covered by any sectoral jurisdiction; and

h) Lack of involvement of the local peoples since formulation and implementation of the laws has traditionally been the prerogative of central government.

It has been reported that "sectoral implementation of environmental laws has often resulted in pitched conflicts between the different government departments, the similarity of goals notwithstanding, which in turn has undermined their effectiveness on the ground." These problems are exacerbated by lack of logistics, finances and
skilled human resources as well as a lack of environmental monitoring. This has been compounded by poor information flow which has created problems of policy interpretation and formulation. All laws are required to be gazetted but the Uganda Gazette is rarely read outside legal circles and the Government Printers rarely print more than 50 copies a month due to lack of demand.xlix

Furthermore, most of the legislation was enacted before Uganda’s independence in the early sixties and

a) it does not address key issues like biological diversity;
b) it is reactive rather than proactive and tends to respond to crisis situations rather than being anticipatory;
c) most laws have been generally rendered obsolete due to the influence of time. (For instance 30 years ago indigenous scientists were few and issues like toxicology and mutation have taken on new dimensions not addressed by the said laws);
d) the law also tends to use the command strategy rather than motivating the resource users and this is very old fashioned when current trends prefer the latter strategy;
e) the machinery for enforcement in such laws is in the form of sanctions, penalties and fines and does not address strategies like economic incentives; and
f) the original fines have never been amended to reflect economic changes like inflation rates and are therefore too insignificant to act as a deterrent to offenders.

The bulk of these laws impose a fine “not exceeding two thousand [2000] shillings”(equivalent to US $ 2).

The author would like to point out that although a new statute, The National Environment Statute, enacted in 1995, does address some of the issues mentioned above (as discussed further on in this Chapter) the old legislation referred to above has not been repealed and is still legally binding.
4.2 DATA MANAGEMENT

For effective management of the environment there needs to be a data and/or information system that is not only up to date, but timely, accurate and accessible. Unfortunately this is lacking and this renders it most difficult to monitor the quality and quantity of natural resources. If this cannot be done then one is unlikely to be in a position to measure adverse impacts such as pollution levels in Lake Victoria. Not only is the data generally lacking but that which is available cannot, in most cases, be easily accessed, nor can one vouchsafe its authenticity. The methods for collecting such data are not standardised, and there is no national inventory of existing data stocks which could assist in identifying current information gaps and prioritising data collection activities. This has contributed to the management by crisis of Uganda's natural resources in some fields.

4.3 ENVIRONMENTAL STANDARDS

The present Acts are, to a large extent, rendered ineffective to regulate industry in the absence of standards against which enforcement officers can judge issues like pollution levels or impact. This is compounded by a situation whereby there are irregular or non existent environmental monitoring systems and audits in place. As a result laws resort to general terms such as “reasonable care”. The Uganda Bureau of Standards, set up in 1983, has yet to publish any standards. Articles 25-31 of the National Environment Statute stipulate that criteria and procedures for measurement of air, water, effluent discharged into waters, noxious smells, noise and vibrations, and soil quality/pollution shall be established. However, to the best of the author's knowledge, these too have yet to be established.
Prior to the break up of the East African Community, transit traffic on Lake Victoria was governed by following Acts and regulations:

- The East African Inland Water Transport Act. 1959 Cap. 32
- The Inland Water Transport (Safety and Navigation) Regulations, 1970
- The East African Customs and Transfer Tax Management Act.
- The East African Customs Regulations.
- The East African Transfer Traffic Regulations;
- The East African Railways Corporation Act, 1970

These were abolished after the break up of EAC and substituted with national laws. In the case of Uganda the customs and rail components have been catered for in national legislation but the only existing national laws specific to IWT is the Inland Water Transport (Control) Act of 1964 (See Appendix 4).

The Act has only 12 substantive provisions, all of which relate to the issue of a licence to ships. It does not cover any other subject like navigational aids, insurance or the conducting of surveys. The main concern of this Act is to regulate “the manner and extent to which the existing transport services serve the routes proposed to be served in the new application and the fares and rates proposed to be charged.” It does however address one important issue. Before any licence is issued to an applicant, the issuing Board is obliged to take steps to ascertain the views of any licensing authority appointed for such a purpose in either Kenya or Tanzania. This suggests that there is some form of regional recognition of each States licences and the need not to engage in commercial activities that might impinge on the sovereignty of another State.

Section 8 confers discretionary powers on the Board to attach the following conditions to any licence:
a) Authorised ships—shall or shall not be used in a specific area or over specified routes.
b) Certain classes or descriptions of goods shall or shall not be carried.
c) Charges, or the maximum or minimum charges to be made for the carriage of goods may be specified.
d) The wages, conditions, and hours of employment of persons employed in connection with the authorised ships may be specified.
e) Such other conditions as the Minister or the Board may deem necessary in the public interest for preventing uneconomic competition may be specified.

Although the Act implies that shipping is regulated in such a way as to eliminate uneconomic competition this might not auger well in the era of liberalising economies as discussed in the previous chapter. It is often self-defeating and futile for Government to impose protectionist regulations on commercial activities whereas market forces should ideally be the best regulators.

The author is of the view that this Act should be amended to include wider topics as hitherto discussed. Tanzania has developed an Inland Waterways Act which has been incorporated in The Merchant Act and Uganda would benefit from studying the latter with a view to incorporating all useful and relevant ideas or stipulations.

### 4.5 THE NEED FOR POLLUTION CONTROL

Lake Victoria is being subjected to various forms of pollution which need to be addressed. The sources are both land and ship-based and include the following:

- Siltation from soil erosion which often results from degradation of soil cover from overgrazing and poor cultivation practices as well as cultivation on steep hill sides. The water carried from offshore causes sediments to build up and introduces undesired nutrients to the aquatic life systems and in some cases leads to serious eutrophication of some portions of the lake;
Untreated effluent is discharged from the factories found on the shores of Lake Victoria. Two breweries discharge 5,000 cu metres of untreated toxic waste in the lake daily: four textile industries discharge bleaching agents like caustic soda, hydrogen peroxide, sodium silicate and hydrogen peroxide: three sugar factories discharge 550 cu metres of untreated waste daily: and two leather tanning factories discharge 420 cu metres of waste per day into the Lake. Some environmentalists believe that the current levels of organic pollution in the rivers and lakes exceed the capacity of the waterways to biodegrade them.

According to NEMA, the effluent often contains a high suspension of solids and some contains corrosive or carcinogenic substances like chlorobenzines and DDT as well as potentially harmful or lethal substances like arsenic. The BOD of the untreated discharge ranges from levels as high as 3500 mg/litre to 700 mg/litre;

- surface run-off containing contaminants from pesticides and herbicides used to control weeds and pests in the surrounding gardens, cultivated fields and the Entebbe Golf Course;
- discharge of house-hold wastes containing solvents from detergents and other chemicals used in the houses; and
- Farming activities that introduce additional nutrient in the watershed from animal wastes.

The following sources of pollution have been identified by Prof. Sampson and although not documented in the case of Uganda, the author is convinced that they too apply in Lake Victoria:

- accidental spills of hydrocarbons as a direct result of loading and discharging operations at the oil terminal docks;
- accidental spills of hydrocarbons during bunkering operations within the entire port;
- discharge of bilge water into the harbour area;
- discharge of oily mixtures into the waters; and
- dumping of garbage and other solid waste by vessels.
In view of the above it is clear that there is a need to address the problem of pollution. In the following sub-sections the author will discuss the obligations of dealing with such pollution both at national and international level.

4.5.1 INTERNATIONAL LAWS AND CASE LAW ON POLLUTION

Uganda is signatory to international as well as regional environmental instruments. However as pointed out by leading experts "compliance with international environmental obligations frequently requires resources, including technologies or technical expertise, that are not readily available, particularly in developing countries."

They go on to conclude that failure to comply often reflects a lack of capacity rather than a lack of will. The author believes that this is largely true for the case of Uganda, but in spite of all limitations Uganda has shown a growing desire to be a party to, and abide by, international as well as regional laws. Uganda's commitment to protect the environment was displayed soon after gaining independence when she adopted the African Convention on the Conservation of Nature and Natural Resources at Algiers on September 15th, 1968. Under Article 5 of this convention the contracting parties undertook an obligation to manage their water and air resources at "the highest possible quantitative and qualitative levels". The parties were further obliged to establish and implement policies that would inter alia prevent pollution.

Under customary international law, transboundary pollution is governed by the principle of "good neighbourliness" which is enshrined in the Roman Maxim "sic utere tou ut alienum non laedas" meaning "one must not use one's own in a manner that is injurious to the neighbours' interests." Lake Victoria, being a shared resource where pollution from one State is likely to impact on another, is likely to be affected by this principle. The Principle is also reiterated in Principle 21 of the Declaration of Principles adopted by the 1972 Stockholm Conference which stipulates that States have, in accordance with the Charter of the United Nations and the principles of
the environment, including a duty of informing NEMA of all activities and phenomena that may affect the environment significantly.

Under Article 57 of the same Act not only is it an offence but it is prohibited to discharge hazardous substances, oil or a mixture containing oil chemicals and materials into any waters except in accordance with the guidelines prescribed by NEMA in consultation with the lead agency. To the author’s best knowledge these guidelines have yet to be formulated. The Act does not specify whether any concessions will be made for operational oil discharged during the normal functions of a vessel and this also implies that all slop must be discharged on land. This is a good policy because it is difficult for the lead agency to establish the quantities of oil or any other substance in the slop poured into the lake and in any case there is a reception facility on shore to receive the slops of vessels.

Furthermore it is an offence under Article 101 to discharge any pollutant into the environment contrary to laid down procedures and the offender is liable upon conviction to imprisonment for a term not less than 18 months or to a fine not less than 180,000 shillings and not more than 18 million shillings (equivalent to US $ 180 and 18,000 respectively) or both. Under Article 57, if convicted, the offender also has, in addition to any other sentence imposed by Court, to pay all the costs of removal, including any costs incurred by any Government agency or organ in the restoration of the environment damaged as a result of the discharge as well as the costs of third parties in the form of reparation, restoration, restitution, or compensation. In addition the offender must mitigate the impact of discharge by; notifying NEMA and other Government Officers, immediately beginning cleanup operations using the best available methods; and complying with directives from NEMA. Until he does so NEMA may seize the vessel (or production facility) and this can be sold by court to defray the costs in case of default after a reasonable passage of time. In convicting an offender, Court is required to consider any mitigating measures undertaken by him. This Act has introduced a fairly significant monetary penalty compared to all other legislation.
4.5.4 THE PUBLIC LANDS ACT

The Public Lands Act of 1969 prohibits pollution on public lands and water bodies except for "reasonable use". This will have to be addressed by the new by-laws on pollution as they do not place a specific standard of what amounts to reasonable use.

4.5.5 PUBLIC HEALTH REQUIREMENTS

The Public Health Act of 1964 requires that the public must be protected from diseases emanating from sewage and pollution. Sewage dumped in open waters can cause chronic attacks of typhoid to the surrounding villages. Hence, the vessels on Lake Victoria must pay heed to this regulation especially since under the said Act the Minister is empowered to stop the establishment of any economic activity or industry that may result in pollution. However, there is a legal loophole in that the provision covers future activities and not the existing ones. This must be amended.

4.5.6 ECONOMIC CONCERNS: NUTRITION, SPECIES, JOBS AT STAKE

Fish stocks are a vital resource in Uganda. It is estimated that fish contributes to more than 50% of the solid animal protein intake for the national population. In turn the consumers generates income multiplier effects in other sectors. The fishing industry provides labour for about 75,000 people in direct employment and to upwards of 500,000 people in indirect employment, giving an employment multiplier of 6.7. Of all the lakes, Lake Victoria, provides 49% of the national catch.

As a wetland Lake Victoria has lacustrine swamps which are a vital source of papyrus and arborescent species. These are very vulnerable ecosystems and they are crucial breeding grounds for fish species that spawn there before swimming to the open lake. They have also been identified as significant areas for fish farming and are a natural habitat for the endangered water fowl and the crested crane (the latter is the
National symbol for Uganda). Thus the wetland should be protected from all forms of pollution including oil spills from the vessels plying the lake. It is very difficult to clean up a swamp in the event of an oil spill so special measures need to be taken in the contingency plans for Lake Victoria.

4.6 ECONOMIC INSTRUMENTS TO COMBAT POLLUTION

Article 3(f) of the National Environment Statute stipulates that NEMA must ensure that all the true and total costs of environmental pollution are borne by the polluter. Article 94 empowers the Minister for Finance to include in the annual budget tax 

a) incentives to encourage good environmental behaviour including the prevention or abatement of pollution;

b) user fees to ensure that those who use environmental resources pay the proper 'value for the utilisation of resources; and,

c) tax disincentives to deter depletion or pollution of resources.

This has yet to be implemented but it is a critical starting point.

A popular form of controlling pollution is through the polluter pays principle (hereinafter referred to as PPP). This was adopted by a number of industrialised countries as early as 1972 to discourage high levels of pollution. It places an implicit burden on the polluter to compensate citizens for the damage they suffer from pollution occasioned by the said polluter. It conforms to notions of equity. Government can make it mandatory for industry to purchase a pollution permit and price it very expensively for any excess pollution generated against the legally acceptable levels. It can act as a deterrent and may encourage the potential polluter to invest in newer and safer technologies. This technique is successfully employed in the United States as ascertained by the author during field research. It is also complemented by both the Rio and Stockholm Declarations which call for the development of laws regarding liability and compensation for environmental damage. However, without effective identification of the polluters, standards of
measuring pollution and close monitoring, PPP might become just another fancy catchphrase or platitude.

The most ideal situation would be to motivate compliance through free access to information and economic incentives like subsidies or grants, tax credits, technical assistance and provision of equipment at preferential rates like tax deductions. In this regard the author would like to draw the reader’s attention to some facts obtained from the Norwegian Ministry of Environment (MOE) during field research. The Norwegian Ministry under its Department of Organisation and Economic Affairs has dealt extensively in this area. They have instituted economic instruments like taxation on sulphur emissions. In response to the Climate Change Convention the Norwegian Government established a Commission on Green Taxes and its MOE is working on proposals for a tax shift that will penalise activities prone to degrading the environment. Shipping will also have differential taxes and an environmental index will be set. In this regard the MOE is going to present a White Paper to Parliament for approval. The said Department has also established some economic incentives which Uganda has had difficulty in implementing because of having to comply with stringent SAPs (structural adjustments programs) imposed by IMF. Funds co-ordinated by the Norwegian State Pollution Control Authority are given to industries to encourage them to install newer, better and safer technologies that will not damage the environment significantly. There is also a special programme for shipping where old ships are given subsidies to enable them make technological adjustments so as reduce risks of pollution.

4.7 CONTINGENCY PLANNING

Contingency plans are not only desirable but the Laws of Uganda seems to require them. Article 67 of the National Environment Statute provides the NEMA shall prepare guidelines or plans for co-ordinating national responses to environment disasters and in so doing it shall consult the lead agencies, the Uganda Police Force,
the Fire Brigade Service, organisations providing health care, whether non-
governmental or governmental, and any other organisation it considers necessary.

Article 64(4) further requires each employer whose activities are likely to have a
significant impact on the environment to prepare a specific disaster preparedness
plan.

From lectures, class discussions, as well as reading materials, a good contingency
plan (hereinafter referred to as the CP) should at least cater for the following

A) **Planning:**

All agencies, local authorities, the IWT Department and interest groups/stakeholders
should meet at the local, regional and national level, together with appropriate legal
draftsmen to brainstorm the salient elements that can realistically be included in the
CP. They must identify the individuals and agencies charged with implementing the
CP as well as establishing their respective roles.

A proactive rather a reactive approach must be followed because it ultimately reduces
the amount of preparation needed, time consumed and stress both from the human
factor and for the environment.

A budget must be prepared and submitted to the special committee on natural
resources in Parliament for the approval and release of funds. Recovery of costs in
the event of a spill occurring has been discussed in S 4.6 *supra*.

B) **Assessing capacity, training and test drills:**

The capabilities of the existing relevant agencies, local authorities, industry and
specialised contractors must be assessed. Improvements should be made and
capacities enhanced through training, refresher courses or purchase of equipment like
computers and mobile telephones.

An Incident Command Structure (ICS) must be established so as to avoid duplication
of tasks, confusion in chains of command and jurisdiction. Establishment of the ICS
will enhance both the integration and familiarisation of the different agencies
involved. The working out of common terminology to be used as well as creating a
working rapport will also be facilitated. Overleaf is an illustrated example of an ICS.
All identified participants in the ICS must undergo orientation procedures to familiarise themselves with the CP. Test drills should be held periodically and any weaknesses or failures observed must be rectified in the CP accordingly. This will enable participants to establish a rapport and working relationships. The importance of this cannot be overestimated considering that there is a diversity of disciplines and offices involved. Specialised training in handling hazardous materials and handling emergency responses should be encouraged. The East African Governments

source: The USCG (United States Coast Guard), Homestead, USA, 1997
enter into a Technical Co-operation Agreement with an appropriate donor country to send experts to train their personnel. Key personnel could also be sent to recognised institutes abroad like the World Maritime University for specialised training.

C) Zoning.

The planners must delineate the geographical area(s) to be covered by the CP. They need to identify the sensitive areas that are likely to suffer in a unique way from a spill. These, in general, usually include fish spawning areas: fishing grounds: recreational beaches: bird nesting areas in the vicinity: the marine ecosystems supporting complex food chains: port infrastructure and facilities if the accident occurs in the port area: human population and health, as well as housing and community facilities, if affected.

The livelihoods of the citizenry and environmental concerns that exist must be safeguarded at all times. In order to have a point of reference for monitoring purposes, as well as establishment of criteria for the prioritising of any species that need to be given special protection due to peculiar vulnerability, a taxonomy of the existing species is recommended. Once the taxonomy is established the CP must be modelled or structured on the “worst case scenario” assessed or envisaged.

D) Response options

The prime objective of a CP should be to ensure a timely and effective response to pollution incidents. It should have a “fool-proof” scheme in place so that every response facet or procedure is carried out in a coherent and systematic manner. Response is largely determined by the assessment of risks involved, priorities assigned to a specific resource, available resources and skilled manpower, the physical and chemical composition of the spilled substance, prevailing weather conditions, water velocity, tides, currents, etc. Overleaf is an illustration exemplifying some response modes.
Potential sources of spills must be determined during zoning. These could include factories and refineries located in the vicinity, and any pipelines which, if subjected to corrosion, stress and/or old age, can burst or cause leakage that can become a cumulative or chronic source of pollution. In the case of Lake Victoria there are several factories surrounding it as well as an oil refinery and major oil pipeline at Kisumu Port. The latter must have their own approved on-site contingency plans which complement this CP. They must not be allowed to discharge untreated effluent into the Lake. They must inspect the pipelines regularly to replace old or corroded pipes and reinforce those that need to be reinforced. All must submit their site plans to the CP planners. They must also provide proof of in-house training of safety and emergency response for their employees as well as basic fire fighting equipment and safety clothing. They should have a list of all employees in a given area at all times to assist co-ordinated evacuation if the need arises.
E) **Equipment, inventory and directory**

Equipment should ideally be located near the high risk areas for rapid mobilisation and deployment. An updated inventory must be kept and the equipment regularly inspected. It must identify the specific locations of all equipment and should be availed to the Incident Commander and all relevant persons and agencies. The equipment should include:- specialised craft for monitoring and surveillance; pollution combating tools like skimmers, boomers and filter barriers; toxic gas detectors; protective clothing; emergency medical supplies as well as barges, boats etc. to support both operations and personnel. The CP must cater for a temporary storage facility and cleanup site on the scene of the spill as well as temporary sheds for rest, medical first aid, food, and toilets etc.

Addresses and telephone numbers must be regularly updated and distributed to all relevant persons. A data management system must also be established.

F) **Notification, monitoring and surveillance**

An alerting system must be implemented and criteria established on when an alert should be raised and who should be notified immediately. In addition to setting up a notification/alerting system, there should be regular surveillance of the potential areas at risk in the region so that when a possible need is identified there can be expeditious mobilisation of an appropriate response. A regional response coordinating centre must be set up to cater for all three of the above captioned facets.

The planners' findings, deliberations, conclusions and recommendations must be published and submitted to the final authority for sanctioning the report and coordinating its actual implementation. This authority will then submit the final and approved CP to all the key players mentioned hitherto.
4.9 LEGISLATION FOR TRANSBOUNDARY POLLUTION ON LAKE VICTORIA

After the formulation of both the contingency plan and the command structure the author deems it prudent to look into the formulation of legislation to cover accidental pollution of transboundary inland water. Uganda has yet, at a regional level, to specifically address transboundary pollution. The Lake Victoria Basin States could obtain both technical and financial assistance from UNEP as the ECE did (see Section 4.8 below). It is UNEP's strategy to

"encourage the development of co-operative mechanisms between States including as appropriate, international legal instruments for the protection and integrated management, development, and use of transboundary water resources with a view for prevention, reduction, control and reversal of their degradation and for the peaceful resolution of disputes between States".

They perform this through a mechanism of "enabling measures" such as the provision of additional financial resources, technical assistance, transfer of technology, capacity building and specific co-operative approaches.

To illustrate the relevance to Uganda, the author will draw from the experience of the ECE as discussed in the following sub-section.

4.8.1 THE ECONOMIC COMMISSION FOR EUROPE (ECE) CODE OF CONDUCT ON ACCIDENTAL POLLUTION OF TRANSBOUNDARY INLAND WATER

The above captioned Code (hereinafter referred to as the Code) is a comprehensive piece of legislation governing the accidental pollution of transboundary inland water for the ECE member States adopted by the ECE at its 55th Session in 1990 (dec.C 45). It covers the protection of transboundary inland waters against pollution from
hazardous activities in case of accidents or natural disasters and mitigating their impact on the aquatic environment. It is primarily aimed at the harmonisation of national measures in the event of an accident occurring and secondly at the formulation of the basic frames of international (read regional) co-operation. In reading the Code the author would like to draw a parallel to the EACS on some of the very useful guidelines and procedures enunciated in the Code to be taken by countries sharing an inland water, individually or jointly to prevent, control and reduce the likelihood of an accidental pollution of transboundary inland waters.

The Code covers any accidental introduction of any hazardous substance from the jurisdiction of one country which causes or threatens to cause significant impairment of the quality of transboundary inland waters and/or significant damage to aquatic systems in an area under the jurisdiction of another country. Hence, the East African Co-operation Secretariat (EACS) should scrutinise it to ascertain which salient provisions could be incorporated in a similar Code for Lake Victoria.

One of the merits of the Code is that it applies to any incident irrespective of whether it occurred in the transboundary inland waters or in their vicinity with the risk of affecting such waters because in most cases the scope of liability is confined to the risk emanating from or within the water body.

Under the section “General provisions”, the Code advocates that the “polluter pays” principle shall be applied and that this should specifically be included within the frame work riparian countries’ national legislation. The latter is an important inclusion because too often states sign bilateral or multilateral treaties and fail to include them in their national legislation, rendering them difficult to implement or enforce in most cases. The next section, (S.III), provides that appropriate legislative and administrative measures are to be taken; members should apply the best available technologies and ensure safe operation for efficient prevention, control, and reduction of accidental pollution. The best available technology is usually expensive but practice has shown that if there is a credible system in place whose major
impediment for implementation is financial constraints, major Donors like the World Bank and the GEF, are quite willing to extend financial assistance.

Paragraph (3) of Section IV is very crucial as it advocates bilateral and multilateral agreements containing the following provisions:-appropriate mutual exchange of all pertinent information; early warning and alarm systems; joint contingency plans; preventive and remedial measures; institutional infrastructures and joint manoeuvres and exercises of competent services such as civil protection; rescue units and fire brigades; common procedures concerning risk assessments and environmental impact assessments; and, finally, common procedures relating to liability and measures to remedy damage caused by accidental pollution of transboundary inland waters.

It goes on to provide that agreements or arrangements in this framework should provide for the necessary international institutions to ensure implementation.

The author is of the opinion that the above section covers the essence of what a similar Code on transboundary pollution of Lake Victoria should entail.

The ensuing sections V-XV of the ECE Code elaborate on what each aspect that is mentioned in the said section IV(3) should entail. The provisions therein are written in very practical terms that are easy to implement even in the presence of financial restrictions. It traverses the institutional, administrative, technical and scientific fora. Section VII elaborates on access to administrative and judicial proceedings. It provides that in order to promote informed decision-making by central, regional or local authorities in proceedings concerning accidental pollution of transboundary inland waters, public hearings should be held. It further provides that persons likely to be affected should be facilitated to participate not only in the preliminary hearings, but also have recourse to, and standing in, administrative and judicial proceedings. The same section goes to provide that access should be availed to legal persons and public authorities of the exposed country.

Paragraph 7 provides that where it is deemed necessary both parties should “without undue delay” enter into consultations and negotiations in order to verify and determine the risk and amount of pollution, aiming at arriving at an arrangement with
regard to the adjustments and modifications of planned activities, safety measures or off-site and on-site contingency plans that would give the exposed country reasonable satisfaction.

This is a very prudent provision because in times of crises diplomatic relations which are normally fragile may be strained and such a provision caters for an amicable solution with an inbuilt flexibility to alter the original plans to meet the demands of a specific situation and this augers well for regional relations in the author's view.

Section VIII would be of specific use to Uganda and would also be instrumental for the region. It gives the following guidelines of where particular attention should be paid in the formulation and application of economic instruments as a tool to control pollution:

a) Optimal combination with existing patterns of legal, administrative and technical instruments;

b) Consistency with prevailing economic principles; and,

c) Anticipated changes of water-use practices owing to the measures applied.

It goes on to provide that economic, including fiscal instruments should be employed where appropriate and possible, in order to:

a) Induce operators to participate in addressing the environmental consequences of their activities regarding transboundary inland waters and to adopt the necessary safety regulations and standards;

b) Encourage operators to substitute the hazardous substances in their production processes with non-hazardous or less hazardous substances; and,

c) Promote the development, application and exchange of information on new technologies and equipment that reduce the risk of pollution.

Section IX calls for the keeping of a register and records of authorisations granted for hazardous materials. The author believes that this could be very instrumental for tracking purposes, especially in the case where an accident occurs and the carrier does not have a detailed list of the substance(s) being carried.
In Section X, the objectives of risk assessment are stated to be the identification of
the nature and scale of potential accidental releases of hazardous substances onto the
aquatic environment; laying down the basis for contingency plans; the identification,
classification, likelihood and broad consequences of major accidents; and disasters
that might occur. The section also calls for inventories to be established. This is of
paramount importance and it is a proactive measure that should be included in the
Code for the Lake Victoria Basin if one is drawn.

The remainder of the sections cover important aspects on the formulation of
contingency plans, early warning systems, notification of incidents, damage
containment and rehabilitation, damage assessment and compensation and finally
post-accident surveillance.

The final Section provides that countries should draw up comprehensive reports in
the event of an incident occurring. Such reports should be availed to other concerned
countries. The latter should then assist each other in the interpretation and assessment
of such reports, in particular the assessment of the efficiency of rehabilitation
measures. The final analysis would be utilised as feedback for the progressive
development and application of preventive measures as well as the improvement of
contingency plans.

Finally, the Code has eight annexes detailing what should be covered under the
following topics:- matters to be regulated; functions of international institutions for
transboundary inland waters; terms and conditions of administrative authorisation.
hazard identification techniques; contingency plans; notification and information on
incidents: rehabilitation methods and techniques, and damage assessment.

Enacting a similar Code for Lake Victoria could provide a useful channel for dispute
avoidance which would be in line with international principles as enunciated in Area
D of the Montevideo Programme II that endorses a strategy of “developing methods,
procedures, and mechanisms that promote, inter alia, informed decisions, mutual
understanding and confidence building with a view to avoiding environmental
disputes, and where such avoidance is not possible, to their peaceful settlement.”

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The author reiterates that this is a most comprehensive Code to be emulated by the EAC Secretariat on behalf of the riparian States of the lake Victoria Basin. There is no need to reinvent the wheel as the old adage says.

As previously mentioned, the formulation of this Code was funded by UNEP. The EAC Secretariat, once it has identified the key elements that it would wish to include in its own Code, and has made an initial draft, could approach UNEP to obtain both the technical and financial support to formulate it and enforce it.

In concluding this chapter, the author would like to stress that environmental protection is best achieved by preventing environmental harm rather than attempting to repair or compensate for environmental damage once it has occurred. Sometimes damage may be irreparable. Restoration may prove to be time consuming, expensive or requiring skills and equipment that may either be unavailable, not readily available and/or very costly. This should act as a caution to the environmental managers and those likely to impact negatively on the environment, for instance the operators of IWT on Lake Victoria.
CHAPTER FIVE

EAST AFRICAN CO-OPERATION: THE WAY FORWARD

5.1 NEED FOR REGIONAL ECONOMIC INTEGRATION

Faced with the stringent regime of the newly established WTO (World Trade Organisation) as well as an avalanche of other grave economic, social and political challenges demanding a common response, Africa is left with little choice outside economic integration. This is in the wake of the global trend towards formidable trading blocs like NAFTA, ASEAN and the EEC. Already there exists in Africa the Economic Community for West African States (ECOWAS), the Maghreb Union, COMESA and the Southern African Development Council (SADC).

5.2 HISTORICAL BACKGROUND OF EAST AFRICAN CO-OPERATION

The history of the three East African States has been marked by a series of (albeit interrupted) economic integration. The first economic integration can be traced back to 1900 when both Kenya and Uganda entered into a bilateral agreement that designated Mombasa as the Customs Collection Centre for the two territories. Following on its heels was the agreement to build the Uganda railways which run

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3 The information contained in this section has been extracted from Government reports filed in the National Archives of Uganda.
from Mombasa port to Kampala in the hinterland. This culminated in the shift of trade from the Port of Tanganyika to Mombasa. The latter decision was influenced by Tanganyika being under German rule at the time while the other two were under British governance. In 1905 an East African Currency Board was set up to issue currency for Kenya and Uganda. In 1917 a Customs Union was established which initially had a common external tariff and later the policy was changed to cater for free inter-territorial exchange of goods.

At the end of the First World War Tanganyika joined Kenya and Uganda under British rule following the League of Nations decision to place it under Britain’s administrative mandate. In 1922 it adopted the common external tariff and subsequently acceded to The Agreement for the free exchange of locally produced goods of 1923. This was instrumental in the conception of the first inklings of a common market for East Africa and led to the formation of the Joint Economic Council in 1940 which saw the three East African States acting as one economic and commercial unit. In the same year the East African Income Tax Board was established. These were the vanguard of the East African Community (EAC). In 1948 so as to establish a legal basis for their co-operation as well as an international outlook, the East African High Commission (EAHC) was established and it consisted of the East African Legislative Council (LEGCO). It was a corporate body with perpetual succession and possessed an official seal. Laws enacted by the EAHC had the force of law in east Africa from whence bodies like the East African Railways and Harbours derived their authority.

When Tanganyika gained independence in 1961 the member states of the EAHC agreed to establish the East African Common Services Organisation (EACSO) to replace the former while maintaining its structure. In 1963 the three States signed The Nairobi Declaration that sought to introduce a political federation in Kenya, Uganda and Tanzania. Voices of dissent soon arose and the idea was ditched. For the next few years there was a lull in regional initiatives. In 1967 the three states convened to sign the Treaty for East African Co-operation. This led to the inception
of the East African Community which in turn established the East African Common
Market. The latter was commissioned with the establishment of common tariffs and
deviation, protection of East African trade by inhibiting the importation of goods
from third states when such goods were produced in East Africa, and unrestricted
inter-territorial trade i.e. the installation of a free trade area.

In 1977 there was a marked strain in the political relationships of the three states and
divergent political philosophies (considered to be ideological aberrations) prevailed.
In the internal management of the EAC power struggles were rife and
mismanagement coupled with a growing perception of disproportionate sharing of
benefits accruing from economic integration among the member countries served as
the last nail in the coffin that culminated in the collapse of the EAC.

In 1984, after a series of meetings, negotiations and international intervention the
three states signed the Mediation Agreement for the Division of Assets and
Liabilities of the defunct EAC. Ironically (at the time), the States emphasised the
need for regional economic integration and inserted a clause in the Mediation
Agreement for the States to explore areas of future co-operation and to take concrete
steps to ensure that co-operation in any identified areas actually materialised.

5.2.1 THE REVAMPING OF THE EAST AFRICAN CO-OPERATION

The new initiative for the East African Co-operation is different in that whereas the
co-operation arrangement for the defunct EAC was largely based in joint ownership
of common services, this is now based on the creation of an enabling environment for
the establishment of a single market and investment in the area. There is a distinct
move away from administrative allocation of resources. Henceforth the distribution
of investments in the region will largely be influenced by incentives and the quality
of the supportive structure.

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5.2.2 STEPS LEADING TO THE EAC’S ESTABLISHMENT

On 30th November, 1993, following a series of diplomatic negotiations, the Presidents of Kenya, Uganda and Tanzania, met in Arusha to sign *The Declaration on Closer East African Co-operation*. Pursuant to this they met again in Kampala on the 26th of November, 1994 to sign the *Protocol on the Establishment of a Secretariat of the Tripartite Permanent Commission For Co-operation Between the United Republic of Tanzania, The Republic of Kenya and the Republic of Uganda*. The Secretariat was later inaugurated on 14th March 1996 at Arusha by the three heads of State.

5.2.3 THE SECRETARIAT FOR THE PERMANENT TRIPARTITE COMMISSION

The Secretariat (as it shall hereinafter be referred to) is the chief executive organ of the Commission. It is based in Arusha and is charged with providing the machinery to facilitate the co-ordination and follow-up action of the activities of member States on matters of co-operation.

The Secretariat has the power to enter into contracts, acquire, own or dispose of movable or immovable property. It has been blessed by the top level political commitment of the Presidents who, at its inauguration, confirmed to all present that their governments have fully paid their contributions to the Secretariat. This means that it has the economic capacity to perform the tasks allocated to it. Furthermore the criteria of appointing the executives was based on merit and not just political clout so the likelihood of mismanagement is minimal.

The Secretariat has succeeded in implementing the first stages of the creation of an enabling environment because the three East African Currencies are fully convertible (which ceased to be the case with the collapse of the defunct EAC), banking policies have been harmonised and the three States hold annual pre-budget consultations with
5.3 PRIORITY AREAS OF CO-OPERATION

The three Heads of State at the Arusha meeting of November 1996 singled out Transport, Communications, Trade and Immigration as the topmost priority areas of co-operation. Judging from the above, the aim of integration can basically be summed up as the facilitation of the four freedoms:

1) the freedom of movement of people;
2) the freedom of movement of goods;
3) the freedom of movement of services; and,
4) the freedom of movement of capital across the frontiers of participating nation states.

This would be an ideal situation. However one must be remember that even in the sophisticated countries, such as those in the European Union, which have evolved integration over the decades are still faced with thorny issues like the retention of the restriction of the flow of capital, cross border movements and public procurement contracts as well as government subsidies to targeted industries. The Secretariat should study these to avoid repeating some of the mistakes or making unrealistic assumptions.

5.4 ROLE OF THE PRIVATE SECTOR

As pointed out by one local journalist, the policy makers should realise that it is not possible to facilitate the free flow of goods, capital and services optimally without involving the private industrial sector. This should preferably be done at the highest and earliest levels of negotiation.
It is important that business associations, NGOs, labour movements and other key players be supported in establishing modalities of co-operation, creating strategic alliances and exchanging information. To some extent this has been catered for by the creation of the East African Business Council whose principal target is to encourage the private sector to engage in cross border investment, joint ventures and increased trade in goods and services. However this Council has not been given a high profile and very few business people know about it in the three countries. They need to advertise their presence and strategy adequately if they are to achieve the Council's objectives.

5.5 JOINT MARITIME SEARCH AND RESCUE OPERATIONS AND PREVENTION OF MARINE POLLUTION

It was established by the Secretariat that the region is at present not adequately prepared to respond to maritime disaster as well as combating pollution at sea and in Lake Victoria. This was manifested by the Mtongwe Ferry and the Mv Bukooba disasters where over 1200 people lost their lives in the tragic accidents as has been described in the previous chapter. To address this the Secretariat convened a Joint Task Force (of which the author was privileged to be seconded to) and the members were charged with the looking into areas and procedures of co-operation in developing a regional plan on search and rescue with a view to keeping the region prepared for any disaster that would require such a response as well as marine pollution control. This Task Force submitted its initial report to the Secretariat. In that report they recommended inter alia that each member State should take necessary measures to complete and put in place national disaster plans so as to facilitate the joint regional co-operation. It also outlined some modalities (inclusive of equipment and personnel) for co-operation in joint search and rescue operations and pollution control in Lake Victoria. The Joint Task force stressed the need for each State to review the current level of preparedness for maritime disasters in terms
of prevention, containment, and recovery. The member States have yet to submit their individual plans as required to the Secretariat. In the absence of the detailed national plans the Joint Task Force’s report would be an important source to draw upon.

One major drawback of the efforts of the Joint task force in their discussion of a contingency plan was that they only addressed oil spills and not hazardous materials yet there are no regulations in place governing transportation of such materials in Lake Victoria. In case of any spill there would be no measures in place to cater for the ensuing chaos. Furthermore the talks emphasised search and rescue rather than pollution control and as a result inadequate attention was paid to the latter. Although modalities were drawn up to facilitate the movement of personnel and equipment from one country to the affected area in the Lake, the member States could not release a detailed inventory for “security reasons” nor did they draw up an extensive directory of the telephones and addresses of whoever was to be involved in the implementation of the Contingency Plans. However it is only fair to add that they drew up a list of the major agencies to be involved and outlined some major equipment like the barge propelled oil boom from the Kenya Ports Authority and two aircraft from the Kenya Navy.

Changes will have to made and as a member of the Joint Task Force the author intends to table some proposals to the Secretariat to be distributed to the other members for deliberations.

5.6 JOINT TASK FORCE FOR THE ADOPTION OF COMMON REGULATIONS ON INLAND WATER TRANSPORT

The Secretariat commissioned another task force of which the author was included as a member, to make recommendations that would foster the adoption of common regulations on inland water transport on Lake Victoria. The main focus of the Task Force was to identify areas of possible harmonisation and the bulk of the Force was
drawn from top-level government officials and their advisors. Below are some of the observations and recommendations they came up with:

5.7 CAPACITY BUILDING

They recommended that the Kisumu Marine Training school and the Dar Es Salaam Maritime Institute be utilised as regional resource centres. The Task Force agreed that a programme of action must be drawn up to show how best to optimise these institutions. Emphasis was drawn on the training of surveyors/ship inspectors. It was further recommended that ship surveyors be handsomely remunerated otherwise they would continue to shun working for Government in search of greener pastures to the detriment of the three Governments. They suggested that the Government surveyors be paid a certain percentage of the proceeds from the 'vessel's' surveyor fees for each ship they surveyed.

To enable harmonised standards for Surveyors as well as have a comprehensive list at hand it was recommended that the Secretariat establish a common registration board for surveyors.

5.8 OPTIMAL USE OF INFRASTRUCTURE

They noted the sub-optimal use of the existing port infrastructure. Most of the infrastructure is publicly owned yet economic indicators had forecast a rise in demand for both passenger and cargo vessels. The Task Force resolved to that Government should encourage the private sector ownership of some infrastructure and vessels. They felt that this would lead to the optimal use of the infrastructure.

They further noted that there were two oil jetties in the region and the oil jetty in Kisumu was not working. A recommendation was made to revive the latter as there was a definite commercial demand for it in their opinion.
5.9 NAVIGATIONAL AIDS AND OTHER EQUIPMENT

A recommendation was made to install a Global Positioning system to aid navigation as well as a hydrography to be carried out for channel sounding and mapping- the location was not specified. It was noted that unless navigational aids were regularly maintained or replaced there would always be a safety risk to users of the Lake. The Task Force also recommended that the communications system between ship-to-ship and ship-to-shore as well as that between the captain and passengers be enhanced.

The following were earmarked for harmonisation and standardisation:-

- conditions of ownership, sale and transfer of crafts and vessels;
- conditions of registering and licensing;
- tonnage measurement of cargo and passenger vessels;
- loadline requirements;
- conditions of approving the berthed and unberthed passenger vessels;
- Rules of safe construction of passengers and cargo vessels including manning skills, sea worthiness, certificates, passenger safety as well as standards of life saving appliances for various categories of vessels;
- standards of navigational lights;
- minimum standard requirements for inland water transportation and seafarers in line with the ILO Convention.

5.10 RESPONSE TO DISASTERS

It was recommended that a regional marine emergency response centre (RERC) be established to increase the region’s preparedness to handle disasters. To abet disasters like the Mtongwe and M/V Bukooba tragedies the members recommended that safety instructions be issued to passengers before departure and that the crew must display to the passengers the use and location of the safety equipment in the same way as it is done by airlines.
5.11 ESTABLISHMENT AND ADOPTION OF COMMON STANDARDS FOR POLLUTION CONTROL FROM LAND AND MARINE BASED SOURCES

The Task Force recommended that a regional committee be set up to review the existing environmental standards with a view to establishing common effluent and emission discharge standards that should be applied uniformly in the region. It further recommended that all legal instrument regarding pollution control be reviewed with a view to harmonising them. The committee, if set up, would be mandated to identify the feasibility of using additional sanctions, economic incentives and disincentives and market forces to ensure compliance with the environment related laws as discussed in the previous chapter (see S. 4.5)

It is advisable that the proposed Committee study the individual experiences of the member countries as well as other regions like the USA or Europe where such measures have been instituted for a comparative analysis taking into considerations what has worked and why it did and scrutinise the factors leading to failures, if any.

It was further recommend that once this committee has submitted their Report to the EACS the latter would study the merits of establishing a Regional Pollution Control Advisory Board.

5.12 PROVISION OF RECEPTION FACILITIES

The meeting recommended that every port should provide adequate reception facilities to receive both the solid waste and sewage as well as any other slop from any calling vessel. Each port should in addition be able to treat and safely dispose off the wastes without allowing pollution of the lake. They further recommended that the private sector should be encouraged to facilitate treatment and that ships should also be in position to treat some waste onboard. This is a very crucial decision to be undertaken and the sooner it is implemented the better because Lake Victoria is
rendered more fragile each time untreated waste and effluent is discharged into it and it is less costly to take a proactive measure than a reactive one. Indeed reception facilities are extremely expensive but since the political will exists, then EACS could approach internal donors through the IMO as Tanzania and Kenya happen to be IMO member states and have ratified MARPOL 73/78 and have indicated that they are in the process of having it included in their national laws. It is important to note that the top decision makers are the ones who arrived at these conclusions because even if the funds are not readily available there is a framework in place and when such funds shall be released it is this framework that will be used to achieve the objectives rather than groping in the dark.

5.13 MEETING OF THE EAC ON THE USE AND MANAGEMENT OF LAKE VICTORIA

From the 21st to 26th October 1996 the aforementioned Joint Task Forces as well as key institutions involved in the management of Lake Victoria e.g. LVEMP met under the auspices of the EACS to deliberate on a holistic approach to the use and management of Lake Victoria. In his opening remarks the EACS Deputy Executive Secretary outlined the theme of the meeting as being “the development of a protocol for IWT and the establishment of an apex arrangement to co-ordinate the use and management of the lake so as to make it more environmentally and navigably safe and also to accelerate economic development in the region”. The topics discussed covered inter alia:

- measures to combat the water hyacinth through manual, mechanical, biological and chemical control, (it is interesting to note that the EACS deemed it crucial to include Rwanda and Burundi in the control of the hyacinth menace in a bid to provide a lasting solution to the problem);
• Industrial effluent management on the shores of Lake Victoria which is often discharged untreated into the lake;
• Management of Sewage (domestic effluent) discharged into the lake;
• Management of wetlands, water catchment areas, and air quality around Lake Victoria;
• Aquatic and mineral resources exploitation;
• Development of infrastructure for safer navigation;
• Facilitation of the free movement of vessels; and
• Human resources development.

As can be deduced the meeting tried to embrace issues in an integrated manner but one might observe that the meeting only identified where action should be taken and what direction such action should take. The detailed modalities would have to be undertaken at a later stage by assigned teams of experts in the relevant fields. The latter would then report their findings through the Task Forces in place and these in turn would scrutinise them to ascertain whether they comply with the original terms of reference before submitting their report to the Secretariat.

Below are some of the highlights of their deliberations

a) Industries built around the lake subsequent to the formulations of the proposed legislation on discharge of effluent and sewage into Lake Victoria should meet the required standards set by the environment authorities with a view to ensuring that effluent are treated to acceptable standards before being discharged into the lake;

b) EIA studies must precede any developments carried out around the lake;

c) The existing laws governing land use, including agriculture and the construction of buildings along shores of the lake, should be updated, harmonised and enforced;

d) Environmental monitoring and auditing should be carried out on all industries around the lake with a view to implementing approved mitigation measures;
e) Exchange of information should be facilitated at all levels and should cover the areas of port-to-port, ports-to-vessels and should relate to meteorological conditions, commercial interest, national port and inland water regulations, maritime distress and disasters, reports, etc.

As concluded earlier on it is very crucial to have these guidelines in place even if they cannot be implemented currently due to financial constraints. They are a vital source which the EACS can draw upon when prioritising projects for the region.

5.14 JOINT PACT BY URC, KRC AND TRC ON LAKE SERVICES

The Rail Corporations of the East African region signed an agreement in May 1996 that covered marine services and their joint operations on Lake Victoria. It broke new ground in that passengers would henceforth be required to possess valid travel documents before they could be allowed on the passenger vessels and that a ship manifest should be mandatory in any of the passenger vessels. Ironically this pact was signed just a fortnight before the region's worst disaster struck in the aforementioned *Mv Bukoba* incident.

Under the pact, the three Corporations agreed to maintain piers, telecommunication systems, cranes and navigational lights in their respective operating waters in good working order and in conformity with recognised standards. Unfortunately similar pacts have been agreed upon in the past and they have remained on paper, unimplemented. Hopefully with the new tide of EAC, the Secretariat might follow up these Corporations to ensure that they meet their obligations. Other areas covered by this agreement are as follows:

- In case of damage or loss to luggage or passengers (*sic*) the point where such loss or damage occurs will be determined and full liability will rest with the member in whose jurisdiction it falls (The author is doubtful whether this is a legally sound provision);
• Frequent exchange of general and technical information on all matters related to marine services including ship movement on the lake, and co-operation in cases of marine emergencies or casualties including search and rescue operations;
• the parties agreed to observe the principle of standardisation in the design and construction of marine crafts, locomotives and rolling stock to ensure compatibility of equipment;

5.15 UNEP/UNDP JOINT PROGRAMME

The three Governments of Kenya, Uganda and Tanzania jointly requested UNEP to assist with the preparation of national environmental laws and legal regimes for the management of resources for Lake Victoria and consequently signed the Agreement on the Tripartite Environment Management Programme for Lake Victoria on 5th August 1994. It is inter alia, stipulated under the Agreement that a five year programme shall be initiated and implemented to strengthen regional co-ordination in the management of the Lake’s resources. This resulted in the creation of the Lake Victoria Environment Management Programme (LVEMP) to cater for all stipulations in the Agreement. It has already received financial support from the Global Environmental Facility (GEF) and the International Development Agency (IDA). The plan has been executed by two regional task forces and national secretariats and a comprehensive report covering the Lake’s ecosystem, its catchment, fringing wetlands, fishery, and riparian communities, has been submitted to the relevant authorities for further studying and formulation of action plans and projects.

At the aforementioned meeting of the EAC on the Use and Management of Lake Victoria (S 5.6, supra) it was stressed that the EAC should be responsible for the co-ordination of the activities of the regional organisations that have been established. This meeting identified a need to bring the LVEMP within EAC’s supervision.

The author lauds this change as it is fundamental and in fact key to the element of success and optimal positive impact that there exists one overall institution to ensure
that tasks are not duplicated by multiple organisations with similar objectives. Instead these should be co-ordinated in a harmonised manner so that issues are handled in an integrated fashion based on pertinent consultations. The Secretariat should be allowed to monitor the implementation of LVEMP.

5.16 IMO MISSION TO LAKE VICTORIA

Recognising the need for a regional approach to implement safety measures in Lake Victoria, the IMO Secretary-General, Mr William O’Neal sent a mission consisting of experts from IMO, the International Hydrographic Organisation (IHO), and the International Association of Lighthouse Authorities (IALA) to East Africa to address three main areas viz.:

- hydrographic surveys and charting of Lake Victoria;
- aids to navigation and routing measures; and
- search and rescue (including radio communication) facilities.

The delegation held a seminar on shipping safety with experts from the three East African states at Mwanza and it was inter alia resolved that joint nautical charts will be prepared and that navigational aids worth £ 10,000 would be erected to establish search and rescue preparedness in each country.

As can be deduced from the above there is both regional and international intervention to some of the issues hitherto highlighted by the author.

5.17 THE PTA TRANSIT REGIME FOR EASTERN AND SOUTHERN STATES

There already exists a mechanism for facilitating regional trade and transit traffic. The PTA Treaty (now reflected in the COMESA Treaty) has the principle aim of promoting co-operation and development in all the fields of trade and customs as well as transport. It is devoted to trade promotions and liberalisation programmes as
well as the reduction of tariff and non-tariff barriers and any other bottlenecks in the transit system. *Protocol V on Transit Trade and Transit Facilities* elaborates the establishment of a uniform regional transit regime covering aspects like the licensing of carriers, customs security for transit goods, transit documents, and procedures. Article 19 requires member states to grant each other transit rights and to take measures to harmonise customs regulations and procedures to facilitate the movement of goods and services. As a matter of fact under the auspices of the Kenya Revenue Authority and Uganda Revenue Authority, the East African States have fairly harmonised documents like the Road Customs and Transit Declaration (RCTD). This has remarkably reduced transit time and costs along the corridor as it has eliminated cumbersome transit procedures. Ordinarily goods in transit are exempt from examination by customs officials unless they suspect a breach of the law. There are many other steps that have been undertaken to improve or promote harmonisation of documentation and other procedures affecting goods in transit and even though the situation is far from perfect there are definite steps being undertaken at reasonable intervals to address any weaknesses in this particular sector.

5.18 OBSERVATIONS

From this chapter it can be concluded that there are many ongoing initiatives at the regional level to address some of the problems highlighted in Chapters two and three. One must give credit where it is due. It is certainly commendable that the East African States have deemed it fit to co-operate at a regional level rather than individually tackle common issues that are likely to impact on neighbours. This could be viewed as a great achievement on part of all concerned especially the policy makers who initiated such dialogue. However the major part of the dialogue exists at policy level, awaiting implementation both from the legal and institutional standpoint. The EAC has a vital role to play to ensure that all the proposals are
implemented and not left to lie in files relegated to shelves. Otherwise the initiatives are likely to be treated as facetitious rhetoric.

It is imperative to obtain funding because, without it, the proposed projects will be non-starters. In addition to the potential donors already suggested, the African Development Bank (ADB), which has an entire section devoted to sustainable development issues, as well as the African Development Fund (ADF), should not be overlooked. International donors are wary of requests for total funding of projects and are encouraged if recipients only seek part funding. This is compounded by the dawn of the “New World Order” where the demise of the Cold War Era has evidenced a new shift in foreign aid policies.
CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

In the previous chapters the author endeavoured to present issues whilst expressing observations and opinions on how some of these may be countered or addressed. The author hopes that the reader will, in conjunction with the conclusions and recommendations made in this final chapter, refer to such opinions and observations, as well as all the recommendations made to the East African Secretariat as reported in Chapter Five. In so doing, the author hopes to eliminate the risk of making redundant conclusions and recommendations.

6.2 NATIONAL POLICY

As pointed out by Mugumyankiko, et al, the creation and development of any sector must be supported by a comprehensive national policy. Just as important is the fact that for stable and sustainable economic growth there must be production, growth and an open and well functioning market to increase the goods and services available to a growing population so as to meet the demands for a better life and above all to address poverty. The provision of an efficient and effectively run IWT system will most certainly stimulate such economic growth. It has been shown from the Canadian and American experience that the provision of cheap and well managed
Lake services are a vital stimulant for economic growth of a given area and that they tend to link producers and consumers to a wider market.

The national policy on lake services should entail the following:

a) harmonisation and simplification of the relevant legislation;

b) harmonisation and simplification of administrative procedures;

c) regular conducting of consultations. The author is of the view that for any policy reviews/changes to be successfully implemented they must be conducted on a consultative and consensual basis to the greatest extent possible with all identified stakeholders being involved; and,

d) strategic planning of port management emphasising the following aspects:

- achievement of maximum throughput with the existing infrastructure;
- maximisation of net profits of the port authorities and the operating of ports at least cost;
- striving for the highest attainable employment level in the port without reducing efficiency or increasing costs;
- offering ship-owners/consignees the highest possible quality of service;
- working towards financial autonomy of the port authorities;
- maximising the return of capital invested;
- ensuring full environmental protection; and
- promoting regional co-operation.

The author strongly believes that measures should be instituted to commercialise or liberalise the Railway bodies and the vessels while maintaining control of the infrastructure. The best method in the author's view is the Shipping Pool arrangement discussed in Section 3.12.2 supra, as it would, if properly managed, eliminate wasteful competition amongst the East African fleets and solve the problem of under-utilised capacity of vessels. A move to integrate a network between shippers, truckers and the railway system, so as to facilitate the smooth trans-shipment of cargo should be initiated.
The author recommends that policy should originate more frequently from the regional fora. This must then be implemented at the national level to facilitate enforcement. This would ensure that there is coherence within the region in the handling of multi-disciplinary issues affecting Lake Victoria. The crucial factor would be to enunciate and establish a mechanism to ensure that both legal and administrative steps were taken at the national level to incorporate regional agreements into local legislation so as to render them enforceable.

It would also be advisable to form a “Regional Advisory Board”. This Board could act as the Shipping Pool Management hitherto discussed. If the idea of a shipping pool is unacceptable to the three States then the Board could be established to carry out, *inter alia*, the following functions:

a) co-ordinating, and harmonising operational norms, standards and practices of all the activities carried out on Lake Victoria especially shipping activities;

b) scrutinising any developments carried out on shores of the lake;

c) assisting in the formulation and co-ordination of appropriate policies, guidelines, rules and strategies to promote all development aspects in the Basin; and in particular

d) developing policies that create an enabling environment of commercially viable and efficient operational enterprises in the Basin and;

e) providing vessel movement data, furnishing statistical and technical information, conducting economic impact assessment studies concerning the Lake, investigating competitive rate structures, providing market information to ports and exploring potential sources of new cargo development.

f) advising on protocols or agreements relating to the various concerned sectors.

g) assessing periodically the efficiency and effectiveness of the operational performances of the various activities, especially water transport, on the Lake.
h) co-ordinating all future joint ventures on the Lake and  
i) setting up an efficient data base and data management system.

Looking at the scope of the proposed duties of the Board it would be most advisable that they operate as an arm of the Secretariat. Creation of such a Board might raise an outcry of Government critics who might advance concerns over the tendency to create yet more and more bodies whereas the existing ones have failed to meet their responsibilities. Such critics are often of the view that Government should instead concentrate on revitalising and facilitating the organs already on the ground. This argument may be plausible for most sectors, but when it comes to regional issues then the creation of a new body can be justified especially since the author proposes that it act as an arm of the EACS rather than a completely autonomous body. The concern of the author is that Joint Task forces are very instrumental but these only meet once or twice a year, and only for limited periods of time not exceeding two weeks at the most, whereas the Board would have qualified personnel seconded to it by each member State. The author’s position is reinforced by the observation quoted below:-

"what is important is that a mechanism for regular dialogue exists because, without this, meetings are only convened to resolve an impending crisis. Clearly, where several countries and different modes of transport are involved, establishment of small secretariats and intergovernmental consultative machinery for regular consultations is a good investment.”

6.4 INSTITUTIONAL CHANGES

These may be divided into management on the one hand and infrastructure on the other hand.
6.4.1 HIERARCHICAL MANAGEMENT

The MOT should aim at devolving greater authority to a semi-autonomous body to specifically manage IWT. Management should also aim at shortening lines of command and communication structures. There should not be too many reporting layers. In addition, officers and subordinate staff should have regular brainstorming sessions with Management. This would foster more initiative among staff and bestow on them a participatory role. This creates a positive sense of recognition and appreciation. Departments must be properly supervised and performance reports of each department should be regularly compiled by Management and discussed at the brainstorming sessions proposed earlier. These should not be set on a competitive note, as this can be detrimental, but rather as a tool of assessment to indicate which department or issue needs to be addressed with more concern and diligence. In order not to create fear of such reports being used to apportion blame, Management should explicitly state so in its written policy.

Management should also endeavour to inculcate a culture of responsiveness to sustainable natural resource use using sound environmental policies. This concept should be included in all training programmes for staff especially senior officers as these need to lead by exemplary behaviour in environmental consciousness.

A strategic planning unit should be installed to provide a mechanism for plotting out all future roles envisaged for the Ministry and the proposed Transport Authority in furthering goals of sustainable development.

6.4.2 PERSONNEL

Motivation of staff should be paramount in policy decisions. The officers must be properly remunerated and criteria for issuing allowances should take into account the
Chapter Two exposed many flaws in the management of vessels, ports and the other auxiliary services which are generally mal-equipped and poorly maintained. The following recommendations could be useful:

- Mapping of the lake for safer navigation and providing current hydrographical information, survey data, navigational charts and navigational aids and;

- Provision of proper and reliable bathymetric surveys of harbour basins and access channels for all the ports,

- Establishing uniform standards for the regular and mandatory survey of ships. There must also be legal provisions for the regular maintenance of the vessels especially since most of these have exceeded their economic life and if not effectively maintained are potential hazards on Lake Victoria;

- Establishment and outfitting of new spare parts, stores, purchase of necessary spare parts and materials.

In 1990 the Ministry of Transport obtained some financial statistics on how much it would cost either to have regular maintenance of existing equipment or to purchase new equipment for ports (see Appendix 5). Unfortunately nothing came out of this exercise. A new study for such costs needs to be conducted in view of the current prominence of IWT on Lake Victoria, especially in light of safety and environmental concerns.

Communication is a vital component of the safe navigation of a vessel and yet chapters two and five reveal that the communications systems employed on Lake Victoria leave much to be desired. The following changes could be appropriate and some of them have been approved by the Joint Task Force:

- Embarking on the modernisation of the national information systems on the Lake and harmonising these at the regional level.
• Equipping of all vessels with modern and regularly serviced communications equipment.
• Establishing a regional information exchange system which incorporates a common VHF channel, safety frequencies and common channel radios.
• Installing EDI (electronic data information).
• Providing specialised training for personnel engaged in the information exchange systems.

6.5 LEGISLATION FOR INLAND WATER TRANSPORT

Deliberations of the EAC Joint Task Forces revealed that the free movement of vessels on the Lake is curtailed mainly by the bureaucracies of the monopolistic nature of the three Railway Corporations, differing national regulations and the different national requirements on immigration, cargo clearing, customs, freight and specifications on the physical integrity of the vessels. There is an apparent need to harmonise legislation, and the Joint Task forces must confer with a specialised team of lawyers, specifically mandated by the EACS to draw up new legislation for Lake Victoria. The railway corporations must also be adequately represented in these meetings and must furnish it with all the joint agreements they have entered into.

New and comprehensive legislation covering both national and regional operations on Lake Victoria should be enacted where it has been pointed out. The necessary by-laws and subsidiary legislation discussed hitherto must also be made. Altogether the legislation must adequately cover the following areas:

a) Safety of life onboard vessels;
b) Settlement of disputes;
c) Safe Manning of ships;
d) Collision prevention;
e) Carriage of dangerous goods;
f) Search and rescue operations;
g) Certification and qualifications of watch keeping officers and crew;
h) Protection and rights of sailors;
i) Regular survey and inspection of ships as well as certification for seaworthiness of ships;
j) Mandatory insurance of passengers; and,
k) Oil pollution and environment protection, including transboundary pollution; and
l) Contingency planning.

Any contingency plans for combating disasters must contain an appropriate balance of prevention, mitigation, preparedness, response, recovery, and restoration. Such plans must also take into considerations all the aspects discussed in S 4.4 supra. Legislators must also enact by-laws that will spell out the parameters for measurement of pollution emissions.

The author recommends, too, that the persons drafting the new IWT Act, if a decision to so is taken, should pay close heed to the deliberations of the African Workshop on Environment Litigation held in Kampala, Uganda, at the end of August 1997. This workshop (sponsored by NEMA and UNEP) which drew participants from the judicial offices of Kenya, South Africa, Mozambique, Uganda, Tanzania and Malawicripts could be instrumental for the proposed Act.

6.6 **RECAP**

While drafting the appropriate legislation, Uganda should learn from the Tanzanian experience which based its current Inland Water Transport Act upon the East African Inland Water Transport Act of 1970. It did so after carefully studying the said Act and making the necessary changes to accommodate current demands of the International community with regard to safe navigation and all the aspects mentioned by the author in items a - k of Section 6.5 above. Tanzania did not simply discard the said East African Act on account of its age but realised that it enunciated some very
sound legal principles that could be still applied in modern times once the necessary changes had been made.

In concluding the author reiterates that, in view of the financial constraints faced by the Government of Uganda, it is best to strategically map out a reasonable time frame to implement the requisite changes in manageable phases. All policies both at the regional and national level should be based on holistic and integrated management and development. Finally, all stakeholders must be regularly consulted or permitted to participate at every stage of the policy formulation.

A strong institutional framework and a comprehensive and clearly enunciated legal framework provide the requisite backbone to the creation of an efficient and cost effective IWT system to serve the Lake Victoria Basin and its hinterlands.
REFERENCES


ii An observation made by the Transport Commissioner for the EU, Mr Neil Kinnock, in a policy paper.


v A Supplement in Newsweek, 29th January 1996.


vii A Supplement in Newsweek, 29th January 1996.

viii Facts given by Thomas Abela, UNIDO's Investment Promotion Co-ordinator for Africa at the end of the Forum held in Kampala in December 1995


x World Bank report on Uganda's agricultural sector, 1995


xii Edith Salasaata, Agricultural extension officer, Ministry of Agriculture and Veterinary Services, in an interview.


xiv EIU Country profile: Rwanda and Burundi 1994-95 "Transport and Communication" London: EIU pg. 15

xv KPA, THA: "1996 Export classified commodity statements" Mombasa: KPA

xvi United Nations Country Presentation by Burundi at the Second UN Conference On the Least Developed Countries, Paris, 3-14 September, 1990

xvii Facts provided by the UCDA (Uganda Coffee Development Authority) Managing Director Mr. Tess Bucanayandi in an interview during the COMESA Trade Forum held in Kampala in 1995.

xviii From statistics provided by the Ministry of Finance 1989 during the Budget Speech.

xix Africa South of Sahara et al, pg. 1021

xx "Spotlight on Africa: Special report on Uganda and Tanzania. Appeared as a special supplement produced for the TIMES by Unimedia Ltd, Friday 25 April, 1997 page 6

xxi Statute No. 4 of 19th May 1995

Chapter 348, Laws of Uganda


2 A paper submitted by Prof. T Sampson at the NOR- Shipping Conference of 1993 titled *Waste reception facilities: a global perspective*. Pg. 8


5 *The Corfu Channel Case* (Great Britain Vs Albania). ICJ Reports 1949 pg. 4


vii Ibid. pg. 92

vii *ditto.*


ix Funded as an ECE/UNEP Project FP/52 01-87-64.

x All the information in this section was obtained from the National archives of Uganda situate at Entebbe.

xi Odour, Ong'weni (1996). "EAC: It is not wise to ignore the people" an article appearing in the Kenyan newspaper, *The Sunday Nation*, of 18 February 1996


xiii IMO NEWS, Number 1: 1997, London: International Maritime Organisation pg. 20

xiv Report filed by Ahmed Merere, feature writer in *The East African* (a regional weekly Newspaper), 20 February 1997


xvii Obtained from AFRICA ON-LINE NEWS on the INTERNET.
Background to the Budget 1989-90 Ministry of Economic Planning and Development (MEPD).


KPA, THA: "1996 Export classified commodity statements". Mombasa: KPA.


Odour, Ong’weni “EAC: It is not wise to ignore the people” an article appearing in the Kenyan Newspaper, The Sunday Nation, of 18 February 1996.


Spotlight on Africa: Special report on Uganda and Tanzania. Appeared as a special supplement produced for the TIMES by Unimedia Ltd., Friday 25 April, 1997

The Corfu Channel Case (Great Britain Vs Albania) ICJ Reports 1949.

The Orange Book, IMDG Code


REGIONAL TREATIES AND NATIONAL LAWS OF UGANDA.


Inland Water Transport (Control) Act, 1964, Cap 348 Laws of Uganda.
Northern Corridor Transit Agreement, 1983.
The 1900 Agreement between Kenya and Uganda Establishing Mombasa as the Customs Collection Centre.
The Declaration on Closer East African Co-operation, 30 November, 1993.
The East African Customs and Transfer Tax Management Act, 1959.
The East African Customs Regulations, 1971
The East African Inland Water Transport Act, 1959 Cap. 32
The East African Mediation Act, 1967
The Inland Water Transport (Safety and Navigation) Regulations, 1970
The National Environment Statute, (Statute No 4) of 1995.
The Preferential Trade Area Treaty, 1974 and all Protocols under the Treaty.
The Public Health Act, 1964
The Public Lands Act, 1969
The Uganda Railways Corporation Decree of 1977.

GOVERNMENT REPORTS AND PUBLICATIONS

1993 Uganda Yearly Review.
Investment Programme For the Republic of Uganda - NEAP Vol. Part A.
URC, *Facts and Figures*, Kampala, 1995

**MODULES**

Donner, P. Maritime law: Compendium. Malmö: WMU
Ma, Shuo. Maritime Economic principals. Malmö: WMU

**PERIODICALS**

Environment Intelligence Unit (EIU).
Focus on IMO.
Marine Policy.
Newsweek (21st January 1996).
Time magazine (for the months of May and September 1996).

**OTHER SOURCES**

Conference and seminar proceedings.
The National Archives of the Republic of Uganda.
Visiting Professor and experts at the WMU.
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<th>Location</th>
<th>Port Facility</th>
<th>General Condition</th>
<th>Project Status</th>
<th>Construction Status</th>
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<td>Mombasa Port</td>
<td>Road/Rail access - Container</td>
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*Source: Ministry of Works, Transport and Communications, Uganda.*
| Transit Routes | Sections       | Length (km) | Track
<p>| | | |
|               |               |             |
|----------------|----------------|--------------|-------------------|-------------------|-------------------|
|                |                | lb/gradient/speed (%) | Condition | Projects | Observations |
| <strong>KENYA-RAIL</strong> |                | (kph)        |               |          |                |
| Mombasa-Malaba | Mombasa-Nakuru | 715          | 60/ 2.2/      | Average  | Upgrading of line |                     |
|                | Nakuru-Malaba  | 370          |               |          |                   | Load limitation    |
|                |                | 1,085        |               |          |                   |                     |
| Nakuru-Kisumu  | Nakuru-Kisumu  | 217          | 60/ 2.2/      | Average  | Upgrading of line |                     |
| <strong>UGANDA-RAIL</strong> |                |              |               |          |                   |                     |
| Malaba-Kampala-Kasese | Malaba-Tororo | 15           | 75/ 1.0/ 56   | Average  | Rehabilitation program |                     |
| Tororo-Jinja   |                | 144          | 80/ 1.0/ 48   | Average  | Rehabilitation program |                     |
| Jinja-Kampala  |                | 91           | 80/ 2.0/ 48   | Average/bad | Rehabilitation program | Minor rehabilit. compl |
| Kampala-Kasese |                | 333          | 50/ 1.5/ 24   | Bad      | Minor rehabilit. compl. | IDA, WB, ITALT |
|                |                | 583          |               |          |                   |                     |
| Port Bell-Kampala | Port Bell-Kampala | 9          | 80/ 1.0/ (30) | New line |                   | DANIDA, completion 1992 |
| <strong>TANZANIA-RAIL</strong> |                |              |               |          |                   |                     |
| Dar-Mwanza     | Dar-Tabora     | 837          | 60-80/ /40-56 | Rehabilitation in progress | Partly speed restrictions |
|                | Tabora-Isaka   | (130)        | 60/ / 56      | Rehabilitation in progress | Partly speed restrictions |
|                | Isaka-Mwanza   | (263)        | 60/ / 56      | Rehabilitation in progress | Partly speed restrictions |
|                |                | 1230         |               |          |                   |                     |
| Tabora-Kigoma  | Tabora-Kigoma  | 411          | 56/ / 48      | Rehabilitation in progress | Partly speed restrictions |</p>
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<td>Good</td>
<td>Resealing/overland completed</td>
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<td>Muranga-Mtito Andei</td>
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<td>Resealing completed</td>
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<td>Sultan Hamud-Ulu</td>
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<td>1.13</td>
<td>1.12</td>
<td>1.20</td>
<td>1.20</td>
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<td>Agriculture as % GDP</td>
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<td>70.99</td>
<td>70.02</td>
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<td>Coffee as % total exports</td>
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<td>86.53</td>
<td>82.00</td>
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<td>Debt: Service Ratio</td>
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<td>83.11</td>
<td>61.11</td>
<td>62.76</td>
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<td>Debt: Export Ratio</td>
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<td>41.21</td>
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</table>

macro-planning Dept; MPED
CHAPTER 348.

THE INLAND WATER TRANSPORT (CONTROL) ACT.

ARRANGEMENT OF SECTIONS.

SECTION

1. Short title.
2. Interpretation.
3. Licensing of certain ships.
4. Application for inland water transport licence.
5. Exclusive licences.
6. Power to call for further particulars.
7. Consideration of application and the grant of licence.
8. Conditions of licences.
10. Duration of licences.
11. Licence not transferable.
12. Appeals.
CHAPTER 348.

THE INLAND WATER TRANSPORT
(CONTROL) ACT.

[1ST JANUARY, 1939.]

An Act To Restrict And Control The Carriage Of Goods
And Passengers By Water Within Uganda.


2. In this Act, unless the context otherwise requires—
   "Board" means the Transport Licensing Board
   established by the Traffic Act;
   "goods" includes goods or burden of any description;
   "licence" means an appropriate licence issued under
   the provisions of this Act;
   "ship" includes every description of vessel used in
   navigation not propelled by oars or hand paddles
   and every lighter, barge or like vessel used in
   navigation however propelled.

3. (1) No person shall, except under and in accordance
    with the terms of a licence, convey by means of any ship
    upon the inland waters of Uganda—
    (a) any goods or any person for hire or reward; or
    (b) any goods for or in connection with any trade or
        business carried on by him.

    (2) This section shall not apply to—
    (a) the use of any ship owned by the Government or
        by the Common Services Organization; or
    (b) the use of any ship exempted from this section by
        the Minister by statutory instrument.

    (3) If any person uses a ship in contravention of the
        provisions of this section he shall be guilty of an offence
        against this Act.

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(4) Licences under this Act shall be known as inland water transport licences and may be issued in the manner hereinafter provided by the Board.

4. Every person applying for a licence for the carriage of passengers or goods by ship shall submit to the Board—

(a) particulars of the type or types and numbers of ships to be used;
(b) particulars of the construction, motive power and cargo capacity of every such ship;
(c) the total number of crew to be carried in every such ship;
(d) the number of passengers every such ship is intended to carry;
(e) the places between which the ships are intended to be navigated and the services to be provided thereby.

5. (1) Notwithstanding any other provision of this Act, the Board may, with the prior approval or upon the directions of the Minister, and subject to such conditions as the Board sees fit to impose, grant to any person an exclusive licence authorising such person to operate ships for the carriage of passengers or goods in such area, over such routes or between such places as the Board may decide, and the provisions of this Act regarding applications for and objections to the grant of a licence shall apply to the applications for and grant of any exclusive licence as herein mentioned:

Provided that no exclusive licence shall be granted unless six months' previous notice in the Gazette is given of any application therefor.

(2) Notwithstanding the provisions of section 10 of this Act, an exclusive licence may be granted by the Board for any period which the Minister may approve or direct.

6. A person applying for a licence under this Act shall, in addition to the particulars specified in section 4 of this Act, give to the Board any information which it may reasonably require for the discharge of its duties in relation to the application and in particular shall, if required by the Board, submit such particulars as the Board may require with respect to any similar business as a carrier of passengers or goods for hire or reward carried on by the applicant at any
time before the making of the application and of the rates charged or proposed to be charged by the applicant and of the wages, conditions and hours of employment of the persons employed in connection with the ships proposed to be used under the licence.

7. (1) The Board shall publish in the Gazette a notice of every application made for the grant of a licence under this Act, other than a short term licence, and shall specify the time within which and the manner in which objections may be made to the grant of the licence.

(2) On any such application the Board shall take into consideration any objections to the application which may be made by persons who are already providing transport facilities for the carriage of goods or passengers for hire or reward between the same places which the applicant intends to serve.

(3) Subject to the other provisions of this Act and any general or special directions of the Minister, the Board shall have full power to grant or refuse any application for a licence, but, in the exercise of its discretion, shall have regard primarily to the public interest, to the manner and extent to which the existing transport services serve the routes proposed to be served in the application and to the fares and rates proposed to be charged:

Provided that where any existing licence is about to expire the Board shall not refuse any application for a licence in substitution therefor in regard to the use of any ship not mechanically propelled and restricted to the territorial waters of Uganda, unless the applicant has had his existing licence or any previous licence under this Act suspended or revoked.

(4) Where an application is for a licence to carry passengers or goods over any route which includes a portion of either Kenya or Tanzania or both these territories, before adjudicating upon such application, the Board shall take such steps as may appear to it to be necessary to ascertain the views upon such application of any licensing authority appointed for a like purpose in either or both of those territories.

(5) The grant of a licence under this Act shall not relieve the holder thereof from compliance with the provisions of any other law in force in respect of ships.
8. (1) The Board may attach to any licence all or any of
the following conditions—

(a) a condition that the authorised ships shall or shall
not be used in a specified area or over specified
routes;

(b) a condition that certain classes or descriptions of
goods shall or shall not be carried;

(c) a condition specifying the charges or the maximum
or minimum charges to be made for the carriage
of goods;

(d) a condition as to the wages, conditions and hours
of employment of persons employed in connection
with the authorised ships;

(e) such other conditions as the Minister or the Board
may deem necessary in the public interest, or
for preventing uneconomic competition, or
otherwise for the effective carrying out of the
purposes of this Act:

Provided that, in the case of a licence granted
in respect of a ship not mechanically propelled
upon the condition that such ship shall be
used only within the territorial waters of
Uganda, no further condition under this sub-
section shall be imposed

(2) The Board may from time to time cancel or vary
any of the conditions attached to a licence issued under this
Act.

(3) Any person who contravenes any condition of any
licence shall be guilty of an offence against this Act.

9. A licence may be revoked or suspended at any time by
the Board on the ground that any of the conditions of the
licence has been contravened.

10. (1) Subject to the provisions of subsection (2) of
section 5 of this Act, every licence, other than a short term
licence, shall, unless previously revoked, continue in force for
one year from the date on which it is expressed to take effect:

Provided that, if on the date of the expiration of any
licence, proceedings are pending before the Board on an
application for the grant of a licence in substitution for an
existing licence held by the applicant, the existing licence
shall continue in force until the Board has disposed of such application, without prejudice however to the exercise in the meantime of the powers of suspension or revocation conferred by this Act.

(2) With a view to enabling a ship to be used temporarily—

(a) for the purpose of a seasonable business;

(b) for the purpose of the execution of a specified enterprise; or

(c) for any other purpose of limited duration,

a licence may be granted for a period of less than one year but not exceeding three months; and any such licence shall be known as a short term licence.

11. No licence shall be transferable except with the written consent of the Board which shall be endorsed on such licence.

12. Any person who—

(a) being an applicant for the grant of a licence is aggrieved by the decision of the Board on the application; or

(b) having made an objection to any such application as aforesaid, being an objection which the Board is bound to take into consideration, is aggrieved by the decision of the Board thereon; or

(c) being the holder of a licence is aggrieved by the revocation or suspension thereof,

may, within one month of the decision complained of, appeal in writing to the Minister, whose decision shall be final.

13. The Minister may make rules prescribing fees and forms and generally for the better carrying out of any of the purposes of this Act.

14. Any person guilty of an offence against this Act or any rule made thereunder shall be liable on conviction to a fine not exceeding two thousand shillings or to imprisonment for a term not exceeding twelve months or to both such fine and imprisonment.
## INVESTMENT FIGURES FOR PORTS IN UGANDA

<table>
<thead>
<tr>
<th>Port 7 designation 8</th>
<th>Replacement value (USD)</th>
<th>Maintainance costs (USD/year)</th>
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<td><strong>Existing facilities</strong></td>
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<td><strong>Jinja Pier</strong></td>
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<td>- New Facilities:</td>
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<td>- Dredging</td>
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<td>B. Lorry transit transport</td>
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### Existing facilities:

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Maintenance, existing facilities

Bukakata Pier

- New facilities:

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<tr>
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Maintenance, case A. a

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<tr>
<td>- Oil equipment: Boom</td>
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Maintenance, case A. b

B. Lorry transit transport

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Maintenance, case B

- Existing facilities | 0 |
- Maintenance, existing facilities | 0 |