



# East Africa Community Lake Victoria Basin Commission

## Regional Stakeholder and Steering Committee meeting

1 MARCH, 2018, NAIROBI

**Statement of Need (problems in the  
region – rationale, multi-sectors, lives  
lost and economic losses, etc)**

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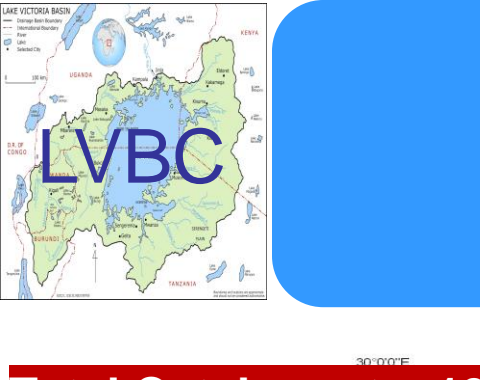
# OUTLINE



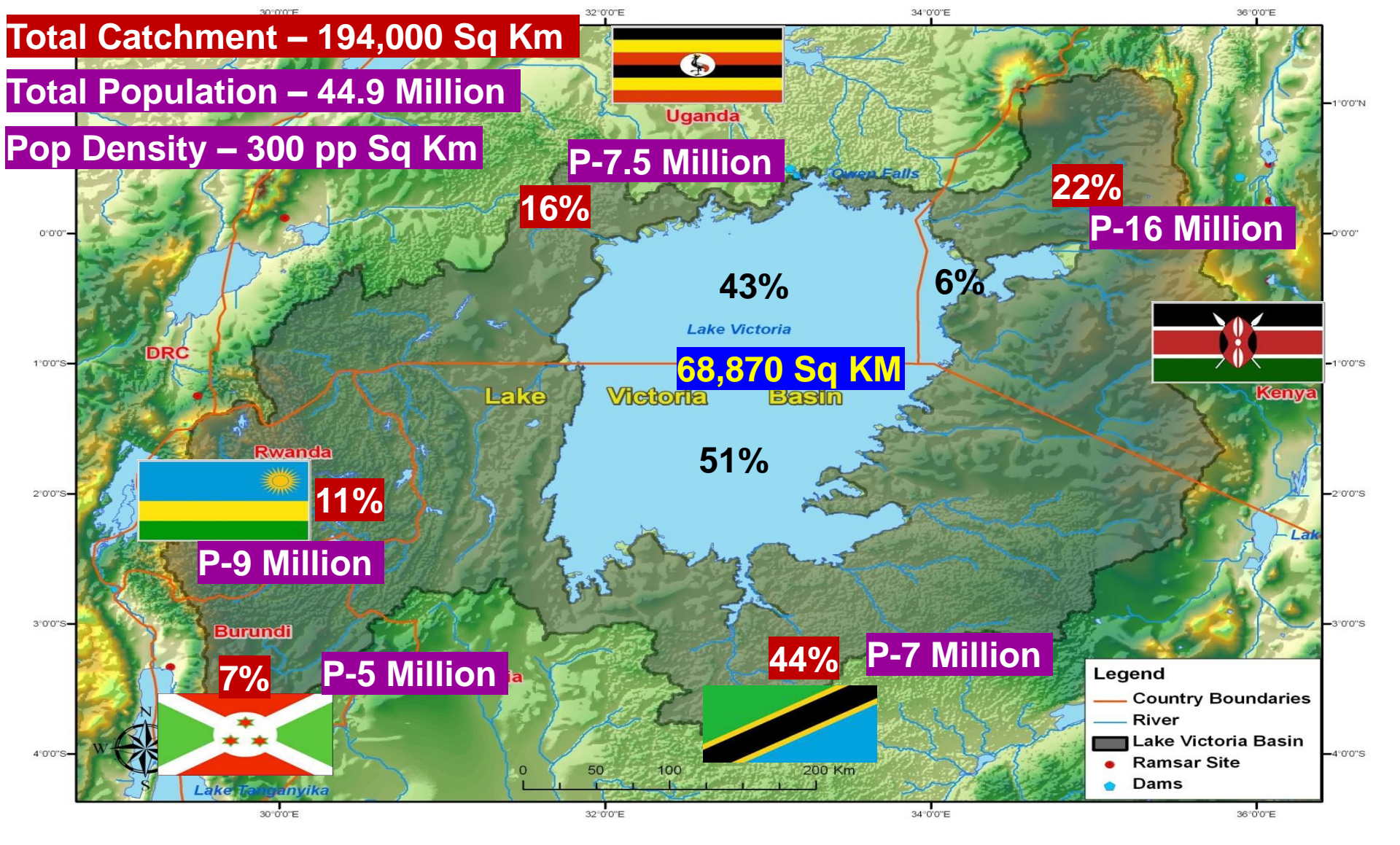
- A. Institutional Background**
- B. Potentials and Challenges**
- C. Programmatic Interventions**
- D. LVEMP Phase II**
- E. Initiatives on Maritime Safety, Security, Transport and Communications in the Lake Victoria**
- F. MNLVMCT Project & Needs Assessment**



# Institutional Background



# LAKE VICTORIA BASIN







# MORE FACTS ABOUT LAKE VICTORIA



Parameter	Figures
Surface Area	68,870 Km <sup>2</sup>
Average Depth	40m
Maximum Depth	84 Meters
Shore line length	4828 Km
Volume	2750 cubic Kilometers
Source of water	Precipitation- 82% Rivers – 18%
Loss of water	Evaporation – 76% River Nile Outflow – 24%
Water Residence Time	23 Years
Flushing Time	123 Years





# POTENTIALS AND CHALLENGES



LVB is resource endowed (1<sup>st</sup> EAC DS designation as REGZ) but constrained by some challenges (sea of challenges – ocean of opportunities)

## Potentials:

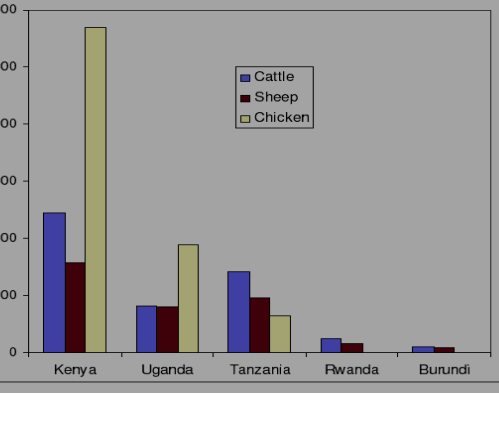
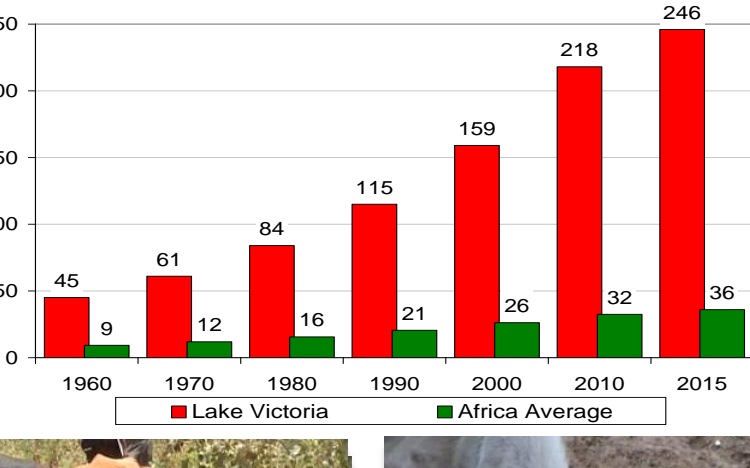
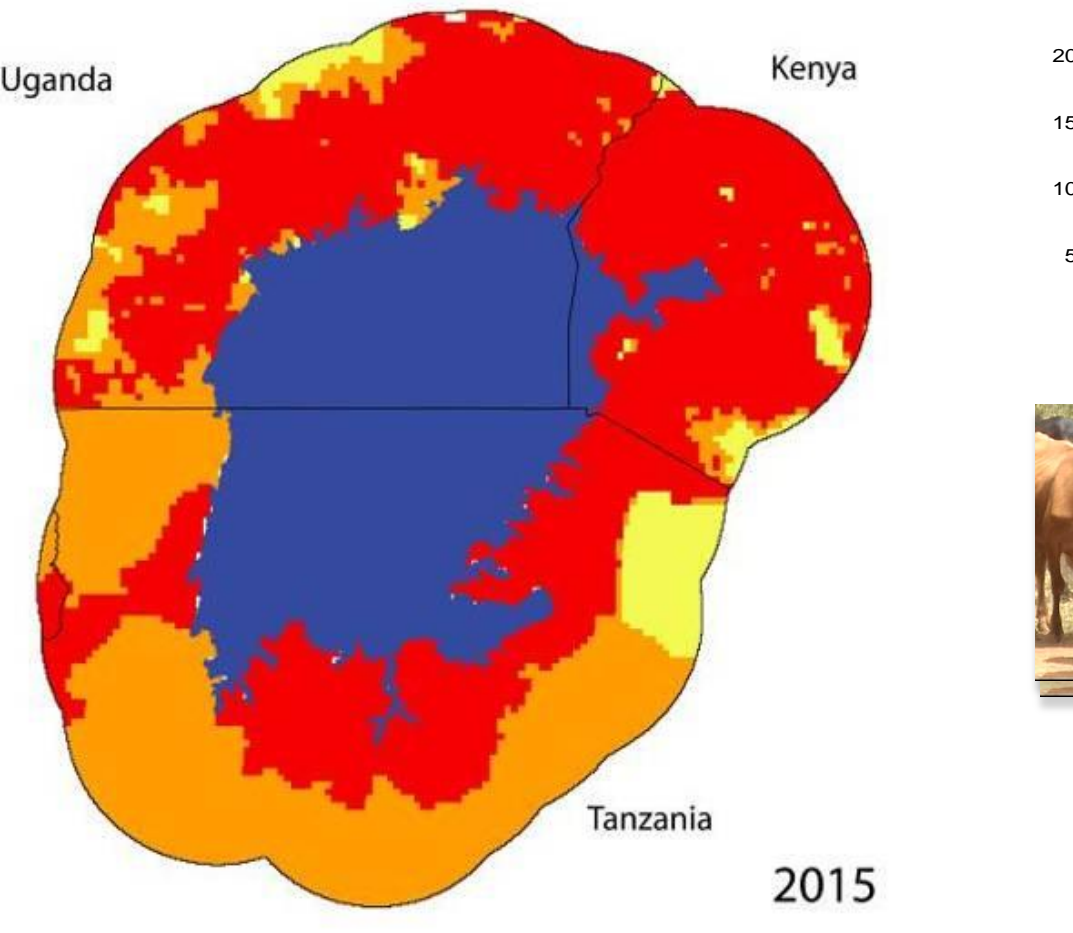
- Water resources
- Fisheries resources - 800,000 to 1,000,000 metric tons of fish annually, worth \$ 900m
- Wildlife
- Biodiversity
- Climate
- Population (over 44.9 million)

## Challenges

- In the lake (pollution, sedimentation, water levels, fisheries)
- In the littoral zone (wetland destruction)
- In the basin (land degradation, deforestations, pollutions)
- Outside the basin (atmospheric deposition, climate change)



# POPULATION DYNAMICS IN LVB







# Lake Victoria Basin in Perspective...







# LAKE VICTORIA BASIN COMMISSION



- LVBC is a specialized institution of the EAC
- Establishment of the Commission is provided for under Article 114 of EAC Treaty (1999).
- Operations of the Commission is governed by the Protocol for Sustainable Development of LVB (2003)

## **Other guiding documents include:**

- Shared Vision & Strategy Framework
- EAC Development Strategy
- Strategic Plan
- Sectoral Council & Council's Decisions & Directives
- Regional policies and strategies



# LVBC'S VISION & MISSION

## Vision

**“A prosperous population living in a healthy and sustainably managed environment providing equitable opportunities & benefits”**



**Anchored on 5 key policy areas:**

- 1. Environment, Ecosystems, NR**
- 2. Production and Income Generation**
- 3. Living Conditions and Quality of Life**
- 4. Population and Demography**
- 5. Policy, Institutions and Governance**

## Mission

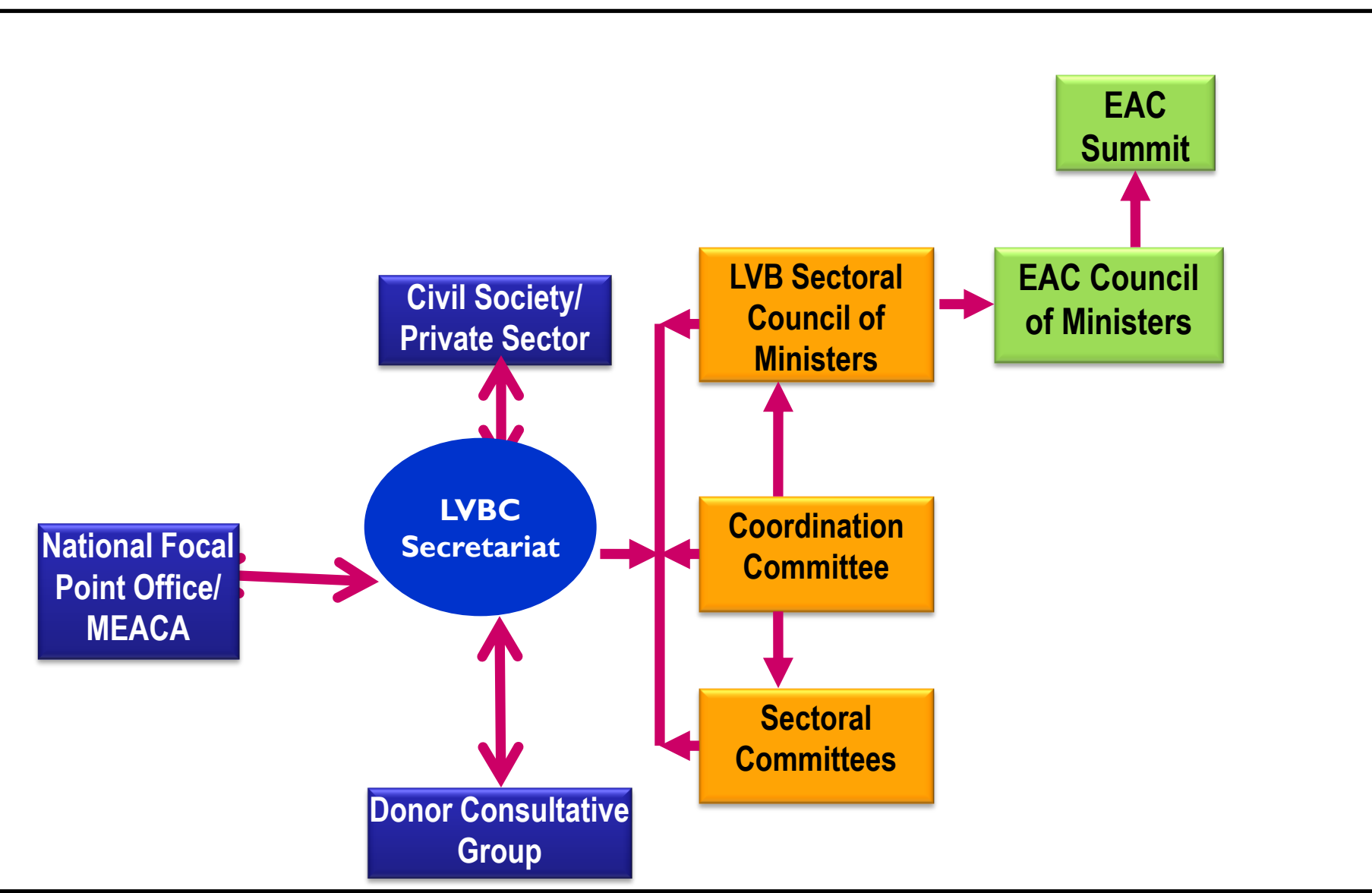
**to promote, facilitate and coordinate activities of different actors in the LVB.**

## Objective

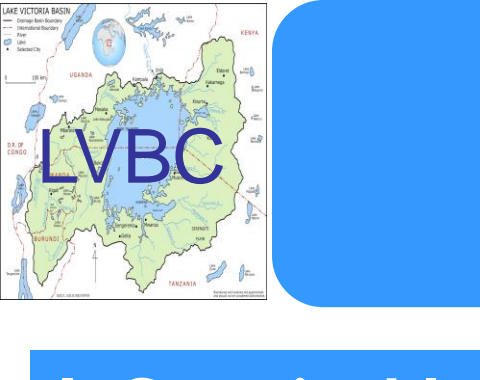
**Equitable economic growth, poverty eradication, Env. Cons., NRM, Safety of Nav.**



# LVBC GOVERNANCE STRUCTURE







# SCOPE OF COOPERATION



- 1. Sustainable development, management and equitable utilization of water resources;**
- 2. Sustainable development and management of fisheries resources;**
- 3. Promotion of sustainable agricultural and land use practices including irrigation;**
- 4. Promotion of sustainable development and management of forestry resources;**
- 5. Promotion of development and management of wetlands;**
- 6. Promotion of trade, commerce and industrial development;**
- 7. Promotion of development of infrastructure and energy;**



# SCOPE OF COOPERATION



- 8. Maintenance of navigational safety and maritime security;**
- 9. Improvement in public health with specific reference to sanitation;**
- 10. Promotion of research, capacity building and information exchange;**
- 11. Environmental protection and management of the Basin'**
- 12. Promotion of Public participation in planning and decision-making;**
- 13. Integration of gender concerns in all activities in the Basin; and**
- 14. Promotion of wildlife conservation and sustainable tourism development.**



# PROGRAMMATIC INTERVENTIONS





# **In line with the Protocol, SVSF, EAC DS, LVBC Strategic Plan, Councils Decisions and Directives**

## **Achieved through: On going projects**

- Lake Victoria Environmental Management Project - **LVEMP**
- Lake Victoria Water and Sanitation - **LWATSAN**
- PREPARED (WASH, Climate Change and Biodiversity)
- Population, Health and Environment - **PHE**

## **Pipeline:**

- Integrated Water Resource Management (**IWRM**) Project
- Multinational Lake Victoria Maritime Communications and Transport Project – **MNLVMCTP**
- EAC Intermodal corridor development - **LVTP**
- LVB Climate Change Adaptation Project



# Lake Victoria Environmental Management Project



- Lake Victoria Environmental Management Project (LVEMP) Phase I : 1998-2005; Kenya, Uganda & Tanzania
- LVEMP Phase II : 2009 – 2017; Kenya, Uganda, Tanzania, Burundi and Rwanda
- Total Project cost for LVEMP II is US \$160 million
- **Objectives of the LVEMP II**
  - ✓ Improvement of the *collaborative management* of the trans-boundary natural resources of the Lake Victoria Basin ( LVB) among the Partner States; and
  - ✓ Improvement of *environmental management* of targeted pollution hotspots and selected degraded sub-catchments for the benefit of communities.



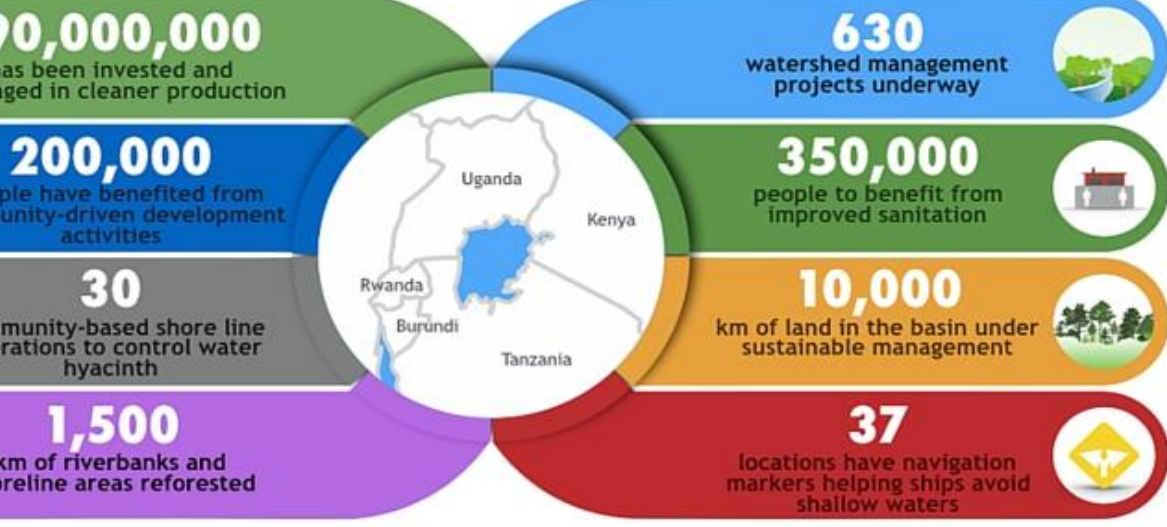


# Components of LVEMP II



- It has four project components;
- ✓ strengthening **coordination capacity** for managing shared water and fisheries resources;
- ✓ Point source **pollution control and prevention**.
- ✓ **Watershed Management** – natural resources conservation and livelihood improvement.
- ✓ Project **coordination and Management**.

## LAKE VICTORIA ENVIRONMENTAL MANAGEMENT PROGRAM IMPACT IN NUMBERS







# LVEMP II achievements



- **Harmonization** of various policies, strategies, legislations and regulatory frameworks eg. EAC Fisheries and Aquaculture Policy, Water Management Policy, Basin-wide Sustainable Land Management strategy, Water Hyacinth Surveillance and Control Strategy, etc
- **Construction and Rehabilitation** of wastewater treatment facilities in Bomet, Homa Bay, Kisumu, Bukoba and Kirinya hence reducing levels of pollution into the LV.
- Construction of **93 public and ecological** sanitation toilets in Kenya, Uganda, Tanzania and Burundi serving over 171,558 people.
- Installation of **Aids to Navigation** around the LV eg. **89** AoN
- It **restored 1,950 hectares** of degraded wetlands.
- Monitoring and control of **water hyacinth**





# LVEMP II achievements



- LVEMP II put over **21,248 Hectares under sustainable land management practices** thereby reducing non-point sources of pollution and improving livelihoods of rural communities in Lake Victoria Basin.
- It facilitated the **empowerment of communities** by introducing for the concept and practice of **Community Driven Development** (CDD) eg. over 620 CDD sub-projects were successfully implemented.
- **Capacity building** of National implementing Agencies eg. provisions of training, water quality labs, vehicles, etc
- It promoted **cleaner production technologies** among industries in the basin
- The project **promoted sustainable land management** practices and technologies through CDDs and CMI sub-projects that contributed to reduction in land degradation



# LVEMP II achievements



- LVEMP II also contributed to the improvement of **livelihoods of communities** that depend on the resources in the basin eg. honey production
- CDD and CMI (co-Management Interventions) approaches were used to introduce new **environmentally friendly technologies** such biogas, energy saving Jikos among others.
- Project supported the development of the **Lake Victoria Fisheries Management Plan III**, the Water Resources Management Plan I



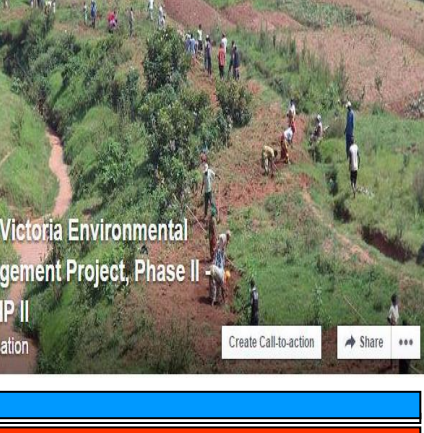


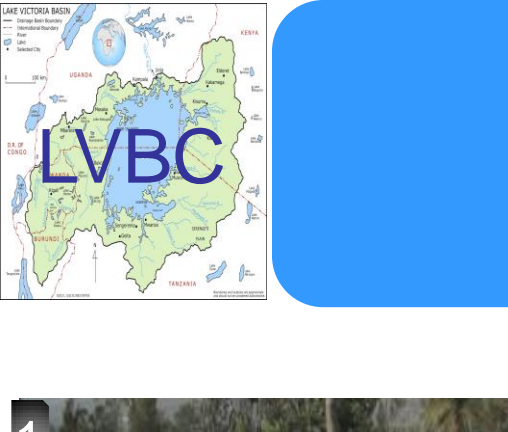


# LVEMP II challenges



- Effects of **climate change**; **population explosion** and high rate of urbanisation as well as invasive weeds and species.
- Operational challenges including bureaucracy in **procurement of goods and services** by Partner States.
- **Politics** in the Region eg electioneering periods.
- **Poor infrastructure** in the lake Victoria basin; road transport, telecommunication, etc





# Projects in Pics



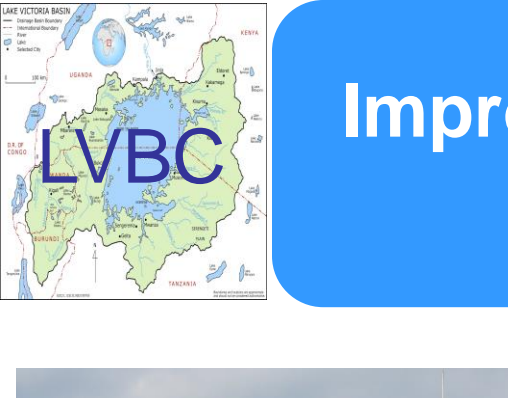




# INITIATIVES IN MARITIME TRANSPORT AND SAFETY IN LAKE VICTORIA



- ☐ Enactment of LV Transport Act (2007) and its Regulations eg Safety and Fees Regulations (2010)
- ☐ Bathymetric Survey for the access to Mwanza, Port bell and Kisumu ports;
- ☐ Development of **Oil spills and Toxic Chemical Contingency Plan** for Lake Victoria;
- ☐ Installations of Aids to Navigation Equipment – at least **89**
- ☐ Installation of a ring of communication network around the lake (and 20 km into the lake)
- ☐ Gazettement by the Council of Ministers of the number **110** as an emergency number;
- ☐ Full fledged department of Maritime Safety at LVBC;
- ☐ Successful negotiations and approval by AfDB the Multi-National LV Maritime Communications and Transport project - **MNLVMCT**



# Improving safety of navigation and security on Lake Victoria



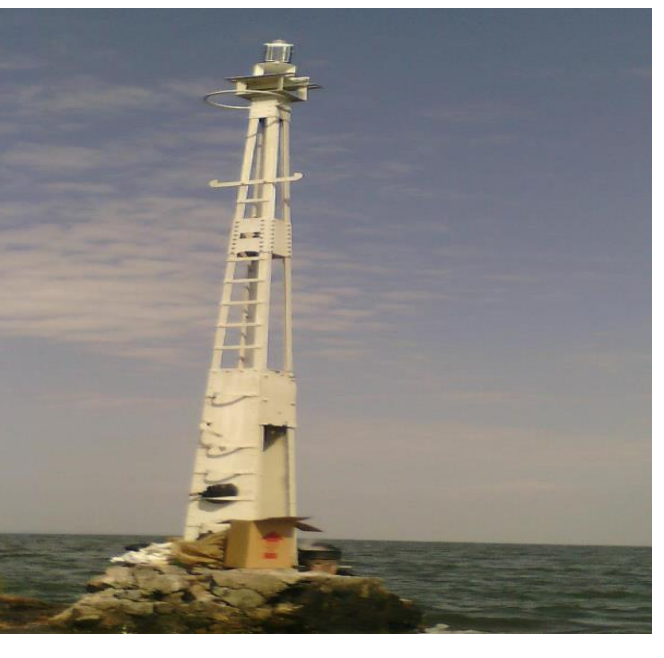




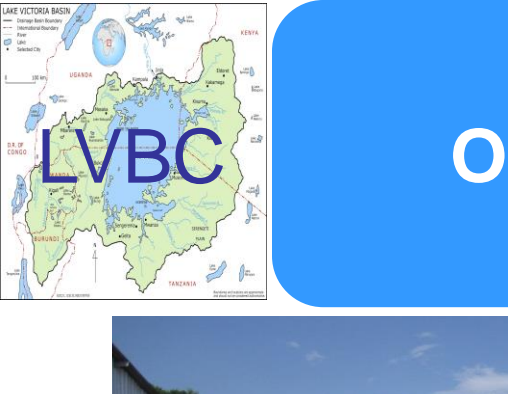
# Installed Aids to Navigation equipment



Plate 1: Aids to Navigation Installed at the Luanda Kotieno Pier in the Republic of Kenya







# Oil spill response equipment







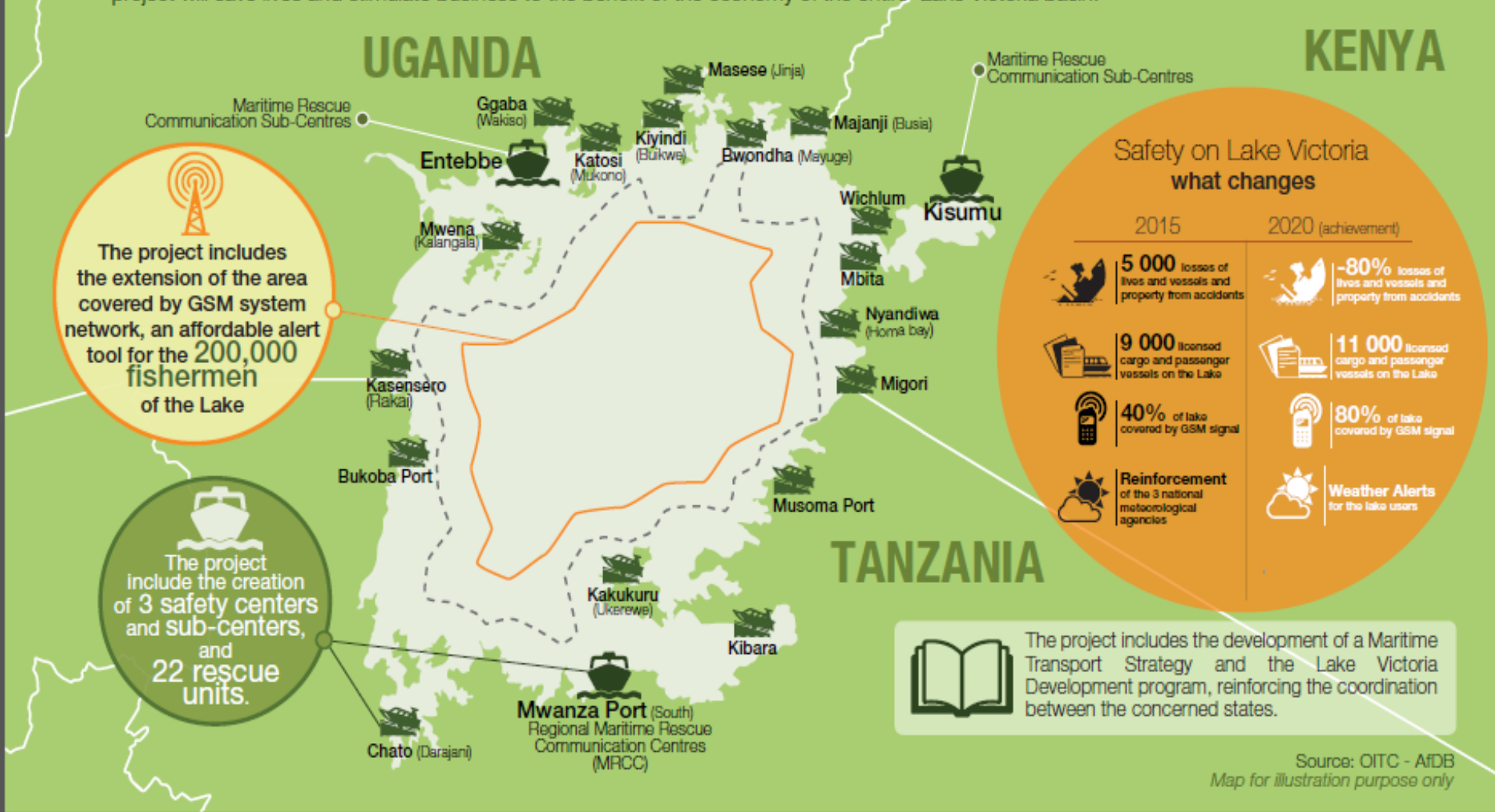
# MNLVMCT Project & Maritime Security



AFRICAN DEVELOPMENT BANK GROUP

## The Multinational Lake Victoria Maritime Communication and Transport Project Reinforcing navigation safety on the largest african lake

On 25th October 2016, the African Development Bank approved a USD25M loan to a multinational project to establish a safety-of-life communications systems for Lake Victoria. The largest lake in Africa, which provides income and livelihood to around 4 million people, counts a fleet of 70,000 vessels mostly comprising of individual fishermen without any alerting or rescue systems. Consequently as many as 5000 people die in the lake each year. By combining modern communications systems with the broad provision of rescue centres, the project will save lives and stimulate business to the benefit of the economy of the entire Lake Victoria basin.



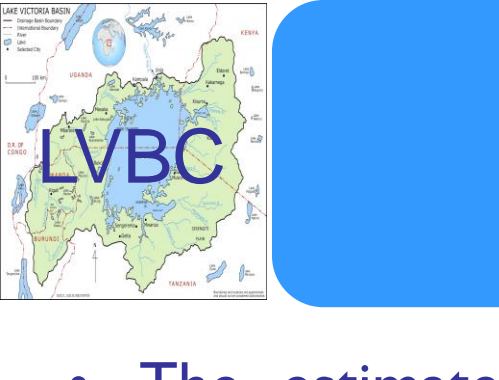


# OVERVIEW OF MNLVMCT



- The **MNLVMCT project** is a trans-border infrastructure initiative designed around the 4th EAC Development Strategy (2011-2016)
- It addresses the maritime transportation and navigation **safety and security** intervention area.
- It will contribute to the provision of **safe, efficient, cheap and environmentally friendly** transport links, and fishing activities that are essential to achieving the goals of poverty reduction and sustainable development.
- The project is in line with the Protocol for Sustainable Development of Lake Victoria Basin; LVBC Strategic Plan 2011 – 2016; the participating countries Strategy Papers (CSP); and the Bank's Regional Indicative Strategy Paper (CSP) for East Africa.

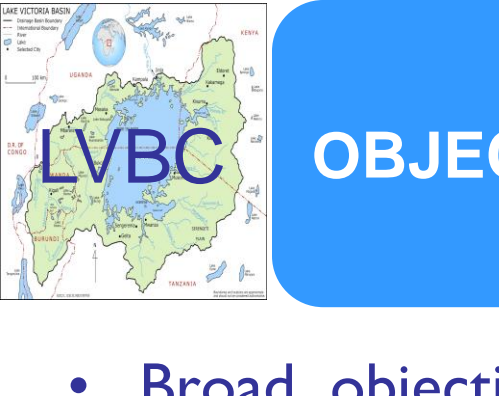




# MNLVMCT Project Cost



- The estimated total MNLVMCT Project cost is **UA 25.95 million (USD 36,583,822)**.
- The proposed financing from ADF window amounts to **UA 17.75 million (USD 25,014,522)**.
  - ✓ ADF loan of **UA 3.77 million (Tanzania)**
  - ✓ ADF loan of **UA 3.77 million (Kenya)**
  - ✓ ADF loan of **UA 10.21 million (Uganda)**
- The European Union – Africa Infrastructure Fund (EU-AIF) is expected to contribute **UA 3.38 million (USD 4,770,000)**
- Participating countries' contributions will amount to approximately **UA 4.82 million (USD 6,799,300)**.
- The project is expected to be implemented over a period of **four years**.



# OBJECTIVES/IMPORTANCE OF MNLVMCT



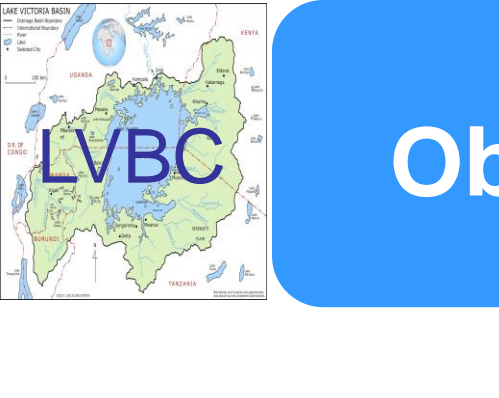
- Broad objective of the project is to facilitate transport and trade on the lake by improving **maritime transport infrastructure** including **maritime communications**, navigation aids, **maritime emergency search and rescue services**, **maritime security** and **inland waterways** for Lake Victoria.
- Maritime communication network coverage and functionality.
- To operationalize the Regional Maritime Rescue Coordination Centre in Mwanza, Tanzania; and two sub centres in Kisumu (Kenya) and Etebbe (Uganda)
- To establish, equip and strengthen the emergency Search and Rescue (SAR) organization.
- To strengthen **weather forecast services** around and on the Lake and other value added services



# Objectives/Importance...



- To support development of the **East African Maritime Transport Strategy** and Lake Victoria Development programme.
- To strengthen the implementation capacity of the designated agencies.
- To support efforts of **women groups** around **SAR facilities** within the beach management units to undertake self-sustaining economic activities that are complementary to the project. The activities include locally produced life jackets; improved environment of 'mugongo wazi' fish skin processing activities and health programmes
- It will help in the implementation of **Lake Victoria Transport Act 2007** and **Oil Spill Contingency Plan** for Lake Victoria



# Objectives/Importance...



- It will improve **maritime security of the Lake**. These include issues related to **piracy**, **armed robberies**, **IUU** (Illegal, Unreported and Unregulated) fishing, **drug and human trafficking**, etc.
- Many precious lives of fishermen will be saved hence contributing to **economic growth** of fishing industry in Lake Victoria.
- It will **boost tourism** in the lake since safety and security of the lake will be guaranteed







## Component 1: Establishment of a Maritime communication

## Maritime Communication Network (MCN) :extending the range

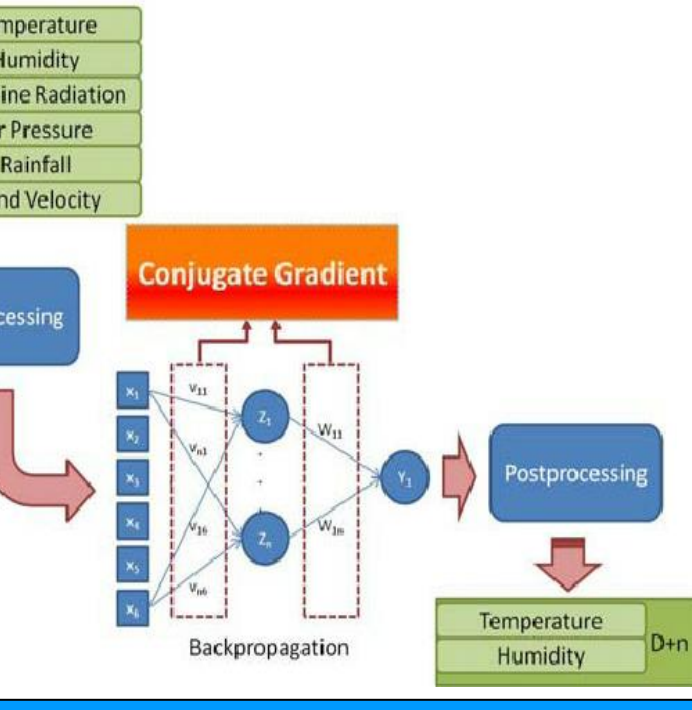
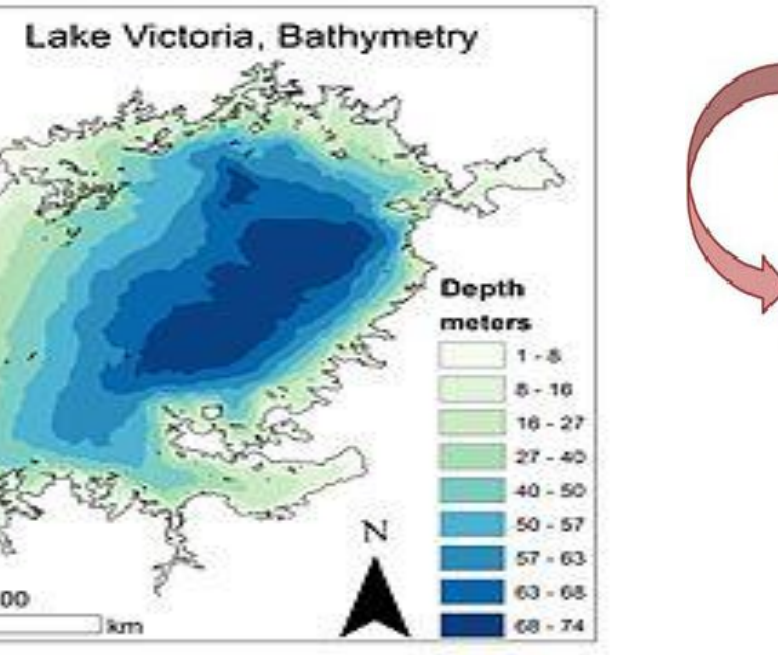




# Components of MNLVMCT Project



- Weather forecast and Value added services
- ✓ installation of weather forecast systems for three MRCCs
- ✓ Provision of briefing rooms for weather alerts in the three MRCC
- ✓ Strengthening the meteorological offices linked to the centres
- ✓ Dissemination of weather alerts products (radio, sms, briefings)
- ✓ Total weather forecast component – 2,475,983 USD





# Components of MNLVMCT Project



## Component 2: Maritime Transport for Lake Victoria Study.

- Development of **East African Maritime Transport Strategy** that will guide the development of the maritime transport sector in the region.
- Preparation of **Lake Victoria Transport Development Programme**. This component will comprise: assessment of current status; demand forecast; identification of projects required for achievement of transport network; detailed feasibility study for the short-term projects to be financed by the Bank; and needs assessment of capacity building.





### Full-time employment and full-time pay

- 







# Maritime communications system for safety on Lake Victoria









# Some challenges

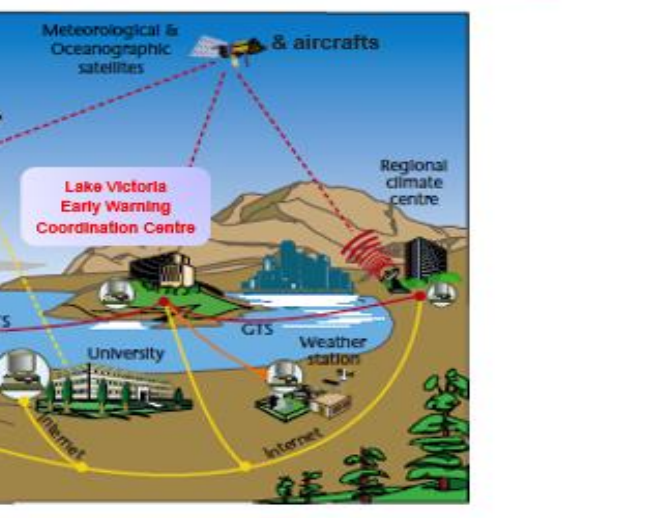


- Increased no of **marine accidents** due to hazardous weather conditions, unseaworthiness of vessels, lack of updated navigational charts, lack of safety awareness, poor seamanship eg estimated **5000** deaths/year affecting **30,000** people.
- Notable marine accidents in Lake Victoria involving large vessels include capsizing of **MV. Bukoba** (1996), sinking of **MV. Kabalega** (2005), sinking of **MV. Nyamageni** (2006), grounding of **MV Thor** (2006), and capsizing of a Passenger boat in Uganda side of the Lake (2010).
- Other maritime security threats in the Lake Victoria include **illicit drugs**, **IUU fishing**, **illegal immigrants**, **pirates**, etc.



# Feasibility Study on Meteorological by LVBC

Enhancing Safety of Navigation and Efficient  
Exploitation of Natural Resources over Lake  
Victoria and Its Basin by Strengthening  
Meteorological Services on the Lake



**Final Report**  
**26 October 2011**

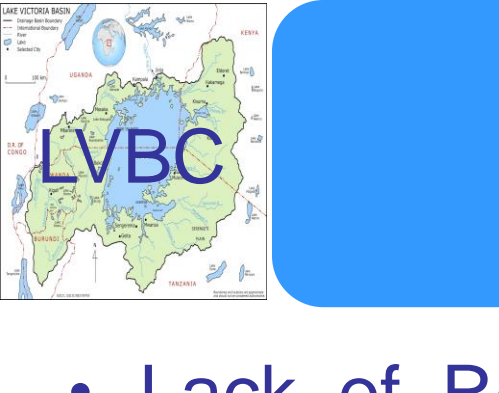




# Needs and Solutions



- Lack of timely weather forecast in the LV - **MNLVMCT & HIGHWAY**
- Lack of reporting and recording systems for marine accidents – **MNLVMCT**
- Lack of Regional maritime rescue coordination centres in the Lake – **MNLVMCT**
- Lack of Regional Maritime Search and Rescue Plan, SOP, - **LTVP, MNLVMCT**
- Lack of proper Lake Ports infrastructure in the LVB - **LVTP**



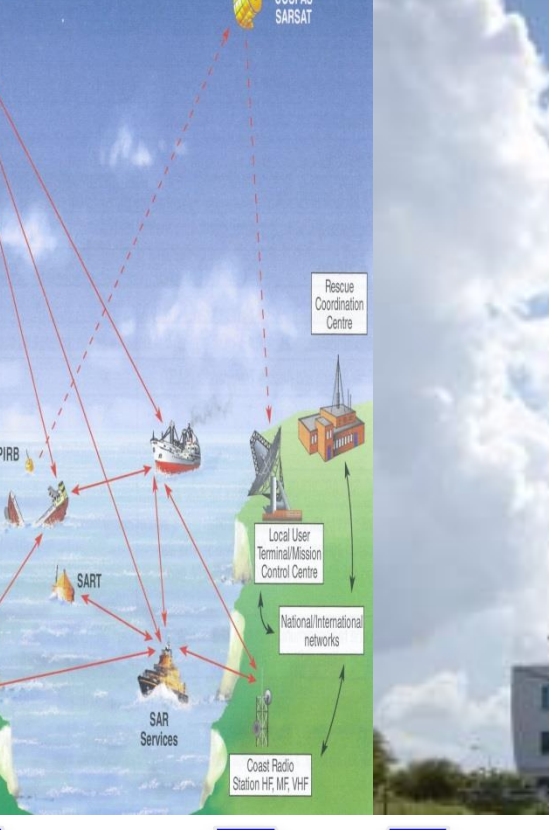
# Needs and Solutions



- Lack of Regional Lake Victoria Maritime Security Policy – Lake Victoria Transport Program (**LVTP**)
- Lack of Lake Victoria Maritime security Strategy and Action Plan – 5yrs Plan; - **LVTP**
- Lack of Regional Maritime Security Information Sharing/Fusion Centres - **MNLVMCT**
- Lack of coordinated maritime surveillance and reconnaissance – **MNLVMCT**
- Lake Ports compliance with ISPS code – **LVTP**
- Maritime Domain Awareness to strengthening maritime security – **IPSTC**



# Lake Victoria Basin Commission



# Thank You