Perspectives from the Lake Victoria Environment Management Project w.r.t to HydroSOS

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26th to 28th September 2017, Laico Lake Victoria Hotel, Entebbe
Outline of presentation

• Overview of the Lake Victoria Environment Management Project
• Efforts towards strengthening institutional capacity for managing shared water resources
• potential use of Status and Outlook products
• adoption challenges.
Overview of the Lake Victoria Environment Management Project

- **Introduction**
- Lake Victoria is a shared resource and 2nd Largest Fresh water, 68,000 sq km
- **Economic importance**
  - Warehouse for Fisheries resources - 500,000 Mg/a
  - Domestic and industrial water supply
  - Employment to 190,000 fisher forks – 600,000 traders
- **Transportation**
- **Hydropower**
Environment Challenges facing LVB Ecosystem

- Deteriorating water quality
  - Increased sedimentation
  - Increased pollution and eutrophication
- Declining Lake levels
- Overexploited natural resources
  - Declining fish stocks and loss of habitats
  - Wetlands destruction
  - Forest degradation
- Resurgence of Water Hyacinth
Human threats to environmental and natural resources in LVB
# Overview of LVEMP II

<table>
<thead>
<tr>
<th>High level Objective</th>
<th>Contribute to “having a prosperous population living in a healthy and sustainably managed environment, providing equitable opportunities and benefits</th>
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<tbody>
<tr>
<td>PDO</td>
<td>1. improve collaborative management of the transboundary natural resources of LVB for the shared benefits of the EAC Partner States; and</td>
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<tr>
<td></td>
<td>1. reduce environmental stress in targeted pollution hotspots and selected degraded sub-catchments to improve the livelihoods of communities depending on the natural resources of the LVB</td>
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<tr>
<th>Regional Context</th>
<th>Uganda</th>
<th>Kenya</th>
<th>Tanzania</th>
<th>Rwanda</th>
<th>Rwanda</th>
<th>LVBC</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Funding USD (10^6)</td>
<td>27.5</td>
<td>40.0</td>
<td>42.5</td>
<td>15.0</td>
<td>15.0</td>
<td>20.1</td>
<td>160.1</td>
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<table>
<thead>
<tr>
<th>Start date</th>
<th>25&lt;sup&gt;th&lt;/sup&gt; January 2010</th>
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<tbody>
<tr>
<td>End date</td>
<td>31&lt;sup&gt;st&lt;/sup&gt; December 2017</td>
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PDO/GEO has been achieved by implementing four main components ...

1) Strengthening institutional capacity for managing shared water and fisheries resources

2) Point sources pollution control and prevention

3) Watershed management

4) Project coordination and management
1. Strengthening institutional capacity for managing water and fisheries resources ...

- 1.2 Ecosystem monitoring and applied research

  - Develop ecosystem monitoring tools and data sharing protocol i.e. Water Information system; Decision Support System; GIS-based database for hydrology, and water hyacinth surveillance

  - Undertake joint ecosystem monitoring and share data
Key Achievements

• Data, Information and Knowledge Sharing Protocol in LVB,
  • Provides guideline on the sharing of data, information and knowledge amongst the Lake Victoria riparian states

• Water Information System (WIS)
  • provides the necessary formats for organizing and harmonizing existing data and new data gathered for these activities
Uganda Water and Environment Information and Knowledge Center

• Extension to the hydrological data centre
• ICT infrastructure procured
• will support the functionality of a one-stop data, information and knowledge centre.
Conceptual framework
overall connection of UWEIKC stations
Our Vision
use/potential use of Status and Outlook products

Predict water hyacinth movement and inform mgt efforts.
use/potential use of Status and Outlook products

Municipal flood outlook
Physical Exposure to Drought Events of 1980-2001

[Map showing physical exposure to drought events in East Africa, with color coding for population exposed per year.]
Duration of Malaria Transmission Season

Number of months of suitable climate

- No transmission in average year
- 1 - 3 months: Epidemic or strongly seasonal
- 4 - 6 months: Endemic and seasonal
- 7 - 12 months: Endemic and perennial

Data source: MARA/ARMA (Mapping Malaria Risk in Africa / Atlas du Risque de la Malaria en Afrique)
use/potential use of Status and Outlook products *cont’d*

- State of the Lake Victoria Basin Report (Interactive)
- Inform short to medium term operation of Hydropower plants
Envisaged adoption challenges of HydroSOS from a regional perspective.

- Need for extensive capacity development
- Consensus building at the regional level is time consuming
- Ad hoc sharing of national data
Conclusion

• Hydrological forecasting in the Lake Victoria Basin is still in its infancy however, a foundation has been built to support its “take off”.

• An enabling environment has been created which is ideal to support the delivery a unique operational system providing up-to-date hydrological information - HydroSOS
Thanks for your Attention