

# Promoting Sustainable Utilization of L.Victoria Through Community Driven Investments

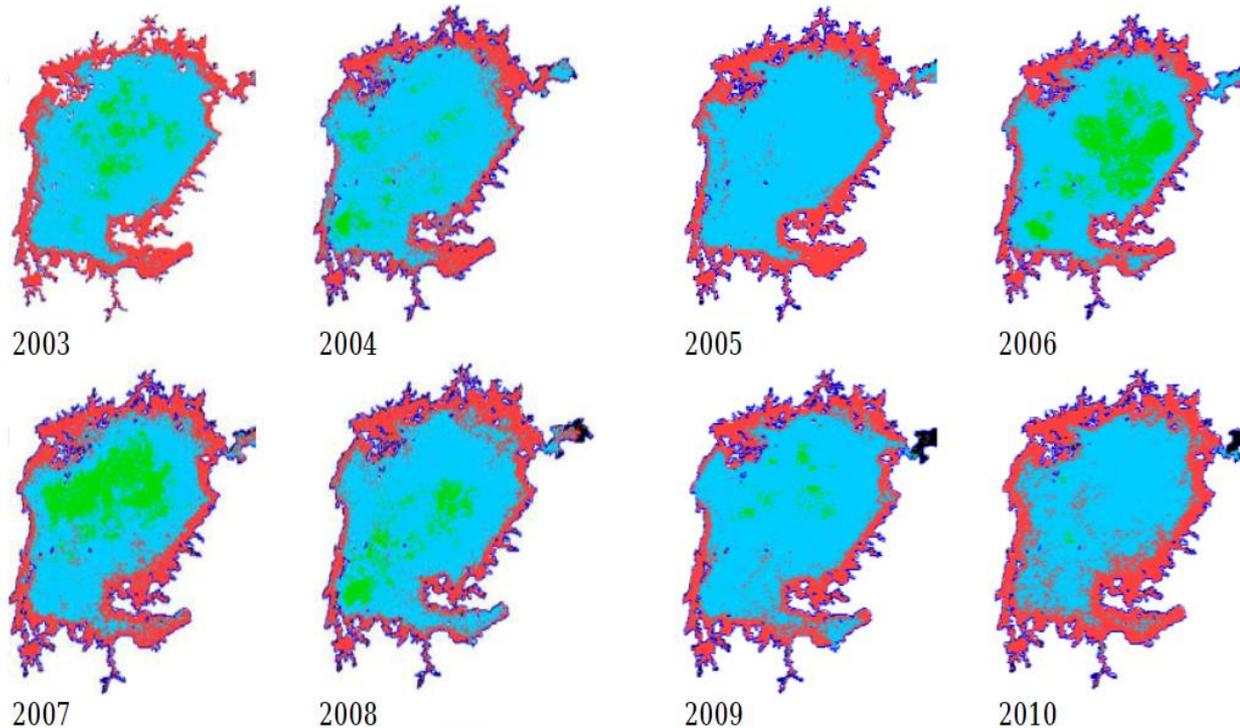
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# L. Victoria's ecosystems have undergone substantial and alarming environmental degradation over the last 40 years

Satellite imagery shows eutrophication in Lake Victoria as an indication of water quality



-  Hypertrophic zone ( $\text{Chlor-a} \geq 56 \text{ mg/m}^3$ ) - Poor Water Quality
-  Eutrophic zone ( $20 \leq \text{chlor-a} \leq 56 \text{ mg/m}^3$ ) - Poor Water Quality
-  Mesotrophic zone ( $2.5 \leq \text{chlor-a} \leq 8 \text{ mg/m}^3$ ) - Fair Water Quality
- Oligotrophic zone not detected ( $< 2.5 \text{ chlor-a}$ ) - Good Water Quality



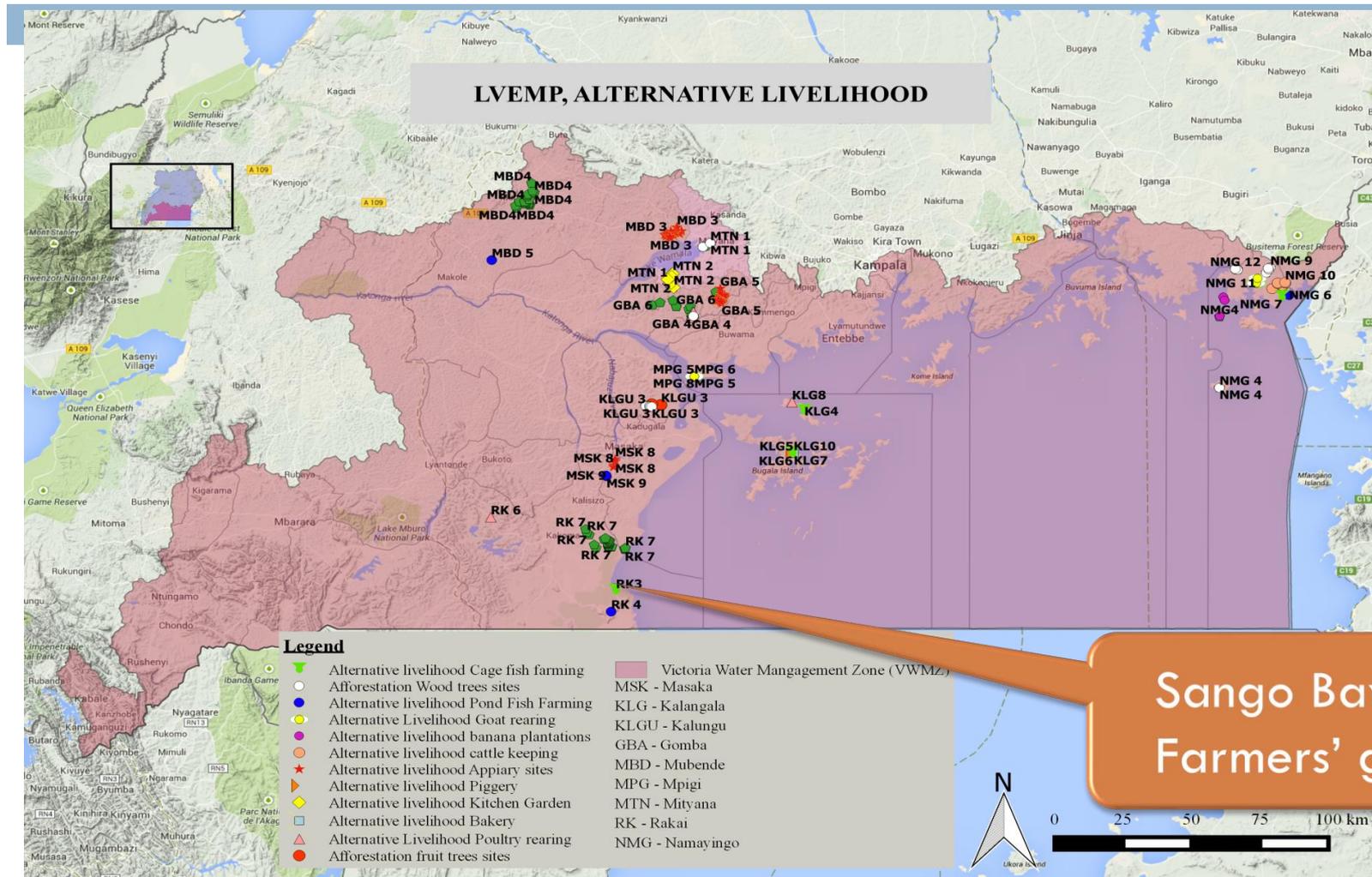
# Introduction *cont'd*

- L. Victoria experiences a variety of complex and interwoven water-quality challenges that are driven largely by the deep poverty and lack of alternative livelihoods
- Slowing degradation requires a multi-faceted, long-term approach coordinated regional with national action
- The LVB countries recognize the need for coordinated action,
- with the support of the World Bank and other DPs, the Basin-countries through the EAC, have proactively taken joint efforts to address environmental degradation in the Lake

# Steps towards reducing the environmental degradation trend in LVB

- LVEMP1 (1996–2005) greatly improved the understanding of the environmental challenges faced by the Lake, and piloted investments in watershed rehabilitation and reducing water hyacinth infestation.
- LVEMP II (2009-2017) prioritized the environmental threats in the Lake, implemented a variety of interventions in pollution and watershed management and strengthened regional cooperation for an improved mgt of the Basin.
- LVEMP3 (2020 – 2025) will prioritize information and monitoring systems, sanitation and wastewater management and sustainable land and water management.

# Community driven investments for rehabilitation of priority degraded hotspot



- ENR hotspots in Katonga sub-catchment; Mubende, Mityana, Gomba, Rakai, Masaka, Kalungu, Mpigi. Littoral zones of Lake Victoria; Namayingo and Kalangala

# SANGO BAY FISH FARMERS GROUP



# A case for LVEMP intervention

- Fishing is the traditional source of livelihood for Sango bay community.
- due to excessive fishing pressure, fish catches declined drastically, threatening the community's livelihood 15 baskets (@150kg) to 2 baskets per day
- encroachment on lake shores through farming activities, burning charcoal in desperate efforts to find alternatives
- periodic eruption and invasion by mats of water hyacinth complicating the movement of fishing vessels

# Impact and possible solution

## □ Impact:

- The overall net effect was degradation of the fisheries resource, resource conflicts and loss of community livelihoods

## □ Solution:

- The community prioritized cage fish culture, tree planting and manual removal of the water hyacinth as options to mitigate the environmental stress on the lake, while supporting socio-economic development of the community.

# Subproject formulation

- awareness/sensitization on environmental stress and possible support
- Held participatory planning meetings to - firm up community needs, identify priority actions,
- Submitted proposal(s) to MWE through the District
- Trained in project management, financial management, procurement and book keeping
- Signed an MoU before receiving the funding (72M)

# Sango Bay Community Sub-project

- **Sub –project Title:** Cage Fish Culture Development, Afforestation And Water Hyacinth Control Project At Sango Bay Fish Landing Site.
- **Sub Project Objective:** to enable sustainable utilization of the lake Victoria by diversifying the livelihoods of communities through cage fish production in order to reduce pressure on the natural fish stocks.
- **specific objectives of the sub-project**
  - Increase fisher household incomes through intensive culture and sale of cage fish to the existing huge fish market locally and beyond.
  - Promote afforestation by planting trees along Sango Bay beach
  - Reduce the menace of water hyacinth infestation around Sango Bay
- **Group Composition:** started with 37 members and grown to 108

# Sub-project Achievements

## □ Cage Fish Culture Development:

- Initially constructed 4 cages and stalked with 6000 fingerlings
- More 4 cages added with stalking density of 10,000 fish@
- overall harvesting potential is 20,700kg of fish with the average end weight of 450g/fish.



Group members harvesting fish from the cage



Harvested fish brought to the landing site for sale

# Sub-project Achievements Cont'd

- Group's upscaling initiatives
  - expanded the fish project by constructing five fish ponds.
  - Fish harvests



Date	Qty (kg)	Unit cost	Total
19/4/15	950	8500	8,075,000
9/9/16	2,700	10,200	27,631,800
21/7/17	4,526	10,000	45,260,000



Fish harvested from ponds

# Sub-project Achievements Cont'd

- Promoted afforestation
  - Initially planted 4,000 trees
  - Established a community tree nursery
  - Encourage members to plant trees on their farms
  - provided free coffee seedlings as incentives
  - Planted 10,500 trees (mysopsis and greivelia) and 15,400 coffee seedlings



# Water hyacinth control

- cleared 15 acres of the water around 12,500kgs of water hyacinth.



# Water hyacinth control cont'd



# Upscaling *cont'd*

- Sustainability strategy: started a piggery project (60 number) and feed the harvested weed to the pigs.



# Upscaling

- demonstrating compost making using water hyacinth and pig wastes while promoting sustainable land and water management and pollution control



- Water tank acquired to support fish breeding, mirco irrigation and livestock watering



- Monday Justus a group member in his coffee plantation

# Some of the success factors

- Community empowerment to generate own solutions
- Strong technical support from district and the central gov't agencies
- strong internal coordination
  - internal monitoring team (for checks and balances)
  - Community procurement committee
  - Transparent accountability to group
- Savings scheme
- Diversification ensures wide stakeholder involvements

# Challenges

- Access to quality fish fingerlings
  - Constructed our own hatchery
- access to affordable quality fish feeds
  - visit other successful farmers and their advice was that we should do away with local feeds. We need to raise capital to import enough feeds.
- Interruption by the Fisheries Protection Forces

# Future plans

- Capitalization of the group's saving scheme to support importation enough fish feeds to last one production cycle (Ush 60m)
- Possibly buying a machine to produce our own feeds (Ush 200m)
- Establish a demonstration farm for knowledge sharing/transfer
- Establish cages away from the lake to support women groups

# Conclusion

- Community participation is key in the sustainable utilization of lake Victoria natural resources
- However, continued community interest can only be achieved if there are economic benefits from the conservation efforts.
- Savings scheme is a key factor in maintaining group cohesion
- Sustainable solution to local problems can only be locally generated



Thank you

