Medium & Large Scale Aquaculture Sectors in Malawi: Prospects for growth

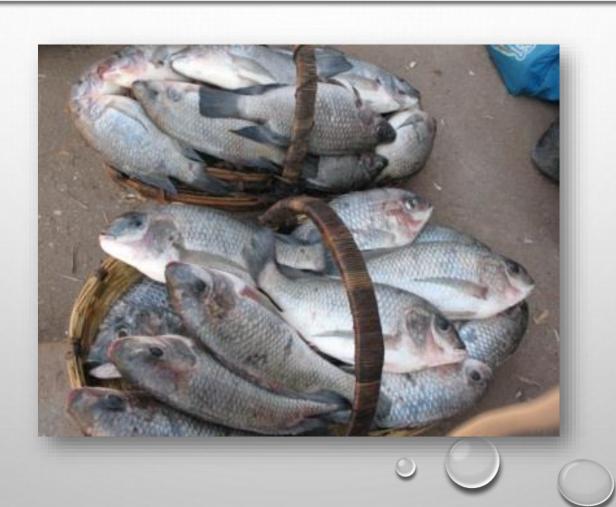
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Aquaculture Policy Research Dissemination Seminar

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Importance of fish in Malawi



- ✓ Contributes about 28% (30%) of the country's animal protein supply.
- ✓ Fisheries and their associated value chains such as processing, marketing etc. are a source of food security and livelihoods for many.
- ✓ Fisheries (capture fisheries and aquaculture) contribute about 4% of Malawi's GDP employing about 700,000 people directly or indirectly.
- ✓ One report puts the GDP at 7.2%.



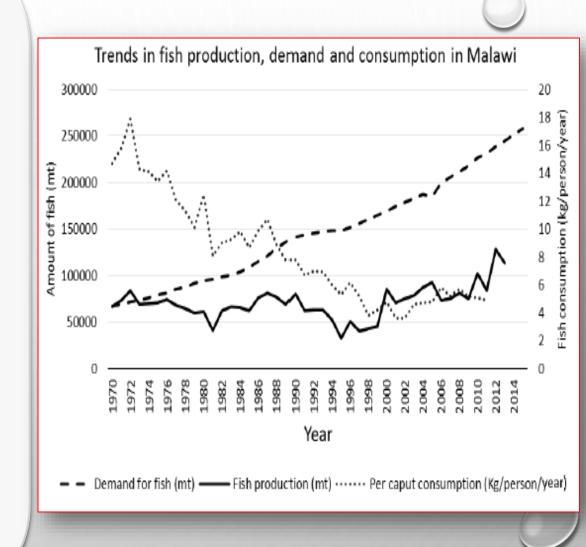


Dwindling catches vs increased demand

- ✓ Fish supply in Malawi is generally from <u>capture</u> <u>fisheries</u> and <u>imports</u> with 75% coming from Lake Malawi.
- ✓ Catches have nevertheless, drastically declined (now at 182,110 tons) due to over-exploitation of fish stocks to meet the increasing demand.
- ✓ Total catches in Lake Chilwa (2nd largest in Malawi) have also dropped by more than a third since the 1990's worsened by the lake's periodic drying.



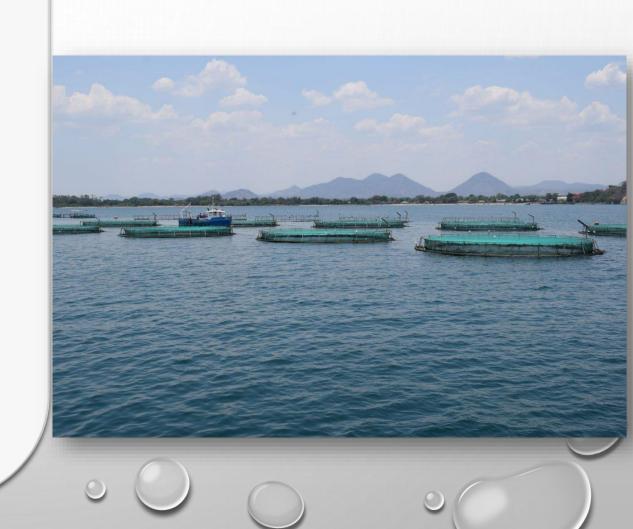
- ✓ Individual fish consumption is currently estimated at 5.6 kg/year from 14 kg/year in the 1970s representing a 60% drop.
- ✓ Demand for animal protein, including fish, is expected to <u>double</u> by 2050 due to population growth and rising incomes.
- ✓ It is apparent that reclaiming wild fish stocks won't be an easy road.
 - ✓ Rapid population growth, poverty, political landscape dynamics, inadequate resources etc. continue derailing fisheries management efforts.
- ✓ Aquaculture: a new paradigm shift



Aquaculture in Malawi: Opportunities for the growth of Medium & Large Scale Sectors

- ✓ High potential for the growth of the aquaculture sector in Malawi.
- ✓ 10–20% of Malawi's land area (1.1m ha) suitable for fish culture.
- ✓ Malawi also has 35,000 ha of underutilized wetlands that can be used for aquaculture.
- ✓ A network of rivers and streams including numerous small water bodies for aquaculture scattered all over the country.
- ✓ A conducive warm climate favouring growth of fish in captivity.

- ✓ An agro-based country able to produce main raw materials for making fish feed e.g. soybean, maize bran, rice bran etc.
- ✓ High interest in the aquaculture sector from government, NGOs, private sector, development partners e.g. GIZ (AVC Project), AfDB (SFAD project) etc.
- ✓ High potential for the development of cage culture.

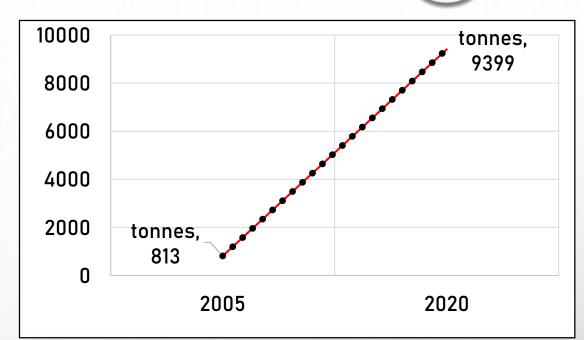


Aims of the Presentation

- ✓ Identify challenges hindering aquaculture development in Malawi & discuss strategies for addressing them.
 - ☐ Why is there low investment in the sector despite the huge potential? What can be done?
- ✓ Present to policy makers, investors & other stakeholders in the fish value chain opportunities within the aquaculture sector.
- ✓ Discuss ways of creating an enabling environment for aquaculture development in Malawi, with options for crosslearning with other SADC member states.
- ✓ Draw best practices & lessons from other SADC member states.



- ✓ Although the sector has grown over time from 813 tons in 2005 to over 9,000 tons in 2020, aquaculture in Malawi remains at <u>subsistence</u> level and farmed fish production is still <u>low</u>.
- ✓ Between 2005 and 2015, aquaculture accounted for just 1–5% of Malawi's total fish production.
- ✓ Small ponds (avg. size: 200m²).





- ✓ Slow growing indigenous fish species
 - ✓ Widely raised species is Oreochromis shiranus and Coptodon rendalli
- ✓ Lack of proper feed
 - ✓ Fish feed is predominantly maize bran
 - ✓ Commercial feed currently being imported from Zambia and is expensive







- ✓ Inadequate capital to invest in large scale/commercial aquaculture
- ✓ Unavailability/expensive materials
 - ✓ Solar equipment
 - ✓ Aerators
 - ✓ Netting materials
 - ✓ Pond liners
- ✓ Unregulated/uncontrolled fish imports
 - ✓ Huge volumes of low priced imported fish suffocating local producers



Best Practices and Lessons from other SADC member states: Zambia

- ✓ Now the 6th/7th largest producer of farmed fish in Africa (from 750 tons in the 80s to >20,000 tons present).
- ✓ Among biggest producers of tilapia in the SADC region with some of the largest freshwater commercial farms in Africa on Lake Kariba.
- ✓ Large-scale commercial aquaculture sector accounts for 71% of the country's aquaculture production.



Drivers of Large Scale Aquaculture in Zambia

- ✓ Introduction of large intensive cage culture operators in Lake Kariba (Siavonga).
 - ✓ More than 100 cages on Lake Kariba now.
 - ✓ Intensive fish feeding in the cages as high as 40mt/day – one firm.
- ✓ Improved access to high quality feeds (large feed manufacturing plants).





Drivers for commercial aquaculture - Zambia

✓ Improved access to high quality seed (large privately owned hatcheries)

✓ Introduction of a new aquaculture policy that provided enabling environment



Best Practices and Lessons from Zambia

✓ The growth of the commercial sector has stimulated the development of the <u>feed sector</u> – a chick and egg scenario.

- ✓ Numerous existing livestock feed mills have now invested into the development of aquafeeds over the last 12 years.
- ✓ Large-scale commercial operators ventured into partnerships with feed mills to better control <u>supply</u>, <u>quality</u> and <u>prices</u> of feeds.
- ✓ Government's Aquaculture Seed Fund benefited more than 3,000 entrepreneurs along the fish value chain throughout the country including medium & large scale youth entrepreneurs.



Triggers of the Large Scale Aquaculture Sector elsewhere in Africa

- ✓ Commercial aquaculture production flourished due to the intensification of private sector controlled small and medium scale enterprises.
- ✓ Public support, expertise, foreign direct investment, interest in aquaculture, global awareness raised through the New Partnership for Africa's Development (NEPAD).
- ✓ Introduction of new aquaculture production systems such as tanks and cages as well as the improvement of current production systems.
- ✓ Expediting, coordinating and adopting policy reforms to create a conducive environment for business.

- ✓ Development and adoption of aquaculture-centered policies and strategic framework.
- ✓ Governments facilitating provision of soft credits and incentives.
- ✓ Research activities in the species characterization, selective breeding and low-cost diet production.
- ✓ On-farm participatory research using model farms and private enterprises are yielding fast aquaculture technologies transfer via farmer-to-farmer pathways.
- ✓ Value addition: freezing, smoking, drying, as well as cold smoking of catfish fillets for export to European markets.

WHERE DO WE GO FROM HERE?

thank