Title: Are there growth variations between cage cultured and wild *O. niloticus* in a lacustrine ecosystem?

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I. Abstract Body (up to 250 words)

Commercial cage culture in the Lake Victoria, Kenya has grown significantly in the past half-decade, leading to production of up to 12,000 tonnes of fish per 8 month cycle. This has motivated more investments, which if not watched can be detrimental to the Lake ecosystem. The present study was conducted to generate useful insights which will inform continued development of the venture for sustainability. The study compared production of *O.niloticus* between cages and the wild and associated water quality parameters to provide baseline information towards sustainability. Data was collected on three cage establishments and at a specified control point 500m away from each of the cage sites for fish morphometrics, water quality, phytoplankton composition and microbiological aspects by using standard protocols and procedures. The fish from the wild and in two cage establishments exhibited isometric growth (b>3) while those from one cage site had negative allometric growth (b=2.47). Physico-chemical parameters and nutrient levels showed no significant differences between the cages and in the control point (*p>0.05*) and were all within the recommended ranges for culture of this species. The findings suggest that further improvements need to be done to ensure more productivity from the cages. However, as cage culture takes root and expands in the region, policy development should be geared towards sustainability of the common resource through inputs into the ecosystem through fish feed, seed and chemotherapeutants.

Image: Cage establishment in Lake Victoria, Kenya.



II. Reference:

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