

THE STATUS OF FISHERIES PRODUCTION AND LEGAL REFORMS TO SUSTAIN FISHERIES

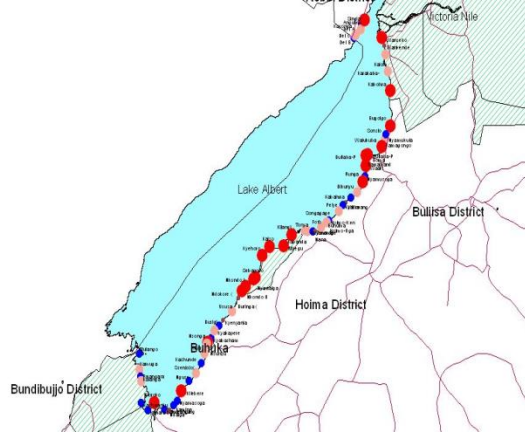
By: Geoffrey Dheyongera

Principal Fisheries Officer – Resource Management

**A PRESENTATION AT THE INCEPTION WORKSHOP ON BUILDING ADAPTIVE
FISHERIES GOVERNANCE CAPACITY**

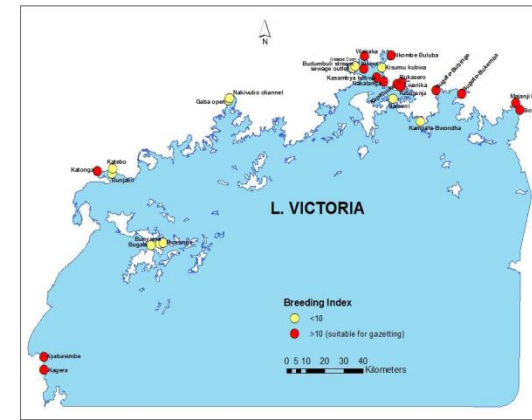
RIDAR HOTEL, SEPTEMBER 2024

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Fisheries Resource Base

- Lakes Victoria, Kyoga, Albert/A. Nile, George/Edward/Over 160 minor Lakes. Rivers, swamps/dams (20% of Uganda)
- Over 250 fish species including farmable ones

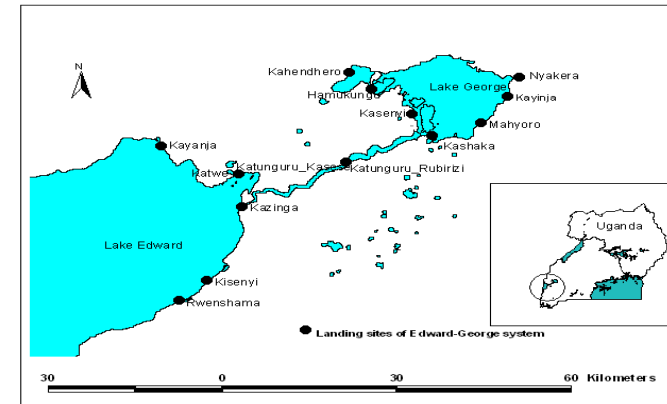
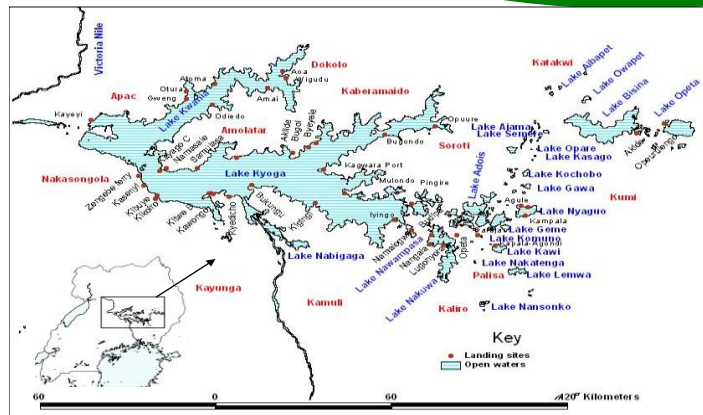


Employment/Nutrition

- Over 1.2m people directly and 3 million livelihoods
- Mainly artisan women and youth
- 50% of animal protein food
- 10 kg as compared with the world standard of 17 kg of FAO

Economy

- Second foreign Income earner
- Contributes 3% to national GDP and 12% to Agriculture GDP

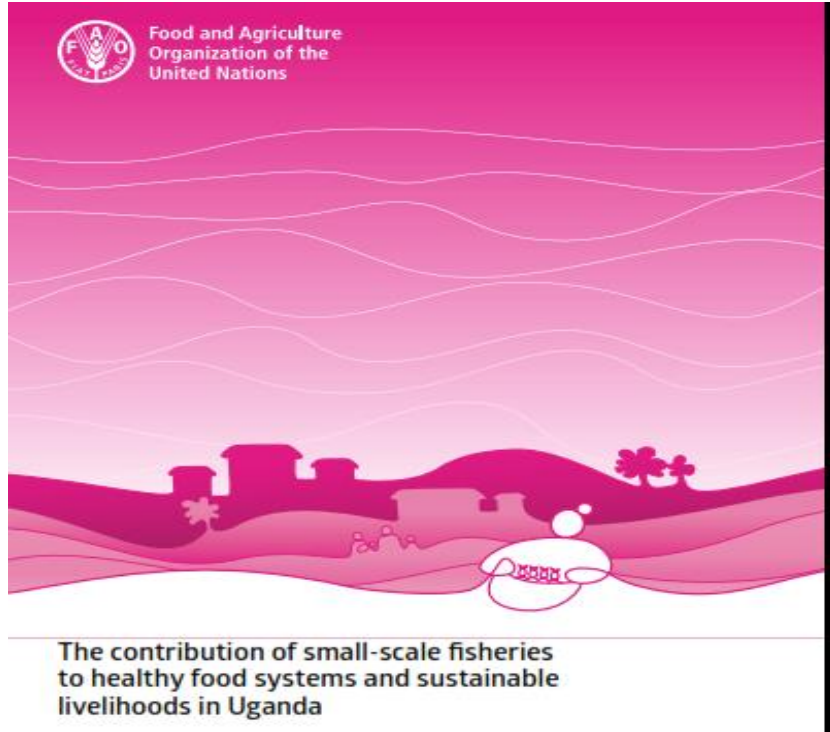


Active fishing fleet

Lake	Landing sites	Boats	Fishers
Victoria	455	30,000	70,000
Albert and Albert Nile	238	18,000	35,030
Kyoga	285	13,000	40,000
Edward	5	299	917
George	8	209	414
Kazinga Channel	2	38	76
TOTAL	993	61,546	146,437

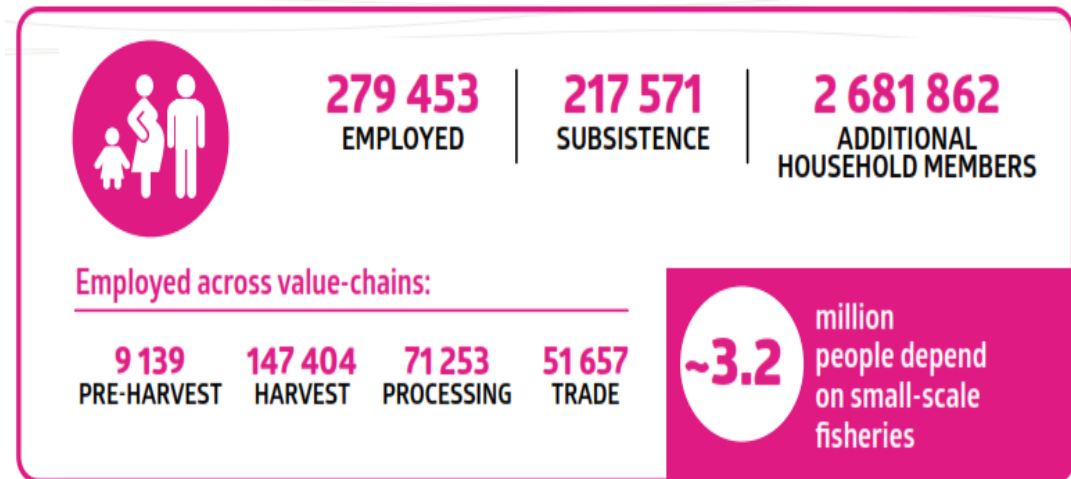
Source: Compiled from frame survey data at DiFR

Importance of fisheries



The contribution of small-scale fisheries to healthy food systems and sustainable livelihoods in Uganda

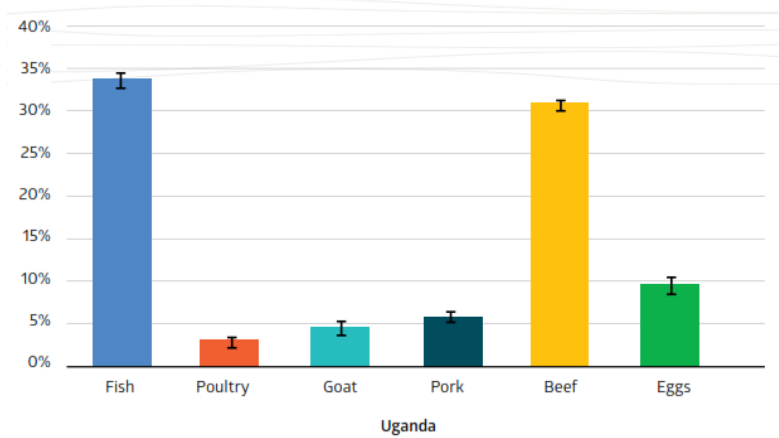
Fiona Armstrong Simmance, Jacob Olwo, Bwambale Mbilingi, Geoffrey Dheyongera, Margaret Masette, Molly Ahern, Nicole Franz, Lena Westlund, Jeppe Kolding, Sloans Chimatiro, Gianluigi Nico, Kendra A. Byrd, Jennifer Gee, Roxane Misk, Ansen Ward.



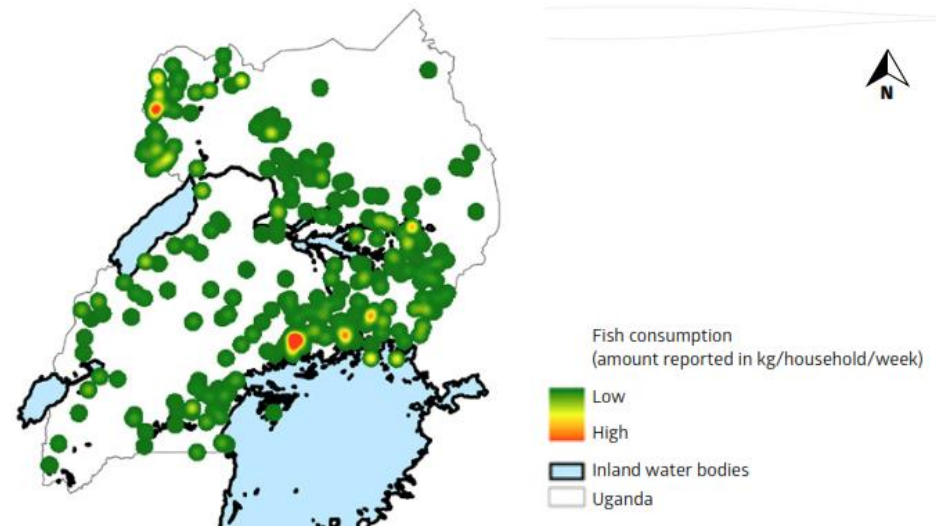
Simmance et al., (2023)

Nutrition

Share of HH (%) consuming animal source protein



Fish consumption pattern



Fish is leading source of animal protein

Consumption low even within fishing community

**Implication: Demand still high
increased production is required**

Management Regime

- Historically, fisheries management was based on central command and control
- Fisheries co-management introduced under the NFP (2004)
Over 700 BMUs were established on all water bodies in Uganda
- The Department of Fisheries Resources was transformed into fully fledged Directorate- over 60 technical staff backed by over 300 Local Government technical fisheries Staff.

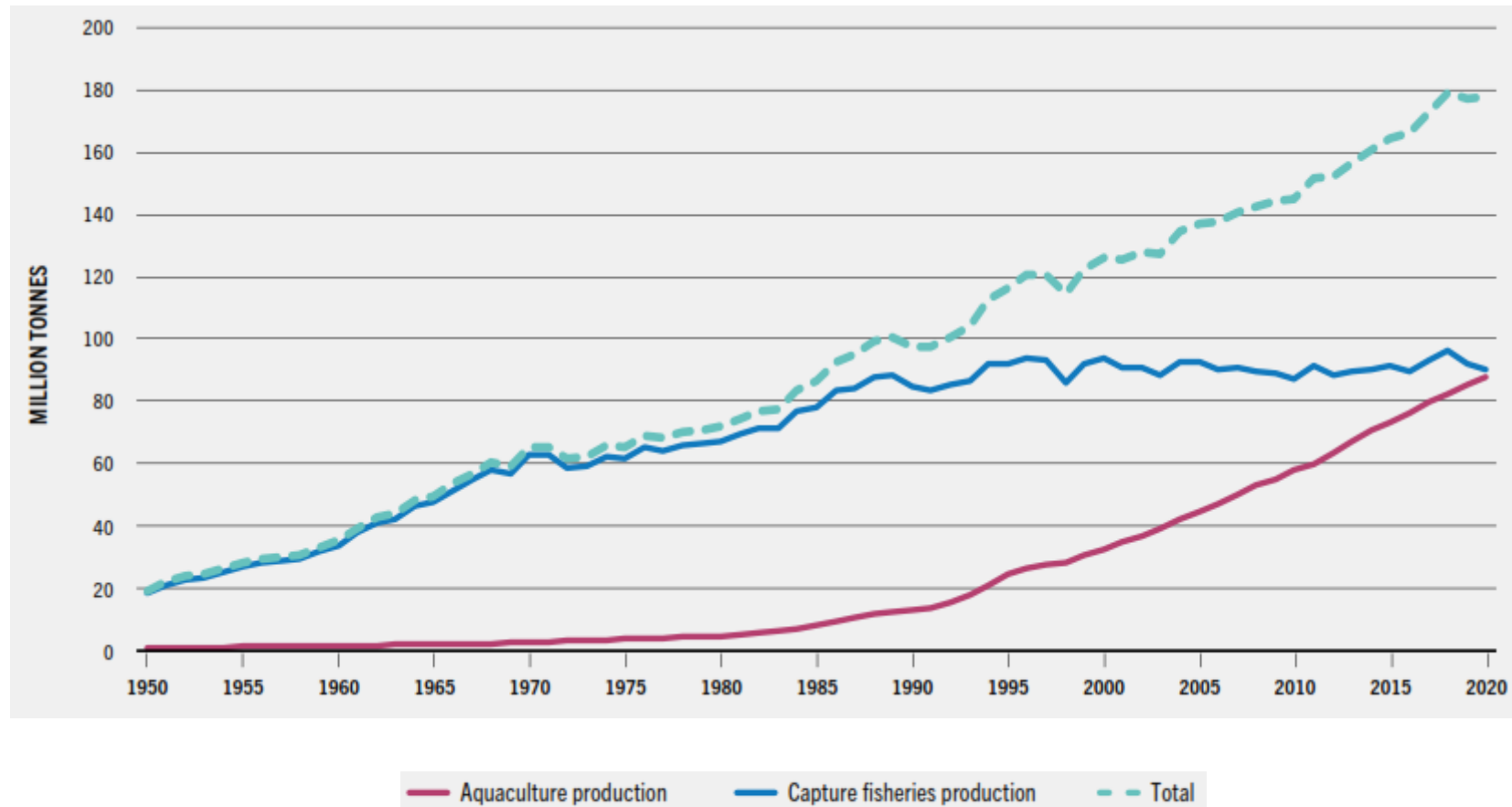
Management Regime

- There are non state actors under the co-management arrangement that include;
 - UFPEA involved in self policing
 - BMUs (Formerly)
 - and other CSOs
- In Nov 2015, the operations of the BMU and Fisheries Staff were suspended in area of law enforcement
- The need for co-management remained - establishment of interim Fish Landing Site Committees (FLSCs) to handle fish traceability issues (December 2015- July 2016)

MAJOR ISSUES IN THE SECTOR

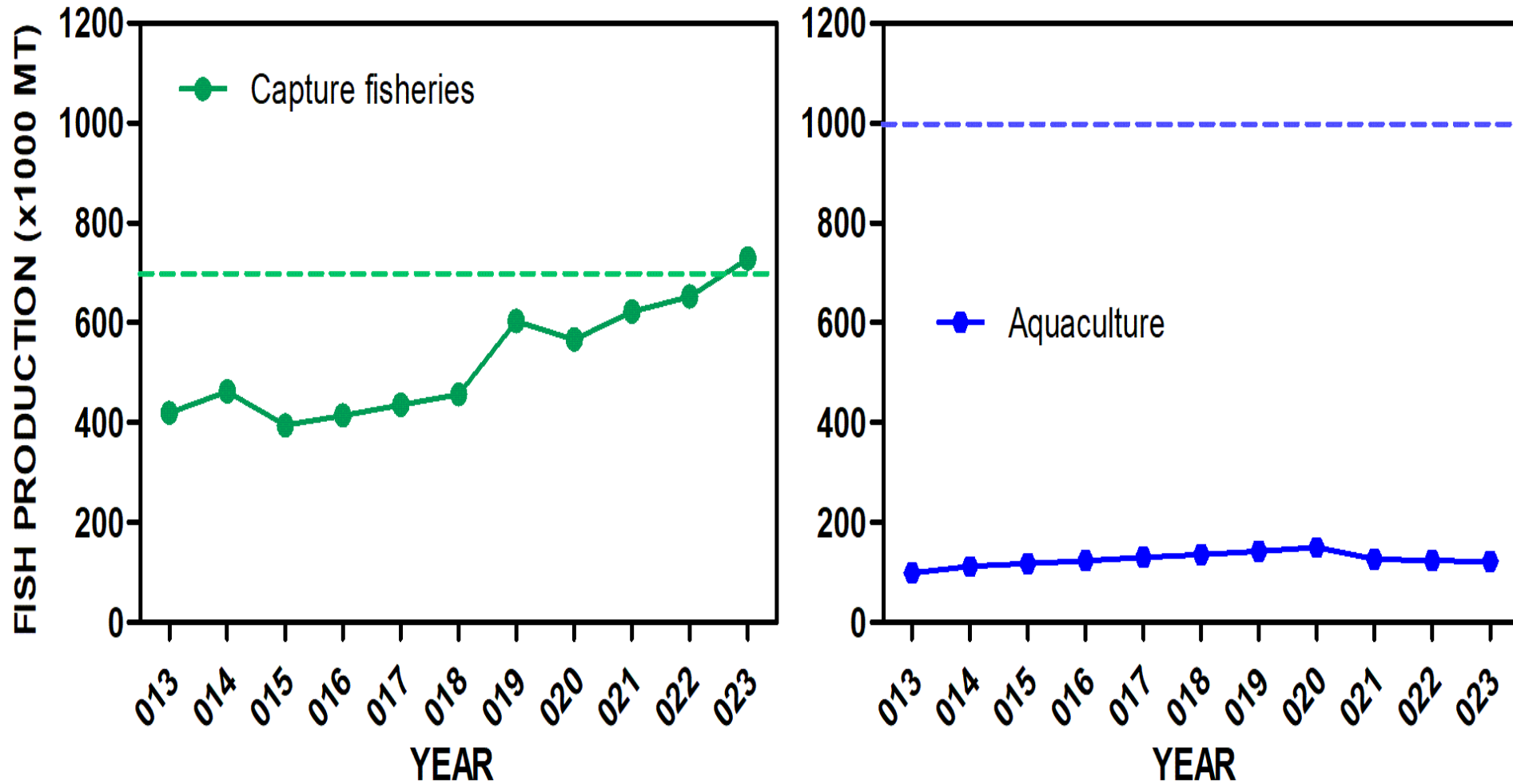
- Collapsing fisheries industry
- Changed fishery dominated by small fish species
- Resource utilization conflicts also accelerated by entry on non citizens

Global fisheries and aquaculture production



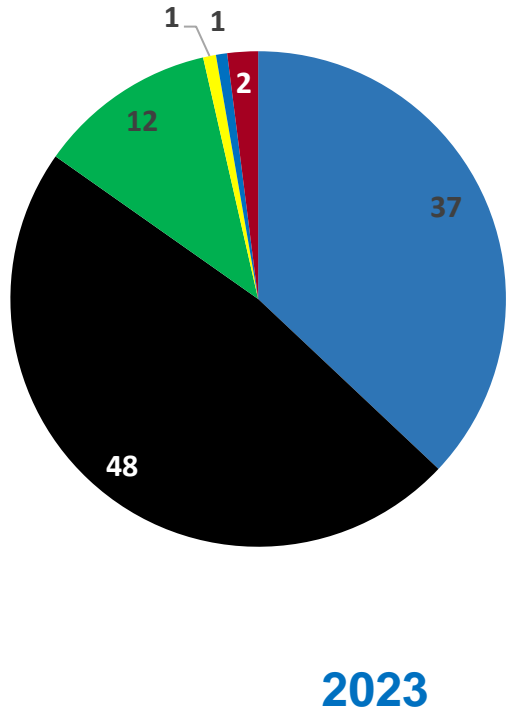
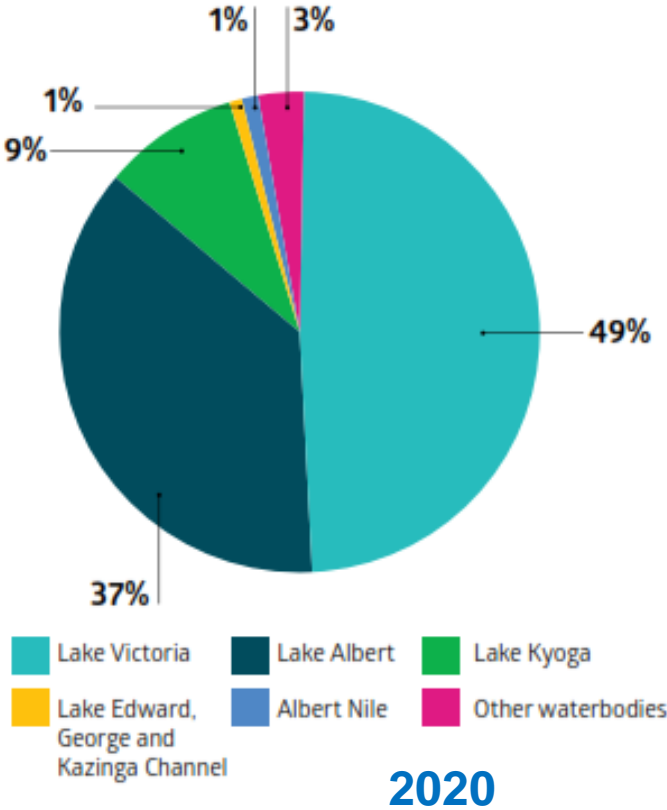
Source: SOFIA 2022

Fish production trends

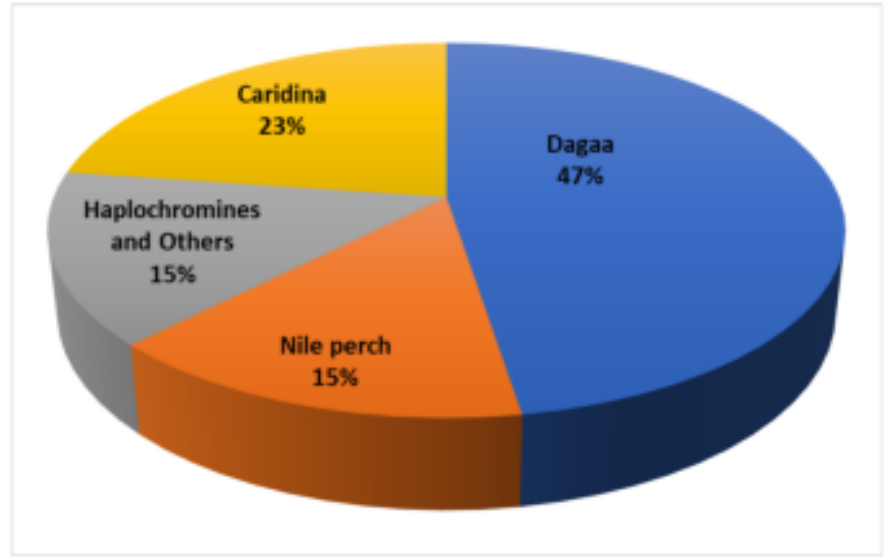
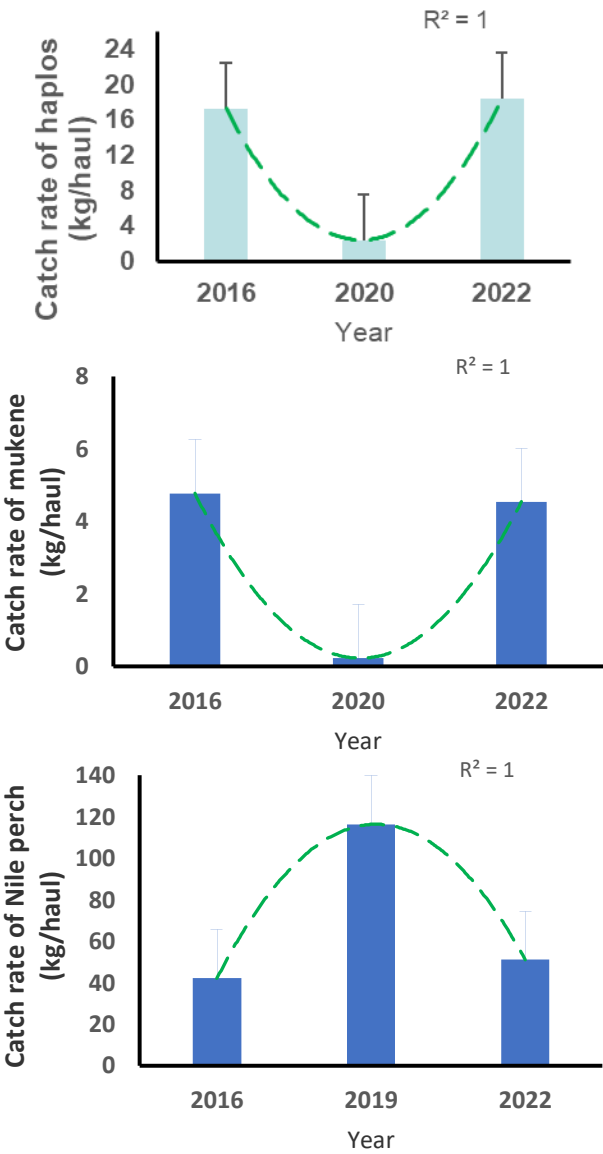


Source: Administrative data and CAS reports at DiFR

Contribution to total capture fisheries production by lake



Catch rates and species proportions

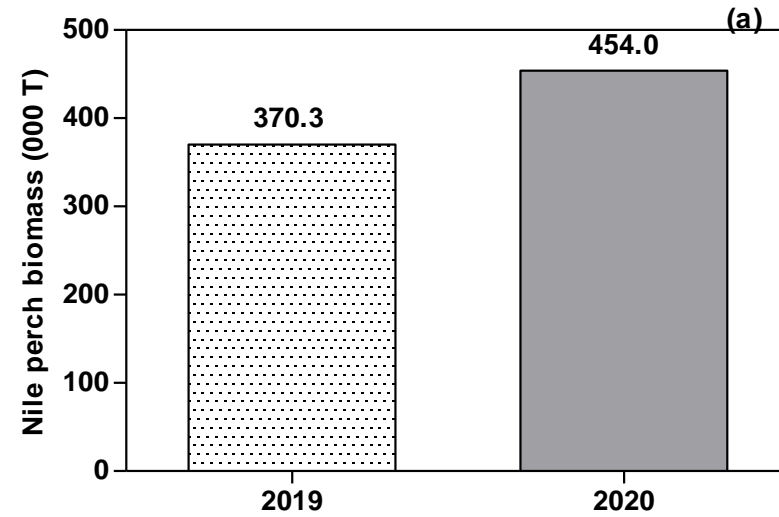
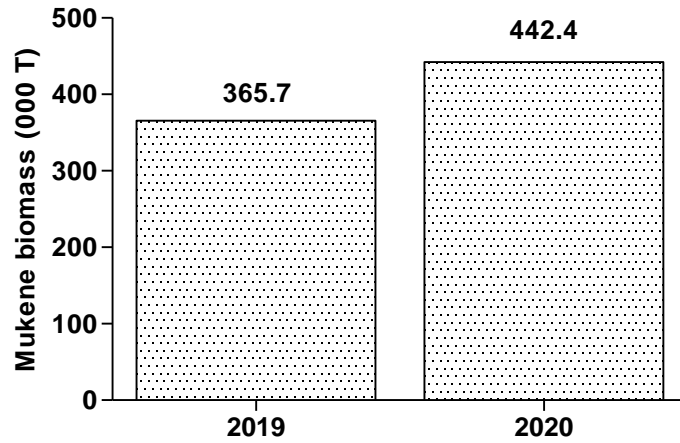


Proportion of catch as at 2022

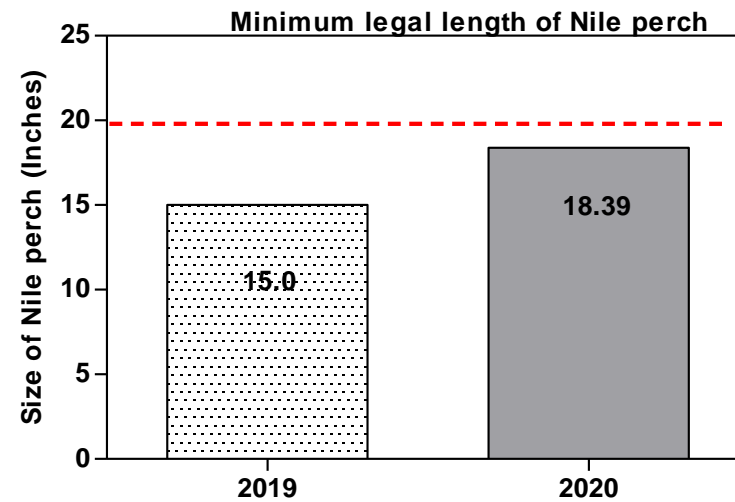
SPS now over 60% by 2023

Source: Elaborated from Hydroacoustic survey report, 2022

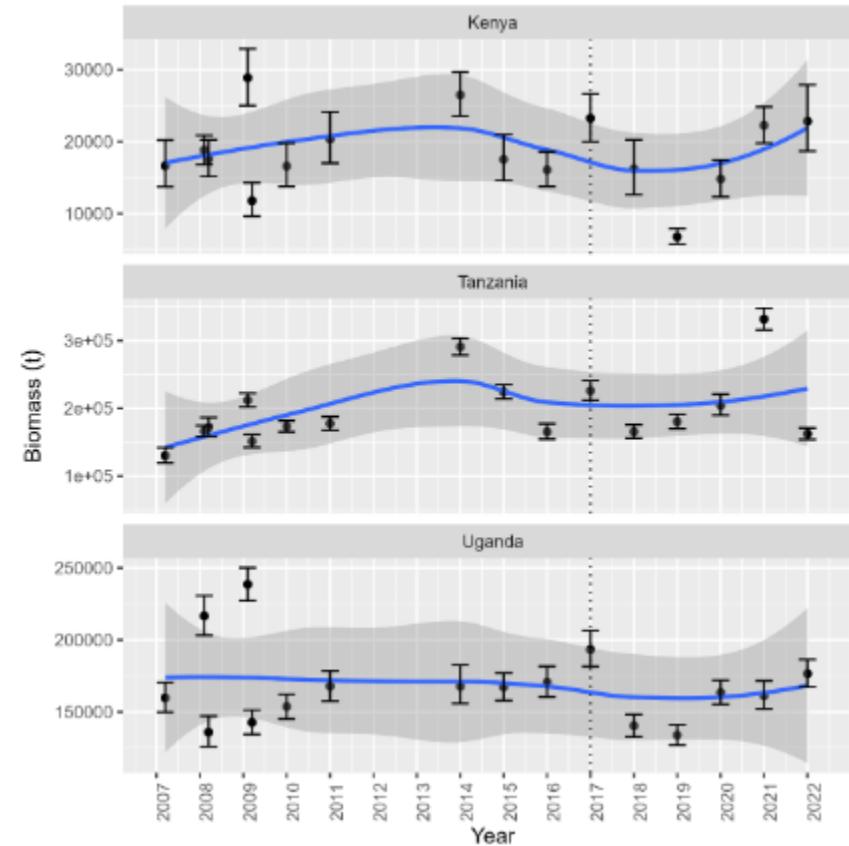
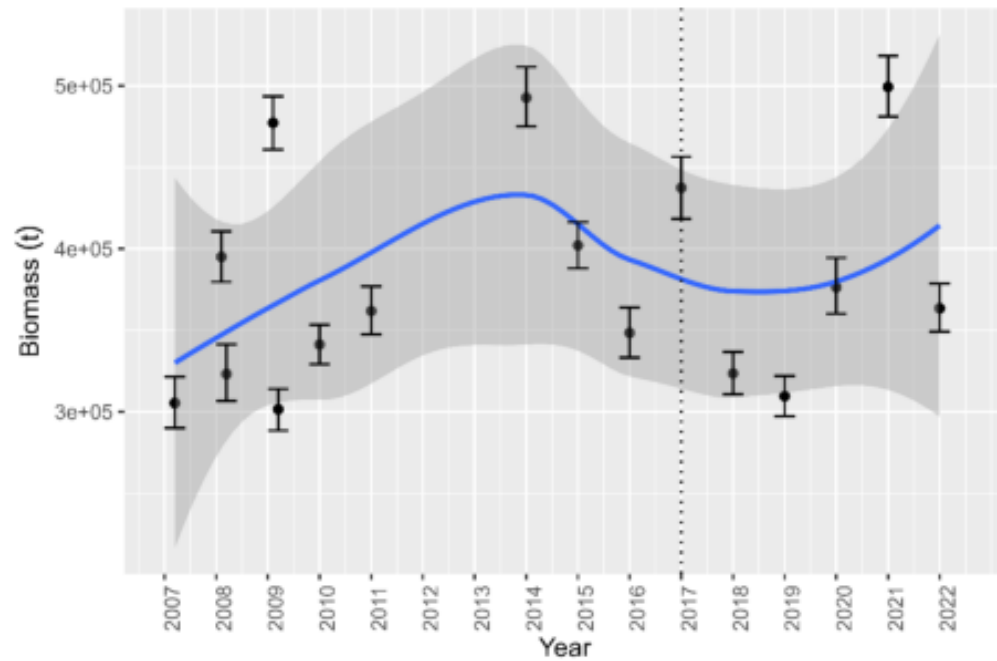
Biomass of mukene and Nile perch in Victoria



(b)

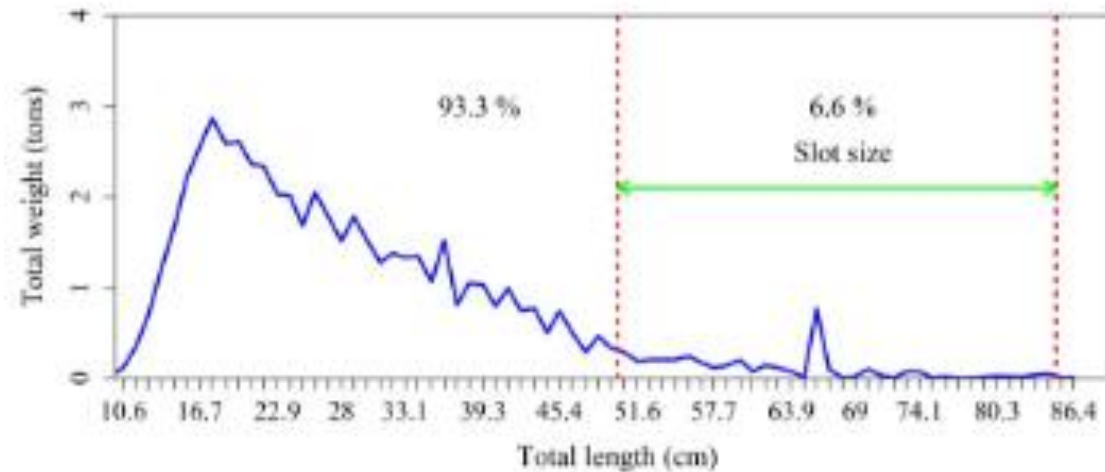
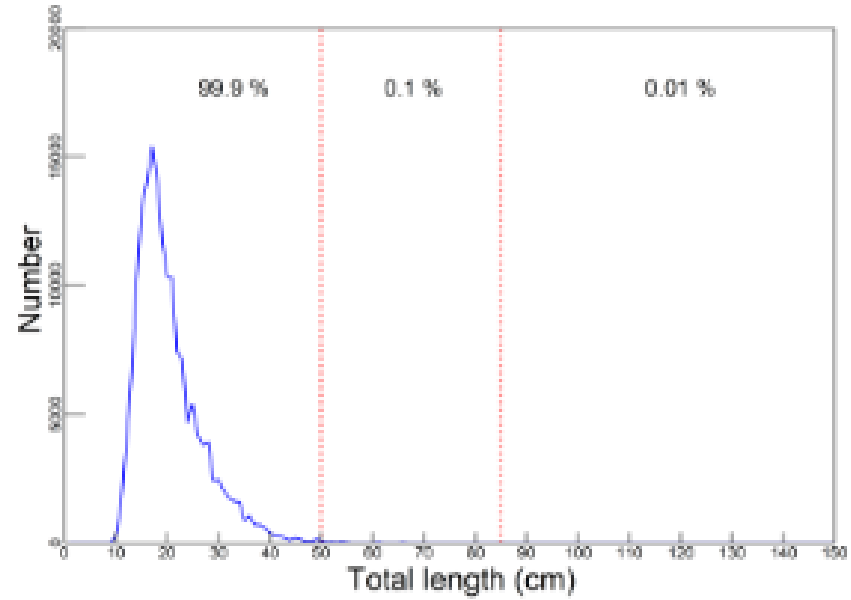
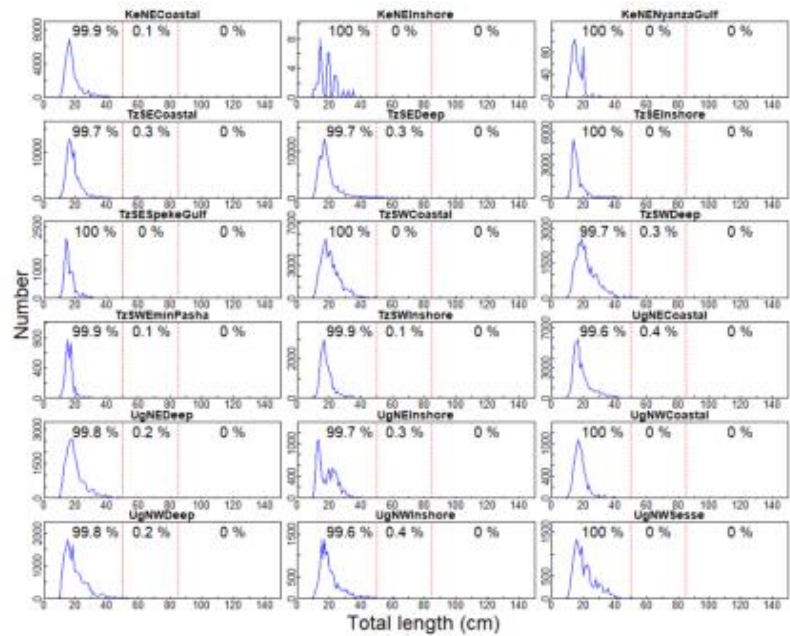


Trends in Nile perch biomass- Lake Victoria

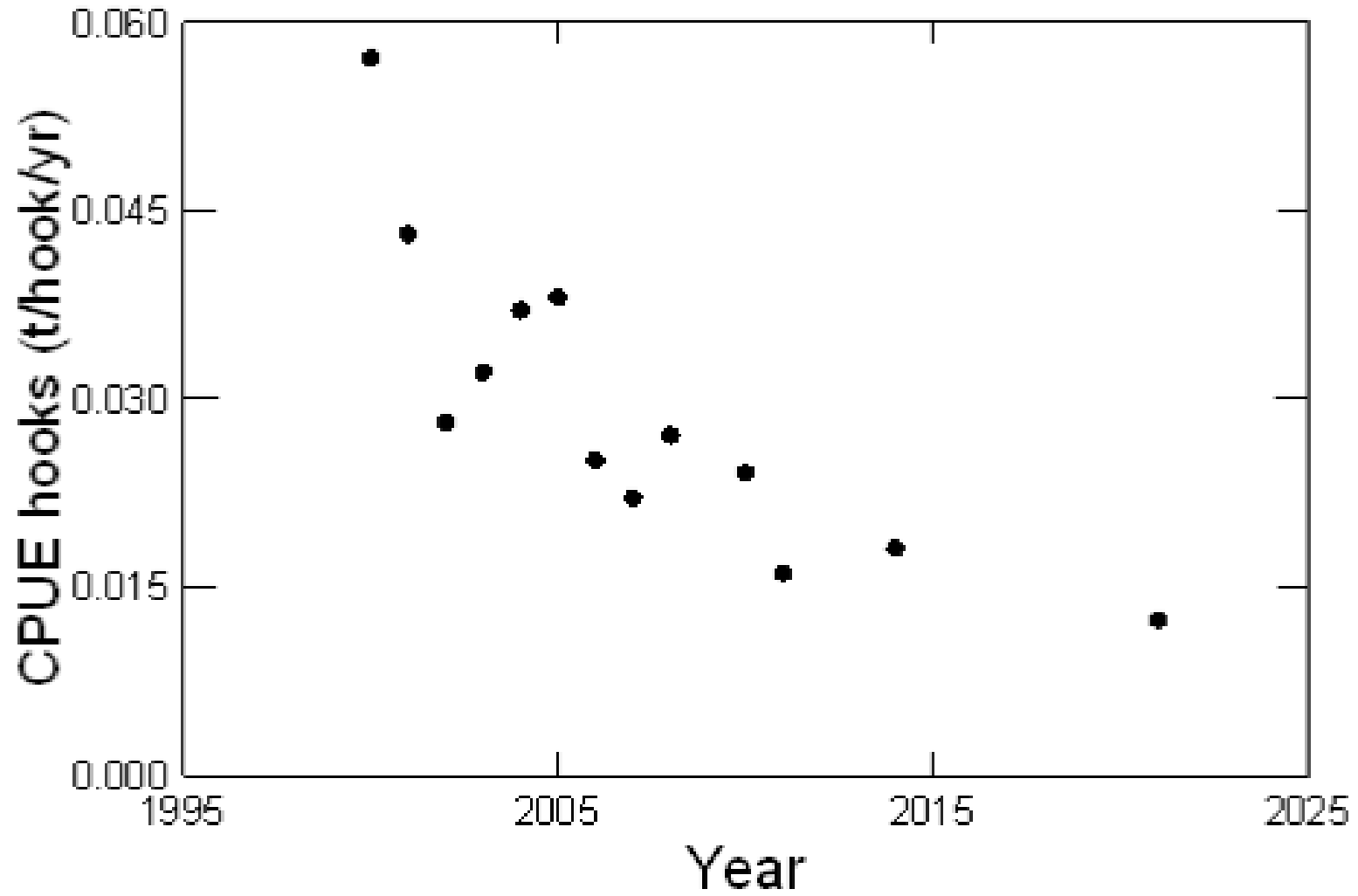


Source: LVFO Hydroacoustic survey report, 2022

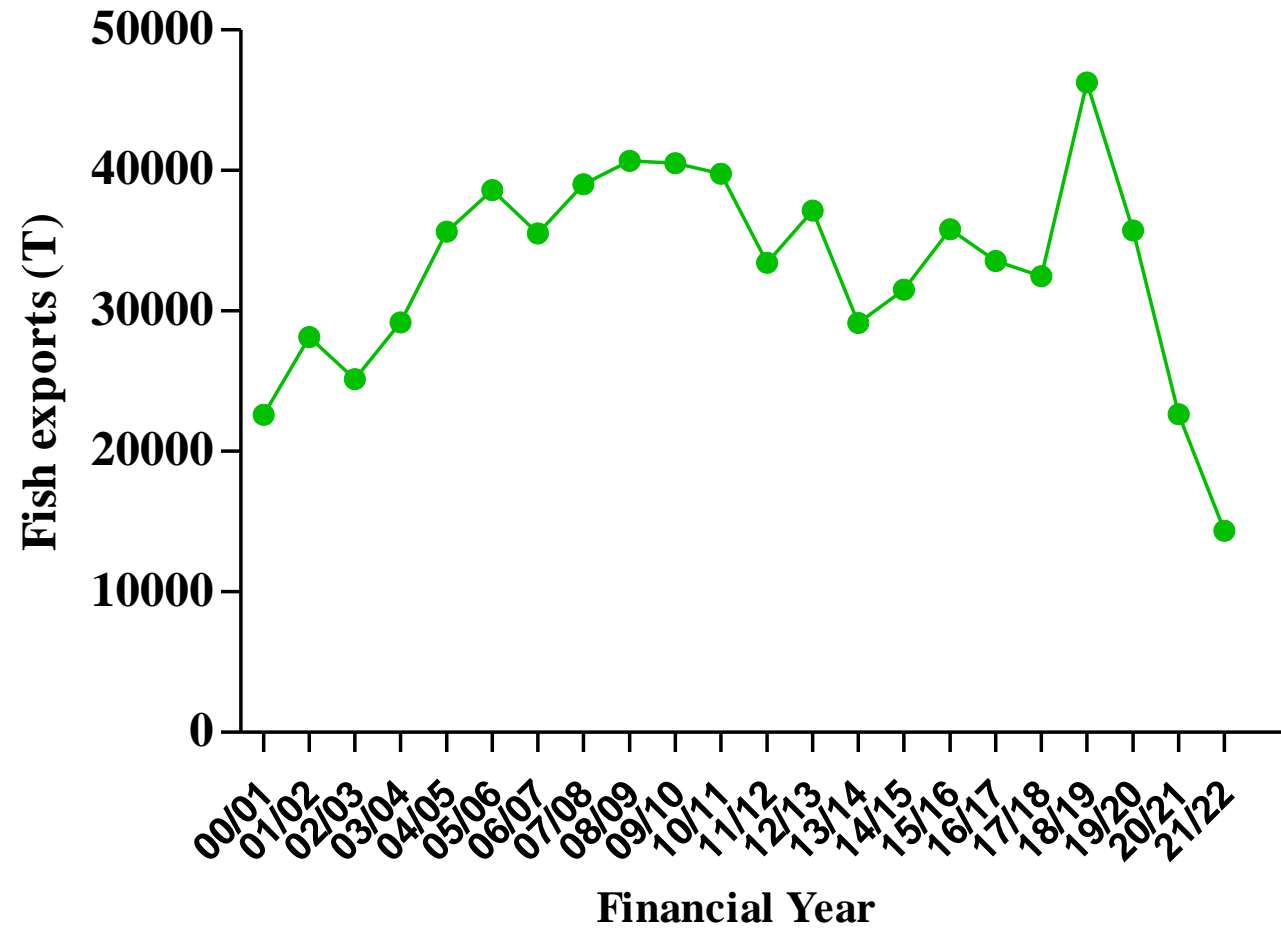
Size distribution of Nile perch



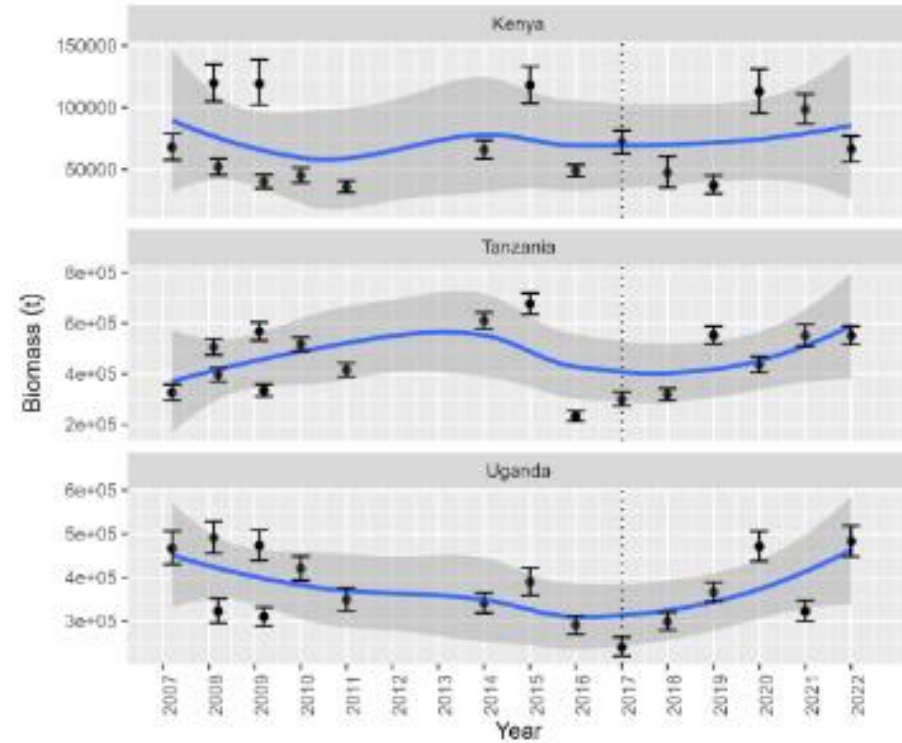
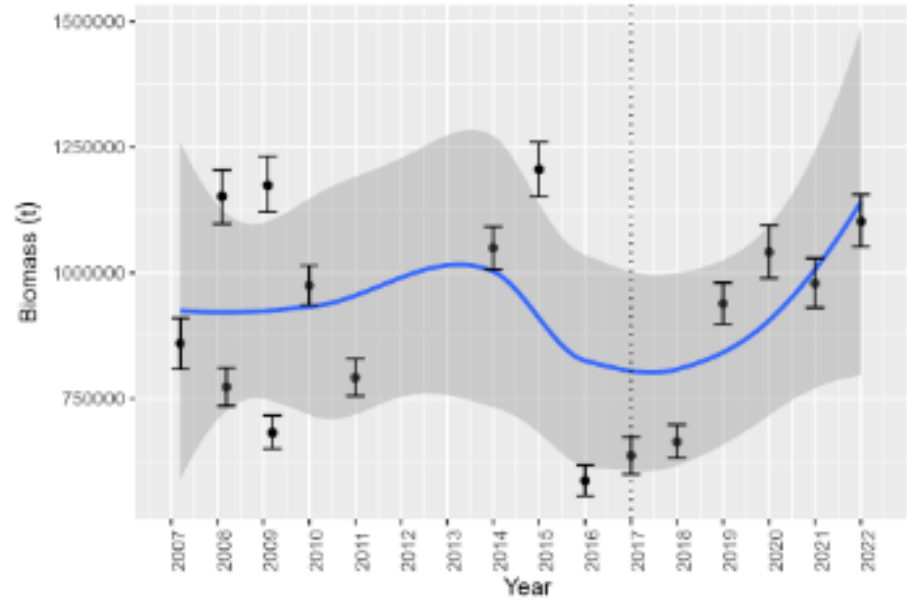
Trends in catch rate of Nile perch



Fish export trends



Trends in mukene biomass- Lake Victoria

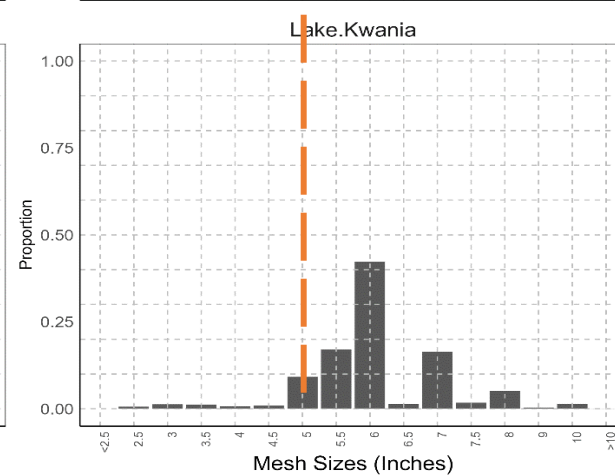
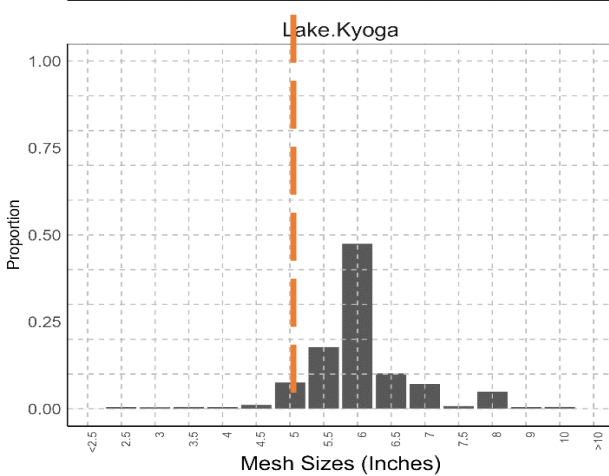
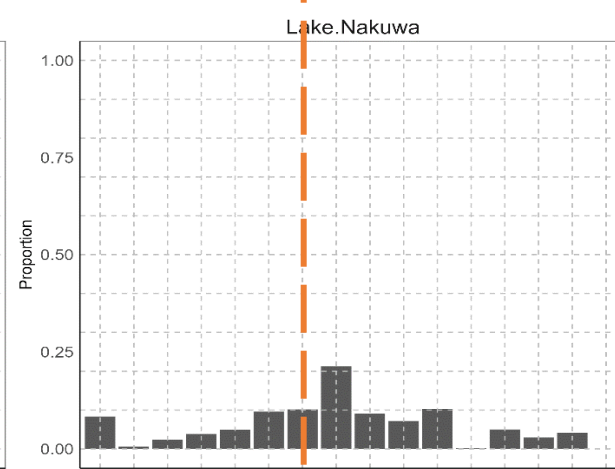
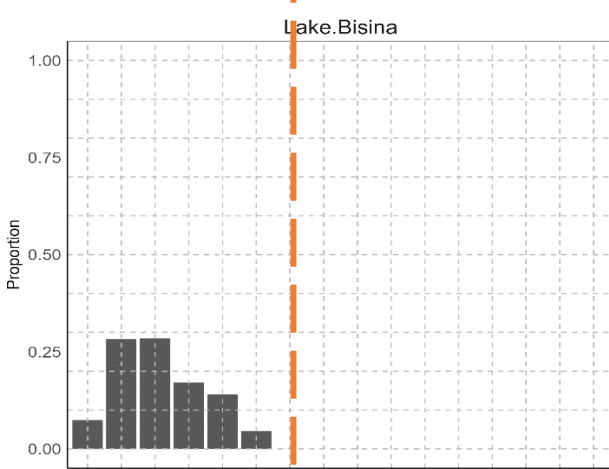
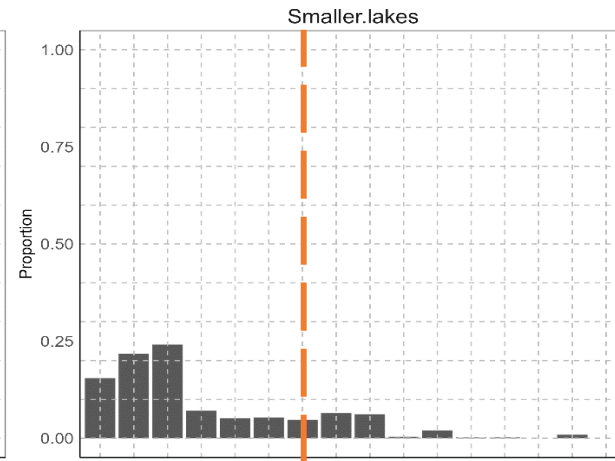
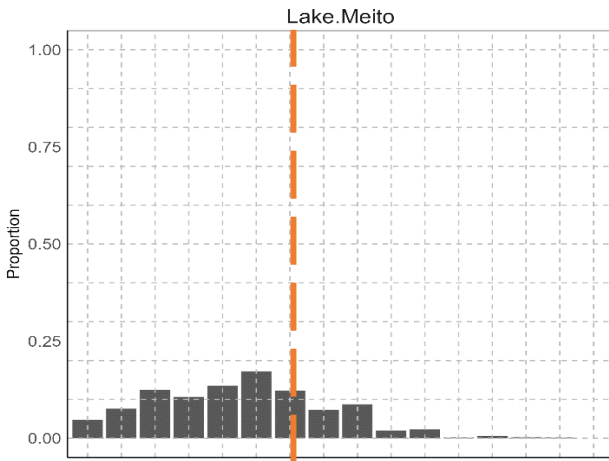


Source: LVFO Hydroacoustic survey report, 2022

Change in fish target species on Lakes Kyoga and Kwania

Parameter	1991	1997	2002	2008	2013	2023	%Change (2013 to 2023)
Landing sites		266	289	245	245	223	-9.0
Fishing crafts	4,045	6,501	6,462	8,405	10,882	13,643	25.4
Crafts using gillnets	2,924	2,567	1,647	4,166	4,601	6,574	42.9
Crafts using beach/boat seines		885	983	998	745	362	-51.4
Crafts using hooks	186	180	976	896	1354	1,366	0.9
Crafts using Mukene nets		109	619	400	906	1,615	78.3
Crafts using basket traps	118	161	389	323	472	510	8.1
Crafts using cast nets			116	244	481	527	9.6
Crafts using Monofilaments					2,145	948	-55.8


Gillnets composition in the Kyoga basin



CORE DRIVERS TO DECLINING FISHERIES

- Increasing population dependent on the fisheries sector leading to increased fishing pressure
- Inadequate capacity and participation of stakeholders in management arrangements
- High market demand for fish at international, Regional and National levels
- Inadequate investment in Fisheries Sector
- Open access approach

RESULTANT IMPACTS

- Environmental and habitat degradation- loss of critical habitats leading to aquatic biodiversity loss
 - Overfishing
 - Illegal fishing and trade in immature fish
 - Poor post harvest facilities and practices
- 
- Reduced catches
 - Reduced income of fishers
 - Poor adaptive capacity and resilience

OPPORTUNITIES IN THE SECTOR

- The resource base is wide (lakes, rivers, dams, ponds etc)
- Nile perch is highly fecund and capable of recovering if properly managed;
- High potential for aquaculture development;

OPPORTUNITIES IN THE SECTOR

- Good political will;
- Readily available fish markets;
- Research technologies available for increased fish production
- Enabling Policy environment (PPP law among others)

14 LIFE BELOW WATER



SDG 14 TARGETS:

14.1 By 2025, prevent and significantly reduce marine pollution of all kinds

14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts

14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices

14.5: By 2020, conserve at least 10 per cent of coastal and marine areas

14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing

14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources

SET TARGETS - WHERE DO WE WANT TO BE:

- *Increasing fish production from capture and aquaculture fisheries to 1.7 million MT to enable increased operational capacity of processing plants*
- *Reduce illegalities by 80%*
- *Promote community-based fish conservation through building capacity for self-policing*

SET TARGETS - WHERE DO WE WANT TO BE -5 yrs:

- Reduced illegal regional trade (IUU) by 80%
- Increase per capita fish consumption from 7kg to at least 15kg
- Reduce post harvest losses by 20%
- *This will: increase the value of fish at beach, hence increased fish export*

PROPOSED REFORMS TO ACHIEVE THE SET TARGETS

- 1) F&A Act, 2023: MCS unit with a collaborative and inclusive fisheries enforcement approach
 - *The Fisheries Enforcement to prevent, deter and enforce jointly national fisheries concerns on land and water targeting; curbing trade in immature fish; control importation and usage of illegal fishing gears; control Illegal unregulated and unreported fishing (IUU) and illegal fishing activities.*
 - *Standard Operating Procedures for Enforcement have been reviewed with strict and clear terms and guidelines to streamline the operations and activities of fisheries enforcement in Uganda.*

Management measures to achieve the set targets

In put (effort) controls

- Limiting fishing effort:
 - Restrict number of boats per lake
 - Restrict NO. of gears per boat
 - Mesh size of fishing gears
 - Fishing holidays/closed fishing season
 - Size of fishing vessels
- Access controls through licensing

Management measures to achieve the set targets

- *Re-establishment of co management structures at grassroots, subcounty, districts and regional levels*
- Regulation light fishing methods (light intensity/gear mesh & depth)

Output (catch) controls

- Total allowable catch limits
- Individual transferable quotas
- Prohibition of certain fishing methods and gears
- Species-specific licensing – control boats per species

Growth rate enhancement

- Limit fishing zones (FBAs)
- Control habitat degradation

Conclusions

- *Measures for sustainable fisheries exploitation can achieve the intended goals*
- *Strengthening capacity of fishing communities to adequately cope with livelihood challenges posed by changing management regimes, climate change and variability is inescapable*
- *Consequently, building adaptive fisheries governance capacity is key*