



**BUSITEMA
UNIVERSITY**
Pursuing Excellence

**ASSESSEMENT OF THE FISH CATCHES IN THE UPPER VICTORIA
NILE UGANDA. ACASE STUDY OF NAMASAGALI WATERS, KAMULI
DISTRICT**

BY

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INFORMATION SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENT
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RESOURCES BUSITEMA UNIVERSITY.**

JUNE 2019

DECLARATION:

I, Kwijuka Ivan, declare that this thesis titled **Assessment of the fish Catches in the Upper Victoria Nile Uganda. A case study of Namasagali Waters, Kamuli District.** Is my original work and has never been submitted for award of a degree in any other university.

Signature..... ..... Date..... 07/06/2019.....

APPROVAL

We certify that this dissertation satisfies the partial fulfilment of the requirements for the award of the Degree of Science in Fisheries and Water Resources Management from Busitema University, Namasagali Campus.

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DEDICATION

I dedicate this dissertation to Mr and Miss Mujuni Lauben for their endless support during my journey of education, May God protect you to see the fruits of your sweats.

ANCRONOMYS

| | |
|---------|--|
| FAO | Food and Agriculture Organisation |
| NaFiRRI | National Fisheries and Research Resource Institute |
| MAAIF | Ministry of Agriculture Animal husbandry and Fisheries |
| NGOs | Non-Governmental Organisations |
| MM | Millimetre |
| CAS | Catch Assessment Survey |
| PSUs | Primary Sampling Units |
| SSUs | Secondary Sampling Units |
| CPUE | Catch per Unit Effort |
| GPS | Global Positioning System |
| LVFO | Lake Victoria Fisheries Organisation |

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ABSTRACT

This research was carried out to assess the fishery status of river Nile a case study of upper Victoria Nile in Namasagali sub- county, Kamuli district, with specific objectives; to determine the relative indices of fish catches in relation to the fishing gears and its impacts, to determine the fish species composition and size structure of the fish catches, to determine the effort of boat size on the catches in the upper Victoria Nile. The study involved the use of both frame survey and catch assessment survey data sheets .The Frame survey captured all the important characteristics of the fisheries and facilities supporting the fisheries and thus provided a strong baseline for future reference of management interventions for the river. CAS for each of the selected landing sites the names of major fish landings were sampled along with the records of the number of active boats at each landing. The For each sampled boat the following information/records were made: Date of sampling, boat type, number of days the fisherman goes out fishing per week, whether day or night catch, type of propulsion, number of crew per boat, gear type, size and number per boat, types of species caught per gear, gear size and fishing method, total weight of individual fish species per gear, gear size fishing method and the total length each species were measured. The fishermen provided information on the price (Shs/Kg) of different fish species at the landing site. The data was collected for the period of two months and it was analyzed using the excel data base in tabular form and graphical form for easy interpretation. In the study in terms of species diversity, on the commercial basis most fishers harvested the following fishes using gillnets and other gears; *Synodontis afrofisheries*, *Labeo species*, *Momyrus Kanume*, *Clarias gariepinus* are going under extinction as it is shown by their average weight per boat type code sampled compared to other fish species, 90.83% of *Lates niloticus* was found to be harvested when they are immature. Annual estimates indicated that 3,409.7 tonnes and income of 24,291,981 Uganda shillings from all the landing sites. This income is very low that need management intervention on the fisheries sector.

CHAPTER ONE:

INTRODUCTION

1.1 Background of the study

A river is a course of water that originates in the mountains and flows downwards until it reaches the sea. On its perpetual journey, river water crosses land, hills and plains. River Nile, with an estimated length of over 6800 km, is the longest river flowing from south to north over 35 degrees of latitude (FAO, 1997). It was long thought that Lake Victoria was its ultimate source, the lake itself is fed by rivers that arise further south, the most important of which is the Kagera. Until recently, it was believed that its tributary, the Luvironza that springs in Tanzania at 4 ° S was the Nile's ultimate source. The Nile is the only permanent river that manages to cross the Sahara, the largest desert in the world, and reach the Mediterranean Sea, yet its early beginnings are in a Montana equatorial climate and it traverses a series of climatic zones before reaching its delta. Its basin orientation is unique among the major rivers in the world in that it runs almost perfectly from south to north, discharging at 31° N. Each climate zone which it crosses shows considerable variability in precipitation and run-off (Camberlin, 2009), but over more than half its length it receives less than 150 mm of rain per annum. Its basin is relatively narrow and small (3.12×10^6 km²) compared to that of most other large rivers of the world (the Congo, ca 4×10^6 km² according to Bailey, 1986; the Amazon, ca 7×10^6 km² according to Sioli, (1984). Rivers are the most important freshwater resource for man. Social, economic and Political development has, in the past and present, been largely related to the availability and distribution of fresh waters contained in riverine systems. The function of the rivers include: Rivers attracts tourist attraction, water for home and industrial use, source of fish, ease means of transport, rainfall formation, generation of hydroelectric power, research areas among many functions.

Rivers play an important role in fishery development, as major sources of fish for rural households and to some extent for industrial processing, hydropower dams, irrigation and fish farming; since they can be used for cage fish farming, rivers carry the nutrient rich waters most especially from the watersheds into the ocean whereby they contain the organisms that the marine fish feed on, also rivers acts as the breeding grounds for the andromous fishes which migrate from sea waters to fresh

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