

BUSITEMA UNIVERSITY

FACULTY OF NATURAL RESOURCES AND ENVIRONMENTAL SCIENCES

DEPARTMENT OF FISHERIES AND WATER RESOURCES MANAGEMENT

**EFFECT OF CLOSED SEASON ON THE COMMERCIAL FISHERIES OF LAKE
KYOGA, NAMASALE FISH LANDING SITE, AMOLATAR DISTRICT**

BY

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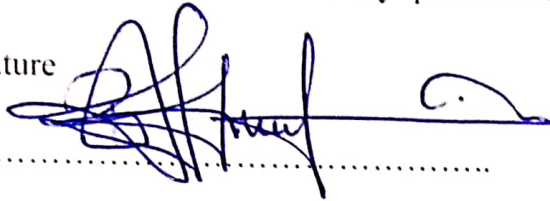
**A RESEARCH REPORT SUBMITTED IN PARTIAL FULLFILMENT OF THE
REQUIREMENT FOR THE AWARD OF A DEGREE IN BACHELORS OF SCIENCE
IN FISHERIES AND WATER RESOURCES MANAGEMENT OF BUSITEMA
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DECLARATION

I **BYARUHANGA VALENCE** declare that this Research report submitted to the Faculty of Natural Resources and Environmental Sciences is my original work and has never been submitted to any institution for award of any qualification.

Signature



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APPROVAL

This is to certify that this research report titled “**Effect of closed season on the commercial fisheries of Lake Kyoga, Namasale fish landing site, Amolatar District**” by Byaruhanga Valence has been done under my supervision and it is ready to be submitted to the Faculty of Natural Resources and Environmental Sciences, Busitema University.

Signature



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VIANNY NATUGONZA (PhD)

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DEDICATION

I dedicate this research report to my beloved parents, my siblings Miriam, Eric , Ronald and Charles for their endless prayers they offered to me through out this course. May the Almighty God bless you abundantly.

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First and foremost, I thank the Almighty God for granting me the gift of life, knowledge and for all the provisions throughout my academic journey.

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LIST OF ABBREVIATIONS

ADDP : Amolatar District Development Plan

BMUs : Beach Management Units

FAO : Food and Agriculture Organization

NaFiRRi : National Fisheries Resources Research Institute

SOPs : Standard Operating Procedures

UPDF-FPU: Uganda People's Defense Force-Fisheries Protection Unit

ABSTRACT

Lake Kyoga was closed to fishing for a period of over a year, from May 2019 to July 2020. This measure was taken after observing a consistent reduction in catches per unit of effort, and the aim was to recover the declining commercial fish stocks. The lack of information on how the fish stocks responded to this closure and how the fishers adapted to closing of the lake from fishing led to the need for this study in order to investigate the effect of closed season on commercial fisheries and people's livelihood around Lake Kyoga. The objectives of the study were to examine the perceptions of fishers on closed seasons, to analyze the catches and catch rates before and after the closure, and to assess adaptation strategies of fishers around Lake Kyoga during the closed season. A case study research design with an appropriate randomization procedure was used to interview the respondents on fish species caught, fishing gears used and their perceptions to closed season so as to find out how helpful the closure is to the fishery and entire fishing community. The study found out that the fishers were not aware of the closed season as a fisheries management tool, and they were not involved in decision making for the duration of the closure. Results indicated that the most caught fish species in Lake Kyoga is Nile tilapia. The commonly used fishing gear was found to be gillnet since it is used for both Nile tilapia and Nile perch. The Lampala net used for Mukene fishery was found to be of 0.8 mm mesh size, while hooks of size number less than 11 were found to be in use for mainly Nile perch. Findings indicated that fishers perceived closed season as a method of fisheries resource sustainability by observable increase in commercial fish stocks during the closure. It was also found out that fishers responded to closed season by joining Agriculture, trade and employment as alternative sources of livelihood. Therefore, the study concludes that there is a significant difference in catches and catch rates before and during the seasonal closure of Lake Kyoga but this reduces with increasing duration of fishing after the closed season.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Globally, fisheries contribute significantly to food security, employment and local economies, proportionally more significant in developing countries (FAO, 2020). Since the global population is projected to rise to 9.7 billion people by 2050, fisheries have an important role to play in feeding this growing population (Winfield, 2012). Total fisheries and aquaculture production reached a record of 214 million tones in 2020, generating USD 141 billion for capture fisheries and USD 265 billion for aquaculture, employing 58.5 million people and supporting livelihood of about 600 million (FAO, 2020).

Africa accounts for over 25 percent of inland fish captures, which represent an important source of food security, particularly in the case of landlocked and low-income countries (FAO, 2020). In Sub-Sahara Africa (SSA), capture fishery serve as a major means of livelihood strategy for more than 40 million people living in the region, and contributing more than US\$3.5 billion for the leading exporter countries since the region is the richest with natural and man-made water bodies (Temesgen et al., 2019). Fish is estimated to contribute to about 25% of the total annual animal protein supply, though, about 8% of the global total fish landing is from SSA, perhaps, over 60% of the supply comes from artisanal fisheries for both domestic and international markets and of these, about 4.7 million tons are from marine fishery (represents about 6% of the total global production) (Temesgen et al., 2019). The inland water resources in SSA cover an estimated 520,000 km² of which large lakes account for 41%, river floodplains 34% and larger reservoirs 8% while total river cover stands at about 35,000 km²(Ssempijja, 2016).The total marine and fresh water fisheries production in SSA stood at 12 million metric tons in 2020, thus representing an economic contribution of over 40 billion USD to African economies (FAO, 2020).

The East Africa Great Lakes (Lake Turkana, Victoria, Kivu, Tanganyika, Edward, Albert and Malawi) contribute the largest part of inland capture fishery (Temesgen et al., 2019). Lake Victoria

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