

**EFFECTIVENESS OF CAGE FISH FARMING IN REDUCING FISHING PRESURE ON
NATURAL FISHERIES RESOURCES: A CASE STUDY OF MASESE FISHING
VILLAGE ON LAKE VICTORIA, JINJA DISTRICT.**



BY

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DECLARATION

I TINDYEBWA BRIAN hereby declare that this research report is my original work and has never been submitted to any other higher institution of learning for any academic award.


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APPROVAL

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DEDICATION

I would like to dedicate this field report to the family of the late Gershom Karengyero, Mum, Mrs. Tiwangye Mary, Grandmother Seperanza Babra, my dear friends Nagaba Pered, Kembabazi Hollen and the entire Department of Natural Resources at Namassagali campus, the Staff and Students of Busitema University, Namasagali Campus.

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LIST OF ACRONYMS AND ABBREVIATIONS

EPA	Environmental Protection Agency
FAO	Food and Agricultural Organization
JCFFA	Jinja Cage Fish Farmers Association
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
NaFIRRI	National Fisheries Resources Research Institute
NAPE	National Association of Professional Environmentalists
NARO	National Agricultural Research Organization
NEMA	National Environmental Management Authority
NGOs	Non Governmental Organizations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Protection Programme
WFP	World Food Programme
WTA	Willingness To Adopt

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ABSTRACT

Uganda's capture fishery is declining majorly due to over fishing by the increasing fishing efforts driven by the ever increasing demand for fish and fish products within local and international markets. This results in increased fish prices which again stimulates more involvement of people in fishing with resultant effects of overfishing and degradation of the country's water resources. Aquaculture has been suggested as an alternative to reduce pressure exerted on fishery resources. This study assesses the effectiveness of cage fish farming in reducing fishing pressure on natural fisheries resources of Uganda. Masese fishing village on Lake Victoria was purposely selected for the study because it harbors both wild fishing and cage farming activities which provided for a purposeful and useful comparative study. A comparative sampling procedure was used to randomly select 70 respondents. Primary data was collected using semi structured questionnaires, direct observations, interviews and use of key informants. Secondary data from text books, annual reports and internet was also used. Data collected was analyzed using EXCEL and SPSS packages.

Results of the study showed that cage fish farming system is developing rapidly in Masese with over 450 cages owned by 65 fish farmers and the system has employed over 45 workers. A high level of activity change in the fisher community was observed with 23.81% of the cage farmers were formally fishermen on Lake Victoria. It was found that cage fish farming is more profitable than wild fishing at Masese. Profitability depending on the number of cages owned by a fish farmer, for example a cage farmer at Masese generated Uganda shillings 24,640,500 net profits than a fisherman using a medium engine boat with 8 Horse power evaluated over a period of eight months. Cage fishing has reduced fishing pressure on Lake Victoria by influencing withdraw of fishermen from the lake in favor of cage fishing, creation of more employment opportunities mostly for the unemployed youth. It has acted as an alternative source of livelihood for fishermen and it has supplemented fish supply thereby narrowing the demand-supply gap that is the primary driver of overfishing. There is a high level of willingness among the fisher community to adopt cage farming which is a good indicator of the potential of cage fish farming to reduce fishing pressure on Lake Victoria.

The study recommends strategic, targeted cage fish farming interventions by Government to increase fish production and decimate fishing pressure on the nature fish stocks.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

This research looked at the effectiveness of cage fish farming in reducing pressure on natural fisheries resources of Lake Victoria part of Jinja district. This chapter covers the background of the study, problem statement, objectives of the study and research questions, scope of the study, significance of the study and conceptual frame work.

1.2 Background of the study

In an article titled "How aquaculture can save Uganda's lakes" published on 19 June 2013 by the local news paper "the daily monitor" revealed that Uganda's fishing industry has moved from the traditional sustainable nomadic system, where fishermen move in circles to ensure conservation, to a fully commercial venture where most players look at making money at all costs.

This, pushed by the high demand of fish in and outside the country, has resulted in use of illegal fishing methods, overfishing and pollution of the country's lakes and rivers. There is political concern that revenues from exportation of fish had fallen from \$196m in 2006 to \$142.6m in 2013, while some fish factories had closed and others were operating below capacity.

This is attributed to irresponsible fishing practices, for e.g fishermen were using undersized nets to catch fish not only on Lake Victoria but on other water resources of Uganda. Meanwhile, fish prices continue to rise. Today, a kilogram of Tilapia (the most popular specie in Uganda) goes for Ug Shs 14,000 in Kampala markets. The many who cannot afford that often do with cheaper and sometimes premature alternatives. Though the sector is undergoing policy framework reviews to promote fish farming more emphasis was expected to be put on conservation, aquaculture and cage farming. Nevertheless the Fisheries Department annual report 2010/11 showed that aquaculture production had grown from 285 tons in 1999 to 100,000 tons in 2010. Although this represents enormous potential for Uganda's aquaculture production, the government needs to harness and promote extensive farming. According to the 2011 aquaculture network for Africa Review, fish farmers contributed minimally towards Uganda's total fish exports, with most fish (Tilapia) coming from the country's lakes and rivers. This presents a need for government to fully implement all the existing regulations, provide physical inputs to fish farmers and encourage credit support from both budgetary allocations and commercial banks

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