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**ANALYSIS OF THE PROFITABILITY OF FISH FARMING IN KABERAMAIDO
DISTRICT**

BY



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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND
ANIMAL SCIENCE IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR
THE AWARD OF THE DEGREE OF BACHELOR OF ANIMAL PRODUCTION AND
MANAGEMENT OF BUSITEMA UNIVERSITY**

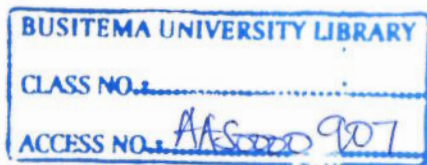
JULY, 2015

DECLARATION

I ACAM RUTH, declare that this dissertation is my own original work and has not been submitted in part or in whole in regard to any other academic qualification.

Sign. 

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APPROVAL

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DEDICATION

This research is dedicated to my father Mr. Okurut Julius Martin and friends for their efforts towards my education.

ACKNOWLEDGEMENT

I extend my sincere thanks to the staff of Kaberamaido District Local Government. Special thanks go to Dr. Ocoma Francis, the District Production Officer and Mr. Otoo, the district Fisheries Officer for their assistance and guidance offered during the course of the study.

My earnest appreciation goes to the staff of Busitema University; special thanks go to Mr. Okiror Simon Peter, Mr. Kauta Moses, Dr Ekou Justine and Mr. Mboguwa Joseph, for spending their precious time in giving meticulous and regular advice and guidance in the production of this manuscript.

Last but not least, I extend my thanks to my parents, relatives, and all persons whose names are not mentioned here, for their endless efforts to ensure that this piece of work comes to completion. Special thank go to my dear friends Waibi Sarah, Akia Gorety and Tino Florence for their support.

To God be the glory!

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
DPO	District Production Officer
DSIP	Development Strategy and Investment Plan for Agriculture
FAO	Food and Agriculture Organization of the United Nations
FCR	Feed Conversion Ratio
GMA	Gross Margin Analysis
HH	Household
LIFDCs	Low-Income and Food Deficient Countries
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
NFI	Net Farm Income
OLS	Ordinary Least of Squares
TFC	Total Fixed Cost
TR	Total Revenue
TVC	Total Variable Cost
UBOS	Uganda Bureau of Statistics

ABSTRACT

This study was conducted in Kalaki County, Kaberamaido district. Multistage random sampling technique was used to select 60 respondents. Data were collected from fish farmers using semi structured questionnaire and interview sessions. Data were analyzed using descriptive statistics, gross margin analysis (GMA) and Ordinary Least Square (OLS) multiple regression model. The results show that the mean age in years, household size and fish farming experience were 42.2, 7.1 and 7.7 respectively. The main species cultured was Tilapia (63.3%) mainly under intensive production level (70.0%). Fish farmers preferred monoculture (86.7%) to polyculture. All the farmers used earthen ponds of mainly 10 meters by 20 meters (65%), a majority 41.7% owned only one fish pond. Based on culturing period (production of table size), more than half of the respondents (55%) cultured their fish for a period of seven months. Annual gross margin and net return from fish production was Ushs 1,116,102 and Ushs 291,610 respectively. The net return on investment was 0.35. The price of catfish fingerlings, total cost of feeds, selling price for catfish, cost of labour and equipment were significant factors affecting the gross margins at 1 %, 5% and 10% confidence levels. Based on the findings of the study it can be concluded that fish production is profitable as evidenced by the positive net returns on investment and gross margins across the sampled farms in the district. Effort should be made by the government to take the fish farmers through various aspects of business management relating to fish farming, farmers should be trained on how to formulate the fish feeds to cut down the feeding cost, fish farmers should be trained on how to maintain records of their activities, and opening up of more hatcheries to make fingerlings easily available should be done.

CHAPTER ONE: INTRODUCTION

1.1 Background

Fish has been an important component of the population's diet in many parts of the world throughout centuries (FAO, 2008). The worldwide decline of ocean fisheries stocks has provided rapid growth in fish and shellfish farming, or aquaculture. Between 1987 and 1997, global production of farmed fish and shellfish (collectively called 'fish') more than doubled in weight and value, as did its contribution to world fish supplies. Fish produced from farming activities currently accounts for over one-quarter of all fish directly consumed by humans. As the human population continues to expand beyond 6 billion, its reliance on farmed fish production as an important source of protein will also increase (Rosamond *et al.*, 2009).

In Africa, some 35 million people (5% of the population) depend wholly or partly on the fisheries sector for their livelihoods (FAO, 1996). Fish has been recognized to constitute 55% of animal protein intake of an average Nigerian (Adekoya & Miller, 2004). Apart from utilization as food, fish is used in medicinal preparation (fish oils), in fashion industry, recreation (fishing sport), fish meals and decorations (Bolorunduro, 2004). Sub-Saharan Africa started aquaculture in the 1950s with the main objectives of food security, income and creation of jobs for the rural poor families (Hecht, 2006). Eventually, it began to drop after 4 decades as compared with Asia. The proof was that, Africa realized a sum of US \$72.5 million from 1978 to 1984 while Asia and the Pacific recovered US \$171.3 million (Lazard *et al.*, 1991). Though fish farming has grown strongly in most regions of the world where the potential exists, it has not done so in Sub-Saharan Africa. In spite of various efforts since the 1950s, returns on government and international aquaculture investments appeared to be insignificant (FAO, 2004) with less than 5% of the suitable land area being used. Sub-Saharan Africa contribution to world aquaculture production is less than 1% (Hecht 2006).

Aquaculture is an important fish subsector in Uganda's economy. It provides affordable source of quality protein (Rutaisire *et al.*, 2009), it is a main source of foreign exchange through exporting baits and fingerlings to Kenya, Rwanda and Tanzania (FAO, 2012). Though aquaculture is facing many limitations like market imperfections, it is still being promoted to

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