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P.O. Box 236, Tororo, Uganda
Gen: +256 - 45 444 8838
Fax: +256 - 45 4436517
Email: info@adm.busitema.ac.ug

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SOCIO ECONOMIC FACTORS INFLUENCING FISH FARMING IN SOROTI DISTRICT



OTIM NATHAN

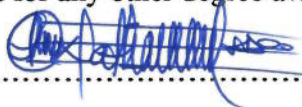
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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND ANIMAL
SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF
THE DEGREE OF BACHELOR OF ANIMAL PRODUCTION AND MANAGEMENT OF
BUSITEMA UNIVERSITY**

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DECLARATION

I **Otim Nathan** do hereby declare that this dissertation is original and has not been published and or submitted for any other degree award to any other University before.

Signed.......... date 23/06/2015.....

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APPROVAL

This dissertation has been submitted for examination with approval of;

Mr. Mbogua Joseph

(BAPTM, Msc. FST), MUK

Assistant lecturer

Department of Animal Production and Management

Faculty of Agriculture and Animal Science

Busitema University

P.O Box 203 Arapai, Soroti

Signed..........date.....24/05/2015.....

DEDICATION

I dedicate this work to my loving parents; Mr. Etuko David and Ms. Adongo Helen and my best friend, Ms. Arwako Gloria. May the Almighty continue to protect and bless you all abundantly.

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TABLE OF CONTENTS

Contents

DECLARATION	I
APPROVAL	II
DEDICATION	III
ACKNOWLEDGEMENT	IV
LIST OF TABLES	VII
LIST OF FIGURES	VIII
LIST OF ABBREVIATIONS	IX
ABSTRACT	X
CHAPTER ONE	1
INTRODUCTION	1
1.0 BACKGROUND	1
1.2 PROBLEM STATEMENT	2
1.3 GENERAL OBJECTIVE	3
1.4 SPECIFIC OBJECTIVES	3
1.5 RESEARCH QUESTIONS	3
1.6 SIGNIFICANCE OF THE STUDY	3
1.7 JUSTIFICATION	4
1.8 SCOPE	4
CHAPTER TWO	5
LITERATURE REVIEW	5
1.1 INTRODUCTION	5
1.2 AQUACULTURE PRODUCTION IN AFRICA	5
1.3 AQUACULTURE PRODUCTION IN UGANDA	6
1.4 IMPORTANCE OF FISH FARMING IN UGANDA	6
1.5 FISH FARMING SYSTEMS	8
1.6 SOCIO ECONOMIC CHARACTERISTICS OF FISH FARMERS	9
AGE	10
FORMAL EDUCATION	10
OCCUPATIONAL STATUS OF THE FISH FARMERS	10
FISH FARMING EXPERIENCE	10
6 SOCIAL PARTICIPATION	11
CHAPTER THREE	12
MATERIALS AND METHODS	12
3.1 STUDY AREA	12

3.2 OPERATIONAL DESIGN	12
3.3 SAMPLING DESIGN.....	12
SAMPLE SIZE DETERMINATION.....	12
3.4 DATA ANALYSIS	13
3.5 DATA PRESENTATION.....	13
3.6 ANTICIPATED CHALLENGES	13
3.7 ETHICAL CONSIDERATIONS	13
CHAPTER FOUR	14
PRESENTATION OF RESULTS.....	14
4.1 SOCIAL CHARACTERISTICS OF FISH FARMERS IN SOROTI COUNTY	14
4.2 FISH FARMING PRACTICES IN SOROTI DISTRICT	16
4.3 ECONOMIC FACTORS INFLUENCING FISH FARMING IN SOROTI DISTRICT	18
4.3.1 RECORD KEEPING.....	18
4.3.2 CREDIT SERVICES	19
4.3.3 INCOME OF FISH FARMERS	20
4.3.4 MARKETING OF FISH IN SOROTI DISTRICT	21
CHAPTER FIVE	23
DISCUSSION OF RESULTS	23
CHAPTER SIX	30
CONCLUSION AND RECOMMENDATIONS.....	30
6.1 CONCLUSION	30
6.2 RECOMMENDATIONS.....	30
REFERENCES.....	32

LIST OF TABLES

Table 1 Social characteristics of fish farmers in Soroti County	14
Table 2 Fish farming practices in Soroti district	16
Table 3 Record keeping among the respondents	18
Table 4 Credit services for fish farmers in Soroti district	19
Table 5 Annual income and usage of income from fish farming	21
Table 6 Marketing of fish in Soroti district	21
Table 7 Association between fish farming and the stated variables	22

LIST OF FIGURES

Figure 4.1 Land holdings in acres among the respondents _____	16
Figure 4.2 Sources of fingerlings in Soroti district _____	18
Figure 4.3 Types of records kept by fish farmers in Soroti district _____	19
Figure 4.4 Types of credit services available for fish farmers in Soroti district _____	20

LIST OF ABBREVIATIONS

ACIAR	Australian Centre for International Agricultural Research
CBFs	Community Based Facilitators
DFR	District Fisheries Report
DHA	Docosahexaenoic Acid
EPA	Eicosapentaenoic Acid
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
IAA	Integrated Aquaculture Agriculture
LIFDCs	Low Income and Food Deficient Countries
LVFO	Livestock Victoria Fisheries Organization
MAAIF	Ministry Of agriculture Animal Industry and Fisheries
NARO	National Agricultural Research Organisation
NEPAD	New Partenership for African Development
PEAP	Poverty Eradication Action Plan
SPSS	Statistical Package for Social Scientists Software
UBOS	Uganda Bureau of Statistics
UNDP	United Nations Development program

ABSTRACT

The study identified socio economic factors influencing fish farming in Soroti district. Multistage sampling technique was used in selection of 60 fish in the district. The findings indicate that; Education ($\chi^2 = 5.349, df=2$), occupation ($\chi^2 = 17.00, df=2$), experience in fish farming ($\chi^2 = 6.742, df=2$), household size ($\chi^2 = 11.605, df=2$) and land ($\chi^2 = 8.098, df=2$) at 10% confidence level ($P < 0.1$) were the social factors that had statistical influence on fish farming. . The sex of the respondent ($P = 0.116$), age of the respondent ($P = 0.365$), marital status ($P = 0.212$), Fish farmers association ($P = 0.114$), Family type ($P = 0.346$) were not significant at 10% confidence level. The main species culture was *Clarias gariepinus* (83.3%) mainly under semi intensive production level (63.7%). Fish farmers preferred monoculture (86.7%) to polyculture All the farmers used earthen ponds of mainly 10 meters by 20 meters (80%), a majority 50% owned only one fish pond, Majority (71.7%) of the fish farmers obtain their fish seed from commercial hatcheries Based on culturing period (production of table size), more than half of the respondents (56.7%) cultured their fish for a period of 7-9 months. The water sourced from the streams/rivers (71.7%). The feeding regime showed, 46.7% fed their fish twice a day mainly on locally made feeds. The farmers fertilized their fish ponds using Poultry manure (65%). The following economic factors had a significant association on fish farming; Annual Household income, types of records kept and Credit sources available ($P < 0.1$) at 10% confidence level. The market channels were not significant ($P = 0.162$) at 10% confidence level. The study concluded that education level, occupation, household size experience in fish farming, and landholdings in acres , household income per annual, types of records kept, and credit services were the socio-economic factors that influenced fish farming in Soroti district. Fish farmers in Soroti should be encouraged and mobilized to form cooperative groups, Government should improve on incentives for fish farmers and local governments, the farmers should be trained on financial management and record keeping, and modern fish farming methods.

CHAPTER ONE

INTRODUCTION

1.0 Background

Fish is ranked the fifth most important agricultural commodity and accounts for 7.5 percent of total world food production with about 1 billion people in developing countries depending on fish products as the primary source of animal protein (FAO, 2006). According to Adekoya and Miller (2004), fish and fish products constitute more than 60% of the total protein intake in adults especially in rural areas. Nevertheless, aquaculture production is dominated by Asian countries contributing 85% of total output and China alone accounting for about 70%; in 2004, Sub-Saharan Africa contributed only 1.6 percent (93500 tonnes) of the total fish production (LVFO, 2008)

Uganda's fisheries sector has recently been recognized for its vital contribution to the food and nutritional security of over 30 million people and for providing income for millions of households engaged in fish production, processing and trade (MAAIF, 2004). The sector is comprised of both capture and culture (aquaculture) fisheries with the former contributing most of the total production (FAO, 2011).

Fish farming development is credited with stimulating the development of rural communities in which they are located. It is recognized for the provision of important livelihood opportunities for the rural poor by improving the local household food security and livelihoods (Kundu, 2010). Fish farming has the potential to significantly contribute to poverty alleviation through income generation, creation of jobs, and enhanced food security (FAO 2006)

However, most fish farmers in Uganda are poor people in villages who practice aquaculture for subsistence with ponds of usually less than 500 m² constructed using family labor (; Isyagi, 2007), with low or no input production systems. The rising fish prices and domestic and regional demand, along with reports of dwindling fish stock in Lake Victoria and Lake Kyoga (Uganda's main source of capture fisheries), adoption of improved fish farming methods has increased and farmers are beginning to build more and larger ponds of 1,000 m², and using higher stocking densities (Bahigwa *et al.*, 2003; FAO 2010).

Ridler & Hishamunda (2001) have identified several economic factors that are important in fish farm development. They include availability and affordability of fingerlings and feeds, availability of

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