FACTORS INFLUENCING FISH PRODUCTION IN FISHERIES

A CASE OF KATUNGURU LANDING SITE KASESE DISTRICT

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DECLARATION

I KATUSHME JENNIFER REG. No. BAE/11214/62/DU do declare that this research report is my original work and has never been submitted to any institution or university of learning for any award.

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APPROVAL

I hereby certify that this research report has been under my supervision and I have approved it for submission to the faculty of Education, Kampala International University.

Name of Supervisor

MR. WOMUZUMBU MOSES

DEDICATION

I dedicate this research report to my Daddy Mr. Kyaligonza Charles Abwooli and my Mummy Mrs. Kyaligonza .K. Venerandah Atwooki of Kikweete Village, Kyenjojo district for all efforts and support they have put in my studies which without them this book would have not seen the light of this world.

ACKNOWLEDGEMENT

With utmost sincerity, I would like to thank all people who have helped me to accomplish my degree.

In a special way I would like to thank my father Mr. Kyaligonza Charles Abwooli and my mummy Mrs. Kyaligonza .K. Venerandah Atwooki for being my stepping stone from the time I joined primary to the time I have completed my degree course. Really Daddy, I cherish your efforts and care. I wish to thank my mother for having showed me motherly love and help during all the time I have been in school. Really mummy without you I would not have completed my studies well and even where things seemed to be difficulty you were there to simplify them for me.

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DEFINITION OF TERMS

- i. **Fisheries** places where fish are caught or reared or industry fishing.
- ii. Fish production the total of fish catch expected in an area over a given period of time.
- iii. **Decline** a fall in the level of production for instance Lake Victoria provided 42.1 percent of the total fish catch in Uganda however, by 1978 thee total production of fish was only 6.4 percent.
- iv. Conserve- preserve a resource.

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ABSTRACT

The research based on factors influencing fish production in fisheries. The research was to establish the causes of low production of fish in Katunguru landing site, to examine the physical factors that cause low production of fish, to find out the human causes of low production of fish and to establish the strategies put in place by the government to improve on fish production in fisheries.

The research was carried out on Lake George and specifically in Katunguru landing site Kasese district, in Western Uganda about 420km from the city and about 70km from the Uganda boarder with Democratic Republic of Congo.

The research was based on a qualitative design of descriptive nature and analytical based on interviews and questionnaires, fishermen, fish traders and fish consumer were selected randomly because they were the people targeted with relevant data.

According to the research carried out the major causes of low fish production in Katunguru landing site include; indiscriminate fishing, many fishermen use net which are of illegal size, poor fishing methods, pollution along the Lake such as dumping industrial wastes with dangerous chemicals which leads to death of many fish species.

The government of Uganda should take position in order to conserve fisheries because fish are very important source of cheap protein food to most Ugandan people and fish provides employment to quit large numbers of people.

CHAPTER ONE: INTRODUCTION

This chapter presents the background of the study, statement of the problem, purpose of the study, objectives, research questions, the scope of the study, significance of the study, anticipated constraints and definition of terms.

1.1 Background of the Study

Fishing is widely practiced all over the world. About 70 percent of the Earth's surface is covered with seas, oceans, lakes and inland waters. This therefore makes it possible for fishing to take place in many countries with large water bodies forming an economic activity mainly to people bordering large water bodies.

According to Byamugisha (1994) in early 1930's the exploitation of Lake George began with high demand for fish from Masaka and Kampala. This stimulated an influx of Buganda fishermen with their Ssese canoes. In between 1957-58, there was an increase in the landings. This was due to use of synthetic gill nets and out boat engines. Today however, there is less fishing activity going on compared to what used to be in the early 1960's and 1970's. This is because fishermen use poor methods of fishing and lack of capital.

According to the district fishery officer Mwanga in the daily monitor 2007, page 10, contends that there has been a decline in the production of fish in Kasese district since 1960's but he never stated the causes of this problem. However, the study will seek to establish the causes of low production of fish in Katunguru landing site.

1.2 Statement of the Problem

According to Henrrie-M. Kichodo (2001). Fish production over the years has been declining in Uganda. However, it should be noted that this problem is particularly acute in Katunguru landing site in Kasese district. Therefore, the researcher show that there is need to study, observe and analyze the factors leading to low production of fish in Katunguru landing site.

1.3 Purpose of the Study

The purpose of the study is to establish the causes of low production of fish in Kantunguru landing site, Kasese district.

1.4 Objectives of the Study

- (i) To examine the physical causes of low fish production in fisheries.
- (ii) To find out the human factors which cause low fish production
- (iii) To establish the strategies put in place by the government to improve on the production of fish in fisheries.

1.5 Research Questions

- (i) What are the physical factors that cause low production of fish?
- (ii) What could be the human causes of low fish production in fisheries?
- (iii) What are the strategies put in place by the government to improve on fish production in Katunguru landing site?

1.6 The Scope of the Study.

This section presents geographical scope and subject scope of the proposed study.

1.1.1 Geographical scope.

The research is to be carried out in Katunguru landing site, located or found on lake George in Kasese district western Uganda about 420 km from the capital city and about 70km from Uganda boarder with democratic republic of Congo.

1.1.2 Subject scope

The study is to focus on physicals and human factors as independent variables and low production of fish as a dependent variable.

1.7 Significance of the Study

- a. The findings in this study will serve as a major guide for the establishment of possible solutions to the problems which cause low fish production.
- b. The research findings will encourage the community to become sensitized about the cause of low production of fish and identity possible solution.
- c. The researchers may use the study for further research.

1.8 Experienced Problems

- (i) Some respondents could seek for payments either in form of money or kind before the required information was accessed.
- (ii) Money for stationary, transport costs to and from various places and compiling the final report was not enough for the researcher.
- (iii) Language barrier was major problem to researcher this is because the researcher was not a Mukonjo and thus unfamiliar with the local people to understand well without any difficulties. Most fishermen and small scale fish traders were illiterate and could not understand English well hence language barrier prevented effective research from being carried out by restricting respondents who can communicate in Lukonjo and the use of an interpreter distorted the original meaning and was viable to exaggeration and interpretations by the interpreter.
- (iv) Time factor was another limitation this because time available was not enough to carry out thorough research this is because on the course of the semester the researcher had so many other issues to attend to or to accomplish including course works, exams and going for school practice therefore limited the study.
- (v) Some respondents refused to reveal information to a stranger who was actually taken to be a spy for tax assessment officials.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This section presents literature, which is relevant to the study. The literature is cited from relevant scholarly works. Therefore reference will be made whose literature is related to fish production. It will cover areas such as factors that cause low production of fish in fisheries.

2.1 Review of Related Literature

According to Richard White (1990), said that fishermen live a tough life far from home on small boats, especially ocean fishermen facing rough weather and sea conditions. They have always had to rely on their own knowledge and instinct to make their living from catching fish hidden within expenses of the ocean. Whatever, their day-to-day difficulties are, all commercial fishermen face too long term problems: over fishing and pollution as well as crowded seas. Therefore, this calls for further research.

Henrie M. Kichodo (2001), "Lake Victoria is the most important fishing ground in Uganda". In 1961 Lake Victoria supplied 42.1 percent of the total fish catch in Uganda. This share however, declined to 6.4 in 1978 but he never stated the possible causes of this sudden fall of fish production on Lake Victoria, this shows that there is need to carryout research.

According to Hartshorn Alexander (1985), world wide demand for fish remain high and considerable competition exists to gain access to productive waters which produce approximately 90 percent of the world's supply. Only 10 percent fish supply comes from Inland waters. Annual fish production rose about 5 percent per year in post world war II etc, from a level of about 19 million tones in 1947 until early 1970's, when output plummeted largely due to the failure of the anchovy harvest of the cost of Peru. The figure below shows that, since that time fish catches have grown slowly, rising at an average rate of only 1 percent per year.

Maximum yearly harvests from the ocean based on current conditions, approximate 100 to 150 million metric tons. In 1980 the total world catch was just over 72 million metric tons. The most desirable fish for human consumption are already harvested at optimum sustainable levels. Only less desirable edible fish and "trash fish" can be harvested in significantly higher quantities. Hartshorn Alexander (1985).

Greatly increased oil prices in late 1970's hampered fishing fleets, which are very energy intensive enterprises. One rule thumb in industry suggests that it take 1 ton of fuel (oil) to catch 1 ton of fish. For this reason, larger long distance trawlers are not competitive as today as more locally oriented smaller rigs particularly those less than 80 feet in length

Hartshorn Alexander (1985), world fishing harvest, in 1970-1985 since the dramatic fall in fish production in 1972 due to the failure of the anchovy harvest of the coast of Peru, catches have gradually increased, leveling of about 75 million metric tones by 1985, the most desirable fish for human consumption are already being harvested at optimum sustainable level, making significantly large catches in future (source united nations). This justifies the need for carrying out this research.

Pitchard J.M (1979) noted that most Africans fishermen are poor and this has limited the modernization of fishing operations. The poor financial history of fishermen has led to persistence of poor fishing equipments which promote over fishing. Observation made and issues raised by pitchard are worth testing in the cases of Katunguru landing site. Kasese district hence justifying the need for the need for carrying out the research.

According Kato Joshua, the fishery officer in the new vision, (20005) Tuesday, points out that traditional fishermen on Lake Victoria are turning to other business due to fist dwindling stock. Lake Victoria stock diminishes, Kato said many boats on Lake Victoria have resorted to carrying fire wood instead of fish ferrying, fire wood is not a choice, but as a result of dwindling fish in the lake. The diminishing of fish spices is attributed to poor methods of fishing. In late 90's poison and explosives were added to a list of poor

methods. However the researchers is not sure whether, this is the same case in Katunguru landing site and hence need to carry out research

Grave (1939), noted that most fish cough in lakes like those of Lake Victoria and other lakes in Uganda are exported. It brings a great deal foreign exchange equivalent to over one thousand American dollars per tone. The catch now exceeds the sustanainable yield and unless deferent countries involved come to some agreement to restrict catches and enforce that agreement the fishing industry will collapse.

Getis Getis fellman (1990) Points out that fishing industry in great lakes has been affected by pollution of water. Lake Erie, the shallowest lake with great number of cities employing sewage into it. There is large "dead" areas in the central lake Eric that contains little fish becomes polluted, the valuable fish die out.

However, the United States of America and Canada are co-operating on major pollution control programs that will ultimately help to make Erie a good fishing lake again. In this case the researcher is hot sure if it is the same case in Katunguru which calls for further research.

White R.G (1973), has pointed out that there is need to reach fishermen modern methods of fishing and fish culture in general so as to be able to defend fish resources in Africa. This is a recognition of the fact that Africa's fisheries are facing a danger of duplication due to poor fishing.

Dr Kisamba in the Daily Monitor June 14th (2007) Friday said, that he was not impressed by the management strategy of government on fisheries resources. The people who have been empowered to manage the resources neither understand the way fish breath nor their ecology (fish and home life) further more, they have no knowledge about the appropriate fish nets recommended for a given species and the way nets affect the lake ecosystem itself. It's the same case in Katunguru landing site Kasese district.

According to D. Fellman (1999) page 221. About 20% of the annual fish supply how comes from inland waters – Lakes, Rivers and farm pond. Agriculture organization (FAO) reports governments subsidize fishers with over & 50 billion annually of low-cost loans and direct grants in effect encouraging uneconomic over-exploitation of decreasing resources. Both over fishing and pollution of coastal and inland waters seriously endangered the supply of traditional and desired food spices.

Herrie Kichodo (2001), indicates that the population of Uganda has been increasing rapidly over the years, the populations of Uganda is increasing and fishing being an attractive occupation has drawn in more and more people. The 26.4 million people of Uganda today leads to more fish being demanded. There is fear that this is leading to over fishing and the fish may not be able to multiply in big quantities supply for future demands. Over exploitation of fish is a major threat to the fish stock and this mainly due to high population of people and thus high demand for fish hence leading to over fishing which reduce the fish population leading to a fall in production and this is shown in the table below.

Table 1: showing the population of Uganda from 1959-1991

YEAR	POPULATION IN MILLION	GROWTH RATE IN %
1959	6.5	2.5
1969	9.5	3.8
1980	12.6	2.7
1991	16.7	2.5

Source: Secondary

CHAPTER THREE: METHODOLOGY

3.0 Introduction

This chapter is a summary of activities to be carried out to achieve the study objectives of

the research. It presents the research design, area and study of population, procedure of

data collection, research instruments, sample size and selection, Data analysis.

3.1 Research Design

The researcher used both qualitative design of descriptive nature and analytical designs

which enabled the researcher to collect enough data as an evidence to make proper

conclusions. The qualitative design was to enable the researcher to gain depth

understanding of given situations by studying the feelings and behavior of the

respondents in the situations and to analyze the data appropriately.

3.2 Area and Study of Population

The research was carried out in Katunguru landing site on lake George in Kasese district

western Uganda about 420 km from the capital city about 70 km from Uganda boarder

with democratic Republic of Congo.

The population composed of fishermen, fish consumers and fish traders. Because they

were the people targeted with the required information

3.3 Procedure of Data Collection

The researcher started by getting and introductory letter from Kampala International

University administration. After acquiring the letter, the researcher proceeded to organize

familiarization tour to the study area. The researcher to a great extent depended on data

collected to make conclusions on the findings. This is known as primary data that was

collected for the first time from the field by the researcher.

However, to a small extent, the researcher used secondary sources for data. This enabled

comparability of secondary data gathered in order to derive a meaningful and objectives

interpretation of the findings.

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3.4 Research Instrument:

The researcher used questionnaire and interviews in collecting the necessary data, interview is a method of data collection where the investigator is brought to contact with the respondents and asks the respondents about the subject under study in this case, the interviews were done face to face but names of the respondents were withheld confidentiality.

The justification for interview as a research instrument was that, it was enable the researcher obtain in depth understanding of the variables from the respondents because it was cheap and helped to obtain information from respondent who can not interpret questions properly.

The second instrument was questionnaire. This is a method of data collection where a number of questions printed or typed in definite order were given to respondents with request to answer the questions and return the questionnaires. This method (questionnaire) was proposed for it helped the respondents to have some time to think carefully before answering questions unlike in face to face interviews. It was also cheap and time saving.

3.6 Sample Size and Selection.

The researcher used purposive selection whereby only those with relevant data were targeted and then respondents were selected randomly. The researcher selected about 17 fishermen out of all fishermen who were in an area; 15 people who were selling fish and about 10 who were consuming fish to represent other consumers. Then the data from all respondents was compared and analyzed in order to come with a conclusion

3.7 Data Analysis

The data obtained in the study using questionnaires was edited first. After editing, data was qualitatively analyzed by comparing it with interviews and observations results. Tables and graphs were used to analyze the data collected.

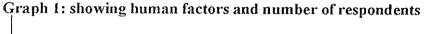
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND DISCUSION

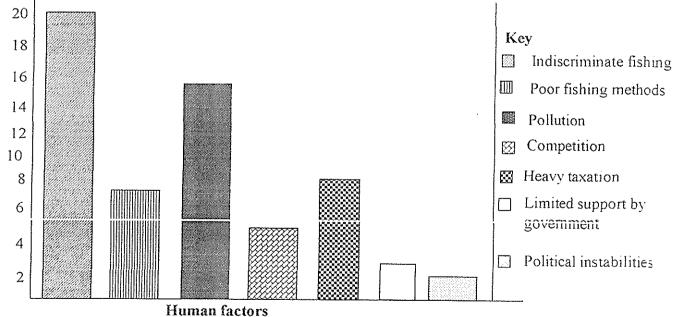
4.1 Introduction

This chapter presents, interprets and analyses the findings in relation to the objectives of the study and research questions that are in questionnaires.

Table 2: showing human factors that led to a decline in fish production and number of respondents

Human factors	No. of respondents	
Indiscriminative fishing	20	
Poor fishing methods	7	
Pollution	15	
Competition	5	
Heavy taxation	10	
Limited support by government	3	
Political instabilities	2	





Scale: Vertical scale -1cm = 2 respondents

Horizontal scale -1 cm = 1 bar (human factors)

According to the research carried out fish production in Katunguru landing site is being affected by both human and physical factors. To start with human factors affect fish production more greatly compared to physical factors.

Table 1 and graph 1 above shows that, indiscriminate fishing is the major problem the researcher found out that leads to a decline in fish production in Katunguru landing site, Kasese district in Uganda. Many fishermen use nets, boats and mosquito seines which are of illegal size. Fishermen prefer to use smaller mesh net sizes than those recommended by law because they are unable to catch mesh nets. For example although beach seining was banned in Uganda, because it contributes to a decline of fish catches by destroying breeding grounds of mainly Tilapia and Nile perch is still being used on Lake George. Fisheries authority are poorly equipped and staffed that crafting fishermen always find it easy to outwit them and many fishermen are ignorant of the implications of catching immature fish in Katunguru landing site on Lake George in Kasese district in Uganda.

Poor fishing methods is another human factor the researcher found out that influence fish production in Katunguru landing site poor fishing methods are still widely used on Ugandan Lakes and this limits the amount of fish catch thus reducing the production. For example in Katunguru small boats are used that can only facilitate fishing of small quantities of fish to be caught and transported to the shores at a time.

Competition highly influences fish production. The fishing industry suffers from frozen and cured sea fish from overseas and from other protein foods such as meat and beans which reduces the demand for fish and thus decreasing the market for fish and discourages the fishing industry. Unfortunately Ugandans use simple methods of fish conservation such as smoking, salting and sun drying which are widely used. These methods are unhygienic and most high class people who are potential customers may prefer to buy tinned and packed fish which are hygienic from other countries and thus the local industry loss a lot of customers and this decreases market for fish thus affecting fish production negatively.

Pollution is another human factor the researcher found out and observed by herself in Katunguru landing site. Pollution of water from chemicals and industrial wastes dumped into Lake George leads to death of fish. For example, Katunguru is near Kasese town where many industries are located is vulnerable, the Hima cement near Kasese discharges wastes without treatment into Lake George as chemicals keep on spreading to the rest parts of the Lake, they affect a large number of fish leading to their death and thus lowering the production.

Heavy taxation by the Uganda Revenue Authority have been imposed on fishermen and fish traders and in addition there are so many taxes imposed at different levels of processing and marketing. This discourages many fishermen in Katunguru who are exploited by middle men and thus get low profit which does not encourage them to continue fishing hence affecting the production of fish.

Limited support by the government is also a factor the researcher found out by using questionnaires and interviews fishermen do complain that they receive little support from the government priorities are given to other sectors like Agriculture and defence thus fishing industry is some how neglected in Katunguru thus low production of fish.

Political instabilities wars have been a common phenomenon in countries like the Republic of Congo, Uganda and many others. This prevents the long term planning and capital accumulation necessary for fishing industry thus decline in fish production. For example wars in Rwanda led to exportation of fish from Uganda to be banned from international market. This is because dead bodies were being disposed in the Lakes including Lake George and fish were feeding on corpses and there fore they were unfit for human consumption thus political instability greatly affects fishing industry leading to low production of fish.

Table 3: showing level of Education of the Participants

Level of education	Fishermen	Fish Traders	Fish Consumer
Illiterates	7	0	9
Primary	20	15	10
Secondary	3	22	4
College	5	2	3
University	1	4	25

Primary source

From the above table, the researcher found out that many fishermen ended in primary and according to the interviews carried out by the researcher. Many fishermen were poor that is why they never reached secondary and they stopped in primary and many had families and they resorted to fishing for survival.

Fish traders most of them completed secondary level and the researchers identified that most fish traders knew how to speak and write English very well and most fishermen remain poor due to inadequate capital to buy high quality fishing equipments.

The large number of fish consumers reached secondary level and university and this shows that most of the fish consumers are employed and earn high income and thus they have high purchasing power. The high number of illiterates due to poverty they never went to schools for Education and they resorted to marriage when they were still young and they have very many children which they are not able to cater in terms of Education and other basic needs which leads them to fishing which provides them with income thus this increase number of people do fishing as their occupation leading to decline in fish production in an area.

On the part of physical factors, the research found out that these factors affects fish production in Katunguru to a small extent.

Table 4: showing the Natural factors and number of respondents Responses

Natural factors	No. of respondents
Climate	5
Predators	6
Diseases	10
Strong winds	7

Primary source

Climate is one of the Natural factors that the researcher found to be affecting fish production in Uganda. This is because industrial evolution have affected the natural system of weather through ejection of dangerous gases which leads to increase of temperatures. The hot tropical climate does not favor the growth of planktons which fish feed on. Kasese is near the equator and it faces the problem of drought which is abnormal shortage of water or rain fall, leads to the lowering the level of water on lakes hence reducing activities, the level of Lake George has decreased compared to the past. Climatic changes such as El-NINO weather phenomenon in 1997-1998 led to an increase in water levels hence hindering fishing activities and therefore, a reduction in fish production.

Predators is another physical factor the researcher found out that contributed to a fall in the fish production. Fishermen complain about a marked reduction in the quantities of fish caught due to the presence of predators such as crocodiles and Nile perch which feed on tilapia and other smaller fish.

Strong winds during certain seasons which leads Lakes to experience strong gales or strong winds which results into nets going a drift or tearing, boats capsizing and drowning of fishermen, delays in fish landing which affects the quality of fish strong winds during the dry season which cause boats which totally depend on wind strength and direction to go out of place and becomes difficulty to control them.

All this leads to ineffective fishing thus low production of fish is expected.

Diseases are common in Kantunguru landing site, such as cholera, bilhazia and sleeping. This is because of the presence of large water bodies which are stagnant form a breeding ground for disease vectors which transmit the above diseases. The fishermen are affected by presence of these diseases and this affect the efficiency in fishing at the same time discouraging others from fishing thus leading to a decline in fish production.

Agricultural resources have also affected fishing especially where agricultural resources such fertile soil, high and reliable rainfall have made people to for livelihood from land rather than water. This leads to fishing being neglected to some extent hence leading to low fish production

CHAPTER FIVE:

5.0 Introduction

This chapter presents the researcher's recommendations and conclusion from the findings

5.1 Recommendations

The researcher would recommend the following ways to be put in place in order to conserve fisheries. Fish farming should be promoted in order to meet the increasing demand for fish through establishments of ponds by government and private sectors. Better fish preservation methods such as use of refrigerated trucks should be introduced to enable fish to reach distant markets while still fresh.

Feeder roads should also be rehabilitated to link the landing site to markets, Ugandan Defence Force (UPDF) may be used to curb insecurity in areas where it occurs in Uganda.

Over fishing may be controlled through licensing of fishermen in order to control fishing activities, regular pastorals by fisheries Authority to stop foreigners from the Ugandan waters especially the Congolese, creation of protected areas for example fishing should not be allowed in some parts of the Lake especially where breeding is taking place. The Lake should be restocked; research should be carried out in fishing technologies.

Fishermen should be given enough money by the government in order to improve on their fishing equipments and they should be trained in fish farming and other activities related to fishing.

Indiscriminative fishing should be banned by the government by putting in place standardized gill nets which may be recommended by law and the use of poor methods of fishing such as baskets poison and others fishing gears should be discouraged.

The government should encourage fishermen to use methods of fish preservation such as the tinned and packed fish and not smoking, salting and these methods are considered as unhygienic in order to reduce competition from other countries.

5.2 Conclusion

In conclusion therefore, fish are important source of food in form of protein to many people in Uganda and great care need to be taken to ensure that fishing grounds are conserved and to ensure steady supply of fish not for the present generations but also the future generation.

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APPENDICES

APPENDIX I: QUESTIONNAIRE FOR FISHERMEN

I am Katusiime Jennifer, a student of Kampala International University. I am carrying out a research study on factors affecting fishing industry. The purpose of this questionnaire is to enable me collect relevant data in this topic.

Your contribution is of high value to this research study and also answers will be treated
with utmost confidentiality. Your honest response is highly appreciated.
Thank you.
1. Respondents
2. Age (tick the appropriate)
10 – 20 20 -30 30 - 40 41 – 50
Above 50
3. Occupation
4. Education level (tick the appropriate)
Primary Secondary College University
None
5. If your occupation is fishing, have there been any fluctuation in fish production over
the years you have been fishing from Lake George (Kantunguru landing site).
Yes No Note sure
6. If yes, state the causes of the fluctuation of fish production in Lake George
7. Suggest the possible strategies put in place by the government reduces the causes
mentioned in (5) above.
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APPENDIX II: QUESTIONNAIRE FOR FISH TRADERS

I am Katusiime Jennifer, a student of Kampala International University; I am carrying out a research study on factors affecting the fishing industry. The purpose of this questionnaire is to enable me collect relevant data on this topic.

Your contribution is of high value to this research study and all answers will be treated with almost confidentiality. Your honesty response is highly appreciated.

Thank you.

1. Respondents 2. Age (tick the appropriate) 31 – 40 41 - 5010 - 2021 - 30Above 50 3. Occupation 4. Education level (tick the appropriate) Primary University Secondary College None 5. If your occupation is selling fish from Lake George, have there been fluctuation in fish production since you started selling fish? Yes 6. If yes, state the causes of the fluctuation in fish production in Lake George 7. Does the government assist you? Yes No 8. If yes, state how it assists you.

APPENDIX III: QUESTIONNAIRE FOR FISH CONSUMERS

I am Katusiime Jennifer, a student of Kampala International University, I am carrying out a research study on factors affecting fishing industry. The purpose is to enable collect relevant information on this topic.

Your contribution is of high value to this research study and all answers will be treated
with almost confidentiality, your honest response is highly appreciated
Thank you
1. Respondents
2. Age (tick the appropriate)
10 – 20 21 – 30 31 – 40 41 – 50
Above 50
3. Occupation
4. Education level (tick appropriate)
Primary Secondary College University
None
5. If you have been consuming fish from Lake George, have there been any fluctuation in
fish production over the year since you started consuming fish from Lake George?
Yes No
6. If yes, state the possible causes of low production of fish in Lake George.
7. Does the high population in Katunguru affect the amount of fish catch?
8. Suggest the possible strategies put in place by the government to reduce on the
problem.

APPENDIX IV

BUDGET

ITEM	AMOUNT
Transport	12,000/=
Stationeries	30,000/=
Questionnaires	50,000/=
Assistance	30,000/=
Lunch	25,000/=
Other expenses	50,000/=
Total	197,000/=

APPENDIX V

TIME FRAME

TIME	ACTIVITIES
November –December	Proposal writing
January – February	Collecting data
March – April	Analyzing data collected
May- June	Report writing
July – August	Submission