# TRAINING OF COMMERCIAL FISHERMEN AND THEIR STANDARDS OF LIVING IN UGANDA

CASE STUDY; KATWE FISHING SITE IN KASESRE DISTRICT

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# **DEDICATION**

This dissertation is dedicated to the Virgin Mary Mother of God for her endless intercession, my family Dad and Mom, Mr. and Mrs. MUJUNE Stephen and MUHINDO Jeneva whose support have made me what I am today.

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#### **List of Abbreviations**

CBS - The Central Bureau of Statistics

CNFC - Chinese National Fisheries Corporation

DFR - Department of Fisheries Resources

KTIC - Katwe Tourism Information Centre

GDP – Gross Domestic Product

LVFO - Lake Victoria Fisheries Organization

LMO's - Lake Management Organization

MPA - marine protected areas

NAADS - National agricultural Advisory Services

NAFRRI - National Fisheries Resources Research Institute

NFRRI - National fisheries resources research institutes

OECD - Co-operation and development

**UN - United Nations** 

UNDF - Uganda Nile Discourse Forum

NOAA - National Oceanic and Atmospheric Administration

U.S – Unites States (of America)

U.S.A – united States of America

#### **ABSTRACT**

This study set to find out the effect if training on the standards of living among the commercial fishermen in Uganda and those living at Katwe fishing site in Kasese district. The Department of Fisheries Resources annual report (DFR, 2012) indicated that fishermen in Uganda are improving in terms of incomes levels and general standards of living as a result of training offered to them, in the report, it was held that training of the fishermen has been done and the fishermen are on that effect using proper fishing methods and also they are adding value to their fish products by packing them and selling them to supermarkets around on a reasonable price. The research objectives where in to finding out the following; to examine the effect of training on the standards of living of the commercial fishermen, to find out the effects of knowledge and skills acquired during training on the standards of living of commercial fishermen and finally to examine the method used in training on commercial fishermen's standards of living.

The study used both qualitative and quantitative research techniques and different data collection methods were used in the field to obtain the data necessary for the study, these methods included surveys where self administered questionnaires were served to respondents their opinions were captured by answering those questions, another methods used was interviews where the researcher formulated an interview guide that had question which he asked the respondents to get the information required.

The findings of the study indicated that training of commercial fishermen is done and there are various methods are being used, however the findings further indicated that the standards of living of the commercial fisher men have not improved having 73% of the respondents agreeing that the standards of living have not improve and only 23% agreed that the standards of living have improved. Some of the reasons for low standards of living among the fishermen according research findings were that the fishermen plan poorly and that they spend extravagantly. The study set out some recommendations in relation to the findings which would help the fishermen improve their standards of living one of them being, government and local authorities encouraging the fishermen to form Savings societies that would help them develop a saving culture that can improve their level of income and thus increasing their standards of living.

#### CHAPTER ONE

#### GENERAL INTRODUCTION

#### 1.0 Introduction

This chapter presents the background to the study, the statement of the problem, the purpose of the study including the specific objectives, scope, and justification of the study, significance of the study, the conceptual framework and definition of key terms.

#### 1.1 Background to the study

Over the past 10 years, majority of the global fish stocks have been lacking adequate catch, survey and the other relevant data required to calculate current abundance and productivity using the conventional stock assessment methods. In developed countries the fish stocks assessed is of the fraction of between 10 and 50% and in developed countries it is said to be much lower ranging between 5 and 20%. (Costello, et al., 2012). This poses the industry a considerable challenge whereby it now becomes difficult to ensure fish stock management.

Recently the United States (U.S), Australia and New Zealand have come up with new scientific ways to set up catch limits to control the overfishing that comes amidst the rise in demand for fish products (Thomas, et al., 2009). This way these countries are trying to fight fish depletion that may arise in unemployment and decrease in Gross Domestic Product (GDP) of the country. That means that nations are conscious about the standards of living of their citizens including those who earn their living through fishing.

The National Oceanic and Atmospheric Administration (NOAA) fisheries economic report of 2012 and 2013 shows a positive trend in the rebuilding of the state's fisheries sector following the adaptation of scientific ways of determining fish stock limits achieved through training of the

stakeholders. (NOAA Economic report, 2006). These reports further show that, the fishing industry all over the world managed to generate over \$185 billion in sales and also provided over two million jobs (NOAA Economic report, 2006). While commercial fishing can generate all this revenue and create abundance jobs, it still remains that the earnings of commercial fishermen vary from boat to boat, season to season.

In China, per capita supplies of fisheries supplies has shown a reserved growth rate of 0.4% per year since 1992 after some form of decline from 1987, the government highly subsidizes the firms dealing in commercial fishing. (Pulvenis, 2006) China nearly spends \$4.1 billion a year subsidizing state backed fishing enterprises; the Chinese National Fisheries Corporation (CNFC) is one of the state owned companies that have benefited from the subsidies. This has thus makes it difficult for the fishermen from other countries as well as small Chinese fishermen who do not benefit from state subsidies to survive. This has subsequently increased the number of fishermen who have gone out of business, recently an estimated 80% of them have left due to increase in labor and fuel costs. (Pulvenis, 2006) this greatly indicates a high level of unemployment that is typical of people facing low standards of living.

In Mozambique, fishing provides critical source of food as well as income to thousands of Mozambicans (Beire, 2014). The United Nations (UN) and Food and Agriculture Program (FAO) has estimated that small-scale fishermen, who caught 84,065 tonnes of fish for the domestic market in 2000, will need to catch 171,040 tonnes to help meet local demand by 2025. With Mozambique's shallow coastal waters being over-fished to meet the ever increasing population with a growth rate of 2.4% annually, fishers cannot satisfy this population which is believed to have 40% of its people living on less than \$1a day. The 2002 Mozambique census counted 90,000 small-scale fishermen with inadequate skills and also used 2,400 boats of which

only 3% were motorized. Given the inadequate modern equipment and limited skills within the fishermen has left an estimated 90,000 small-scale fishermen who provide directly for 50,000 families unable to access deep-water species or make the best of diminishing coastal stocks (Arne, 2007). This lives the fishermen with little incomes which explain their low standards of living.

In Uganda, the fishing industry employs 25,000 people and fish generally accounts for 60% of animal protein consumption. In the quest to improve Uganda's fishing industry, the Nile tilapia species was introduced in the waters of Lake Victoria in the early 1950's and later the Nile perch was introduce in the waters of lake Kyoga and later appeared in lake Victoria in the year 1955. As this move was to improve the economic status of the fishers, only the large scale fishermen whose operations exploited the introduced species for foreign currency are doing better whereas the small scale fishermen and fishmongers who relied on their traditional species for their livelihoods are vanishing breed. (Reynolds, et al. 1989)

Fishers' livelihoods in Uganda are analyzed in a framework of sustainable rural livelihoods, social financial and physical and physical capital. (Ian, 1998)

#### **1.2** Statement of the problem

In the report of Lake Edward fisheries Katsongo (2009) alleged that; training of commercial fishermen around the shores of Lake Edward will improve the socio-economic standards of living of the commercial fishermen given the skills and knowledge acquired. Wegoye and Michael (2005) in their research on economic viability of the fishing enterprises found out that fishermen had a low educational attainment and lacked specialized training acquired in tertiary

institutions, which greatly narrows their alternative sources of livelihood, thus low incomes indicating low standards of living among the commercial fishermen.

Despite of the fact that the Uganda Nile Discourse Forum (UNDF), NELSAP and other government bodies like the fisheries department of Entebbe have provided regular training to the fishermen, Mbingili, et al (2013) also reveal that training of boat owners on the landing sites along Lake Edward has been done to improve the fishers' livelihoods though their standards of living have not shown a significant improvement and there is low capital accumulation to expand their commercial fishing enterprises.

### 1.3 Objectives of the study

#### 1.3.1 Major objective

The purpose of this study is to examine the effect of training on standards of living of commercial fishermen at Katwe fishing site on Lake Edward in Kasese district.

#### 1.3.2 Specific objectives.

- 1. To examine the effect of frequency of training on the standards of living of commercial fishermen at Katwe fishing site on Lake Edward.
- 2. To find out the effects of knowledge and skills acquired during training on the standards of living of commercial fishermen at Katwe fishing site on Lake Edward.
- 3. To examine the effect of method used in training on commercial fishermen's standards of living at Katwe fishing site Lake Edward.

#### 1.4 Research questions.

- 1. How does frequency of training affect the commercial fishermen's standards of living at Katwe fishing site?
- 2. How does knowledge and skills acquired during training affect the commercial fishermen's standards of living at Katwe fishing site?
- 3. What is the effect of method used in training of commercial fishermen on their standards of living at Katwe landing site?

### 1.5 Scope of the study

#### 1.5.1 Content scope

This study was focusing on assessing the effect of training of commercial fishermen on the standards of living of commercial fishermen living around Katwe fishing community on Lake Edward in Kasese district. The study was also focusing on analyzing the fishermens' livelihoods and the level of dependence the communities on the aquatic resources along Lake Edward but especially Katwe landing site.

#### 1.5.2 Geographical scope

The study was confined to Katwe fishing village, Lake Edward in Kasese district. Katwe fishing site is neighboring Kayanzi fishing site, Queen Elizabeth national park and Nyakiyumbu subcounty; the researcher preferred Katwe fishing site because it is easily accessible to him as it is in the neighborhood of his home of origin and is one of the popular landing sites that are in the

heart of the district and have enjoyed the fruits of fisheries programs like training though the fishermen here are seen to be prospering as desired.

#### 1.5.3 Time scope

The study will be tied to the period between 2010 -2014, this time scope was be selected because virtually the training of fishermen intensified around the year 2006 up to date. This period is also enough for the researcher to find out how the standards of living among commercial fishermen vary with training.

#### 1.6 significance of the study

The purpose of the study was to make an assessment of how training affects the commercial fishermen's standards of living through using Katwe landing site as the area of focus. Training is one element that can be used as a weapon to polish individuals with knowledge and skills that can help them do various things with ease. In Uganda commercial fishermen have been trained in order to manage the fisheries resources more effectively such that the aquatic life is conserved and utilized well by the population around; skills like communication, marketing, financial management and saving culture all geared towards improving peoples standards of living through improved incomes, health and the general social economic status are expected to improve given the training.

The researcher intends to find out how efficient training has helped in the attaining of fisheries goals of improving people's standards of living, identify the best ways or methods training should be done to achieve maximum results. Also inform the fisheries management on the best

fishing methods that could help them advice fishers on how to utilize the fisheries resources efficiently without dangers of depletion.

The research will help the commercial fishermen develop ways of improving their incomes as well as improving their standards of living. The research will help policy makers and other stake holders like donor agencies on ways to execute and implement training sessions for commercial fishermen. This will of course have a detailed approach to managing personal finances. The researcher will also help academicians who always want to refer to other people's findings for evidence.

#### 1.7 Justification of the study

Fishnet Africa is an organization that promotes fishing industry within the continent of Africa by ensuring that the sector remains a profitable venture. While working with other organizations, Fishnet Africa publishes monthly magazines sensitizing people especially fishermen on various aspects like fishing gears, fish products among others, all this is done to keep the fishermen with current data.

At Katwe fishing site, almost a half of the population is involved in the fishing activities like preserving fish collecting firewood used in drying the fish and others work as fishmongers. There it is worthy for the research to find out the social economic status of all these people trap the loop holes in the economic status as well as the standards of living and then find ways to fill the gap as per the forth laid approach to cub the gap and in this case it is training. Otherwise if this research is not conducted the people of Katwe fishing site will face severe economic and financial challenges.

#### 1.8 Definition of key terms

Commercial fishing: this is the activity of catching fish and other seafood for commercial profit.

**Commercial fishermen**: these are the people involved in the commercial fishing activity.

**Standards of living**: this refers to the social economic welfare of an individual or society in a given period of time measured by the basket of goods consumed.

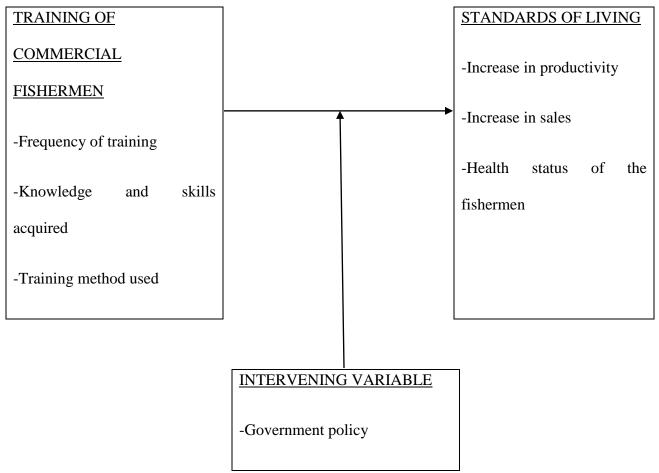
**Quality of life:** Quality of life refers to the overall wellbeing of the population indicated by the general wealth, social needs satisfaction; it also involves evaluation of social, physical and emotional wants enjoyed by a society within a given location.

**Fisheries resources;** these are the aquatic living organisms that are being harnessed to provide food and income to the population around it.

#### 1.9 The conceptual framework

Independent variables

dependent variables



Source; Mbilingi, et al. (2013) as modified by the researcher.

In the conceptual frame work the independent variables are directly affected by dependent variables. For example increase in the times or frequency of training can increase productivity within the fishing industry at Katwe fishing site thus increase the fishermen's' income that results into improved standards of living. In the same way, knowledge and skills acquired can affect the sales made, for example increase in skills acquired like communication skills can boost the marketing of the fish products that increase sales hence increasing fishermen's income. The

communication skills as suggested by Asiedu and Nunoo (2013) can be utilized and help the commercial fishermen develop other skills like marketing skills.

A change in the independent variable causes a direct change on the dependent variable though there are other factors that may make the condition unusual as well like the efficiency of gears used or technology applied in the fishing activities.

#### 1.10 Conclusion

Chapter presents the introduction of the paper covering the background, statement of the problem, purpose of the study, objectives, research questions, scope, significance of the study and the conceptual framework. The next chapter reviews literature of the subject under investigation.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.0 Introduction

This chapter reviews literature related to the study, the review was guided by the objectives of the study about the effect of training on the standards of living among the commercial fishermen on the fishing sites in Uganda. The chapter presents the conceptual review which consists of the key variables in the study including training and standards of living, frequency of training and how it affects the commercial fishermen's standards of living, skills acquired during training and how they affect commercial fishermen's standards of living and finally the method of training and its effect on standards of living among commercial fishermen not living out the summary of the literature and the conclusion of the literature as well as the conclusion.

#### 2.1.0 Conceptual review

This subsection reviews scholars work on the variables in the conceptual framework, mainly the independent and the dependent variables consisting of training and standards of living.

# 2.1.1 Training

William (2002) defines training as the process of acquiring knowledge and developing skills for the existing job, a tool for the workers to contribute to the organization and a means to the end. The definition of training according to William (2002) highlights acquisition of skills and knowledge that has to be applied by the worker so as to obtain results efficiently and effectively.

In the same way, Armstrong (2009) contends that training is a planned program followed by instruction aimed at enhancing employee's performance through improving their capabilities and skills to accomplish their jobs more efficiently. Like William (2002), Armstrong (2009) also brings forward the aspect of applicability of skills acquired after instructions to improve employee performance. The two authors William (2002) and Armstrong (2009) clearly bring out a common cause and outcome of training as being towards improving worker's efficiency and effectiveness so as to improve profitability in any form of business setting.

Defining training in the researcher's perspective will not divert from the way the scholars William (2002) and Armstrong (2009) defined it. According to the researcher training refers to a process aimed at equipping individuals or workers with skills and knowledge required to accomplish a certain job effectively and efficiently achieved through different instruction methods. As the above scholars alleged, training is aim at improving workers performance which may include increase in productivity at work, improved incomes that improves the individual's quality of life, increase in profitability derived from increased sales. The increase in profitability, productivity, and the general individual's performance achieved through training is also evident in the work of Clark (1999) and Chaibva (2000) whereby they agree that training enhances capacity building. In this case capacity built is considered to be the ability for the commercial fishermen to manage their businesses well so as to take care of their families with improved housing facilities and good levels of education attained by their children. (Clark, 1999; UNEP, 2002a). This literature precisely looks at training as a way of improving people's quality of life; Quality of life refers to physiological well-being, life satisfaction, health status and social support enjoyed by the people living in a certain area. (Muldoon, et al.1998). For purposes of this study the researcher measures quality of life the housing facilities, the number of children in

school of a given family, skills acquired by the fishermen, fishing gears used, the health status and the basic needs that the fishermen can afford per day. This research will further seek to find out whether quality of life and social economic standards are related and whether they measure standards of living.

#### 2.1.2 Standards of living

Different authors have advanced what it is meant by standards of living in different literature papers and these are there views.

Helen B. and Peter M. (1999) describe standards of living to be the amount of wealth, comfort, and other material things that an individual, group or nation has. Houghton (2000) also defines standards of living as the level of material comfort as measured by goods, services and luxuries available to the individual, group, or nation. In the same way Mitana (2008) in his Economics book asserts that standards of living refer to the social economic wellbeing or welfare of an individual or society in a given period of time measured by the basket of goods consumed. The three authors here are both studying the standards of living in relation to variety of goods and services consumed in a given society or group of individuals and also the comfort of the people which may be measured by the way of housing, how people spend their leisure among others. In the Collins Dictionary (1991), a standard of living is a level of subsistence and comfort in daily life maintained by a community, class or individual. In the Collins Dictionary, they look at standards of living from the perspective subsistence and comfort in daily life of an individual meaning it emphasizes on the ease with which people live there life. The Collins Dictionary (1991) embarks on the level of comfort and subsistence which also involves survival, continuation and life which is very critical to commercial fishermen whereby in America the

fatality rate of the fishers was 300 out of 1000 people according to a report by the pacific ground fish which explains there state with regard to their standard of living.

Having reviewed the literature about standards of living by these several scholars including Mitana (2008) who considers standards of living to be the social economic wellbeing of an individual or society measured by the basket of goods consumed, in this case Mitana's idea can be compared to the quality of life that this research tries to investigate because quality of life can be measured from the basic human requirements that an individual or society can afford some of these basics can be shown by the range of goods consumed. Jackson et al. (2003) defines quality of life as the overall wellbeing that is comprised of material social and emotional wellbeing together with personal development and purposeful activity.

The authors in the literature above do not clearly bring out whether the social life that the people live also affects their standards of living. By social life the research means the way the people spend their leisure, what their customs and values are and how preservative the people are to their culture. There the researcher used this research as a tool to investigate the other variables and their effect on the standards of living.

#### 2.1.3 Commercial fishing

Fishing is of a worldwide importance for the generation of food, income and other various economic and social needs (Arlinghaus, et al. 2002). According to the Organization for Cooperation and development (OECD), commercial fishing refers to the activity of catching fish for purposes of earning income to support fishermen meet their economic and social needs. (OECD, 1998). A commercial fisherman is therefore one who catches or traps fish and other sea life for commercial sale (Jennifer B. 2008). Commercial fishing is an income generating activity in the

world, it is practices in the United States of America (U.S.A), Chile, Canada and other countries that are bordered by massive water bodies thus oceans and here fishing is done mainly at a large scale (NOAA, 2012). In Africa fishing is also one of the economic activities the economy for example in Uganda is one of the leading sectors that contribute to the GDP of the country. Whereby by 2003 the fisheries sector of Uganda contributed about 2.48% and a ratio which is said to have increase to more than 12% by 2006 showing a great and fast growth rate. (Konstantine O, et al. 2006). Lake Edward in the west of Uganda with many fishing sites has Katwe fishing site where commercial fishing is done. The fishing site has small scale fishermen who catch fish for sale to the nearby towns where they get income to support their families and earn a living. (FAO, 1989).

Like in other areas where small scale commercial fishing is carried out, Katwe's small scale-scale fishermen are said to be poor, calling small scale commercial fisher poor people is a maxim that has been used for long. (Smith, 1979). For long there has been an assumption that small scale commercial fishermen are poor in regard to the housing, the way they feed, the general way the live their lives. (Smith 1979; World Bank, 1982) However some scholars Clark and Warwick (1994) in their work "change of marine communities" critique the idea of Smith (1979) that initially this was almost the trend however commercial fishing in some countries like in U.S.A and China the government interned by subsidizing the risky job and since then at least some commercial fishermen have prospered and are now earning a living and doing fishing on a large scale. Siding with Smith (1979) however small-scale commercial fishing in Uganda is also said to be comprising of low status members. (NAADS, 2003).

## 2.2 Frequency of training affects on commercial fishermen's standards of living

Uganda having been blessed with almost 20% of the total land is covered with water with aquatic resources. (Reynolds and Wandaya 1989). Fishing has become one of the basic sectors that people depend on for survival and generally earning a living. Basing on the fact that more people are flocking the sector to free entry and exit in the industry, there is a significant increase in fishing activities and therefore leading to decrease in the fish population. recent research reveals that commercial fishing has led to global fish decline (McPhee, et al. 2002) though other fishing activities like recreational fishing have also led to fish decline (Post, et al. 2002). This may in the long-run lead to permanent direct or indirect effects on fish population.

However, the decline in the fish population in Ugandan waters may not be solely attributed to increased reduction in fish population; other factor like the introduction of exotic fish species like the Nile Perch in Lake Victoria, over fishing and dumping of wastes that may be poisonous to the fish species in the waters may also cause decline in the fish population. (Ogutu-Ohwayu R 1990; Schofield and Chapman, 1999). Schwartz J (2002) also reveals that the reduction in the fish population could have been as a result of the diversity of fish species especially those that are newly introduced in the fresh waters of Uganda and are said to be feeding on the local species. The national reduction in the fish population greatly affects a large population of people who survive on fishing activities to earn a living. This threatens the economy at large because there are more people who are likely to be rendered unemployed just in case the situation persists.

The National fisheries resources research institutes (NFRRI) of Uganda on intervening in the issue of the aquatic resources depletion threat, it came up with different ways to keep the individuals that are likely to be affected by the scandal such that their standards of living can be

improved alongside the threat of decline in the fish population. Asila (2001) a scholar of Moi University in Kenya suggested that to ensure stock management of fish in Ugandan waters, there should be restrictions on the size of nets that are being used as it would eliminate fishing of immature fish that can also lead to fish depletion. (Asila, 2001). Other scholars like Balciunas, et al. (2002) suggested that fisheries resources should be effectively managed but the people involved in the fishing activity should also have the skills and knowledge on how to go about the fish resources such that they can earn a living and maintain good standards of living.

Training when done effectively and more often maintains consistency in quality of work since the skills acquired are efficiently applied given the competency of the workers. The marine protected areas (MPAs) can be conserved by ensuring that fish habitats are well maintained as well as maintaining fish habitats quality as it also maintains the fish population that sustains the fishermen economically and socially (DeMartini, 1991). Roberts, et al. (2001) also propounded that fishing grounds can be conserved effectively and properly thus keeping the quantity of the fish population quite constant and this can improve the fishermen's life with ease.

Grebavol (1989) reveals that in order to ascertain the standards of living among the commercial fishermen it is better to compare the quality of life they are living against the rest of the population dwellers like other business men, the corporate class among others. At this level he was considering the quality of life to be the ease with which the fishermen can attain the basics of life like food, good housing, education and their general social way of living including how they spend their leisure time among others. The researcher however agrees with Grebavol (1989) because the many of the basic measures of standards of living in a common understanding rotates around the housing comfort enjoyed, the rate at which children are sent to school, an

which level do they attain, the social way of living thus how they spend their leisure time vis-àvis their cultural belief and norms.

Fishermen especially in Uganda are self employed people who buy their own fishing gears and then enter into the business activities. In Uganda where there is a high level of income inequalities (OECD, 2011) has got fishermen who do not own the fishing gears like the boats themselves so this necessitates that some will be hiring the gears or they work for the owners of the equipments. This creates inconsistencies in the standards of living especially while considering the level of income as the basis because some earn more than the others during the sharing. Doulman (2009) in the FAO report indicated that the division of fishing income among members of ascertain fishing group vary especially when incomes of individuals getting extra income from non-fishing activities.

Goldstein (2011) proved that employees who have acquired skills from training become more efficient at work, this has forced managers to send their employees for more training so as to obtain better results. For any working environment or organization, the human resources available given their skills are so important because their performance triggers or shrinks the profitability of the organization or activity (Goldestein, 2011). Luke (2011) also agrees with Goldesteins' idea that training improves the performance of workers however he adds that training acts as a motivation drive to the workers and that established organizations give training to their workers to cater for complex situations.

The fact that authors like Luke (2011) alleged that training acts as a motivational drive, the researcher was in the quest to find out whether workers may only be motivated to work by training other than the results of their work like the profits earned from the job done.

# 2.3 Skills acquired during training and their affect commercial fishermen's standards of living

During training there are several skills that may be acquired depending on the aim of the training but basically like William (2002) and Armstrong (2009) defined training as an activity aimed at equipping people with skills in order to improve performance. It implies therefore that during training there are several skills that may be acquired and they include the following; communication skills, financial management and control skills, community development and leadership skills and also record keeping skills. Clark (1999) reveals that the skills acquired from the training are fundamental for capacity building, whereby capacity building refers to the ability for a certain community to sustain its own needs independently without external interventions(). In the researcher's view of point, the skills acquired from training are essential in the performance of tasks especially for the commercial fishermen, for example the communication skills can help the fishermen in marketing their output as well as identifying the distribution channel since communication skills aacquaints one with human relation skills which eases interactions with different people. In the same way the commercial fishermen may learn more skills like financial control skills, in this way the fishermen learn how they can manage and spend what they earn. Ag marketing resource centre (MRC) reveals that understanding communication enhances effective communication that is necessary for marketing skills development.(MRC, 2012). MRC looks at marketing skills as being a product of good communication skills; in the workshop of stakeholders in Kasese, Mwedde (2009) alleged that training would impart several skills including marketing skills that will be a great deal for the stakeholder including government tax base increase. Therefore training was one of the remedies for improving fisheries status as well as maintaining harmony between the fisheries sector and Uganda Wildlife Authority. (Mwedde, 2009)

Katsongo (2009) highlighted some ways in which fisheries resources on Lake Edward can be maintained for example avoiding illegal activities like poaching and using poison when catching fish as he alleged that it would reduce fish which would greatly affect the nutrition status as well as the income of the fishermen on lake Edward. Lake Edward being shared by Uganda taking 29% and Congo 71% of the total water, the 2009 fisheries workshop was honored by delegates from Congo who also revealed some problems that the fisheries subsection on Lake Edward in the Congo side face like unrestricted entry of people and immigrants in the fishing village, presence of armed groups in the national park and the surrounding village which make regulation and implementation of policies very difficult. (Mwedde, 2009)

The Uganda Nile Discourse Forum (UNDF) report that was targeting the Albertine graben which encompasses Lakes Albert and Edward aiming at finding out the utilization of water resources in the region found out that there is increased dependence of the communities on the ecosystem resources. (UNDF, 2013). During the survey it was found out that the communities around the Albertin graben depend on the fisheries resource, the survey therefore propounded ways in which people's livelihoods as well as increasing their income through poverty eradication programs that are to be implemented through training and setting regulatory policies among others. It is from these training sessions that the communities along two lakes are to acquire skills that are to be used to maintain the fisheries resources that will support sustainable development of the communities including the fishermen.(UNDF,2013)

Asiedu and Nunoo (2013) in her work showed that skills acquired on training by the people on the fishing communities can help improve their livelihoods as they would learn other skills to engage in other relevant income generating activities. Mbilingi B. et al. (2013) also alleged that training in form of sensitization was done to equip members in the fishing communities with other livelihood options to improve their standards of living and reduce over dependence on the fisheries resources thus managing fisheries resources effectively.

#### 2.4 Method of training and its effect on commercial fishermen standards of living

According to Mbingili et al (2013) training of people living in fishing communities especially commercial fishermen on lake Edward has been done to enhance their livelihoods, this research shows that a bigger percentage of the boat owners 76.7% have got the training compared to 48.2 boat crew members. Further research by Mbingili et al. (2013) indicates that the approach of training that was mainly used was that of training only the boat owners other than the boat crew who are the actual fishers, this means that the actual fishers were had inadequate training on how to improve then livelihoods as well as their standards of living. Westaway (2009) indicates that there are high dropouts among fishers and alleges that this is due to poverty, group influence and paid work. This indicates that fishermen have poor education implying they are low skilled people who should be trained using various instructions in order to sustain their livelihood and improve their standards of living.

In order to enhance training among commercial fishermen, various approaches may be applied but all geared toward sensitizing the fishers. For example Katsongo (2013) showed what can be done to conserve the fisheries resource and utilize them with due diligence through a workshop that was held in Kasese Virina gardens whereby stakeholders including local leaders, fishers and delegates from the Democratic republic of Congo (DRC), in this report he alleged that water

resources should be maintained effectively and he highlighted the various ways in which fish population can be maintained in the wares of the Albertine Graben whereby Katsongo (2013) imparted on the fishing methods used emphasizing that poisoning of ship should be prohibited and other dangerous fish catching methods that are unselective like electrical method that may cause fish depletion which is hazardous to the livelihoods of the commercial fishermen in the region.

It is not only workshops that can be used in enhancing training of commercial fishermen but also other methods like use of tutorials and seminars can also act as a good weapon for implementing training of the commercial fishermen. For example the fishers of on Lake Edward especially on Kayanja, Katwe, Kasenyi and Katunguru according to research by Safina N. et al. (2013) where sensitized about how to diversify their livelihood in the seminar that was conducted six months before the research by Safina et al. (2013). This seminar had more boat owners than boat crew who are actually the fishers.

Owing to the fact that fishers are dominated by school dropouts (Westaway, 2009), tutorials being self administered are not effective as a method of training commercial fishermen. Tutorials may not yield good results since tutorials need monitoring which is a bit expensive for the stakeholders involved in the fisheries sector. Cherly and Ian (2004) indicate that tutorials are not an effective approach to training because it is hard to measure the skills acquired from this mode of training

Conferences and seminars by non-governmental organizations, Food and Agricultural Organization (FAO) in particular have been earlier made as early as the 1995 in regard to the fishing sector. FAO intercepts the fishing sector via seminars like the case of the 1995

conference that arouse the code of conduct for responsible fisheries. The code is voluntary though some parts of it are based on relevant rules of international law, as reflected in the United Nations Convention on law of the sea of 10<sup>th</sup> December 1982. The code also contains provisions that may in the future be given, or have already been given binding effect means of other obligatory legal instruments among other parties, such as the agreement to promote compliance with conservation and management measures by fishing vessels on the high sea, 1993. FAO offers guidelines for responsible fisheries, establishing principles and standards applicable to the conservation, management and development of all fisheries. Within the same code, FAO recognizes nutritional, economic, social, environmental and cultural importance of fisheries and the interests of all those concerned with the fishery sector, it also recognizes the importance of safety issue, and contains several separate references to the subject, addressing working and living conditions, health and safety standards, education and training, safety of fishing vessels, search and rescue, and accident. Again like Collins Dictionary capitalizes on subsistence, continuity, life, and social comfort enjoyed by an individual or group FAO through the 1995 seminar and code of conduct guided and trained fishermen on safety matters. This was mainly because the rate of fatality also accounts for the level of standards of living. A new federal report says fishermen working off the west coast of the united states face on of the highest death rates in commercial fishing even worse than in the ocean off Alaska. (Doud. 2007) the report further indicate that in the three united states protectorates of California, Oregon and Washington fatality rate increase two times more than the fatality of commercial fishermen between the years of 2000 and 2006. This clearly indicates a decrease in the standards of living since it is even difficult to determine the lifespan of the fishermen.

#### 2.5 Summary of literature

In this case the Food and Agriculture Organization is considering environmental conservation and in particular the aquatic life which is a resource that can be harnessed responsibly, the FAO capitalizes on the preservation of aquatic life a resources that can be maintained the resources in the waters that maintain fish catches hence maintaining the incomes among the commercial fishermen. Whereas the fisheries code prioritizes the management, conservation and protection of fisheries and aquatic resources which in real sense ensures to maintain fish catches such that in the long run balance the income of the commercial fishermen across all seasons which explains the status the prevailing standards of living the commercial fishermen.

All in all the literature reviewed above is all stressing the standards of living among the commercial fishermen. For example the NAP stresses the need for the modernizations of fishing methods and fishing fleet, and the importance of stepping-up efforts to expand offshore fishing with the need to improve the commercial fishermen's standards of living. Ogutu-Ohway et al. (1989) brings forward the issue of introduction of the Nile perch in Lake Victoria which was all geared towards expanding the fish resources in the Uganda fishing waters so as to increase the catch shares that increase the income among people involved in the fishing activities which increases their purchasing power thus improved standards of living.

#### 2.6 Conclusion

Notably this chapter has presented the literature reviewed by different scholars mainly the conceptual variables of training and standards of living, frequency of training and its effects on the standards of living among commercial fishermen, the effect of the skills acquired during training on commercial fishermen's standards of living and how the method used on training affects the standards of living among the fishers. The next chapter presents the methodology that

guided the study thus the techniques used in collecting, analyzing and interpreting as well as presenting the findings among others.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.0 Introduction

This chapter presents the methodology and techniques that were used in the study. It highlights the research design and procedure that were employed in data collection. This chapter further presents the study population and area, the sample size and sampling techniques, the data collection methods and instruments, data analysis which basically encompasses both qualitative and quantitative approaches. The other sections covered in this chapter include the study limitations and ethical considerations.

#### 3.1 Research Design

The researcher used a combination of descriptive and cross sectional design. In the search for rich data including peoples habits and attitudes, the researcher used both descriptive and cross sectional research design since the cross section design according to Eric and Rea (2001) gives an in depth investigation of an individual, group, institution or even a phenomena. The cross section research design also captures the state of a variable at a particular time for varied analysis. The researcher used cross sectional research design because it brings the research in direct contact with the respondents in the field and further more the phenomenon under investigation is a real life developmental contemporary issue.

#### 3.2 Area of the study

The study was conducted at Katwe fishing village on Lake Edward in Kasese district, Katwe is one of the prominent fishing sites on Lake Edward taking a total perimeter of 163 kilometers (KTIC, 1997). It is bordered by another fishing site called Kayanze in its west. It also has a salt

lake that has attracted salt mining in the neighborhood. The area under investigation however encompassed other business areas of Katwe-Kabatoro town council such that it standards of living of the people around the area are critically assessed since the whole town council is made up of fishers and salt extractors from Lake Katwe.

# 3.3 Study population

Mugenda and Mugenda (1999) defined study population as the group of people that the research targets to investigate. The Central Bureau of Statistics (CBS, 1997) indicated that population can be classified into demographics, age and sex composition, economic levels, education status among others. Katwe Tourism Information Centre (KTIC, 2008) reveals that the population of Katwe-Kabatoro town council was around 6000 people, the target population for this study included a portion of residents in Katwe-Kabatoro town council where the fishing site is located, business entities like fishmongers, boat crews and boat owners, the retailers around Katwe fishing site in Katwe-Kabatoro town council. The study will target a population of 50 respondents though a total number of 44 respondents was sampled.

**Table 1: Showing study population** 

CATEGORY	NUMBER OF RESPONDENTS
Lake Katwe fisheries management	4
Boat owners	10
Boat crews	10
Fish mongers	10
Retailers	10
Total	44

Source: Primary data

# 3.4 Sampling procedures

Stratified random sampling was used as the respondents were divided into different groups basing on age, gender and different activities involved in for example there people who are involved in fishing activities and others in salt mining related activities. Stratified random sampling was integrated with purposive sampling in a way that selection was done focusing on particular members and groups in the community aiming at getting the required data.

### 3.4.1 Sample size

A sample is a selection of a small group, individuals, objects or even units representing a bigger portion or a whole. During the study the sample size that represented the rest of the community members was 42 and it was determined by a formula below;

$$n = \frac{N}{1 + Ne^2}$$

Where n is the sample size; N is the total population;  $e^2$  is the 0.05 standard error

N = 50

e = 0.05

$$n = \frac{50}{1 + 50x0.0025} = 44 people$$

**Table 2: Showing selected respondents of the sample** 

Category	Number of respondents	Percentage of respondents (%)
Katwe fisheries management	4	9.1
Boat owners	10	22.7
Boat crews	10	22.7
Fishmongers	10	22.7
Retailers	10	22.7
TOTAL	44	100

# 3.4.2 Sampling techniques

During the study the researcher used simple random sampling and purposive sampling techniques. This was because simple random sampling gives the respondents in a sample equal chances of being selected therefore it eliminates chances of getting biased information since all respondents then have equal chances of being selected. Purposive sampling was also ideal in this research because it aims at targeting the real people with the relevant information; it was also a good sampling technique because it reduces time that would have been wasted on respondents that actually do not have the data needed.

#### 3.5 Data collection methods

Mainly the research used two data collection methods which are survey and interviews; however documents review was also engaged during data collecting. The researcher decided to use a combination of data collection methods simply because it allows for easy triangulation. Triangulation is defined by Denzin (1978) as the combination of different methodologies in the study of one social issue or phenomena.

The data collection methods selected were used to gives both primary and secondary data. Primary data was obtained from questionnaires, interview guides and observations made by the researcher where secondary data was obtained from listening to news, reading reports, magazines, newspapers, , journals and other relevant documents about the subject under study.

#### 3.6 Data collection instruments

The research having employed survey, interview and documents review, it necessitated it to use the relevant tools to enhance the methods selected thus using the questionnaires, interview guides as well as relevant documents like reports, journals, newspapers and others as the tools used in the study.

# 3.6.1 Questionnaires

James (1997) considers a questionnaire to be a means of eliciting feelings, experiences, beliefs, attitudes and perceptions. Questionnaires were used in data collection because they help the researcher capture the respondents' attitudes as well as their habits and they can also be used to capture more information in the shortest time since they are self administered. The questionnaire are always comprised of easy questions and can easily help the research get information that the respondents may not be willing to give to the research directly especially when the data needed is considered to be confidential to some respondents, for example the age brackets of the respondents.

The questionnaires had standards measurements that were easy to be analyzed by the research for example; the <u>yes</u>, <u>no</u> or <u>not sure</u> analysis gauge. The other standard measurement was the five point valuing scale which is of the form of 1=strongly agree, 2=agree, 3=not sure, 4=disagree, 5=strongly disagree. This scale is easy to understand by both the researcher and the respondents and can easily reveal the opinions of the respondents to the researcher. Questionnaires made data control easy because the there is maintained uniformity and standardization in the questions

asked since the respondents receive the same questions with the same wording as well as phrases, the data was easily controlled because the researcher controlled the condition under which the questions were answered.

### 3.6.2 Interview guide

An interview is guide is a direct face to face attempt to obtain valid and reliable measures in the form of verbal responses from one or more respondents. (James, 1997). This tool will be used to enhance the method of interviewing. According to James (1997) still an interview guide refers to a set of predetermined questions asked to the respondents in a person to person situation and using the same order of questions as specified in the interview schedule. In this particular study, a set of structured questions were chronological designed to be administered to the respondents. This instrument was quicker in yielding information and it was more convenient in cases where the researcher used purposive sampling. It helped the researcher to clarify some questions which were not clear to the respondents it was ideal for the minors thus the respondents under the age of 18 and the illiterates who could not afford to respond using the questionnaires. It was also a good tool for enhancing data management since the researcher would also observe the nonverbal behavior of the respondents.

#### 3.6.3 Documents review

The researcher acquire some other data through reading the works that have been documented in the fisheries field, these documents constitute the reports, newspapers, magazines, and other written materials like meeting minutes from various secretaries.

#### 3.7 Data control methods

The study was confined to members living in Katwe-Kabatoro town council and focusing on the group of people dealing in fishery related activities. Katwe-Kabatoro town council is made up of mainly two economic groups whereby some people engage in fishing activities while others deal with salt mining or both. But to maintain validity the researcher only focused on the portion of individual dealing in fishing related activities. Data collection methods and instruments were given keen attention so as to maintain validity throughout the study; for example the questionnaires where standardized and uniformity was maintained in order to make data analysis and comparison easy. Sampling was done well therefore there are no chances of double sampling that may result into biased results. All instruments used in this study were well edited following the instructions of the research supervisor allocated to me. The questionnaires were planned and tested thoroughly by submitting them to the researcher's classmates and members in order to generate valid and reliable data. All this was geared towards getting proper and valid data that is relevant t the subject under investigation.

#### 3.7 Data Management and Processing

At the end of collecting data, the research edited the findings in order to achieve accuracy, consistency and coherence. Codes were then attached to the data that was edited in terms of frequencies, degree or extent and percentages. The data was processed and presented using tables, pie charts and other graphs that clearly explained the outcomes of the results, this was done with the help of computer application software that is to say Microsoft excel, Microsoft word and general analysis was done by the statistical package for social sciences. (SPSS)

#### 3.8 Data Analysis

Amin (2005) defines data analysis as a component of research that leads to data reduction, display of data, drawing of conclusions and making the necessary verification for the intended purpose of the study. In this study data was presented using both qualitative and quantitative methods.

Qualitative data analysis is a subjective approach of interpreting and analyzing data to measure peoples' opinions, feeling and attitudes, it deals with meanings, concepts, characteristics, metaphors, symbols and description of things (John, 2006). The researcher used the qualitative method in analyzing data because it allows collecting of generalized data which may even be descriptive in nature thereby allowing collection of valid data that id relevant to the phenomenon under investigation. Qualitative analysis is also easy to use when analyzing data an it may involving making of estimates.

John (2006) defines quantitative data analysis as counts and measures of things, John (2006) adds that quantitative analysis is measurable and objective in nature; it is an important tool of data analysis since it offers the research with an opportunity to interpret numerical data such that it gives easy and meaningful information to both the researcher and other stakeholders. Numerical data can be translated into graphs, pie charts, and other diagrammatical representations that explain trends or tendencies and size of one variable against another.

Data was presented using tables, pie charts and graphs with the aid of computer application software especially Microsoft word, Microsoft excel and the special package for social sciences (SPSS).

#### 3.9 Ethical Considerations

During the study the researcher ensured that the ethical issues that are advocated for are maintained for purposes of a good image between the researcher and the participants. The respondents were not be coerced to deliver information and or given money to give data or information in turn. The researcher held the responsibility of keeping the data of the respondents confidential, for example the respondents' bio data like their age and health status. This was achieved by the way the research tools were designed that is to say the questionnaires did not require the respondents to indicate their names. The researcher did not subject the participants to any kind of mental stress like asking questions that are detrimental to their self interest that are likely to cause psychological disorders and thus depriving them of their rights.

#### 3.10 Limitations of the Study

Quite a number of limitations were encountered in regard to the context of the study and the researcher. To the context of the research, some individuals were not ready to disclose the details of their businesses like the inventory value in fear of taxes, in this case some people fear disclosing the number of boats they own; however this problem was suppressed by telling the respondents the aim of the study as being an academic obligation and also assured the respondents that there their information will be confidential to the researcher. The researcher may also find challenges like; time constraints to overcome this, the researcher sought a period long enough to take a pilot study and the actual field research, another challenge was inadequate funds to facilitate the researcher though it was conquered by asking the guardian for financial support.

#### 3.11 Conclusion

This chapter presented the methodology of the study looking at areas of the study design, study area and population, sampling procedure, sample size and sampling techniques, the data collection methods and instruments, quality control, data management, processing and analysis, ethical considerations and finally the study limitations.

By presenting the above sections, the methodology guided the research to come with suitable techniques and tools that were appropriate for study and made data collecting, interpreting, processing and general data analysis easy for the researcher and other stake holders who may use the research findings of this study.

#### **CHAPTER FOUR**

### PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

#### 4.0 Introduction

This chapter is devoted to the presentation, analysis and discussion of findings on the effect of training on the standards of living among the commercial fishermen at Katwe fishing site in Kasese district, in this chapter, each objective in relation to variables of the study are presented and discussed objective per objective using qualitative and quantitative approaches.

# 4.1.0 Respondents demographic analysis

The demographics of the respondents are categorized into structures of age group, sex, level of education and marital status. This structure was critical to be identified for purposes of clarity of the results and thus enhance proper interpretation of the findings.

# 4.1.1 Respondents age group

**Table3: Showing age group of the respondents** 

		Frequency	Percent	Cumulative Percent
Valid	10-16	3	6.8	6.8
	17-25	17	38.6	45.5
	26-35	9	20.5	65.9
	36-70	15	34.1	100.0
Total		44	100.0	

Source: primary data, 2014

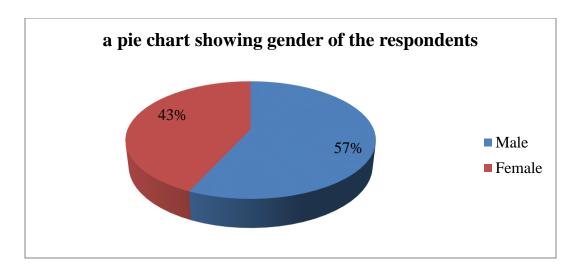
From the table above it is indicated that the majority of the respondents to the study were of the youth age brackets thus between the age of 17 and 25 taking a percentage of 38.6% where as the elderly thus 36 and above years accounted for 34.1%. The study engaged the group as indicated in the table because the majority of the people involved in fishing activities were coincidentally falling under that age group, ranging from fish mongers, the youth involved in other fishing activities among others.

Having categorized the age groups of the respondents, it is also important to take note of the sex composition of the respondents that were involved and that is indicated in the chart below. The age analysis helped the researcher to know the most affect age bracket so as to give recommendations in accordance to the age bracket since different age groups respond differently to differently to different adjustments.

# **4.1.2** The sex composition of the respondents

The study set to find out the gender variations among respondents so that it becomes easy for the researcher to identify how the sex composition influences the research findings, results of the sex composition analysis are presented in the figure below;

Figure 1: A pie chart showing the sex composition of the respondents of the study.



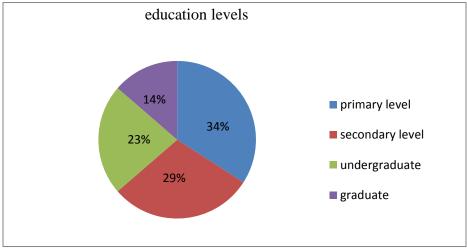
Source: primary data

From figure 1 it is indicated that male respondents are more than the female respondents though with a minimal difference, it the reason why researcher took more male respondents because they are more involved in the fishing activities especially fish catching, fish trading that involves selling fish and other fishing activities. The females are also involved indirectly in the fishing activities as they involve in fish selling activities thus accounting for 43% of the respondents. The female and male respondents involved in the study also include residents of Katwe-kabatoro town council.

# 4.1.3 Respondents' education levels

The respondents to the study entailed a mixture of persons with different education backgrounds, these backgrounds need to be highlighted and analyzed for data sanity and reliability.

Figure 2: A pie chart showing the level of education of the respondents to the study



Source: Primary data

According to the pie chart above, it is indicated that 34% of the total respondents' education level was just below basic thus of primary level, a few are in school accounting for 29% in secondary, 23% undergraduate and finally 14% of graduate level.

The low level status of the respondents among the respondents is evidenced by Westway (2009) a scholar who stated that children of fishermen drop out of school at the primary level due to poverty among the fishermen. (westway, 2009)

### 4.1.4 The marital status of the respondents to the study

The marital status analysis is important since different respondents of a different status have different views of about different ideas.

**Table 4: showing marital status of the respondents** 

	-			Cumulative
		Frequency	Percent	Percent
Valid	single	24	54.5	54.5
	married	19	43.2	97.7
	divorces	1	2.3	100.0
Total		44	100.0	

Source: Primary data

According to the analysis of the marital status of the respondents, it is indicated that the majority number of respondents are married followed by 17 respondents who are singles, these respondents both depend on the fishing activities for their livelihood. Through the observation made by the researcher in the field, it was observed that a good number of the youths who are also singles engage in the fishing activities though they are not seen to be in good living conditions as far as clothing and housing is concerned.

Data about the marital status was one of the key aspects to consider since it was noted from some respondents that training about life protection from HIV/AIDS is frequently done, these respondents were adding that it because some of the fishermen live far away from their families so they are considered as singles and there are also some single fishermen thus making it difficult for them to protect their lives against the killer disease AIDS.

from the statistics in Table 4, it is indicated that more respondents are single this could be the reason some respondents believe is one of the reasons for the HIV/AIDS prevalence in the region since most for the people in the area are single and those who are married are said be having their families in far places.

Given the statistics of the marital status of the respondents, it is prudent to note that some of the fisher men accounting for about 50% married respondents were living far away from their spouse, those a good number were still living a single life thus accounting for 52.2% of the total respondents.

### 4.1.5 The religious affiliation of the respondents

Different respondents were contacted during data collection, these respondents were of different religious denominations thus there is need to understand these religious denominations so as to achieve data coherence and understand better why the society under study behaves besides their different religions.

Table 5: A graph showing the religious affiliation of the respondents

	-			Cumulative
		Frequency	Percent	Percent
Valid	Catholic	20	35.7	45.5
	Protestant	17	30.4	84.1
	Muslim	7	12.5	100.0
Total		44	100.0	

Source: Primary data

Katwe population comprises of Christians as well as a good number of Muslims, however the graph above is made up of Christians thus the Catholics and Protestants taking the lead of the respondents to the study. It is indicated that 35.7% of the respondents were Catholics, 30.4% were Protestants, and 12.5% being Muslims. According to the district statistics Kasese as a

district has got a considerable number of Muslims doing business in Bwera-Mpondwe at the border. A good number of these have occupied different parts of the district including Katwe fishing village thus accounting for 12.5%. It is critical to take analysis of the religious denominations of the respondents since different believers have different views and ideologies about different aspects.

### 4.1.6 Residential locations of the respondents

It is important to take note of the residential locations of the respondents since it is basic to track their locations s so as to maintain and areas of the study and thus obtain results and probable solutions for the particular people in the particular area of study.

Locations of the respondents

natives of katwe

living in other areas but working on the fishing lake (Edward)

Figure 3: Pie chart showing the location of the total number of respondents to the study

Source: primary data

From the chart above, it is indicated that the respondents were majorly those occupying the region under study accounting for 80% of the total respondents, the remaining 20% of the respondent were living in areas around Katwe but were involved fully or partially in the fishing activities at Katwe fishing site. The study is all about assessing the standards of the fishermen

living at Katwe landing site alongside training of these fishermen. Since it is believed that with training of fishermen and other fraternities on the how to improve their livelihood, their standards of living would improve as suggested by Balciunas et al (2002)

# 4.2 Training and peoples standards of living

This section assesses the relationship between training and peoples standards of living at Katwe fishing site in Kasese. The study assess the effect of training on the standards of living of commercial fishermen as presented below

73% 27% No

Figure 4; chart showing response on training and standards of living

Source: primary data

Results indicate that 73% of the majority of the respondents accepted that training significantly affects the people's standards of living while smaller percentage 27% disagreed that training affects the people's standards of living. From the results as indicated in the figure. The implication of the results is that once there is training among the commercial fishermen, then the standards of living and quality of life lived would improve among the commercial fishermen. These research findings are supported by Chaibva (2000) who extensively described how

training enhances capacity building and also improve standards of living and productivity of individuals at work places. Where he adds that capacity building in this regard refers to the ability of the commercial fishermen to manage their business in an appropriate manner such that they are able to take care of their families with good housing facility and better education for their children. (Chaibva, 2000). This implies that if training is offered to the commercial fishermen, then their standard of living should improve relative to the training offered.

### 4.3.1 Fishermen at Katwe fishing site get adequate training

The study set out to establish the sufficiency of training offered to commercial fishermen and whether it affects their standards of living. It was important to analyze whether training is adequate because it has a direct impact on the skills acquired which skills are considered to be crucial in the improving the standards of living since they affect the level of income as they are seen to be one of the factors that dictate the fish catches holding other factors constant.

Table 6: Showing opinions about whether there is adequate training for the commercial fishermen at Katwe fishing site

		Frequency	Percent	Cumulative Percent
Valid	Strongly agree	11	25.0	25.0
	Agree	20	45.5	70.5
	Disagree	2	4.5	75.0
	Strongly disagree	7	15.9	90.9
	Not sure	4	9.1	100.0
	Total	44	100.0	

Source: Primary data

From the table 6 above, it can be observed that 25% strongly agreed that there is enough training of the commerce fishermen whereas 45.5% agreed, 4.5% disagreed, 15.9% strongly disagreed and 9.1% were not sure whether the training is really enough. The fact the 70.5% comprising of those who are agreed plus those who disagreed then it can be mentioned that there is enough training to the commercial fishermen.

The findings were in agreement with DeMartini (1991) writings which gave a deeper explanation on the effect of training on the standards of living once it's done effectively, alleging that if training is done effectively and constantly it is likely to make an impact on the trainee, whereby the trainee acquires the skills necessary for their performance. However there are some challenges that come alongside the acquired skills that may limit increase in the level of income of the commercial fishermen like Schwartz (2002) indicated that there is a decrease in fish population due to new species fish introduces in Uganda's water bodies arguing that they reduce the fish population since they feed on the local fish breed, this might in a way decrease daily fish catches as well as the level of income of the commercial fishermen.

# 4.3.2 Agreement with whether knowledge and skills acquired during training affects the commercial men's standards of living.

The study set out to look at how knowledge and skills acquired during training affects the commercial fishermen's standards of living. The respondents view about how knowledge and skills acquired on training affect the fishermen's standards of living was important to determine whether the training offered to the commercial fishermen at Katwe fishing site was fruitful for the targeted people.

Table 7: Table showing the descriptive statistics of how knowledge and skills acquired on training improves commercial fishermen's standards of living

	N	Mean	Std. Deviation
Effect of skills and knowledge acquire during training	44	2.50	1.285
Valid N (listwise)	44		

Source: Primary data

The results in the table above revealed that respondents agreed that knowledge and skills acquired during training improves fishermen's standards of living with a mean value of 2.50 and standard deviation of 1.28 implying that skills and knowledge acquired during training truly affects the standards of living among the commercial fishermen. The implication of these findings is that the skills and knowledge acquired helps the people improve their standards of living. These findings are supported by DFR annual report (2012) which indicated that wemon who were trained about fish preservation methods across in selected fishing regions in the country acquired the skills necessary as they has started supplying processed and packed fish products to local supermarkets, this according to the report has improved their income base and independence.

During review of literature in regard to this study, it was clear that training of commercial fishermen was conducted and several skills pertaining fish preservation, fish processing methods as well as fish packing methods were learnt by the participants of the training. This is evident in the DFR annual report that in Kayindi and Kashekulo in kalangal women were being practically trained on improved fish processing methods and of late these women are processing a packing Mukene to be sold in supermarkets. (DFR, 2012) The majority of the respondents agreed that there is training offered to commercial fishermen. In this case the effects of training as discussed

in the literature review of this paper by Safina et al. (2013), Mbingili et al.(2013) and other authors should fall due to the area under study other factors remaining constant.

As Mwedde (2009) had alleged that training of commercial fishermen would help them acquire several skills like good fishing methods and marketing skills as well as communication skills. Like MRC (2012) stated that good marketing skills are curved out of good communication skills acquired out of training. It is therefore assumed that given the training offered to the commercial fishermen they should be equipped with the skills that will improve the fishing sector as a whole as well as improving their standards of living through improved working conditions and improved incomes.

The figure above shows the number of respondents who agreed that training is offered to the commercial fishermen

# 4.3.2 Opinions about whether various methods are used when training the commercial fishermen

The study further sought to find out the whether various methods are used when training the commercial fishermen at Katwe fishing site. The purpose of determining whether there are various methods used when training the commercial fishermen is derived from Safina et al. (2004) opinion that the method used when training affects the results of the training as presented below.

Table 8: Agreement with whether various methods are used while training.

		Frequency		Cumulative Percent
Valid	Not sure	1	2.3	2.3
	Agree	34	77.3	79.5
	Strongly agree	9	20.5	100.0
	Total	44	100.0	

Source: Primary data

From the findings, it is indicated that 77.3% agreed that various methods are used when training the commercial fishermen, 20.5% strongly agreed while 2.3% were not sure whether there are different methods of training. The finding are in support with cherly and Ian (2004) who alleged that tutorials are said not to be a good training approach since it is difficult to ascertain the relevance of the training unless a combination of other methods is used as well. And indeed it might be difficult to measure the skills acquired from the tutorials as a method of training. In the case of this study it has been found out that training is done using various approaches since the aspects that the fishermen are being trained about are even different. Therefore these fishermen are entitled to the benefits of training since various methods are used, the benefits of training referred to in this case are highlighted by Safina et al. (2004)

# 4.3.3 The effect of methods used when training and the standards of living among the commercial fishermen

This section of the study apparently assesses the effect of the method used when training on the standards of living among the commercial fishermen. The respondents where basically asked following the Yes or No scale and the results are presented below

Table 9: Showing the training methods and their effects on the standards of living of the commercial fishermen

		Frequency	Percent	Cumulative Percent
Valid	Yes	26	59	59
	No	18	41	100.0
	Total	44	100.0	

Source: primary data

The bar chart above indicates that a good number of respondents agreed that the training methods used affects the standards of living of the commercial fishermen. 59% accepted that training method affects the skills and knowledge acquired which in turn influences the standards of living through improved working methods and new income generating techniques. 41% of the respondents disagreed that the training methods does not affect the standards of living of the commercial fishermen, they thought it is the competence of an individual and other individual factors that influence the standards of living of the commercial fishermen in spite of training and the methods used in training.

The fact that Cherly and Ian (2004) criticize tutorials as a training method alleging that it should not be depended on solely since it limits practicability of the training subject, therefore other method that may enhance applicability are to be used as well if training id to yield better results. For this study, the findings indicated that the commercial fishermen at Katwe fishing site have been trained using several approach owing to the fact that they are trained in distinguished aspects of capacity building and maintain better standards of living. The reasons why some methods used in training are not sufficient is that some training methods could be theoretical,

where as some training needs hands-on training for instance preservation of fish and fish packing among others.

#### 4.4 Performance of fishermen

This study assessed the fishermen's performance in terms of output measured in fish catches, fishing methods used which should be legal and good, and fish depletion threat that may endanger the fishermen's source of livelihood. Assessment of the fishermen's performance is set to determine whether training really helps them in any case.

# **4.4.1 Poor fishing methods**

This analysis is about showing respondents opinions on whether there is any poor fishing method. Poor fishing methods may lead to fish depletion which could be hazardous to the commercial fishermen since it poses a high risk of severe poverty and starvation to families that solely depend on the fish resources for food.

Table 10: showing whether there any poor fishing methods used by fishermen at Katwe fishing site.

	-	Frequency	Percent	Cumulative Percent
Valid	No	17	38.6	38.6
	Yes	27	61.4	100.0
	Total	44	100.0	

Source: Primary data

The table statistics indicate that 61.4% agree that there indeed poor methods of fishing being used at Katwe fishing site whereas 38.6% disagreed with the preposition that poor methods of

fishing are being used. The fact that a bigger percentage agrees that there are poor methods of fishing being used, it is clear that there is a problem of seasonal fish depletion caused by poor fishing methods though other factors like climate are also responsible for fish reduction in the waters.

Just like Katsongo (2013) alleged that methods like using electricity and poisoning to catch fish should be prohibited in lake waters, justifying that these methods are highly responsible for fish depletion in water bodies. The methods of fishing that should not be used in Ugandan water bodies are clearly highlighted in the statutory instrument under section 3(a)(b) especially indicating the types of nets that should be used. The Fish Act (1997), Kamanyi and Okoranani (1989) in their survey report alleged that commercial fishermen using prohibited fishing methods are more than likely landing immature fish, adding that using undersized nets leads to destructive fishing. In the analysis of whether there are poor methods of fishing are used at Katwe fishing site it is indicate that it's true there are poor methods used. In this case there are is destructive fishing at the landing site that leads to fish depletion as supported by Kamanyi and Okoranani (1989) this consequently reduces the level of income among the commercial fishermen since the fish catches reduce, this automatically imply low standards of living among the commercial fishermen. It implies low standards of living since Mitana (2008) defines standards of living as the social economic welfare of the population over a given period of time measured by a basket of goods and services consumed, and of course the basket of goods and services is determined by the level of income of the population who are the consumers.

#### 4.4.2 Poor fishing methods at Katwe fishing site may lead to fish depletion.

The fishing methods used at Katwe fishing site have a hand in determining the fish population, fish depletion that also influences the level of income of the commercial men at Katwe fishing site, this is because the fishermen depend solely on the fish in the lake for a livelihood. Ogutu-Ohwayu (1990); Schofield and Chapman, (1999) both alleged that poor fishing methods, over fishing and dumping of wastes in the lake waters of Uganda are potential reasons for fish depletion thus reducing the capacity of the fishermen to raise income. The findings below show whether there is a risk of fish depletion at Katwe fishing site and whether the depletion of fish can decrease the level of income among the commercial fishermen that subsequently reduces the standards of living among the commercial fishermen.

Table 11: Showing opinions about the risk of poor fishing methods at Katwe fishing site

		Frequency	Percent	Cumulative Percent
Valid	Strongly agree	7	15.9	15.9
	Agree	17	38.6	54.5
	Disagree	12	27.3	81.8
	Strongly disagree	6	13.6	95.5
	Note sure	2	4.5	100.0
	Total	44	100.0	

Source: Primary data

The table above indicates that 15% strongly agree that poor fishing methods may lead to fish depletion, 38.6% also agree with the preposition that there are high risks of fish depletion as a result of poor fishing methods. Whereas 27.3% disagree and 13.6 completely or strongly disagree with the statement that poor fishing methods may lead to fish depletion. 4.5% did not have enough knowledge about the effect of poor fishing methods on the fishing site on fish

population. In the review of literature to this study Asila (2001) maintained that there should be a restriction on the size of nets used in order to manage the fish population and avoid fish depletion in the water bodies of Uganda, majority of the respondents agreed with Asilia (2001) that poor fishing methods really would lead to fish depletion this would reduce the fishermen's future incomes since they would be left with nothing to catch and therefore would end up in absolute poverty. This subsequently implies a poor status of living among these fishermen.

# 4.5 Standards of living for the commercial fishermen

For the purposes of this study standard of living were measured using a few basic variables thus, income earned by commercial fishermen to cater for their families, how the commercial fishermen utilize their leisure time that is to say in community development groups or otherwise as per the research finding.

# 4.5.1 The fishermen at Katwe fishing site earn enough money to cater for their families.

The study was set to assess whether the commercial fishermen get enough money to cater for their families given the training they go through. The results are presented below;

Table 12: showing whether fishermen at Katwe fishing site earn enough money to cater for their families.

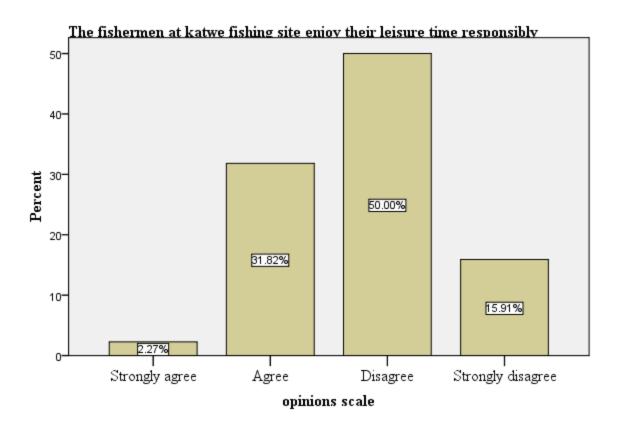
		Frequency	Percent	Cumulative Percent
Valid	Strongly agree	12	27.0	27.0
	Agree	19	43.2	70.2
	Disagree	9	20.5	90.7
	Strongly disagree	4	9.0	100
	Total	44	100.0	

Source: Primary data

From the bar graph above, 27.0% strongly agreed that the commercial fishermen actually earn enough income to cater for their basic needs and families, 43.2% agreed, 20.5% disagreed, and 9.0% strongly disagreed. if these members are really receiving enough money to cater for their families and human basic needs. Since majority of the respondents are agreeing with the preposition that the commercial fishermen are earning enough to cater for their families. It was made clear by Houghton (2000) in the literature review of this study that standards of living are about the level of comfort measured by the basket of goods consumed, this implies that the ability to purchase id one of the variables to consider when one talks about standards of living, therefore it was prudent to find out whether the fishermen do get enough money to cater for their families because this is what reveals the status of their living standards.

# 4.5.2 Fishermen at Katwe fishing site enjoy their leisure time responsibly

Figure 5; Showing opinions about how the commercial fishermen enjoy their leisure time



Source: Primary data

Helen and peter (1999) described standards of living as the amount of wealth, comfort and other material things that an individual an individual or group or nation has. In this case the leisure subjected to the individuals or a group of people would be represented by the level of comfort Helen and Peter (1999) were referring to. From the graph above, it is indicated that 50% disagree with the statement that commercial fishermen at Katwe fishing site enjoy their leisure accordingly and responsibly, 16.91% strongly disagree and 31.82 agree while 2.27% strongly agree. Now that majority of the respondents greatly disagreed, it is implied that the standards of living among these people is really poor in accordance to Hellen and Peter (1999). The Collins dictionary (1991) looks at standards of living as the level of subsistence and comfort in daily life maintained by a community, class or individual. This definition also contradicts the responses

from the survey questionnaires which had the majority of the respondents disagreeing that the commercial fishermen do not enjoy their leisure time responsibly.

Some respondents who were interviewed about how the commercial fishermen enjoy their leisure time raised cause for attention when the responded saying the fishermen after their daily work have to go to nearby bars to enjoy their earnings which they say they is hard earned relating to the risks involved like spending a lot of hours on the waters which is dangerous to their lives.

# 4.5.3 People at Katwe fishing site are generally staying in good conditions

The study set out to find out whether the people of Katwe fishing site are really living in good conditions which are used to determine their standards of living. Owing to the hypothesis that standards of living increase with the increase in the level of training, the study set out to find out the effect of training by investigating into the standards of living and the results were as below;

Table 13: showing opinions about the preposition that people at Katwe fishing site are generally staying in good working conditions

		Frequency	Percent	Cumulative Percent
Valid	Agree	9	20.5	20.5
	Disagree	23	52.3	72.7
	Strongly disagree	12	27.2	100.0
	Total	44	100.0	

Source: Primary data

From the table above, it is proved that 20.5% agree that the fishermen at Katwe are generally living in good conditions, while 52.3% disagree and 27.2% strongly disagree with the

fishermen preposition the are not generally in good living conditions. Wegoya and Micheal (2005) highlighted something on other sources from which the commercial fishermen can forge away out to improve their standards of living, they added that this could be as a result of low skilled and thus subject them to one source of income which sometime unreliable due to other factors like climatic changes and others. This corresponds with the views of the majority respondents under the analysis of whether the commercial fishermen are staying in good conditions.

In a family, it is usually the responsibility of the parents or guardians to cater for the needs and wants of the rest of the members, in the bid to fulfill this obligation, the people at Katwe fishing site engage in various activities that are usually income generating. The two major activities of these are salt mining and fishing, the fishing activities pull a good number of the population of Katwe fishing site. This implies that these people just depend on the fishing activities to earn a living. Their conditions of living are therefore dependent on these activities.

By observation, Katwe fishing site has a ghost town which is having empty old residential houses which are said to have been occupied by deceased members that departed due to the most dangerous killer disease AIDS. This is supported by the Kasese district AIDS report indicated high HIV/AIDS prevalence in the region. By observation still the researcher actually observed that the state of life was not generally good considering factors like roads, tapped water whereby residents were seen fetching water for domestic use from the lake which is unhealthy.

### 4.5.4 People's opinion on whether fishermen have community development associations.

Table 14; showing whether the fishermen at Katwe fishing site have community development associations.

	-	Frequency	Percent	Cumulative Percent
Valid	Yes	31	70.5	70.5
	No	13	29.5	100.0
	Total	44	100.0	

Source: Primary data

Community development groups according to Karlan and Valdavia (2010) help in organizing members and sharing of ideas as well as commanding a strong base that may be used to used for purposes of collective investment. It was therefore prudent to take analysis of whether the community of Katwe fishing site the area under study do have any form of communal organizations that may help that develop socially or even economically.

According to the table 6, 31 respondents accounting for 70.5% of the total respondents agreed that there are community development groups of different people for different aims, one of the respondents gave an example of Katwe fishermen development group which he said has more than 50 members who frequently meet to plan for the their welfare and general development as a community. Only 29.5% disagreed with the preposition that there are community development groups at the fishing site. These respondents mainly disagreed giving a reason that these fishermen groups are very much abused in way that they mainly use them as drinking groups where they are seen convening during evening hours to take alcohol routinely after work.

As earlier noted by Karlan and Valdavia (2010) that when people are united they together develop due to easy sharing of ideas and resources, Katwe could be one of the most developed areas in the district since it has the community organizations but data from the field indicated

that these groups are being abused since they are used as alcohol drinking groups and end up missing the main objective for formulating the groups.

The researcher observed that the youth of Katwe town council have developed a habit of drug abuse. This was evident as the researcher steadily watched young boys for a period of five consecutive days when they ran to a vehicle that parks along the road near a the trading centre to buy drugs packed in banana leaves which they termed as "mayirungi" Most of these young boys are said to have dropped out of school for the sake of working in the fish lake as well as the salt lake, however most the respondents who gave an opinion about these young fellers 70% said these youth have actually made it a habit and that they smoke drugs and also drink alcohol during evening hours. This is in line with what the researcher observed when in the field.

#### **CHAPTER FIVE**

## SUMMARY, CONCLUSIONS AND RECOMMENDATION OF FINDINGS

#### 5.0 Introduction

This chapter presents the summary, conclusions drawn from the study, and then the recommendations of the research findings.

# **5.1 Summary of the findings**

The study was carried out mainly to assess the role of training among the commercial fishermen, in this regard the researcher aimed at finding out how training affects the standards of living among the commercial fishermen Katwe fishing site. Other objectives of the study were to examine the effect of frequency of training and the standards of living of the commercial fishermen, to find out the effect of methods used while training of the commercial fishermen and these methods impacts on the standards of living of the commercial fishermen, and finally to to assess the effects of skills and knowledge acquired n training on the standards of living of the commercial fishermen. The study was focusing of Katwe fishing site on lake Edward in Kasese district.

# 5.1.1 To examine the effect of frequency of training on the standards of living of the commercial fishermen at Katwe fishing site

The finding of the study indicated that frequency of training or the number of times the people are trained about a particular subject has a direct effect on the results of the training. In the case a good number of the respondents agreed that there is frequent training of the commercial

fishermen. Alleging that the commercial fishermen at Katwe fishing site are being trained on various aspects including fish preservation methods, health sensitization like HIV/AIDS sensitization programs, among others. Like Demartini (1991) alleges that once training is made effectively on a regular basis the people subjected to that kind of training have higher chances of performing better in the field they are being trained. Therefore the biggest percentage of the respondents (70%) agree that there if frequent training of the commercial fishermen at Katwe fishing site, then their standards of living should be relatively increasing.

# 5.1.2 To find out the effect of training method on the standards of living of the commercial fishermen

The method used while training impacts the results of the training. In the case of this study the mode of training used is said to be appropriate for the trainees thus the people dealing in fishing and fishing related activities. The 2012 DFR report indicated the hands-on training method that was used when training women dealing in fishing activities thus fish processing and fish packing greatly yielded results as most women got involved in supplying their packed fish products to local supermarkets. This improved their standards of living they earned extra income from supplying packs and processed fish.

# 5.1.3 To study the effect of knowledge and skills acquired on training of the standards of the living of the commercial fishermen

The skills and knowledge acquired on training also affects the standards of living of the trainees, this was also evidenced by the results of the DFR report of 2012 whereby the woman were trained and acquired special skills and the knowledge to add value to the fish they sell by

packing it so that it may be sold to greater platforms, and indeed supermarkets started selling the fish locally processed and packed by the women since they had acquired the skills and were using those skills well.

### **5.2** Conclusions of major findings

There are more males dealing in the fishing activities altogether, however some females are also engaging in the fishing activities especially fish processing and fish selling. The research findings show that there are many uneducated individuals involving in the fishing activities directly and indirectly, the low education levels of the people of Katwe fishing site results from the involvement in the fishing activities at an early age, many families depend on the fishing resources for food and income thus parents engage their children in the fishing activities so that they arise more income for the sustainability of the family. The fact that the level of education is low implies a low standard of living as some scholars like Hunter (2005) suggest that education is one of the indicators of standards of living.

Due to the fact that the research findings show there is frequent training of the commercial fishermen, the desired situation is that the commercial fishermen should gain skills and knowledge necessary to improve the fishing activities that improve the fishermen's income, way of life and their general standards of living. The research finding however indicate that the standards of living among the commercial fishermen have not improved in spite of the frequent training offered to the commercial fishermen as suggested by the respondents to the study. There could be other factors that have hindered the improvement in the standards of living among the commercial fishermen, these factors could be negligence of the fishermen whereby they over drink alcohol, drug addiction, prostitution that makes them vulnerable to the risk of HIV and poor planning among other factors.

Fishermen have been trained about the proper fishing methods to use so as to properly utilize the fish resources, other aspects of training are personal finance management and HIV/AIDS training programs. This training offered to the commercial fishermen is meant to safeguard the water resources which are utilized by a good percentage of the population; however the fishermen have continued to misuse the fisheries resources by practicing poor fishing methods like using small illegal nets thus reducing the fish in the lake that leads to unbalanced seasonal catches that subject the fishermen to low incomes in some seasons, this has made the commercial fishermen to be subjected to poor standards of living.

The research findings indicate that there is training among the commercial fishermen and that various methods have been used to train the commercial fishermen on how to manage their finances and also use the skills learnt to utilize the fisheries resources appropriately. In spite of the training the standards of living have not improved as desired. The indicators of poor standard of living are still significant in the area where the study was conducted, there several indicators of poor standards of living such poor housing, poor schools with low standards, absence of a good health centre, poor water supply; the people of Katwe still depend on lake water for domestic use, this water is neither processed nor purified for home consumption, this has retarded the hygiene of the people living in this area and thus subjecting them to heath related problems taking an example of the 2011 cholera outbreak in the region, thus implying poor standards of living among the citizen of Katwe.

### **5.3 Recommendations of findings**

Local leaders should encourage community development groups within which the members can structure simple savings and credit cooperatives (SACCOs) from which members can raise capital to support their family responsibilities like paying school fees and paying for home

necessities. The government can also come up with aggressive policies directed towards capacity building whereby fishermen are guaranteed to be part SACCOs such that they are capable of earning and this makes the members to get a saving spirit thus improved standards of living.

Since standards of living are not only measured by the level of income but also quality of educations, social amenities like good roads, clean water, electricity among others; the government should therefore include Katwe region in the plans for construction of the social amenities like good roads, this kind of infrastructure development will stimulate other business activities that will provide an alternative source of livelihood. In this way the fish resources will not be at risk of being depleted since some members of the population will deal in alternative businesses.

The ministry of Agriculture, Animal Industry and Fisheries should put in place tight measures to counteract the problem of poor fishing method, for example penalize the fishermen caught using illegal fishing gears, this can maintain the fish population in the lake and thus maintain a fish population and eliminate the problem fish depletion that endangers the living standards of the commercial fishermen at Katwe fishing site.

The government should come up with a body that is responsible for initiating people to the fishing activities, the new people who want to engage in the fishing activities should be taken through training so that the economic activity is not turned into a disastrous activity that can cause complete fish depletion. The commercial fishermen beginning the system should go through a mandatory training program so that they use the fish resources with due diligence. This would help them sustain their dependence on the fish resources thus improving their standards of living.

Special training programs particularly aiming at equipping the commercial fishermen with income generating programs like fish processing and fish packing, this will widen the demand for the fish products since they can now at that level be supplied to supermarkets and thus generate more income for the commercial fishermen, thus improving their standards of living.

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### **APPENDICES**

Appendix 1

### A self administered Questionnaire for fisheries management members

I am Mukasa Joackim, a student of Uganda Martyrs University working on a research seeking to find out the effect of training on the standards of living of commercial fishermen's at Katwe fishing site. You have been identified as one of the resource persons who can give information to make this study a success. I humbly request you to fill this questionnaire with honesty because confidentiality will be maintained, therefore the information you give will be used only for the academic motive of this study.

Thank you for your time and co-operation.

(c) What is your Religious affiliation

Protestant

Catholic

Section A
In this section you are required to <u>Tick</u> the appropriate alternative
(a) Sex (Please tick the appropriate alternative)
Male Female
(b) Age group in years (Please tick the appropriate alternative)
Below 18 years Between 18 and 30 years Between 60 and 45 years
Between 45 and 60 years 60 years and above

Muslim

Others

(d) M	arital status (Please tick the appropriate alternative)
Marrie	ed Single Divorced Others
Section B	
In this sec	ction you are required to tick in the appropriate box
<b>(i)</b>	What is your Management position? (tick the appropriate category)
Fisher	ies officer Fish guard fisheries site guide others
(ii)	For how long have you worked with the fisheries sector?
	At least 1 year 2 years but less that 5 years more than 5 years
(iii)	Has the government offered training to the fishermen in the recent years?
	(Answer with YES/NO)
(iv)	Do the fishermen have community development groups or any other form of social
	organizations at the local level?
	YES NO
(v)	Have you registered any cases of poor fishing methods?
	YES NO

### **Section c**

In this section you are required to tick where applicable to show the extent to which you agree or disagree with the statement using the scale as illustrated below

SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly disagree, NS=Not sure

STATEMENT	SA	A	D	SD	NS
Fishermen at Katwe fishing site get enough training					
Fishermen at this fishing site have the necessary skills					
they need					
Various methods are used in training of fishermen at					
Katwe fishing site					
The fishermen at Katwe get enough money to cater for					
their families					
The fishermen at Katwe fishing site enjoy their leisure					
time responsibly					
There are risks of fish depletion caused by the method					
of fishing used					
The fishermen at Katwe fishing site make enough sales					
Katwe fishing site fishermen are generally staying in					
good conditions					

THANK YOU

Appendix 2

**Questionnaires for youth** 

I am Mukasa Joackim, a student of Uganda Martyrs University working on a research seeking to find out the effect of training on the standards of living of commercial fishermen's at Katwe fishing site. You have been identified as one of the resource persons who can give information to make this study a success. I humbly request you to fill this questionnaire with honesty because confidentiality will be maintained, therefore the information you give will be used only for the academic motive of this study. Thank you for your time and co-operation. **Section A** In this section you are required to <u>Tick</u> the appropriate alternative (a) Sex (Please tick the appropriate alternative) Male Female (b) Age group in years (Please tick the appropriate alternative) Between 10 and 16 years Between17 and 25 years Between 26 and 35 years (c) What is your Religious affiliation Catholic **Protestant** Others Muslim (d) Marital status (Please tick the appropriate alternative) Married Single Divorced Others (e) Highest Education Level (Please tick the appropriate alternative)

	Primary level	senior one	senior two	senior three
	Senior four	A' Level	Higher institution	Not in school
<b>(f)</b>	How many children are	you at your home?		(Put the number of
	children you parents hav	re. E.g. 7)		
(g)	What is your area of	residence		(Put
	name of your area of resi	idence)		
( <b>h</b> )	What is your father's occ	cupation		
<b>(i)</b>	Mother's occupation			
Sectio	n B			
In this	section please tick the ap	propriate box (	)	
(a)	Who pays your school fee	es?		
Father	Mot	her	Guardian	
(b)	Who buys food at home?			
Fat	her I	Mother	Brother/Sist	er
Section	n C			
In	this section you are requi	red to tick where ap	plicable to show the	extent to which you

In this section you are required to tick where applicable to show the extent to which you agree or disagree with the statement using the scale as illustrated below

**SA**=Strongly Agree, **A**=Agree, **D**=Disagree, **SD**=Strongly disagree, **NS**=Not sure

STATEMENT	SA	A	D	SD	NS
Fishermen at Katwe fishing site get enough training					
Fishermen at this fishing site have the necessary skills					
they need					
Various methods are used in training of fishermen at					
Katwe fishing site					
The fishermen at Katwe get enough money to cater for					
their families					
The fishermen at Katwe fishing site enjoy their leisure					
time responsibly					
There are risks of fish depletion caused by the method of					
fishing used					
The fishermen at Katwe fishing site make enough sales					
Katwe fishing site fishermen are generally staying in					
good conditions					

### THANK YOU

# Appendix 3

## An interview guide for retailers

I am Mukasa Joackim a student of Uganda Martyrs University carrying out a research seeking to find out the effect of training on the standards of living of commercial fishermen's at Katwe fishing site. You have been identified as one of the resource persons who can give information to make this study a success. I ask you to answer the questions that am going to ask you and I beg that you ask for clarity where you have not understood for purposes of data integrity.

Thank you for your time and co-operation.

- 1. Sex?
- 2. How long have you been in business?
- 3. Tell me something about your customer base; do you have many customers? Are they repeating customer?
- 4. What do they purchase most?
- 5. How often do they purchase salt, sugar and soap?
- 6. Is the customers' purchasing seasonal?
- 7. Which season brings more customers?
- 8. Do you keep records of your customers? If yes are there those who deal in fisheries activity and what is their purchasing power like?

#### Good luck

Thank you for your help and support. Have a good day and God bless you abundantly.

### Appendix 4

### An interview guide for fishermen

I am Mukasa Joackim a student of Uganda Martyrs University carrying out a research seeking to find out the effect of training on the standards of living of commercial fishermen's at Katwe fishing site. You have been identified as one of the resource persons who can give information to make this study a success. I ask you to answer the questions that am going to ask you and I beg that you ask for clarity where you have not understood for purposes of data integrity.

Thank you for your time and co-operation.

- 1. Sex?
- 2. What is your religious affiliation?
- 3. Are you married?
- 4. How many children do you have?
- 5. How long have you been dealing in the fisheries activities?
- 6. Apart from fisheries, are there any other activities that you deal in? if yes what are those activities?
- 7. What challenges do you face?
- 8. Are there any remedies? Has government helped you curb those challenges?
- 9. Has there been any thing like training? Is yes, how often is it? and which methods are used?
- 10. Do you gain any skills from the training? If yes, which skills are they?
- 11. Do you have dependants?
- 12. Do you get enough money to look after your dependants?
- 13. Do you get time for leisure? If yes, how do you spend your leisure time?
- 14. What can be done to improve the way you carry out you activities as well as your profitability?

# Appendix 5

An interview guide for fish sellers

I am Mukasa Joackim a student of Uganda Martyrs University carrying out a research seeking to find out the effect of training on the standards of living of commercial fishermen's at Katwe fishing site. You have been identified as one of the resource persons who can give information to make this study a success. I ask you to answer the questions that am going to ask you and I beg that you ask for clarity where you have not understood for purposes of data integrity.

Thank you for your time and co-operation.

- 1. Sex?
- 2. What is your religious affiliation?
- 3. Are you married?
- 4. Where do you live? (location)
- 5. How many children do you have?
- 6. How long have you been dealing in the fisheries activities?
- 7. Do you sell the fish that you catch yourself or you buy from the fishermen?
- 8. Which other job do you do? (if any)
- 9. What challenges do you face?
- 10. Are there any remedies? Has government helped you curb those challenges?
- 11. Are you getting enough fish supplies for sale?
- 12. Do you find fish selling profitable?
- 13. What may be done in order to improve your business dealings?