

**A STUDY ON THE CONTRIBUTION OF FISHING ACTIVITIES ON THE SOCIO-
ECONOMIC DEVELOPMENT OF COMMUNITIES IN UGANDA**

A CASE STUDY OF KIBUKU FISH PONDS

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ABSTRACT

Using Kibuku Fish Ponds in Uganda as the testing phase, this study would have examined the link among fishing and financial difficulty, examined how fishing affects society's growth in the economy in Kibuku Ponds, and briefly examined the function of fishing as a safety net for communities there. For the study, which involved 40 participants, data were gathered via questionnaires, inspections, and questionnaires that combined both statistical and qualitative methodologies. The data were assembled using information from primary and secondary sources.

According to the survey, the majority of respondents in the 40–50 age range (37.5%) worked in agriculture, the fishing sector, or other associated industries. Most of the district-level agribusiness senior managers from respective units provided these replies. Growers should be pushed to get fish seed from reliable vendors, such as respected entrepreneurs and government research institutions. Predation control methods that should be vigorously promoted include the use of nets, lime, slashing surrounding fish ponds, maintaining correct records, employing several ponds to raise catfish in especial, and evaluating fish at least once every month.

Key words: fishing operations and socioeconomic development

Background to the Study

Medium-sized and small-sized fishers are widespread over the world, but they are particularly prevalent in emerging, tropical countries (Berkes et al., 2015). Notwithstanding regional

variations, relatively small fisheries are typically characterized as being aggressive and competitive, with practically all of the catch being employed as food fish.

According to Béné et al., these fisheries have a significant advantageous social and economic effect on civilization at all dimensions, particularly local and personal ones (2007). 90% of all fisherman are thought to engage in small-scale trawling, which provides for 50% of the biggest supplier of edible fish (Béné, 2016). Since 95 percent of these fishers live in developing nations, small-scale fishermen are essential for giving residents in certain of these countries access to food, entertainment, and employment. A key welfare aspect is the ability of comparatively tiny fisheries to support or absorb more employment. Also, they serve as social safety nets since, in times of adversity or catastrophic event, some individuals may momentarily convert to fishing (Béné, 2016). In the 1700s and 1800s, African nations—especially Ghana—were renowned for their productive fisheries (Lawson and Kwei Jorian, 2017).

In Ghana, both large- and small-scale fishing operations are carried out on patrol boats employing hooks and lines, drift-loaded ratchet straps, gill nets, and sand seine nets (Amador et al., 2006).

5% of the agrarian GDP of the country is made up of the aquaculture business segment.

Problem Statement

The political and social development of Ugandan communities has been significantly influenced by the fishing industry.

Notwithstanding, a number of problems that affect both the industry in terms sustainability and the livelihood of those who depend on it have been plaguing the sector.

This study aims to assess the effects of commercial fishing on the socioeconomic development of Ugandan villages.

The report outlined prospective economic prospects and looked at the sector's challenges.

The study will also examine the effects that fishing is having on the environment and propose alternatives for ecologically responsible fishing techniques.

The findings of this study will help us understand how fishing potentially help Ugandan villages prosper economically.

Specific objectives

- 1. To examine to the influence of the fisheries activities on the community economic development in Kibuku fish ponds.*
- 2. To investigate the influence of Fisheries as a safety net at the individual household level in Kibuku Fish Ponds.*
- 3. To examine the relationship between Fisheries and household consumption in Kibuku Fish Ponds.*

Research question

- 1. What is the influence of the fisheries activities on the community economic development in Kibuku fish ponds?*
- 2. What is the influence of Fisheries as a safety net at the individual household level in Kibuku Fish Ponds?*
- 3. To examine the relationship between Fisheries and household consumption in Kibuku Fish Ponds.*

Methodology

Research Design

Because the authors of the study descriptive technique used a test case of Kibuku fish ponds, it was simpler to understand how fishing enterprises in Uganda related to the economic growth of nearby villages.

The design used quantitative as well as qualitative methods.

Themes gleaned from participant responses must be incorporated into the qualitative method.

Yet, to produce graphs, charts, and frequency tables, quantitative techniques were combined with descriptive and inferential statistics.

Participants in the Study

The survey will involve forty (40) respondents, including ten (10) government leaders, fifteen (15) traders, and fifteen (15) current farmers. So that everyone was informed, among the government representatives were those from the Ministries of Agriculture, Animal Industries, and Fisheries. Further significant interviews were performed, among others in the departments of the organization for food and agriculture and the agricultural strategy plan.

Research procedure

After being instructed to do so by the supervisor, the researchers obtained an introductory letter from the department of learning and professions asking for permission to conduct the research.

Each volunteer in the research region received a copy of this letter requesting approval to perform the study.

After obtaining approval, the researcher must interview individuals who have participated in the study and administer surveys to respondents.

Analysis was then done on the data collected from the study participants.

Techniques for Information Gathering

Interview guide

Interactions are necessary to clarify the information gathered from surveys.

The goal was to supplement the data that questionnaires and films had already provided with further information.

By using structured interview, it is possible to introduce explanations, modifications, and variety within the actual information gathering process as well as through supplementary remarks, the respondents' biological and facial gestures, tone of voice, emotions, attitudes, and mannerisms (Amin, 2005).

Questionnaire Survey

A questionnaire, as according Babbie & Mouton (2001), is a list of printed questions or statements that research volunteers must respond to in order to offer information that is pertinent to the study's topic. The respondents who were restricted in one place were given the questionnaire. Given that the respondents could read, comprehend, and construct ideas, this was the most effective way to gather data from them. The surveys were formatted with both open-ended and closed-ended questions. It was created using the goals.

Data analysis

When the initial field data had been acquired, adjusted, and verified to be uniform, accurate, and dependable, data analysis was conducted.

The following two types of study methods were used to evaluate the data:

For easier understanding, the quantitative was supplemented with analytical explanations, such as tables showing percentages and frequency values, bar charts, and graphs.

The responses provided by participants that were pertinent to the research question were discovered through the assessment of the qualitative data.

The researcher first categorizes the field data in order to be able to interpret participants' comments.

RESULTS

Background information of the respondents

The study explored the background information of respondents and variables such as gender, age, marital status and level of education were examined as showed in following tables.

Gender of respondent

The study had both male and female respondents and male persons were more than female ones interacted with.

Table 1: Showing gender distribution of respondents

Gender	Frequency	Percentage
<i>Male</i>	30	75
<i>Female</i>	10	25
Total	40	100

Source: **Field Data**, 2022

According to findings, 75% of respondents were found to be male persons while only 25% were female respondents. This were because the study were voluntary and thus more male persons compared to female ones were much more willing to participate and express their views comfortably. However, the female respondents in the study also were crucial in revealing information that the study used to generate this report.

Age of the respondent

The study explored the age of respondents considered in the study accordingly four age brackets were examined so as to maintain privacy of respondents who find it easily to reveal their exact age but estimate easily.

Table 2: Showing age distribution of respondents

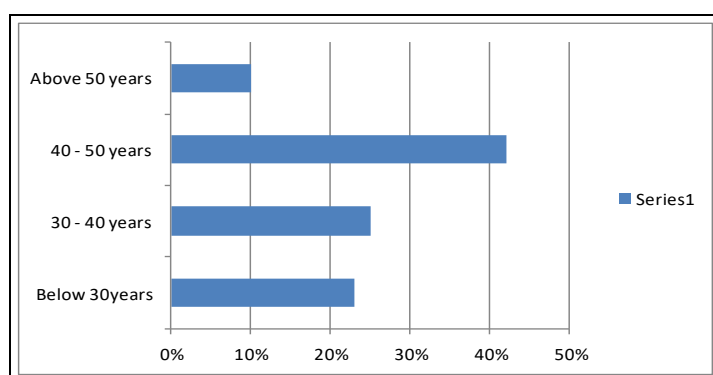
Age (years)	Sex				Frequency	Percentage
	<i>M</i>	<i>%</i>	<i>F</i>	<i>%</i>		
<i>Below 30</i>	3	10	1	10	4	10
<i>30-40</i>	5	16.6	3	30	8	20
<i>40-50</i>	12	40	3	30	15	37.5
<i>Above 50</i>	10	33.3	3	30	13	32.5
Total	30	100	10	100	40	100

Source: **Field Data**, 2022

The study revealed that majority of respondents making 37.5% were in the 40-50 years' age bracket and among these were persons from the fisheries industry, famers, and other fishing related departments. On addition 20% of the respondents were in the 30 - 40 age bracket more so

10% of the respondent were below 30 years, and only 32.5% were above 50 years of age they were mainly head departments in various departments at the district level of department of agriculture.

Figure 1: Showing age distribution of respondents



Source: Field Data, 2022

Marital status of respondent

The study considered the marital status of respondents and the married, single, widowed and separated/divorced persons were interacted with while in the field.

Table 3: Showing marital status of respondents

Marital status	Sex				Total Frequency	Total Percentage
	M	%	F	%		
<i>Married</i>						
<i>Married</i>	18	60	4	40	22	55
<i>Single</i>	8	26.6	3	30	11	27.5
<i>Widow(er)</i>	2	6.6	1	10	3	7.5
<i>Separated/divorced</i>	2	6.6	2	20	4	10

Total	30	100	10	35	40	100
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Source: **Field Data**, 2022

The study found out that 22% of respondents thus majority were married, only 4 respondents 10% had separated/divorced, 7.5% of them were widow(er) while single persons constituted 27.5% of the total respondents. However, the marital status of respondents had no bias as far as influencing the responses and understanding of study variables were concerned.

Education level of respondent

The study examined the education level of respondents so as to guide the flow of interview in as far as asking specific questions to specific education level of respondents was concerned. The study considered five variables and they were; primary, secondary, degree, masters and other levels of education.

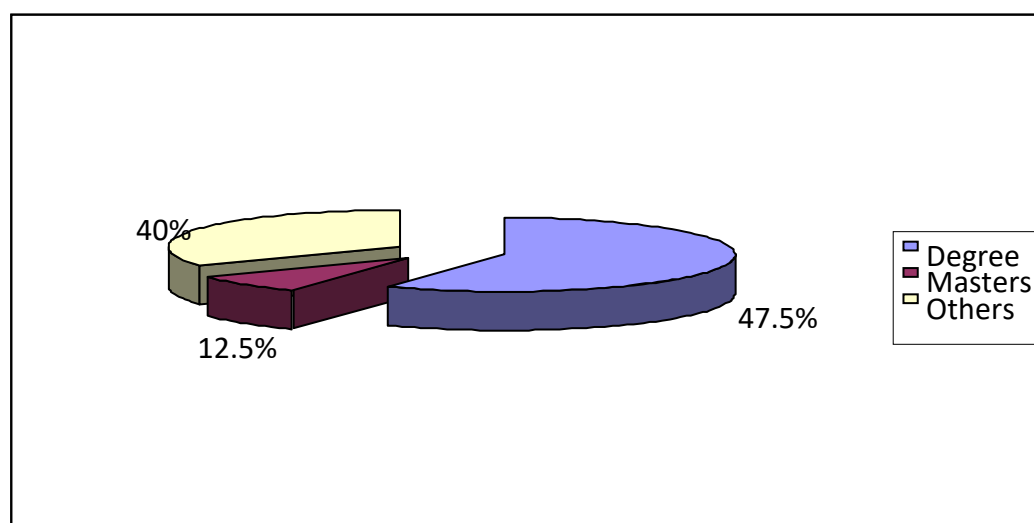
Table 4: Showing education level of respondents

Education level	Sex				Total Frequency	Total Percentage
	M	%	F	%		
<i>Degree</i>	14	46.6	5	50	19	47.5
<i>Masters</i>	4	13.4	1	10	5	12.5
<i>Others (Diplomas and Certificates)</i>	12	40	4	40	16	40
Total	30	100	10	100	40	100

Source: **Field Data**, 2022

The study found out that there was no respondent with primary and secondary level while 40% had other levels of education like diplomas and certificates in various fields. In addition, 12.5% of respondents had Master's degrees as their level of education and majority of respondents amounting 47.5% had degrees as the level of education. This implies that majority of government officials and model farmers have high levels of education ranging from diplomas to master's degrees.

Figure 2: Showing education level of respondents



Source: **Field Data** 2022

Characteristics of fish farmers compared in Kibuku fish pond

The characteristics of fish producers that Kibuku Fish compared are summarized in the table below;

Experiments were conducted to see whether fish farmers' means varied significantly from one another.

There is also a display of the simple frequency.

It was discovered that tilapia (TLF) and catfish (CTF) farmers had higher experience, with significant working backgrounds of 8.80 and 7.55 years, correspondingly (51.90 years for TLFs and 51.57 years for CTFs).

It was found that many retired, intermediate, and older civil workers who had amassed significant wealth over the years became engaged in fish farming.

The mean amount of time spent in school was the same for the two farmer types, with TLFs having 10.05 years compared to CTFs' 10.08 years.

Table 5: Selected Socioeconomic Characteristics of tilapia and catfish Farmers

Characteristics	Tilapia (n=60)		Catfish (n=60)		t-value	p-value
	Mean	SD	Mean	SD		
<i>Experience (years)</i>	8.80	6.53	7.55	6.79	1.03	0.31
<i>Age household head (yrs.)</i>	51.90	13.11	51.57	14.41	0.13	0.90
<i>Level of education(years)</i>	10.05	4.46	10.08	5.60	0.038	0.97
<i>House hold size(persons)</i>	10.10	4.83	11.55	5.60	1.52	0.13
	Tilapia Farmers		Catfish Farmers			Chi square value

<i>Credit access (%)</i>	<i>26.70</i>		<i>31.70</i>			<i>0.55</i>
<i>Fertilizer use</i>	<i>88.3</i>		<i>85.0</i>			<i>0.288</i>
<i>Lime use (%)</i>	<i>15.00</i>		<i>16.70</i>			<i>0.80</i>
<i>Sex of household head (%)</i>	<i>98.30</i>		<i>95.00</i>			<i>0.31</i>
<i>Practiced sampling (%)</i>	<i>58.30</i>		<i>65.00</i>			<i>0.45</i>
<i>Kept records %</i>	<i>41.70</i>		<i>51.70</i>			<i>0.27</i>

(Source: Survey data 2017/ 2019)

Poor lime use by farmers.

Lime kills all life in a remodeled pond already when fresh seafood fry is added.

It was reportedly employed by 17% of CTFs and 16% of TLFs.

Due to the low level of intake, catfish and other species from one upstream cycle may eat just released seedling and fry.

This is not surprising because it has already been shown to be used by other agricultural producers.

However, only 0.5- and 2-kilometer radius bombs of lime were purchased for Uganda in the years 2006 and 2007 out of a total of 46 and 108 cubic meters of international fertilizer, indicating that not all imported lime is utilized by the aquaculture production.

The influence of the fisheries activities on the community economic development in Kibuku fish ponds

Response	Total Frequency	Total Percentage%	Accumulative percent%
Increase household income	20	50	50
Stabilizing & increasing domestic food production	10	25	75
Create employment opportunities	5	12.5	87.5
Support forwards education	5	12.5	100
Total	40	100	

Source: Field Data, 2022

According to survey results, discrimination against women refers to treating men and women unfairly. This was mentioned by 15% of research participants.

Also, 26% of respondents noted that gender discrimination results in gender segregation in all spheres of life, including workplace.

More specifically, 32% of respondents stated that gender discrimination pertains to interpersonal prejudice, when people are unfairly judged in light of others.

According to the study, 25% of the participants felt that favoritism in various forms was the main cause of gender inequality.

The relationship between Fisheries and household consumption in Kibuku Fish Ponds.

Response	Total Frequency	Total Percentage%	Accumulative percent%
<i>Increase household income</i>	20	50	50
<i>Stabilizing & increasing domestic food production</i>	10	25	75
<i>Create employment opportunities</i>	5	12.5	87.5
<i>Support forwards education</i>	5	12.5	100
Total	40	100	

Source: **Primary Data**, 2022

Based on the results, it is evident that 20 respondents (50%) indicated that there is likely to be an increase in household income that will help them acquire the necessities while 10 respondents (25%) also indicated that fishing contributes on the stabilizing and increasing domestic food production for both sell and home consumptions, so this is because fishing has an impact on the household income in Kibuku Fish Ponds.

The influence of Fisheries as a safety net at the individual household level in Kibuku Fish Ponds

<i>Fisheries as a safety net at the individual household level</i>	<i>Total Frequency</i>	<i>Total Percentage%</i>	<i>Accumulative percent%</i>
<i>Yes</i>	<i>40</i>	<i>100</i>	<i>100</i>
<i>No</i>	<i>0</i>	<i>0</i>	<i>100</i>
<i>Total</i>	<i>40</i>	<i>100</i>	

Source: **Primary Data**, 2022

Basing on the findings it was found that there is an influence of fisheries as a safety net on individual household level since the majority of respondent agreed with the matter. it was found that 40(100%) respondents supported the view that fisheries are as safety net to the people in Kibuku Fish Pond surrounding areas. however, none of respondent responded that there is no influence of fisheries as safety net at the individual household in Kibuku Fish Pond.

Is fish farming profitable

<i>Response</i>	<i>Total Frequency</i>	<i>Total Percentage%</i>	<i>Accumulative percent%</i>
<i>Yes</i>	<i>40</i>	<i>40</i>	<i>40</i>

No	0	0	100
Total	40	100	

Source: **Primary Data**, 2022

Based on the literature review revealed that one of most popular agribusinesses in Uganda is fish farming as for good reasons. Therefore, according to the finding it was revealed there is profit in fish farming when proper planning is implemented, as well as implying good management skills applied in doing the projects. This implies that, 40% respondents agreed that fish farming are profitable in Kibuku fish pond.

Conclusion

The study's findings suggest that in order for the two research-related companies to be competitive, they must make improvements.

Also, cooperative producers can pool their resources and make modest out-of-pocket contributions to purchase costlier goods that a single farmer might find difficult to acquire. Members of a group can alternately help one another out with challenging tasks like pond development or rehabilitation. Also, it is easier to undertake market survey as a group of farmers.

RECOMMENDATION

Farmers should receive instruction on how to raise premium tilapia fry in order to get around the ban.

Fast-maturing tilapia breeds would reduce waiting times and increase farmer income.

Farmers must to be encouraged to get fish seed from reliable vendors like governmental research institutions and other businesses.

The use of nets, lime, slashing around fish ponds, maintaining accurate records, using multiple ponds to raise catfish in specific, and evaluating catfish at least once per month are all predator control techniques that should be strongly pushed.

Sacrifice won't be confused with predation if this is done.

The price per output unit will decrease after the system is in operation since a significant volume of catfish will be caught.

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