

Fishing and poverty levels around Lake Victoria (Kenya)

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Abstract

Fishing is known to be one of the oldest occupations of mankind and in Lake Victoria; it has been largely practiced at artisanal levels. Despite this, poverty amongst the fisher folk remains high. Why the fisher folk remain in perpetual poverty was the key research question for this study. Sampling was conducted on 12 landing beaches between June and August 2004. Data was obtained using survey questionnaires; personal interviews were made using open-ended questions and beach observations.

Results from this study indicates that 179 fishers sampled earned an average income of Ksh. 107,063 each in a year with modal income of Ksh. 57,600 while in a day they earned an average income of Ksh. 518 each with modal income of Ksh. 200. Fishers perceived that with the decline of Kenyan economy, income they get from fishing cannot sustain them because of increased daily expenses, exploitations on fish prices, strict laws and regulation as well as decline in fish catches by about 88 %. Fishers live in isolation and far from urban centers but near markets or beaches 55.3% while 35.2% lived in remote areas with primary level of education forming 60.9%.

Results indicate that fishers are always vulnerable to diseases like Diarrhea, Amoebae, typhoid, Malaria, cholera and Aids. They own an average of 4.2 acres of land and cultivate only a small portion of their land 41.3%. Majority of fishers are men who are self-employed but always exploited by middlemen on fish prices; they live in isolation in grass-thatched houses and eat three meals a day. Poverty amongst them was due to lack of capability of efficiently participating in the industry.

Key words: Poverty, isolation, vulnerability, physical weakness and powerlessness.

Introduction

Lake Victoria is the second biggest lake in the world with a surface area of 69,000 km². The lake is shared between three countries, Tanzania constituting 49% of the area of the lake, Uganda 45% and Kenya 6%. Lake Victoria dominates Kenya's fishing industry whereby in 1995 it accounted for 94% of the total catch of 193,789 tones of fish while 3% was from the marine fishing.

Ikiara (1999) reported that due to the expansion of the Nile perch export Kenya's fishing industry contributed 0.2% of the annual GDP between 1971-1981 while in 1990 the contribution rose to 2% and 4.4% of the non-monetary and monetary GDP. In 1995 fish export earned Kenya Ksh.15 billion in foreign currency while in the same period fishermen earned a total of Ksh.. 5.2 billion from fishing, less than 30% of the value of the retail trade (Ikiara, 1999).

In Kenya the fisheries department recently estimated that a total of 798,000 people were directly or indirectly supported by the fishing industry compared to 720,000 in 1995 whereby there were 34,000 fishermen, 238,000 dependants and ancillary services such as trade in fishing inputs, fish handling, processing and marketing. In 1995, for instance, 560,000 people were estimated to have been employed in Kenya's fishing industry accounting for 25% of the country's total employment in the employment in the informal sector and 14.5% of the country's total employment.

According to (Reynolds *et al.*, 1992) Lake Victoria fisheries produced a total value of US\$ 280 million between 1975 and 1989. Employment increased from 158,000 employees in fishing and ancillary activities in the entire lake to 422,000 by 1992 when Nile perch fisheries was at the peak (Wilson, 1993)

Ikiara (1999) reported that the value of fish produced from Lake Victoria has grown since 1980 from Ksh. 0.2 billion to about 22 billion in 1995. The commercialization of Lake Victoria fishery has been increasing since late 1970,s and this has yielded substantial benefits to the Kenyan economy in terms of foreign exchange earnings, income earnings to the owners of fish processing and animal feeds manufacturing factories, tax income to the government, fisher incomes, and creation of employment opportunities. C. Bokea and M. Ikiara (2000) estimates that the government of Kenya collects at least Ksh. 131.6 million (US\$ 1.9 million) annually from the Lake Victoria fisheries, most of which can be attributed to fishery transformation. Annual per capita fish consumption in Kenya increased from 2kgs in 1963 to 8kgs in 1992 (Kenya Fisheries Department). Ikiara (1999) estimated that the average monthly income for boat owners was Ksh. 6,000 while crewmember earned between Ksh. 1000-2000 per month but the fish-processing sector, processors earned slightly more than the fishing crew. The income distribution from the fishery is increasing skewed in favour of the owner of fish processing and animal feed factories against the fishers, factory employees and fish consumers.

Ikiara (1999) also reported that the highest levels of malnutrition in Kenya are now found within fishing communities because fisher folk consume very little of what they harvest and yet they have no access of supplementary sources of protein. The high poverty levels that exist among the fishing communities contribute to high fish pressure even with rising real prices, poor fishers strive to increase their fishing

intake as much as possible. World bank (1972) defined poverty as hunger, lack of shelter, being sick and not being able to see a doctor, not able to go to school and not able to read, not having a job, fear for the future and living one day at a time. World Bank (2002) defined poverty as loosing a child brought by unclean water, powerlessness, lack of presentation and freedom.

According to the Danish Association for International Cooperation, poor people are prevented from acquiring basic needs like shelter, health, and education. They are often deprived of dignity, live insecure lives and are vulnerable to risks and crisis, have little access to vital knowledge and information, are denied rights, are excluded from access to productive resources, and have few possibilities of influencing the political environment.

The Poverty Eradication Plan (1999-2015) identifies the poor as the landless, the handicapped, female-headed households, households headed by people without formal education, and pastoralists in drought areas (arid and semi -arid areas of the land), unskilled and semi-skilled casual laborers, Aids orphans, street children and beggars.

Sen. (1983) pg 153 describes absolute poverty as a condition characterized by severe deprivation of basic human needs, including food, safe water for drinking, sanitation facilities, health, shelter, education, and information.

The aim of this study was to establish why fishers of Lake Victoria keep on remaining trapped in the state of poverty and they are the owners of the fish caught. Fishing in the Lake Victoria is a major activity for people within the lake basin with an estimation of 124,000 fishers and estimated fish production capacity of 400,000-600,000 metric tones per year with a value of US\$ 300-600 million at the beach level (LVFO 1999).

Objectives of the study

- Examine the poverty levels of fishers of Lake Victoria

Specific Objectives

- Find out why the fisher folk always remain in perpetual poverty.
- Examine main indicators leading to poverty
- Establish main reasons hindering the improvement of their standard of living.

Methodology

Data collection was carried out between June and August 2004 covering 12 landing beaches within Busia, Suba and Homabay Districts. Data was obtained using structured survey Questionnaires and secondary data sourced from literature review. Personal interviews and beach observations were made.

Random sampling method was used to select the respondents for the interview e.g. boat owners,

crewmembers, gear owners and boat renters. A stratified random sampling method was used to select the beaches for fieldwork. Data was analyzed using SPSS package.

Results and discussions

Characteristics of fisher of Lake Victoria

Studies done by (SEDA WOG II, 1999) revealed that fishers of Lake Victoria were dominantly men with the age bracket of 21-45years. This study also confirms the above results where 97.8% of fishers involved in actual fishing activity were men while women were only owners of fishing equipment and were mostly involved in beach seining. Their average age was 34 years with a mode age of 28 years. However, minimum and maximum age ranged between 15-64 years. This result indicates that now younger people have joined the fishery. On marital status 88.3% of fishers were married with at least one spouse per fisher forming 69.2%. They had 6 dependants per fisher indicating a large family size to feed.

Education being one of the most important indicator of poverty shows that literacy level amongst fishers is high where 60.9% of fishers had attained primary level of education, 38% secondary level, 0.6% had attained university level while 0.6 % had not gone to school.

Knowing the fisher's parent educational background was important to establish whether their present educational level was due to their family educational background. However results indicate that 57% of fisher family members had attained primary level and 1.1% university level. Fishers family members could not attain the required educational level due to lack of funds 67.6% This shows that most fishers being in remote areas with few educational facilities have little access to vital knowledge and information.

Out of 175 fishers interviewed, 36.7% had family members who were involved in other activities that contributed some income to the family.

Poverty amongst fishers of Lake Victoria

(i) Income earned from the fishery

Fishing is an important source of livelihood for many Kenyans for many years. It is also an important source of animal protein, especially for most people living around the lake. In theory fishers of Lake Victoria are regarded as the poorest group of people in all sectors of the economy. Looking at the way they live, the way they look, assets they own, saving habits and their family sizes one wonders. When one enters at the beach and look at the fishers, most of them look weak, poorly dressed, drunk and live in poor housing structures. They have many dependants, wives, orphans and widows to feed.

Results from the study indicate that 89.4% of fishers around the Lake Victoria (Kenya) have no other sources of income except fishing. This shows clearly that poverty amongst the fishers was due to lack of

alternative income sources. Fishers sampled around Lake Victoria earned income from the fishery totaling to Ksh. 20,331,160 in a year, with an average income of Ksh. 107,063 per fisher per year.

In a day a fisher earned an average income of Ksh. 518 per fisher per day with a modal of Ksh. 200. Their daily income ranged between Ksh. 40-20,000 and yearly income ranged between Ksh. 7,200-1,404,000. From all these earnings can we say that the fishers of Lake Victoria are poor? This is evident that fishers get good earnings from the fishery but they are not able to mobilize their earnings properly and lack the culture of saving and investing.

(ii) Kenyan economy and job satisfaction

The Kenyan economy has declined; money has become scarce and not changing hands. From the survey carried out, out of 179 fishers interviewed, 88.3% perceived that the income they get from fishing activity could not sustain them because of inflation in the country, daily expenses have increased, scarcity of fish in the lake, exploitation on fish prices by factory agents, strict laws and regulation in the fishery and they feel that fishing was their only source of livelihood.

(iii) Shelter and Food

The standard of living of majority of fishers around Lake Victoria is very low. Shelter and food are the most important basic needs of mankind but looking at the landing beaches around the Lake, fishers live in poor housing structures with inadequate social amenities and inadequate food supply. Most of the houses they live in are muddy thatched houses with few semi-permanent ones.

The results confirm that 63.7% of fishers at their homes live in grass-thatched houses while 26.8% live in semi-permanent houses showing that fishers lack good shelter as shown in Figure 1.

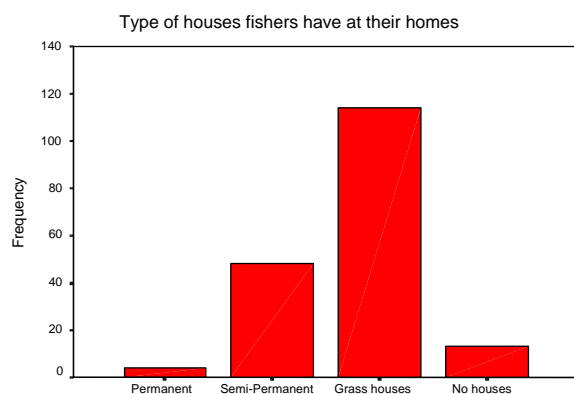


Figure 1: Types of houses fishers have at their homes.

Food being a necessity for ones life, there is malnutrition along the sampled beaches because majority of fishers depend on fish earnings to buy food that is also scarce. This has affected their nutritional status leading to eating unbalanced diets.

From the results got, 43.6% of the sampled fishers around the Lake and their families take three meals a day while 42.5% take two meals a day. The changes in daily catches of fish determine the number of meals one can take in a day but there is a possibility of missing a meal in a day (Figure 2).

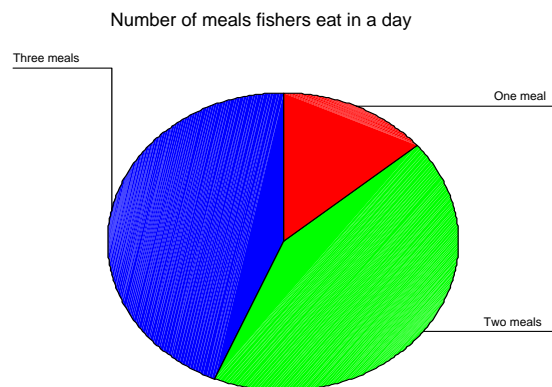


Figure 2: Number of meals taken by fishers in a day.

When fishers were asked whether they ever lacked food to eat or stayed hungry with their families, 77% indicated that sometimes they lacked food to eat especially when they don't catch any fish, poor yields from their farms, draught seasons and when fish prices are low, 12.3% had not lacked food at all and these were mostly fishers who own many boats and gears, 6.7% often lacked food and 3.4% had always lacked food especially workers in the boats (crewmembers).

Fish prices have increased and fish has become increasingly inaccessible to the local fishing communities that have placed other poor Kenyans seriously threatened by food insecurity. Although fish export earnings to Kenya is a bout 7 million a year, the fishermen who bring in the catch are so poor that they cannot afford to eat it.

Fishers residency and local politics

(i) Locational position of fisher's residency:

Fishers of Lake Victoria are isolated from most facilities that are found in the urban centers. Locational factors on their residency affect fishers on education, health, information gathering and communication.

Results show that 55.3% of fishers live in homes situated near a market s or beach while 35.2% live in remote areas with little access to vital knowledge and information (Figure 3).

In those areas there are few good schools, lack of teachers, modern equipments e.g. computers. Schools that were situated near to the lake had a lot of school dropouts due to the influence from the fishery and the few good schools were very far from their residency.

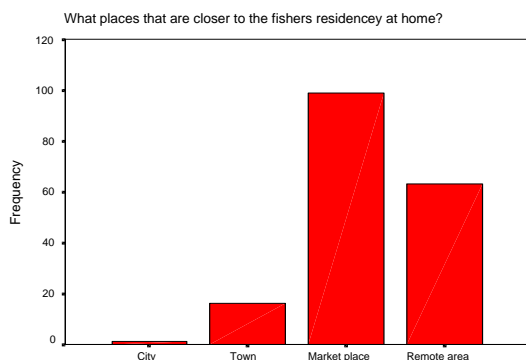


Figure 3: Places that are closer to the fisher's residency at home.

(ii) *Political meetings*

Fishers feel that they are not properly represented in the fishery. Any decision made concerning the fishery they are never consulted, they are rarely invited to the management meetings. They cannot have their kinsmen representing them in high position in the government.

When asked how often they meet with their political leaders for advice or to know what the others are doing in other areas, 58.7% indicated that they had not met with their political leaders at all since they were elected but some had sometimes made with their leaders 31.8%.

Majority of fishers revealed that their leaders only came to the beaches during campaigning period, launching government directives, or funeral and have nothing to offer the fishers.

Powerlessness of fishers in the fishery

(i) *Fishers involvement in the fishery*

Fishers involved in fishing activity were composed of boat owners, boat renters, gear owners and crewmembers. Fishers lacked enough capital to buy efficient fishing equipment like effective fishing gears, boats, and outboard engines. From that they felt that they earned little money from fishing as compared to 10 years ago.

Due to lack of cold storage facilities to store fish and sell at better prices they have experienced big losses from the sale of catches.

One big problem fishers have around the lake was middlemen who have captured the whole market. A lot of money is got from the fish sale but the fishermen still remain poor. At times the fishermen are forced to sell their fish at a throw away prices because they cant store it for a long period (perishable).

Although Lake Victoria is a major foreign earner to the tune of 7 billion from fish export, the huge industry does not help to improve the living standard of the fishing communities or raise the economic status of the fishers due to large number of middlemen in the fishery.

Once fish is landed on the landing beaches, the fishermen cease to play any significant role in the trade also the cooperative societies which could benefit the local fishermen and fishmongers, have totally failed due to corruption.

Although majority of fishers perceive that the income they get from fishing cannot sustain them, the majority also tend to be spend thrifts. They do not save any of their income from the sale of fish, many tend to reason that there is always more fish in the lake and their motto is "Drink today for tomorrow we fish". Fishers also have other various constraints in their activities. Gears required by the government are very expensive and theft of equipment is very rampant around the lake. Most fisher's fish at shallow waters where they get low catches while those with engine and bigger boats fish in the open waters and get more catches thus getting high income. Thus they feel that low earnings from the fishery put them in a state of poverty.

Among the employers in Lake Victoria fishery 67.6% were self employed, 26.3% boat owners, 5% employers who paid wages on daily basis, 1.1% foreigners who own fishing boats and nets.

(ii) *Exploitation of fishers in the fishery*

In the course of carrying out their fishing activities majority of fishers perceived that they are totally exploited. Fishers have a weak bargaining power in their interaction with fish purchasers. Locally based fish agents of processing factories dominate the market. Most purchasers of fish no longer avail credit to fishery, several factors also influence where fishers sell their fish, including prices, distance to the market, availability of fish, costs of other commodities and domestic goods at the market points. 45.7% of fishers were always exploited in one way or the other Figure 4).

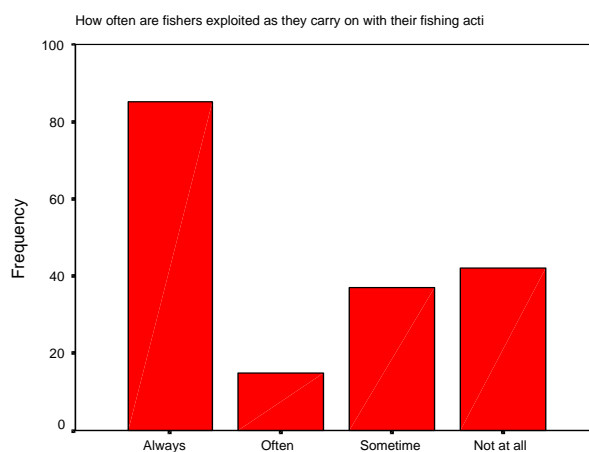


Figure 4: How fishers are exploited as they carry on with their fishing activities.

- Middlemen exploited fishers on fish prices
- Boat owners exploited crewmembers on daily wages and mistreatments

- Government officials solicit for bribes and confiscate their gears
- Unnecessary contribution to the BMUs.

(iii) Government assistance or aid

Fishers of Lake Victoria feel that they are always powerless when carrying out their fishing activities. Famine, floods and droughts that affect them greatly always strike them and they don't have any alternative way for survival. During the period under review the government of Kenya was distributing relief food to the communities that have been stricken by famine, droughts or floods.

When asked whether they had ever received any government aid like relief food in time of famine, 73.2% had not got any relief food at all and 52% didn't have any idea why they didn't get relief food but 16.2% felt they were powerless to receive food and felt distributing agents were exploiting them. This result shows that fishers are powerless when it comes to government aid.

(iv) Discrimination in schools

About 42.5% of fishers sampled indicated that they were not discriminated by school head teachers in securing a vacancy for their children in good schools after passing national examinations. However the few who were always discriminated indicated that they were discriminated because of ethnicity, by clan or village 21.8%.

In school fees payment, 33.5% of fishers were sometime able to pay school fees promptly especially when there was good catches and better prices while 22.3% could not afford fee payment at all. The most common group affected were crewmembers due to low earnings.

Diseases and other risks threatening fishers of Lake Victoria

(i) Diseases affecting fishers of Lake Victoria

Fishers around Lake Victoria are always vulnerable to diseases and other risks due to lack of medical facilities, ignorance, culture and poverty etc. Most of the hospitals or dispensaries available at the landing beaches lacked medical facilities and enough qualified doctors. Waterborne diseases are the major problems to the fishers forming 83.2%. Malaria, typhoid, amoebae, cholera and aids related diseases were identified as the most frequent diseases affecting the fishing communities. Poor health status of the fishers has resulted to poor production of fish and increased poverty amongst them.

Apart from the killer malaria, the lake region has been occasioned by the high prevalence of the HIV/Aids due to adulteration of cultural practices such as wife inheritance where many have succumbed to the scourge, leaving only the young and the old to take care of one another.

The diseases have reduced life expectancy, high child mortality and substantial amount of money is used to treat diseases rendering them poor.

Results of the study indicates that 66.5% of the fishers got treatment and their families at the health centers while 16% got at private clinics. Apart from dispensaries or health centers, which were nearer to the fisher's homes 64.8%, complicated cases were referred to the District and Provincial hospitals which were very far from the fishers' residency. The unclean water for drinking and poor sanitation hinders the health status of the fishers around the lake. Results indicate that although there is poverty amongst the fishers 53.6% were sometimes able to meet their hospital bills when they took their families to the hospital and among them the most hit were the crewmembers who earns low wages. Boat owners, renters and boat managers did not have many problems in paying hospital bills because they owned many boats and gears.

(ii) Sources of water for domestic uses:

Fishers around Lake Victoria require water for drinking and for other domestic uses. About 75.4% draw water for their daily uses from Lake Victoria while 10% used piped water Figure 5.

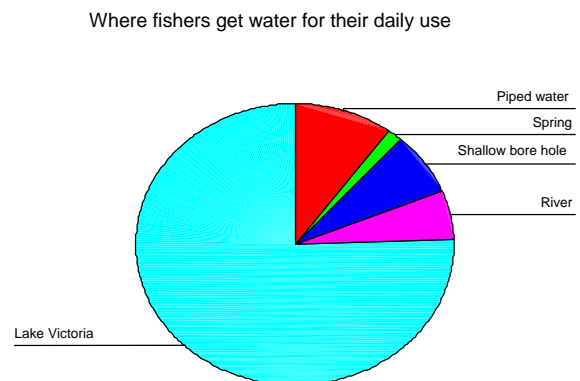


Figure 5: Where fishers get water for their daily use.

Although Lake Victoria is a fresh water Lake, the water is not safe for drinking. There are several reported cases of the outbreaks of many waterborne diseases. From our results 43.6% always boil water before drinking, 33.5% do not boil water at all while the remaining group use chlorine or water guard to purify water. Majority of fishers take their cattle to drink water in the Lake while a few took to dams, rivers and boreholes. Other results also indicates that fishers travel a long distances in search of water but those living at the beaches draw water from the Lake directly.

Farming activities

Size of land fishers cultivate in a season

Apart from fishing activities fishers also do farming activities as another alternative means of livelihood.

Out of 150 fishers interviewed one fisher owned an average of 4.2 acres of land with a modal of 2 acres. The size of land owned by fishers ranged between 1-60 acres but 29 fishers were landless.

The above results indicates that fishers have alternative means of earning income from farming thus the case of poverty amongst them does not arise. The survey shows that 41.3% fishers cultivate a small portion of land during farming season while 29.6% cultivated a big chunk of land (Figure 6).

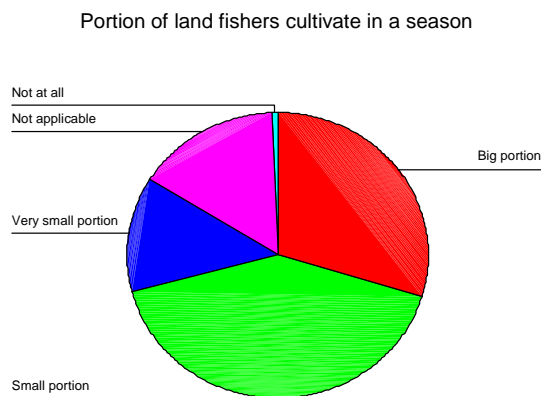


Figure 6: Portion of land fishers cultivate in a season.

Majority of the fishers complained of unpredictable climatic conditions, low rainfall, poor soils and lack of farming equipments. 41.9% of fishers perceived that all the produce from their farms were little or less due to poor climatic conditions. They also indicated that earnings from their produce were low. In the course of cultivating their farms 58.7%, of fishers set aside 3 hours and above in cultivating activities in a day, 15.6% had set aside 2-3 hours in a day, 7.8% could take 1-2 hours a day, 1.7% would not cultivate any land at all and 16.2% did not set aside any hours because they were landless.

Conclusions

- Fishing activities on lake Victoria is dominated by men
- Fishing is the main source of income for the fishers
- Fishers live in isolation and are prevented from acquiring basic needs such as shelter, health and education
- Poverty amongst the fishers is due to lack of being capable of efficiently participating in the industry
- Majority of fishers sampled are literate but have little access to vital knowledge
- Fishers get a lot of income from fishing activities but have poor business management skills
- Middlemen on fish prices heavily exploit fishers.
- Fishers Live in grass thatched houses and eat three meals a day on average
- Fishers are physically weak; they live insecure lives and are vulnerable to risks and diseases
- Fishers have few possibilities of influencing the political environment
- The fishers lack proper representation and freedom
- Their standard of living is poor.

Recommendations

- Harness the money in the fishery sector for development e.g. NGOs.
- Education a must so as to upgrade fisher's standard of living.

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