

Socioeconomic and Income Generation Factors on Fish Sellers in South Eastern Nigeria

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Abstract

This study examined the socioeconomic of fish farmers in Oguta Lake of Imo state and Ezu River of Anambra State, both in Nigeria. To achieve the objectives of this study, the data were collected with the aid of questionnaires, interviews, few field observations. The study findings showed that there were most female fish mongers in Oguta Lake, (56.67% Oguta & 46.67% Ezu) whereas there were more male fish mongers/sellers in Ezu River(43.33% Oguta & 53.33% Ezu), and the majority of them (50%) in both Oguta Lake and Ezu River were in their active ages (31-40 years), and majority were also married (83.33% Oguta & 73.33% Ezu), coupled with a more level of education in Ezu River (73.33%) whereas the reverse was the case in Oguta Lake(50%). Moreover, there were more household size of 4-6 persons. (50% Oguta & 43.33% Ezu). The study findings showed that most fish mongers in Oguta Lake had an average annual income that ranges between N10000- N50,000, (86.7% Oguta & 43.33%) whereas the reverse was the case in Ezu River, where the average annual income ranged between N50,000- N150,000 (13.3% Oguta & 56.67% Ezu).

Keywords: Socioeconomic, Fish Mongers, Annual Income, Household, Questionnaire

Introduction

Nigeria is blessed with abundant natural and human resources with numerous water bodies as one of the most important natural resources bequeathed to the country by nature. The Nigerian fishery sector not only provides employment for citizens in the coastal area, but also contributes more than 40 per cent of the animal protein consumed by the average Nigerian (Adewumi et al. 2012). In Nigeria, men and women depend on agriculture for their survival. Climate change threatens to set back development efforts by decades, placing least developed countries and Sub-Saharan African countries and already vulnerable populations in an even more precarious position (Solomon, 2014). Socioeconomic characteristics of individuals including their age, gender, income, education and others can determine their levels of vulnerability to climate change. While exposure to a hazard may be the same among different social groups, the impacts are determined according to the varying capability of each group in handling the effects of hazards (de Loyola Hummell, Cutter, & Emrich, 2016). Those with higher socio-economic status fare much better in the face of disaster due to the fact that they have the resources to protect themselves.

The broad aim of this study is to compare the socio-economic and income generation factors of fish mongers in Oguta Lake of Imo state and Ezu River of Anambra State, both lakes are located in South Eastern Part of Nigeria. The specific objectives are:

- i. To describe the socio-economic factors affecting fish mongers in Oguta Lake and Ezu River.
- ii. To identify the constraints faced by the fish mongers/fishers in fish farming in the study areas.
- iii. To compare the socio-economic factors affecting fish mongers in Oguta Lake and Ezu River.

Fish Seller

A fish seller (historically fishwife for female practitioners) is someone who sells raw fish and seafood. They can be wholesalers or retailers and are trained at selecting and purchasing, handling, gutting, boning, filleting, displaying, merchandising and selling their product. Fish is supplied by a variety of sources including imports, domestic capture (that is fish caught from the various inland waters and coastal areas by artisanal fisher folks using boats and nets) and fish farming.

Methods, Techniques and Area Descriptions

Area of the Study

Oguta Lake

Oguta lake is a lean finger lake formed by the damming of the lower Njaba River with alluvium. It is the largest natural lake in Imo State, Southeastern Nigeria; within the equatorial rainforest region of Niger Delta. Oguta lakes catchment area comprises the drainage area of the Njaba River and a part of the River Niger floodplain in the region south of Onitsha. Oguta lake is located within latitude $5^{\circ} 42' 14.39''$ N and $6^{\circ} 47' 19.79''$ E. Oguta Lake is a strategic importance to both local population and the Imo State government of Nigeria. To the former, the lake is the main source of domestic water supply and also used for recreation, fishing, transportation and sand mining activities.

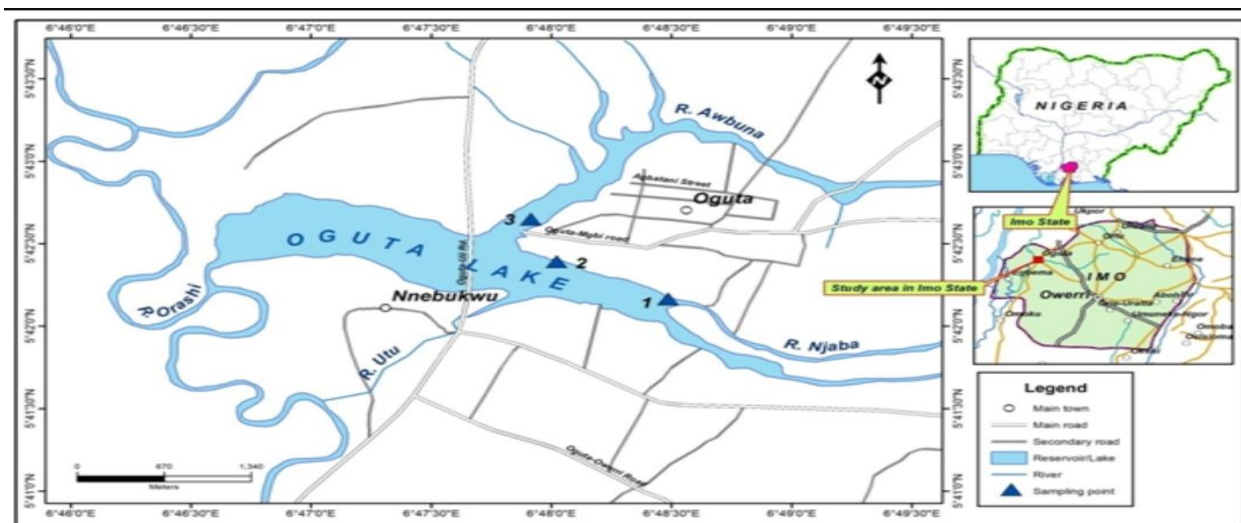


Figure 1. Map showing Oguta Lake in Imo State, Nigeria.

Ezu River

Ezu River, is located at Ebenebe, Awka North Local Government Area, Anambra State of Southeastern Nigeria. Ezu River is located at a longitude $6^{\circ}36.0'E$ and $7^{\circ}12.0'E$, and latitude located $5^{\circ}42^{\circ}.0'N$ within the tropical rain forest belt. Ezu is a flowing river that links several communities in the southeast and empties into Omabala River and subsequently River Niger and the Atlantic Ocean.

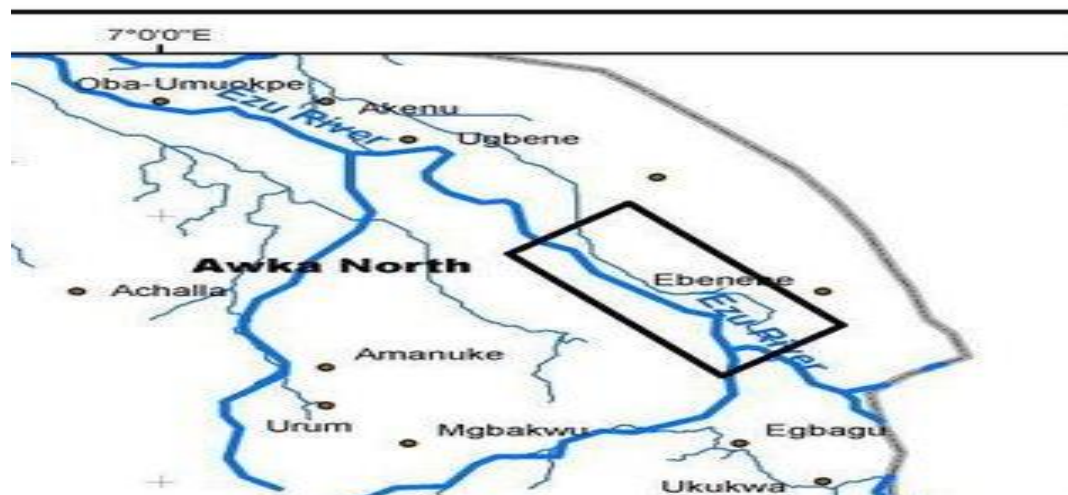


Figure 2. Map showing Ezu River in Anambra State, Nigeria.

Sampling Size

According to demographic statistics bulletin (2017), the population of Oguta local government rose from 20096 to 196,000 in 2016. The population sample comprises of 30 fish mongers/fishers that were randomly selected within the following fish cycles, fish blocks, in Oguta /Orlu agricultural zone of Imo State. From the record obtained, from Imo State Agricultural Agency Imo ADP. There were 33 fish cycles and 15 fish blocks in Oguta/Orlu Agricultural Zone.

Method of Data Collection

In this study, questionnaire, interviews, few observations and visit to fish landings sites, fish markets, were used during the data collection.

Source of Data Collection

Data collection for this study came from primary and secondary data. The Primary was generated through field survey using well-structured questionnaire, while secondary data on the other hand were obtained through relevant literature, ranging from textbook and journals, articles, proceedings and interviews.

Data Analysis

Analysis tools used were: descriptive statistics like frequency, percentage and mean, and other appropriate statistical tools.

Results

This chapter presents results and data analysis of the study findings. The socioeconomic characteristics of the farmers examined sex, age, marital status, religion, ethnic group, level of educational qualification, major primary occupation, other occupation outside fishing, household size, fishing experience.



Plate 1: A Fish Farmer In Ezu River, Anambra State, South East Nigeria

Table 1 Socioeconomic Characteristics of Fish Farmers/Sellers In Oguta Lake, Imo State

Socioeconomic characteristics	Frequency	Percentage (%)
Gender		
Male	13	43.33
Female	17	56.67
Age		
21-30	7	23.33
31-40	15	50.00
41-50	8	26.67
Marital Status		
Single	3	10.0
Married	22	83.33

Divorced	3	
Widowed	2	6.67
Christianity	27	90.0
Islam	0	0
Traditional Religion	3	10.0
Ethnic Group		
Igbo	25	83.33
Yoruba	5	16.67
Educational Qualification		
Non-Formal Education	3	10.0
Primary Education	12	40.0
Secondary Education	15	50.0
Major Primary Occupation		
Fishing / Boat Riding	13	43.33
Fish Processing/Marketing	17	56.67
Other Occupation Outside Fishing		
Farming	10	33.33
Trading	12	40.00
Others	8	26.67
Household Size		
1-3	7	23.33
4-6	15	50.00
7-8	8	26.67
Fishing Experience		
1-3	4	13.33
4-6	5	16.67
7-8	5	16.67
None	16	53.33

Gender: The table shows that female fish monger/fishers (56.67%) while the male fish monger/fishers were (43.33%).

Age: Those between the age ranges of 21-30 years had the least percentage value of (23.33%), while those from 31-40 years were (50.0%) and those from 41-50 years had the percentage value of (26.67%).

Marital Status: Single fish mongers/fishers were (10.0%), married fish mongers/fishers percentage (73.33%), the widowed were (10%) while the least were the divorced (6.67%).

Religion: Fish mongers/fishers who were Christians had a percentage of (90.0%), while the traditionalists had the percentage of (10.0%)

Ethnic Group: The ethnic group of the fish mongers/fishers were majorly the Igbos and had the percentage of (83.33%), while the Yoruba were (16.67%)

Educational Qualification: Fish mongers/fishers that had only primary education were (20.0%), those with tertiary education were (73.33%), and those with the least percentage were non-formal education (6.67%).

Major Primary Occupation: Those who had a major primary occupation of fishing/boat riding percentage (43.33%), while those who were into fish processing/marketing percentage of (56.67%).

Other Occupation Outside Fishing: Those who were also involved in farming were (33%), those involved in trading (40%) those with the least percentage were (26.67%).

Household Size: Those who had the house range of 4-6 persons had (50%), those within the range of 7-8 had (26.67%) and the least were those within the range of 1-3 (23.33%)

Fishing Experience: Those who had fishing experience of 4-6 years were (16.67%), those of 7-8 years had (16.67%), those who had no fishing experience were (53.33%) while those of 1-3 years of experience with the least percentage were (13.33%)

Table 2: Income Generation of Fish Mongers/ Fishers In Oguta Lake, Imo State Nigeria

S/N	Income generation characteristics	Frequency	Percentage (%)
11.	Average Monthly Income		
	N10,000-N50,000	26	86.7
	N50,000-N150,000	4	13.3
12	Type of Building		
	Block House	12	40.0
	Block house with Iron roof	18	60.0
13	Social Amentities Available		
	Electricity		
	Tarred Road		
	All of the Above	30	100
14	Rate of Income Per Sales Cycle Monthly		
	High	3	10.00
	Moderate	16	53.33
	Low	11	36.67
15	Numbers of Family Members		
	None	13	43.33
	1-2	14	46.67
	Above 3	3	10.00

Average Monthly Income: Those whose incomes were between 10,000-50,000 naira had the least percentage (86.7%), while those between 50,000-150,000 naira had the percentage of (13.3%).

Type of Building: Those who lived in block house had the percentage of (40%), while those who lived in block house with Iron house had the percentage of (60%).

Social Amentities Available: The percentage of the social amenities that were available within the environment included electricity; tarred road was (30%).

Rate of Income Per Sales Cycle Monthly: The percentage of those whose rate of income was high were (10%), those who had moderate income were (53.33%) while those with low income were (36.67%).

Numbers of Family Members: Those fish mongers/fishers whose family members of 1-2 that were involved in fishing are (46.67%), those whose family members above 3 (10%) while those that had no family members involved in fishing were (43.33%).

Table 3: Income Generation of Fish Farmers/ Fishers In Ezu River of Anambra State

Income Generation Characteristics	Frequency	Percentage (%)
Average Monthly Income		
N10,000-N50,000	13	43.33
N50,000-N150,000	17	56.67
Type of Building		
Block House	11	36.67
Block house with Iron roof	19	63.33
Social Amentities Available		
Electricity		
Tarred Road		
All of the Above	30	100
Rate of Income Per Sales Cycle Monthly		

High	4	13.33
Moderate	14	56.67
Low	12	30.0
Numbers of Family Members		
None	19	63.33
1-2	11	36.67
Above 3		

Average Monthly Income: Those whose incomes were between 10,000-50,000 naira had the least percentage (43.33%), while those between 50,000-150,000 naira had the percentage of (56.67%).

Type of Building: Those who lived in block house had the percentage of (36.67%), while those who lived in block house with Iron house had the percentage of (63.33%).

Social Amentities Available: The percentage of the social amenities that were available within the environment included electricity; tarred road was (30%).

Rate of Income Per Sales Cycle Monthly: The percentage of those whose rate of income was high were (13.33%), those who had moderate income were (36.67%) while those with low income were (30%).

Numbers of Family Members: Those fish mongers/fishers whose family members of 1-2 that were involved in fishing are (36.67%), those whose family members above 3 (10%) while those that had no family members involved in fishing were (63.33%).

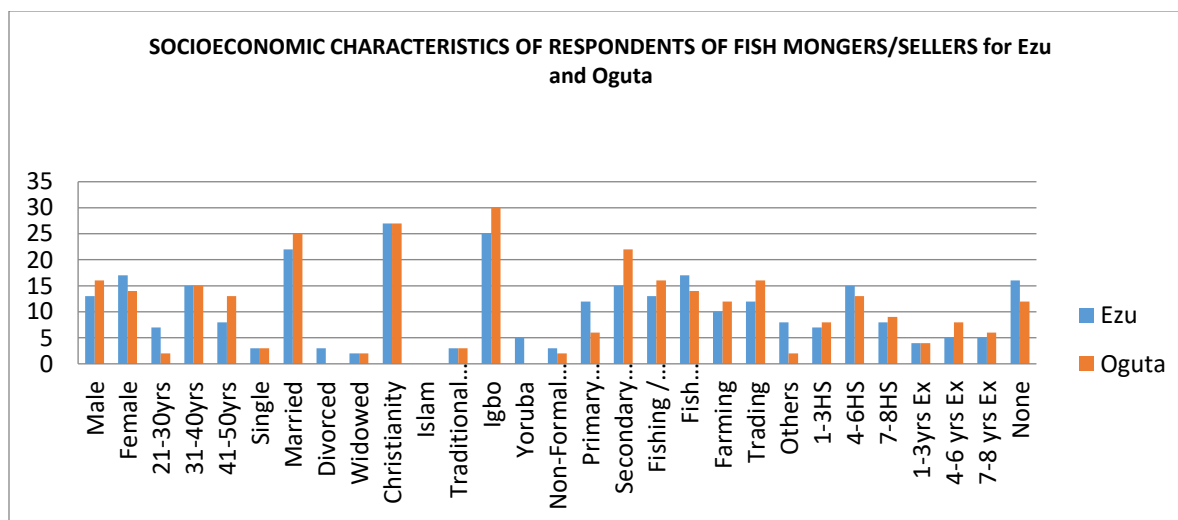


Figure 3: A comparative analysis of the socio-economic factors affecting fish mongers in Oguta Lake and Imo State, south eastern Nigeria

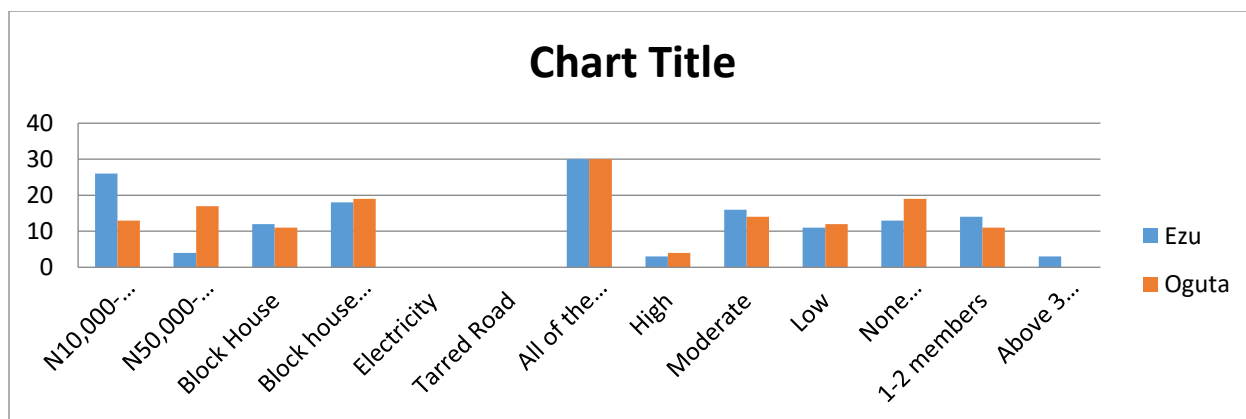


Figure 4: A Comparative Analysis of The Income Generation Factors Affecting Fish Mongers in Oguta Lake and Imo State, South East, Nigeria.

Discussion

Results from figure 3 showed that there were more female fish mongers in Oguta lake, than male fish mongers, while the reverse was the case in Ezu River, where they were more males than female. And the results of having more female fish mongers/fishers was similar to the results obtained by Agbebi and Adetuwo (2018) the results revealed that fish marketing in Igbokoda fish market, Ondo State Nigeria were dominated by females (88.7%) than (males)11.3% This result was also in line with the findings of Agbebi and Fagbote (2012), that fish marketers were more dominated by female gender than male and that women play a central role in fish processing and marketing and that women also have better bargaining power than men. While in the contradicting results of having more male fish mongers than female was similar with the results obtained by Osondu and Ijeoma (2014), Wayep and Rapede (2018) in their various works.

Observation from figure 3 showed that those between the age brackets 31-40 years had the highest percentage 50% in both Oguta Lake and Ezu River. The implication of these findings was that large proportions of the respondent were adults and can adequately be regarded as active, and physically disposed to marketing activities. Age is very important in fish marketing activities, because age has a significant influence on the decision-making process of the marketers Agbebi and Adetuwo (2012).

Observation from figure 3 showed that there were more married fish mongers/fishers in Ezu River than in Oguta Lake. This indicates that there would be maximum support from the spouse(s) and children of these fish mongers/fishers, so as to contribute to the economy of the home. This also implies that fish marketing was dominated by married individual who were responsible according to the society standard and therefore were likely to have some experience of life. (Onubuogu et al.,2014).

Observations from Figure 3, showed that, there were equal percentage of fish mongers/fishers in the two water bodies are equal. High percentage of Christians was also an indication that the respondents were permanent settlers in the area and all their economic activities, including religious activities revolve around the area.

Observations from Figure 3, showed that there were more fish mongers/fishers in Ezu River who had access to secondary education, whereas the reverse was the case in Oguta Lake, where the fish mongers had more access to primary education. This means that most fish mongers/fishers were able to take critical decisions concerning their farming enterprise.

Observation from Figure 3, showed that there were more of household size of 4-6 of fish mongers while the least were household size of 1-3. The indicates that the household size of 4-6 persons was desirable and of great importance to rural household as they rely more on their family members than hired laborers in their family activities thereby reducing production cost. This finding is consistent with (Palmquist, 1991).

Results from Figure 4, showed that fish mongers in Oguta Lake earned a monthly average income of N10,000-N50, 000 whereas the reverse was in the case in Ezu River, where they were more fish mongers who earned N50,000- N150,000. This result shows that an average fish monger/fisher earns between N10,000- N50, 000 per month. This is an indication that fish marketing was not only affording these farmers a source of income, but also provides a source of protein to them (Sanusi et al. 2015).

Observations from Figure 4 showed that most fish mongers in Ezu River & Oguta Lake lived in block house with Iron roof, while the least were those who lived in just block house. This indicates that most of the fish mongers are permanent residents in the environment.

Observations from figure 4, showed that the fish mongers' rate of income per sales cycle monthly fishers in Oguta lake & Ezu River with the highest percentage fell under the moderate category while that the fish mongers' rate of income per sales cycle monthly fishers in Oguta lake and Ezu River with the highest percentage fell under the high category.

Observations from table 3 and 6 showed that most of the fish mongers/fishers in Ezu River and Oguta Lake strongly agreed to the financial, institutional and marketing constraints. And results from the respondents showed that the Government of Imo State and Anambra State do not have any known support towards aquaculture improvement as there was no government supports noticed during this study. There were also no extension services from government, loan Facilities or training. And it was noticed that most of the fish mongers carry out their processing and marketing activities through self-help and family support.

Conclusion

This study was carried out to investigate the effects of socio-economic and income generation factors of fish mongers in Oguta Lake of Imo State and Ezu River of Anambra State, both in Nigeria. This study noticed that majority of fish mongers in Oguta lake were occupied by mostly female fish mongers than male, whereas the reverse was the case for Ezu river where there were more male fish mongers. The study noticed that they were also more married persons in Ezu town than that of Oguta and they did maintain a moderate family size. Most fish monger attended secondary school in Ezu town than those in Oguta town. The study also noticed that most fish mongers in Oguta made an average monthly income of ₦10 000 - ₦50 000, whereas the reverse is the case in Ezu River where they made an average monthly income N50,000- N150,000. Now major constraint that were also identified during the cause of this study include marketing & financial constraint. Finally, Government of the Imo and Anambra state don't seem to be putting serious effort and support towards aquaculture development in the region as majority of the fish mongers complained of lack of Government support or assistance.

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