

# The Socioeconomic Characteristics of The Artisanal Fisherfolks in

# the Coastal Region of Ondo State, Nigeria.

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#### Abstract

The study was carried out in the coastal region of Ondo -State, Nigeria. A multistage sampling technique was used to select the respondents. Two LGAs, namely, Ilaje and Ese-Odo were purposively selected because they fall within the coastal region of the state. At the second stage, ten towns/villages were randomly selected from each LGA. At the third stage, 20 respondents were also selected from each of the villages/towns, making a total of 400 respondents. Data were collected using well structured questionnaire, interview schedule and Focus Group Discussion (FGD), which were administered on the respondents. The result of the socioeconomic characteristics of the fisherfolks with respect to age revealed that most of the fisherfolks were within the working age group of 31 - 60 years and this amounted to 68.75% while 84.0% of the fisherfolks were married. The percentage of the male were 67.25% while the female were 32.75%. The household size of (1-5) members recorded the highest (56.75%). 96.25% had one form of education or the other while only 3.5% had no formal education while 90.0% of the fisherfolks had no additional qualification. Most of the fisherfolks were Christians (82.75%), 76.25% took fishing as their major occupation while 48.25% were not involved in any other occupation. The fisherfolks that had fishing experience of (11-20) years amounted to be 34.0%. most of the fisherfolks (43.75%) got their inputs from the markets and are rightful owners of their inputs. 85% of the fisherfolks made used of dugout canoe to carry out their fishing activities while 60% of the fisherfolks made used of the active methods of fishing.

Keywords: socioeconomic, characteristics, artisanal, fisherfolks, coastal region.

## Introduction

Ondo State, fisherfolks are mostly artisanal that still depend on traditional methods of fishing but in recent times, some of them have started using motorized canoes fitted with out-board engine for their fishing exercise. The fisherfolks are dispersed along coastlines, and because they depend mainly on marine ecosystems situated close to their homes they are particularly vulnerable to resource depletions. Small-scale fishing communities are also vulnerable to climatic and other natural events, such as yearly and seasonal fluctuations in stock; poor catches; bad weather and natural disasters such as floods and storms at sea; high cost of fishing inputs, market price fluctuations and variable access to markets.

### Materials and methods

The descriptive statistic was used to determine the socio-economic characteristics of the fisherfolks. The description include, mean, median, mode, standard deviation, frequency distribution, percentages, pie and bar charts.

# **Result and Discussion**

#### Age of Fisherfolks

The result of age distribution of the fisherfolks in the study area is presented in Table 1. The age range of the fisherfolks was between 21-75 with a mean of 48.25 years. About 6.75% of the fisherfolks were between the age of 21-30 years, 29.75% were within the age of 31-40 years, 23.75% of the fisherfolks were between 41-50 years, those that were between the age of 51-60 years amounted to be 15.25%, the percentage of those that were between the age of 61-70 years was 22.25 while only 2.25% of the fisherfolks were between the age of 71-80 years.

Most of the fisherfolks were within the working age group of 31 - 60 years and this amounted to 68.75%. This implies that most of the fisherfolks were still within their active and productive age group for efficient fish production. The result shows that most of the fisherfolks were within the economically active age of the population and therefore, constitute a good labour force in fish production, since efforts are being made to increase fish production from the artisanal sector by the Federal Government of Nigeria in recent years.

There was sharp decline in the number of fisherfolks that were between the age range of 21-30 years and 71-80 years (6.75% and 2.25%). However, those fisherfolks that were between the ages of 61-70 years who are suppose to be dependent age group were still active in fishing (22.25%). The implication of this might due to



the fact that the fisherfolks took fishing as a way of life and many communities that are located near river, lakes and seas depend on fishing for food and their livelihood. This result might have been to the fact the old people that are retired still go into fishing.

Table 1 Age distribution of Fisherfolks

Variables	Options	Pooled	LGAs	Ilaje	LGA	Ese-odo	LGA
Age	(range)	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
	21 – 30	27	6.75	17	8.50	10	5.0
	31-40	120	29.75	65	32.50	55	27.00
	41 - 50	95	23.75	35	17.50	60	30.00
	51 - 60	61	15.25	30	15.00	31	15.50
	61 - 70	88	22.25	51	25.50	37	18.50
	71 - 80	09	2.25	2	1	7	3.50
Total		400	100.00	200	100.00	200	100.00

Minimum 21

age:

Maximum 75

age:

Mean age: 48.25

S.D.

12.51

**Source:** Computed From Field Data, 2012.

## Marital status of Fisherfolks

The marital status of the fisherfolks is presented in Table 2. It was observed from the table that only 2.75% of the respondents were single, 10.25% are divorced and 84.0% of the fisherfolks were married. This shows that the married were more interested in fishing than the single and this might have been due to the fact that most of the respondents rely in fishing to cater for their household since they depend on water for their livelihood and will be more committed to their households. The single might not be interested in fishing, perhaps, they were involved in other jobs to earn their living in the nearby cities/ urban areas. Despite the fact that Nigeria is blessed with 14 million hectares of inland waters, rivers and lakes, yet fish production remain underdeveloped in most of those waters which are often surrounded by poor communities in need of assistance

Table 2 Marital status of the Respondents

Variables	Options	Pooled	LGAs	Ilaje	LGA	Ese-odo	LGA
Status		Frequency	Percentage	Frequency	Percentage	Frequency	percentage
	Married	336	84.00	166	83.00	170	85.00
	Single	11	2.75	5	2.50	6	3.00
	Divorced/	41	10.25	23	11.50	18	9.00
	Separated						
	Others	12	3.00	6	3.00	6	3.00
Total		400	100.00	200	100.00	200	100.00

Source: Computed from field data, 2012

## Distribution of Respondents by Gender

The result for gender distribution of the fisherfolks is presented in Figure 2. It shows that most of the fisherfolks 67.25% were male while 32.75% were female. The difference between the two categories conforms to the FAO (1998) findings that Women are rarely involved in fish capture at sea or on lakes because it inherent dangers, long period of fishing voyage and their dominant role in household activities. Adebayo and Pitan (2001) also reported that a greater percentage of women (64.2%) are actively involved in fish marketing.

This implies that fishing activities absorb more males than females because of the strength, quality time required and various risks due to drudgery nature of the fishing job. In addition, most of the fisherfolks were married; their femalefolks might be involved in other business like, trade, teaching and other fishing activities like, processing, packaging, marketing to complement the efforts of their husbands. The distribution according to gender cannot be over emphasised because gender plays a very significant role in any economy. The bulk of work that makes fish get to the final consumers is handled by women. Women therefore, perform the functions of auctioneers, retailers, fish vendor and dealers for export.

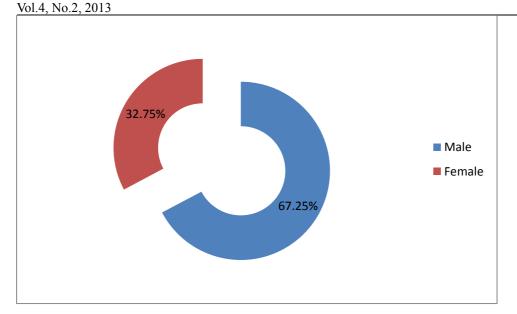


Figure 2 Gender of fisherfolks

Source: Computed from field data, 2012.

# **Household size of the Fisherfolks**

Keeping of large families is common in African tradition because it is believed that large household size could be an avenue for household heads to use the members for various economic purposes to urgument family income. Artisanal fisheries contribute 85-90% of domestic production and this provides economic support and livelihood for 6million coastal and riverside rural dwellers, particularly in the Niger Delta as well as Central and North Eastern part of the country.

The household size of the fisherfolks is presented in Table3. About 56.75% of the fisherfolks were within the range of household size of (1-5), 25.75% of the fisherfolks kept household size of between (6-10) members, those that had household size of between (11-15) were 8.0% and this is follow closely by 5.5% of household size of  $(\ge 21)$  members while the lowest (4.0%) were those that their household size were between (16-20) members. The implication of this is that the fisherfolks would have enough family hand to assist them in their fishing activities and hence they would pay less for hired labour.

The study also revealed that the fisherfolks kept moderate family sizes (82.50%) of between (1-10) members, with mean size of 6.75, minimum household member of 3 while the maximum was 24. The implication of this might because the fisherfolks have knowledge of family planning and the campaign for keeping moderate family sizes still continue in each of the health centre's that are within the various communities.

Table 3 Household size of fisherfolks

Variables	Options	Pooled	LGAs	Ilaje	LGA	Ese-odo	LGA
Household size	(range)	Frequency	Percentage	Frequency	Percentage	Frequency	percentage
	1 – 5	227	56.75	111	55.50	116	58.00
	6 – 10	103	25.75	56	28.00	47	23.50
	11 – 15	32	8.00	16	8.00	16	8.00
	16 - 20	16	4.00	07	3.50	09	4.50
	>20	22	5.50	10	5.00	12	6.00
Total		400	100.00	200	100.00	200	100.00
Maximum:		24		22		24	
Minimum:		3.0					
Mean:		6.75		5.5		8	
S.D.		6.2					

Source: Computed from field data, 2012.

**Educational level of fisherfolks** 

The educational level of the fisherfolks is presented in Figure 3. It was observed that most of the fisherfolks (96.25%) had one form of education or the other while only 3.5% had no formal education, which represents a very few numbers of the fisherfolks. Those that had primary education were 42.0%, 42.25% of the fisherfolks represent those that had secondary education, the percentage of the fisherfolks that had polytechnic education amounted to 10.50% while only 3.75% had university education. The above result shows that most of the fisherfolks were literates and this justified one of the goals of the Ondo state government in making education their paramount in social development.

This result implies that the fisherfolks would have basic knowledge in the fishing operations and would be easier for them to adopt innovations from extension agents and research institutes for efficient productivity. The call for a great increase in domestic fish production from inland waters in the country can only be successfully achieved through education. Education aids sustainable development.

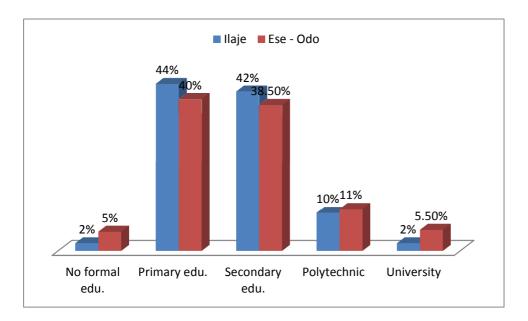


Figure 2 Educational level of fisherfolks (Ilaje and Ese-Odo LGAs) Source: Computed from field data, 2012.

### **Additional Qualification of fisherfolks**

The level of education is positively correlated with productivity and adoption of improved technology. Additional qualification (AQ) will add value to what one knows and boost production and sustainability. Table 4, shows the distribution of the fisherfolks based on their additional qualifications. 90.0% of the fisherfolks had no additional qualification; the percentage of those that had additional qualifications was very minimal (10.0%). Only 8.75% had vocational training while 1.25% had computer training. The reasons might have been that most of the fisherfolks had no time for further studies due to the nature of their work, lack of interest or awareness.

In addition, some of the fisherfolks believed that additional qualification may not be necessary because fishing is their way of life and the skill for fishing were acquired through their forefathers. To the fisherfolks, fishing does not require serious training since they are introduced to it right from childhood. The result implies that the fisherfolks in the study area may be lacking some modifications and modern day techniques of fishing activities which include production, distribution, processing transportation, packaging etc. Hence, the value of their fishing style is likely to be obsolete.



Variables	Options	Pooled	LGAs	Ilaje	LGA	Ese-odo	LGA
Additional qualification		Frequency	Percentage	Frequency	Percentage	Frequency	percentage
	Non (NAQ)	360	90.00	183	91.50	177	88.50
	Vocational training	35	8.75	14	7.00	21	10.50
	Computer literate	5	1.25	3	1.50	2	1.00
Total		400	100.00	200	100.00	200	100.00

Source: Computed from field data, 2012.

#### Distribution of Fisherfolks according to Religion

Fish is generally acceptable in most communities of the world; there are various reasons for the merits of eating fish. One such reason is that fish is less tough and more digestible compared to beef, mutton, chicken and bush meat. Thus, there are no taboos to fish consumption except in some cases where women are forbidden to fish during menstruation as opined by (Adeleke *et al.*, 2011). The result of the distribution of the fisherfolks according to religion is presented in Figure 4.

From the figure, most of the fisherfolks were Christians (82.75%) while other groups were the traditional believers (14.0%) and the Muslims (3.0%). This result may be as a result of the early missionaries who travelled to countries via water and they might have been the first to penetrate the coastal areas with their Christian religion and this justify the reasons while there are more Christians in the southern part of the state. The implication of the above result does not stop the fisherfolks from fishing in spite of the taboos associated with it by the people.

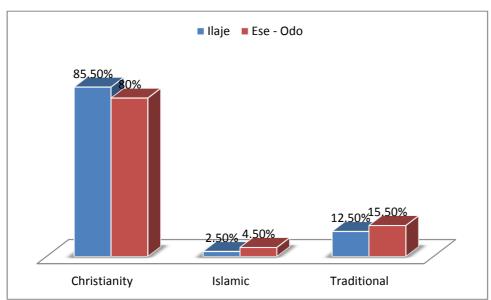


Figure 4 Religion of the fisherfolks (Ilaje and Ese-Odo LGAs)

Source: Computed from field data, 2012.

# Source of Inputs/ Fishing Gears for fisherfolks

The artisanal fisherman settle along the coastline, they rely predominantly on the use of small fishing gears, large dugout canoes and motorized canoes for fishing. From the study the fisherfolks got their inputs from various means which include friends, family, cooperatives, market and government. Figures 5, revealed that 43.75% of the fisherfolks got their inputs from the markets and are owners of their inputs, 32% got theirs from their family, and 1.75% got theirs from the government. This implies that most of the respondents prefer to be rightful owner of their fishing gears which include canoe, nets hooks, line and other fishing gears.

Those that rely on other sources like the government, cooperative are those that make use of sophisticated gears like motorized speed boat and engines. From the information gathered from the fisherfolks, some of them borrow these gears for certain amount of money or in exchange for what they catch.

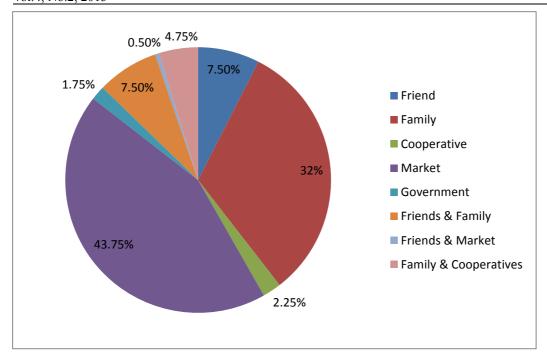


Figure 5 Source of Inputs/ Fishing Gears for fisherfolks Source: Computed from field data, 2012.

#### **Conclusion and Recommendations**

The descriptive statistic was used to determine the socio-economic characteristics of the fisherfolks. Most of the fisherfolks were within the working age group of 31-60 years and this amounted to 68.75% while 84.0% of the fisherfolks were married, the male were 67.25% while the female were 32.75%. The household size of (1-5) members recorded the highest (56.75%). 96.25% had one form of education or the other while only 3.5% had no formal education while 90.0% of the fisherfolks had no additional qualification. Most of the fisherfolks were Christians (82.75). Most of the fisherfolks (43.75%) got their inputs from the markets and are rightful owners of their inputs.

Based on the result of the findings, it is therefore recommended that:

- Fisherfolks should be encouraged to form cooperative societies that will assist them in procuring modern day fishing gears that would boost their fish production.
- Assistance should be rendered to them by the government or Non Governmental Organisations (NGOs), in terms of soft loans, grants and subsidies, to increase fish production.
- The fisherfolks should be encouraged to diversify their production activities to other non fish oriented ventures, to improve their living standard.

#### References

Adebayo, O. and Pitan, O.O. (2003): The role of women in marketing of frozen fish in Lagos State of Nigeria. In: 16th Annual Conference of the Fisheries Society of Nigeria (FISON), 4-9 November 2001, Maiduguri, Nigeria.

Adeleke M.L., Ajibefun I.A. and Famoofo O.O. (2011): Utilization of the indigenous systems to reducing the effect of climate change and vulnerability of the fish farmers in the Nigeria (using Ilaje LGA of Ondo state as a case study).

Apata, T.G., Samuel, K.D and Adeola, A.O. (2009): Analysis of Climate Change Perception and Adaptation among Arable Food Crop Farmers in South Western Nigeria. Contributed Paper prepared for presentation at the International Association of Agricultural Economists' 2009 Conference, Beijing, China, August 16-22, 2009.

Fagbenro, O. A. (2005): Aquaculture in Nigeria: history, status and prospects. A report of FAO World Fish Centre Workshop. Cameroon.

Food and Agriculture Organization (FAO) (1998): Fisheries Bio-Economics Theory: Modeling and Management, (FAO Fisheries Technical Paper 368, Seij, J. C.; O. Defeo and S. Salas, Food and Agriculture Organization of the United Nations Rome



- Food and Agriculture Organization (FAO) (2003): Fisheries management II. The ecosystem approach to fisheries. FAO Technical Guidelines for Responsible Fisheries No. 4, Suppl. 2. 112p.
- Food and Agriculture Organization (FAO) (2004): FAO recommendations on the prevention, control and eradication of highly pathogenic avian influenza (HPA1) in Asia. FAO Position Paper, Rome. FAO, 49 pp.
- Food and Agriculture Organization (FAO) (2005): Review of the state of world marine fishery resources. FAO Fisheries Technical Paper. No. 457. Rome, FAO. 235 p.
- Food and Agriculture Organization (FAO) (2005): Small scale aquaculture in sub-Sahara Africa: Revisiting the aquaculture target group paradigm. Rome: FAO Fisheries.122pp.
- Food and Agriculture Organization (FAO) (2006): Fisheries management in the Federal Republic of Nigeria.www.fao.org/fi/fcp/en/NGA/body, retrieved on January 13, 2006.
- Food and Agriculture Organization (FAO) (2006): Nigeria's fisheries profile. <a href="www.fao.org/fi/fcp/en/NGA">www.fao.org/fi/fcp/en/NGA</a>, retrieved on February 2, 2006.
- Food and Agriculture Organization (FAO) (2006): State of world aquaculture: 2006. FAO Fisheries Technical Paper. No. 500. Rome, FAO. 134 pp. (Also available at <a href="https://www.fao.org/docrep/009/a0874e/a0874e00.html">www.fao.org/docrep/009/a0874e/a0874e00.html</a>).
- Food and Agriculture Organization (FAO) (2007): The state of world fisheries and aquaculture 2006. Rome. FAO: 162 pp.
- Food and Agriculture Organization (FAO) (2008): Report of the FAO Expert Workshop on Climate Change Implications for Fisheries and Aquaculture: Rome, Italy, 7–9 April 2008. FAO Fisheries Report no. 870 (Food and Agriculture Organization of the United Nations, 2009.2008);http://tiny.cc/fisheries7
- National Population Commissions (NPC): Provisional of 2006 Nigeria Census Results.

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