

# Effects Of Gender Roles In Artisanal Fishing In Rivers State, Nigeria

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## ABSTRACT

The study examined the effects of gender roles in artisanal fishing in Rivers State. Structured questionnaire was used to elicit information from the respondents. Random sampling techniques information from the respondents. Random sampling technique was used to select 150 artisanal fishing from 30 communities across the 3 agricultural zones in Rivers State. Data obtained were subjected to descriptive statistics. The major specific roles performed by the male gender were actual fishing, hiring of canoes and transport of fishing while the female gender were processing, marketing and storage of fish. The mean percentage for gender preferences for extension services were male (67.73%) and female (60.91%), suggesting no significant difference. The overall mean for artisanal fishing contribution and constraints faced by both gender were 3.03 and 3.01 respectively. The null  $H_{01}$  showed that there was significant difference between gender and specific roles in artisanal fishing. The result of  $H_{02}$  showed that there was no significant relationship between gender and preferences for extension services in artisanal fishing. Finally  $H_{03}$  revealed that there was no significant relationship between gender and constraints face in artisanal fishing. It was therefore recommended that appropriate water ways policies regulations and extension services to enhance the gender roles in artisanal fishing to ultimately boost fish production.

**Keywords: Gender roles, Artisanal fishing, Constraints.**

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## INTRODUCTION

Artisanal fishing refers to traditional or small-scale fishing which have characterized by those fishing activities mainly non-mechanized, but with low level of production (Yodains, 2000). Artisanal fishing is the predominant fishing method in tropical developing countries. In Nigeria for example, the coastal artisanal fishing makes use of traditional dug-out canoes, roughing from three to eighteen meters (3-18m) in length. While the gears used include case nets, hand lines, baskets, traps, long lines, set gill nets and breach purse seines, Artisanal fishing includes coastal, brackish water and all inland fishery sources such as rivers, reservoir, dams, lakes, lagoons as well as the flood plains of Niger Delta and other major rivers in Nigeria. In practices however, the scope of artisanal fishing varies between countries, for instance one-man canoe fishing and long-lines fishing in poor developing countries and developed nations respectively.

Men and women in developing countries contributed significantly to agricultural production especially in fish production and processing and are increasingly recognized in words if not in practice, for this contribution. But there is still a long way to go to match their reality to this rhetoric and to ensure that women received adequate support so that their efforts in the field contribute in the best way possible to health and nutrition related household – level out comes

Women's agricultural work, in addition to their work and the home that is unrecognized as part of the formal work sector, have long been ignored by developing country policy makers as well as the international donor community (Afolabi, 2008). Although fish production is traditionally considered as masculine enterprise, women's role in fishing is complementary and crucial. The fishing activities of women include unloading of fish from landing canoes. Fishing processing, fish marketing, traditional fishing of marine food resources, production of fish drying cards, canoe hiring and sales of fishing gears. The gender division of labour in fishing communities is usually noticeable. Fishing is an economic activity that tends to be dominated by men, while women typically labour as seafood processors, teachers, health careers commerce, or other services. Fishermen often travel deep-sea for extended period of time and so, are absent "members of the community (Williams et al, 2002). Earlier studies in Nigeria have shown that women do participate in artisanal fishing as seen among Ijaw women of the Niger Delta (Elabor-Idemudia, 1991). Nupe women along the Benue river basins and women along the Kainji lake region (Williams et al, 2002). Also in Brittany France the wives of Fishermen were known to play important roles within the fishery enterprises by realizing different of fishing gears and selling of fishing (Williams et al, 2002). The United Nation Economic and Social Council (ECOSOC, 1997) in conclusions, define gender mainstreaming as the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equality is not perpetuated. The ultimate goal is to achieve gender equality (United Nation; 1997.). Gender mainstreaming entails bringing the perceptions, experience, knowledge and interests of women and well as men to bear on policy-making, Planning and decision making. Mainstreaming should situate gender equality issues at the centre of analyses and policy decisions, medium-term plans, programme budgets, and institutional structures and processes. This requires explicit, systematic attention to relevant gender perspectives in all areas of the work of the United Nations. The problems of gender participation in farming especially artisanal fishing in donor sponsored programme have never been ascribed to socio-economic attributes of the stakeholder which are the key determinates to farmers involvement in these programmes.

### **Purpose of the Study**

#### **Specifically the study sought to:**

- (1) Examine the gender specific roles in artisanal fishing in the study area
- (2) Examine gender preferences for extension services in artisanal fishing
- (3) Ascertain the constraints faced by gender in an artisanal fishing in the study area.

#### **Hypotheses of the study**

- H<sub>01</sub>: There is no significant difference between gender to specific roles in artisanal fishing in Rivers State.
- H<sub>02</sub>: There is no significant relationship between gender and preference for extension services in artisanal fishing in Rivers State
- H<sub>03</sub>: There is no significant relationship between genders and the constraint face in artisanal fishing in Rivers State.

### Methodology

Rivers State is in South-South geo-political zones of Nigeria, with two thirds of its in the Niger Delta geographic terrain. The dominant ethnic groups are Ijaws, Ikwerre, Etche, Ekpeye, and Ogoni whose language are majorly spoken although pidgin English is widely spoken by the people and use din radio and television broadcast. Rivers State is currently made up of 23 Local Government Areas. The state divided into three (3) senatorial district namely, Rivers East, Rivers West and Rivers South East. While five (5) registered artisanal fishers randomly selected from each of the (5) major communities in the six (6) Local Government Areas to give a sample size of one hundred and fifty (150) Fishermen. Two (2) Local Governments Areas were selected from each of the three (3) Agricultural zones in the state. Primary data for the study were collected using well – structured questionnaire administered to the one hundred and fifty (150) respondents, the questionnaire comprised four sections. Section ‘A’ sought information on the socio-economic characteristic of the Artisanal fishers, section “B” Gender specific roles, section C, Gender preference for extension services, section ‘D’ constraints faced by Gender.

A pilot test as carried out adopting the test retest approach. A trial test uses 20 respondents (rural men and women) from the study area but from outside the areas of coverage to avoid been biased. Data collected were analyzed using crondach alpha to determine the internal consistency of the items. This give the overall reliability co-efficient value of 0.90 was observed. Data collected were presented using descriptive statistics such as table, percentage and T-test objectives 1 were presented in percentage while objective 2 and 3 were presented in mean scores. A four point Likert-type scale with options strongly Agree, Agrees, Disagree and strongly Disagree and were scaled 4 to 1, respectively.

The value were added to give 10 and divided by 4 to get a mean of 2.5. In terms of reliability, mean stores of 2.5 and above were classified as measure while those mean scores below 2.5 were regarded not viable measures.

### Results and Discussion

Table 1 reveals that the mean percentage role performed by the male and females genders were respectively 47.00% and 46.00%. the greatest specific roles performed by the male gender were actual fishing of marine food resources accounting for 70.00%, hiring of canoes and transport of fish accounting for 60.00% each while unloading of fish from landing canoes account for 50%. The findings is in line with that of Davis (2003) and De Siloa, *et al* (2009) who noted that males have the stammer to handle the action ties involved in fishing which may be too tedious for females. The greatest specific roles performed by the female gender were fish storage 80% while marketing of fish, sales of fishing gear, processing and preservation, marine resources accounting for 60.00%.

**Table 1: Gender Specific Roles in Artisanal Fishing**

S/N	Variable	Male n=100	%	Female n=50	%
1	Actual fishing of marine food resources	70	70.00	10	20.00
2	Mending fishing gear	40	40.0	10	20.00
3	Processing of marine food resources	30	30.00	30	60.00
4	Hiring of canoes	50	60.00	20	40.00
5	Sales of fishing gear	30	30.00	30	60.00
6	Unloading of fish from landing canoe	50	50.00	10	20.00

7	Preservation of marine bud resources	40	40.00	30	60.00
8	Marketing of fish	30	30.00	30	60.00
9	Transporting of fish	60	60.00	20	10.00
10	Fish storage	60	60.00	40	80.00
	<b>Total role performed by the gender</b>	<b>470</b>	<b>470.00</b>	<b>240</b>	<b>460</b>
	<b>Mean role performed by the gender</b>	<b>47.00</b>	<b>47.00</b>	<b>24.00</b>	<b>46.00</b>

Source: Field Survey, 2017

### Gender Preferences for Extension Services in Artisanal

Table 2 established the average percentage means for the male and female genders were respectively 67.73% and 60.91% with the male dominating in preference for extension services available. Findings reveal that 95% and 60% of the males and females gender respectively preferred extension services on sensitization against the use of explosives for fishing.

The table further showed that 90% and 60% of the male and female gender respectively preferred extension services on the use of right fishing gear. However, more male gender participate the following extension services, participation in cooperative society 80%, savings and income management 60% and weather benefits 80%. It also showed that more female gender preferred extension services in fish processing techniques 80%, fish preservation techniques, 80% and linkages t the market 60% in the study area.

**Table2: Gender Preferences for Extension Services in Artisanal fishing**

S/NO	Variable	Male n= 100		Female n = 50	
		Frequency	Percentage (%)	Frequency	Percentage (%)
1	Fish processing techniques	60	60	40	80
2	Fish preservation techniques	60	60	40	80
3	Linkage to the market	60	60	40	80
4	Use of right fishing gear	90	90	30	60
5	Use of motorized boat	80	80	30	60
6	Sensitization against use of explosives	95	95	30	60
7	Sensitization against use of poisonous chemical	40	40	20	40
8	Participation in cooperation society	80	80	20	40
9	Training no saving and income management	60	60	25	50
10	Training on weather benefits	80	80	30	60
11	Linkage to soft loan and credit	40	40	30	60
	<b>Overall mean</b>		<b>67.73</b>		<b>60.91</b>

Source: Field Survey, 2017 Multiple Choice

### Perceived constraints faced by Gender in Artisanal Fishing

The overall mean constraints faced by the male and female genders were 3.05 and 2.98 respectively. The mean of mean value was 3.01. The individual constraints for male and female are high cost of fishing gear (3.30 and 2.80), poor preservation and storage equipment (3.25 and 2.80), poor mobility to distant creeks

(3.10 and 3.10), use of rudimentary tools (2.80 and 2.80), inadequate extension services (3.10 and 3.10), spoilage of fish (3.25 and 3.00), inadequate capital for expansion (3.20 and 2.80), illiteracy (3.15 and 3.10), pollution by oil and gas spillage (3.05 and 3.10), climate change (3.35 and 3.30), while insecurity around the creeks (2.60 and 3.40), lack of opportunities for leading role (2.50 and 3.00). The gender agreed that poor sales (2.95) were a constraints while the female gender disagreed (2.40). Also, female gender agreed that lack of opportunities for leading roles is a constraints while male gender barely acknowledged it as an obvious constraints.

**Table 3: Perceived Constraints faced by Gender in Artisanal Fishing**

S/N	Variable	Male n=100 SA (4)	A (3)	SD (2)	D (3)	Mean	SA (4)	Female n=50 A (3)	SD (2)	D (1)	Mean	Mean of Mean
1	High cost of fishing gear	60	20	10	10	3.30	20	15	0	15	2.80	3.05
2	Poor preservation and storage equipments	40	50	5	5	3.25	15	15	15	5	2.80	3.05
3	Poor mobility to distant creeks	40	40	10	10	3.10	20	20	5	5	3.10	3.10
4	Use of rudimentary tools	30	30	30	10	2.80	20	15	0	15	2.80	2.80
5	Inadequate extension services	50	20	20	10	3.10	20	20	5	5	3.10	3.10
6	Spoilage of fish	40	50	5	5	3.25	15	20	5	0	3.00	3.13
7	Inadequate capital for expansion	50	30	10	10	3.20	10	20	5	10	2.80	3.00
8	Poor sales	30	50	5	15	2.95	20	10	20	10	2.40	2.68
9	Illiteracy	45	35	10	10	3.15	20	15	15	0	3.10	3.13
10	Pollution by oil and gas spillage	40	40	5	15	3.05	20	20	5	5	3.10	3.08
11	Climate change	50	40	5	5	3.35	25	25	5	0	3.30	3.33
12	Insecurity around the creed	30	20	30	20	2.60	20	20	5	0	3.40	3.00
13	Lack of opportunities for leading role	20	30	30	20	2.50		20	5	0	3.00	2.75
	<b>Overall mean</b>					<b>3.05</b>					<b>2.98</b>	<b>3.20</b>
	<b>Mean of mean = 3.00</b>											

Source: Field Survey, 2017

\* $\geq 2.5$  = accept \* $\leq 2.50$  reject

**Hypothesis of the Study**

The result of the null hypothesis 1 showed that the T-cal was greater than the T-tab value ( $T_{cal} > T_{tab}$ ) at probability level of 0.05. This implies that there was significant relationship between specific gender roles in artisanal fishing in Rivers State. This means that the null hypothesis that there was no significant relationship between hypothesis is rejected (Table 4 1A)

The result of the null hypothesis 2 showed that T-cal value was less than the T-tab value ( $T_{cal} < T_{tab}$ ) at probability level of 0.05. this implies that there was no significant relationship in gender preference in artisanal fishing in Rivers State. therefore the null hypothesis is accepted. Hypothesis 3 showed that the T-

cal was less than the T-tab value ( $T_{cal} < T_{tab}$ ) at probability level of 0.05. This implies that there was no significant relationship between the constraints faced by gender and their productive activities in artisanal fishing in Rivers State. Therefore the null hypothesis is accepted.

Table 4-1A Hypothesis 1) (T-test)

Gender	Mean	SD	DF	T-cab	T-tab	Prob	Decision	Reason
Male	47.00	15.67	18	7.64	2.10	9,95	Rejected	$T_{cal} < T_{tab}$
Female	46.00	18.37						

Table 4-1B Hypothesis 2) (T-test)

Gender	Mean	SD	DF	T-cab	T-tab	Prob	Decision	Reason
Male	67.73	18.69	20	0/60	2.086	0.05	Accept	$T_{cal} < T_{tab}$
Female	60.91	32.73						

Table 4-1C Hypothesis 3) (T-test)

Gender	Mean	SD	DF	T-cab	T-tab	Prob	Decision	Reason
Male	3.02	0.305	24	0.67	2.064	0.05	Accept	$T_{cal} < T_{tab}$
Female	2.94	0.308						

### Conclusion and Recommendations

The study has shown that the practice of artisanal fishing is prevalently traditional, rudimentary and labourious, hence male gender dominated and characterized with specific roles. The male and female gender significantly contribute to food production, though some school of thought believe that female gender constitute greater part of the agricultural labour force as well as spend more time working in the farm compared to their male counter parts, even though the contributions and activities of the male gender is better recognized than the female gender. The resultant effect for both male and female gender is less access to extension services, little access to extension training, information, markets credit. Therefore, promotion the continuous use of rudimentary tools and methods. Poor catch and impoverishing artisanal fishers in the study area. Some of the constraints faced include high cost fishing gear, poor storage facilities, poor mobility and water pollution by oil and gas, water hyacinth, lack of extension service. The study recommends that male and female gender artisanal fisher folks should be provided with equal platform to access extension services that encourage the use of modern and affordable fishing gears to boost fish production. Government should assess in mitigating all forms of marine water pollution in order to enhance artisanal fishing

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