

## RETIREEES ENGAGEMENT IN FISH FARMING IN DELTA STATE, NIGERIA

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**ABSTRACT:** *Life at retirement is a very critical period in the life of people. As a result it is expected that retirees, since they have more time to themselves, should be engaged in one activity or the other in order to earn extra income to supplement their pension. This study was conducted to ascertain if many retirees are engaged in fish farming in Delta state, Nigeria, considering the fact that fish is in high demand because of the nutritional value. Two hundred and thirty (230) respondents were selected for this study. Data were collected with the use of questionnaires and interview schedule. Most of the retirees were males, married and educated, with average household size of 5 persons. They had attended agricultural extension training sessions during their active service years. However, most of them were not engaged in fish farming after retirement. The decision of those who are engaged in fish farming was influenced by level of education, marital status, household size and extension training. Conversely, the decision of those who were not engaged in fish farming was informed by their age and gender. It was recommended that workers should be trained and encouraged to engage in fish farming after retirement, agricultural extension training programmes for workers (members of workers cooperative societies) should be sustained and workers need to be encouraged to engage in fish farming some years prior to their retirement.*

**KEYWORDS:** Retirees, fish farming, agricultural extension training, aquaculture, socioeconomic variables.

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### INTRODUCTION

Most retirees return to their villages of origin to avoid financial insolvency of their households as the cost of living in the village is lower than in the urban settlement (Ofuoku, 2012). Those who retire from government and private organization in the rural areas also face some financial constraints on retirement. This is because they are no longer to receive their full salaries and allowances. Many plan for retirement and start to do something else to earn extra income when they retire from active service. On retirement, the retirees have much time.

Hurd and Rohwedder (2003), Ward-Batts (2008) state that before retirees have more available time, they get engaged in more-time intensive production of commodities. However, Kalankoski and Oumtrakool (2013) retirees spend more time for leisure's than non-retirees. The implication here is that retirees do not stay idle. They engage in one activity or the other. Ofuoku (2012), found that most retirees who embarked on return migration engaged in agriculture and agricultural related activities. He further reported that most families had enough land to sustain farming activities such as fish farming among others. Gantarn (1999) states that most urban-rural migrant engage in

farming on the return to their villages after saving money for such during their active service lives in the urban area.

Jinadu (2012) asserts that several attempts were made to boost fish production in Nigeria, but the fisheries sector still exhibits deficit in the supply and demand of fish to the populace. Since Ofuoku (2012) found that most urban-rural migrants are retirees and are interested in farming, it is expected that many retirees are engaged in fish farming, considering the short gestation period of table fish

### **Objectives**

The major objective of this study is to ascertain the level of involvement of retirees in table fish farming. The specific objectives were to:

- i. determine the socioeconomic characteristics of the retirees
- ii .ascertain the level of involvement of retirees in fish farming.
- iii. examine the influence of socio-economic characteristics of retirees on their decision to be engaged in fish farming.

### **Hypothesis**

The socio-economic characteristics of retirees do not influence their engagement in fish farming.

### **METHODOLOGY**

This study was carried out in Delta State, Nigeria. The state is situated between longitudes  $5^{\circ}$  and  $6^{\circ} 45'$  (degree) east of Greenwich meridian and latitudes of  $5^{\circ}$  and  $6^{\circ} 30'$  (degree) North of the equator. It shares boundaries with Edo state to the North, Bayelsa State and Atlantic Ocean to the south, Anambra state to the east and Ondo state to the west. The state is the forest vegetational belts in the central and southern parts and derived savannah in the northern part.

The State demarcated into three(3) agricultural zones, such as Delta North, Central and South Agricultural zones consisting of nine (9) extension blocks; while Delta South Agricultural zones has six (6) extension blocks.

Multistage sampling method was used to select the respondents. At first stage, 50% of the extension blocks in each agricultural zone was randomly selected to get 13 blocks from each of the selected. This resulted to the selection of 23 rural communities at the second stage. At the 3<sup>rd</sup> stage, 10 retirees resident in the selected rural areas were purposively selected with the aid of informants. This resulted to selection of 230 respondents.

Data for the study were generated from the respondents with the use questionnaires administered to those with reasonable level of formal education, while interview schedule was utilized in eliciting information from those with little or no formal education.

The collected data were analyzed using descriptive and inferential statistics. Objective is addressed with the use of frequency counts and percentages; objective (iii) was met with the hypothesis which was tested with the application of logit regression model. Linear logistic regression model has similarity with linear regression model but it was best suited for this study for the fact that the dependent variable was dichotomous in this study, the binary response was whether the respondent

were engage in fish farming or net, i.e yes=1, no=0. The logistic model was stated implicitly as follows:

$$\ln \left( \frac{P_i}{1 - P_i} \right) = \beta_0 + \sum_{j=1}^n \beta_j X_{ij} + \epsilon$$

1-  $P_i$

The empirical model specifying involvement in fish farming by the  $i^{th}$  farmer is explicitly specified

$$\ln \left( \frac{P_i}{1 - P_i} \right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \epsilon$$

Where

- $Y$  = involvement in fish farming (duming)
- $\beta_0$  = constant term
- $X_1$  = gender (duming)
- $X_2$  = Age (years)
- $X_3$  = level of education (no. of years of schooling)
- $X_4$  = marital status (duming)
- $X_5$  = household size (no. of persons)
- $X_6$  = extension training (duming)

## RESULT AND DISCUSSION

### Socioeconomic characteristics of retirees

Most (60.43%) of the respondents were males. This implies that the work force is dominated by the males. However women also make an encouraging percentage of fish farmers among the retirees. Most (87.39%) of the retirees were between the ages of 60 – 74 years. These are still exuding some energy for fish farming as these days most fish ponds are of surface tanks and tapauline. Majority (73.35%) of the retirees were married. This means that most of them are saddled with responsibilities; especially the males and they need extra income to shoulder such responsibilities. Many (31.74) of them had tertiary education, while 30.87% had secondary education as 27.39% of them had primary level education. This is an indication that most of them had one level or the other of formal education. Education is expected to be an influencing factor for decision to engage in fish farming after retirement. Most (85.65%) of the retirees had household sizes of between 1 and 6 persons. These form responsibilities to them as more often than not, most household are dependents. This is in consonance with Ofuoku (2012) who found a similar trend in household size. Most retirees received extension training various agricultural enterprises. Ofuoku (2012) suggested extension training for urban – rural migrants most of who are retirees who embarked or return migration to their respective villages.

**Table 1. Socio-economic characteristics of respondents**

variables	Number of persons	Percentages (%)
<b>Gender</b>		
Male	139	60.43
female	91	39.57
<b>age</b>		
60-65	72	31.30
66-70	83	36.09
71-75	46	20.00
76-80	17	7.39
Above 80	12	5.22
<b>marital status</b>		
married	171	73.35
single	0	0.0
widowed	26	11.30
divorced	33	14.35
<b>level of Education</b>		
no formal education	23	10.0
primary education	63	27.39
secondary education	71	30.87
tertiary education	73	31.74
<b>household size (no. of persons)</b>		
1-3	113	49.13
4-6	84	36.52
7-10	28	12.17
Above 10	5	2.17
<b>Extension training</b>		
yes	189	82.17
No	41	17.83

**Level of involvement of retirees in fish farming**

Table 2 indicates that the mean involvement score was 2.82 which is <3.0. this implies that many of the retirees were not engaged in fish farming. Ofuoku et al (2008) found that the level of adoption of fish farming technologies was low. The low percentage of the retirees who were involved in fish farming is attributed to the high cost of fish feeds and the problem of poaching experienced by many fish farmers. Ofuoku et al (2006) discovered that poaching ranked 1<sup>st</sup> among the constraints to fish farming in Delta State Nigeria, while high cost of inputs ranked 2<sup>nd</sup> with

these constraints experienced by fish farmers, one will not be surprised that many retirees are not involved or engaged in fish farming.

**Table 2. Distribution of retirees according to their fish farming engagement**

Stages of involvement	Frequency	Percentage (%)	score
Awareness (1)	22	9.57	22
Interest (2)	15	6.52	30
Evaluation (3)	17	7.39	51
Trial (4)	80	34.78	320
Engagement (5)	96	41.74	480
total	230	100.0	903
mean involvement			2.82

Cut-off mean=3.0 ( $\geq 3.0$  = high level of involvement in fish farming,  $< 3.0$  = low level of involvement in fish farming)

### **Influence of retirees' socioeconomic characteristics on their decision to engage in fish farming**

Table 3. indicates that gender had a negative significant relationship with retirees decision to engage in fish farming. It implies women retirees do not zealously decide to engage in fish farming since 39.57% of them compared to 60.43% of men were retirees. This is attributed to the fact that fish farming is dominated by men.

Age also had a negative but significant relationship with the retirees decision to get involved in fish farming. This is in consonance with a priori expectation. It implies that older retirees are risk averse as fish farming is not void of the risk of poaching and the cost of inputs is high. This is congruent with Lemchi et al (2003), Maduakor (2001) who opine that as one becomes older one becomes more risk averse. This result can also be attributed to the fact that sometimes the labour required is intensive.

Level of education was significantly and positively related with retiree's decision on fish farming. This is in agreement with a priori expectation. The implication is that education is a variable that encourages people to venture into fish farming as Madukwe (1995) states that educational level of farmers is one of the salient variables related to the use of important farm practices. That is how education is also related to the decision by retirees to engage in fish farming.

Education has exposed them to useful information on fish farming. Education therefore influences the behavior of retirees' behavior (positive towards fish farming).

**Table 3. Estimation of the influence of retiree's socio-economic characteristic on decision to engage in fish farming**

variable	Coefficients	Std error	statistics
constant	0.091	1.336	0.049*
X <sub>1</sub> (Gender)	-0.040	0.491	0.014*
X <sub>2</sub> (Age)	-0.063	0.929	0.014*
X <sub>3</sub> (Level of education)	0.028	0.127	0.031*
X <sub>4</sub> (Marital Status)	0.050	0.581	0.016*
X <sub>5</sub> (Household size)	0.038	0.142	0.033*
X <sub>6</sub> (Extension training)	0.049	0.025	0.071*

R<sup>2</sup> = 0.882      \*significant (P < 0.05)

Marital status also significantly and positively influenced the decision of retirees to embark on fish farming. With the responsibility over their spouses their need to earn extra income to cater for the short fall in salary paid to them as pension.

Household size proved to positively and significantly influence the decision of retirees to engage in fish farming. This means that the larger the household size the more likely a retiree will engage in fish farming activities. This is attributed to the fact that the monthly pension paid cannot adequately cater for the needs of their household members. In order to make up for the reduced income in the name of pension they took the decision to embark on fish farming. Hard and Rohwdder (2003), Ward-Batts (2008) found that retirees have more time available to them and so they shift toward more – time intensive production of commodities. This is to enable them make up for the shortage in income monthly.

Extension training had positive and significant influence on the decision of the retirees to embark on fish farming. This implies that the retirees who had extension training tends to be more likely to decide on going into fish farming. Ofuoku (2012) suggest that retirees should be given pre-retirement years so that they could take to farming after retirement.

## CONCLUSION AND RECOMMENDATIONS

Many retirees find it difficult to make ends meet as a result of reduced income to their households. In order to provide for this shortage in income it is expected that most of them gage in activities that will earn them extra income to supplement the pensions received by them. Most of the retirees were males and most of them are also married and had one level of formal education or the other. They had average household size of 5 persons and had agricultural extension training. Many retirees were not engaged in fish farming. However their decision to engage in fish farming was

influenced by their gender and age negatively but positively by their level of education, marital status, household size and agricultural extension training, they had prior to retirement.

It is therefore recommended that:

- (i) Workers should be encouraged to prepare for retirement by giving them training on fish farming and other agricultural activities.
- (ii) Agricultural extension training given to workers, members of workers co-operative societies should be sustained. These are mostly done through their respective workers co-operative societies.
- (iii) Retirees should have been encouraged to engage in fish farming no matter the level of production, some years before retirement. This enable them to master the intricacies involved in fish farming so that they just retire into it.

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