

**SOCIO-ECONOMIC DIMENSIONS OF FEMALE PARTICIPATION IN FISH
FARMING IN IKANGBA FISH FARM ESTATE IN IJEBU-ODE LOCAL
GOVERNMENT AREA OF OGUN STATE**

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ABSTRACT

Female participation in agriculture is highly essential as it provides between eighty to ninety percent of the country's food needs. This study examined the socio-economic dimension of female participation in fish farming in Ikangba Fish Farm Estate in Ijebu-Ode Local Government of Ogun State. Data were obtained from 60 randomly selected respondents with the use of questionnaires and the data collected were analyzed using simple percentages and regression analyses. The results of the socio-economic dimension showed that majority of the respondents in the fish farm estate were educated, 56.7% were married and 99.9% were between the ages of 20 and 35years. Some 46.6.6% of the respondents had more than 10years fishing experience while 53.4% falls below 10 years of fishing experience. From the study working experience and educational status has positive impact on the output of the fish farming and it is significant at 1%. Other variables though not significant included age, marital status and educational background. There is no significant difference in the socio-economic factors of female fish farmers in respect to the management factors, production information and output data. Female in the fish farm estate are in their active age and took part in actual production in most types of fish farming and in various stages of fish development. It is recommended that policies that will promote the participation of female farmers in fish farming should be encouraged in order to boost agricultural production in term of fish production in the area and across the country.

Key Words: dimension, female participation, fish farming, management, policies.

INTRODUCTION

Fish farming, a profitable venture, is rapidly expanding and it will continue to be profitable if the planning and management are well taken care of. Fish farming started in Nigeria over 40 years ago (Adekoya and Miller, 2004). The Nigerian government has recognized the importance of the fishery sub-sector and it has made several attempts over the years to increase their productivity through institutional reforms and the various economic measures. Some of these measures provided subsidy for inputs and exemption from tax for fishermen.

Nigerian females are saddled with most of the tasks in farming and rearing production 'supposedly' meant for the men but the benefits gained by them are not commensurate to the man-hours they spend on the task. Despite the dominant and important role female play in farming and rearing production in the country, they are hardly given any attention in the area of training and/or visitation by extension agents with improved technologies. Banks hardly grant them loans and they are hardly reached with improved seeds, fertilizer and other inputs (Aminu, 2007). These conditions have entrenched the female in a vicious cycle of poverty that places them at a less advantageous vantage of income and resource empowerment. Few Nigerian females are engaged in top management cadre of formal sector establishments simply because majority of them lack the educational qualifications necessary for such positions. There is a long history of female participation in productive labour in Nigeria.

In Nigeria, female participation in Agriculture provides between 80 to 90 percent of the country's food needs (Odife, 2002). It however has diverse aspects and this includes fish farming which involves the rearing of fish for the purpose of consumption or sale. Lamac (2010) pointed out that, the under-utilization of female in Agriculture has obvious implications for economic welfare and growth. Several factors, both economic and non-economic are responsible for this.

Despite the efforts of government, there is still a deficit in the supply and demand for fish by the population (Dada, 2004). Most of the fish farming in Nigeria is carried out by small scale operators in small fresh water ponds (UNDP). Nigeria has a population of over one hundred million people and has her national fish demand at over 1.5 million metric tonnes. The current annual aquaculture production hovers around 500,000 metric tonnes. These combined with ever decreasing catch (due to over exploitation) from the capture fisheries have not been able to meet the ever-increasing protein demand of the country. Thus, the challenge to increase protein consumption in Nigeria appears to be more urgent now than ever (Mbanasor, 2002). Poor people are facing new barriers in both their production and returns on fish. Even by the standards of developing countries, artisanal fishers and fish workers are often among the poorest people and they generally operate on a small scale and use traditional fishing practices yet new technologies and environment requirement favour large scale capital intensive operation at the expense of traditional and small scale commercial fishing (Delgado *et al.*, 2008). Whereas small scale fish farming supplies the greatest percentage of the Nigerian's annual fish production output (FDF, 2011).

Today, aquaculture is the fastest growing livestock production sector in Nigeria, with a growth of about 29% in 2006 alone, and with prospects of continued growth. This is because demand for fish is on the increase line with population growth, while catches from fisheries are on the decline, even globally (Delagado, *et. al.*, 2008). Thus, this study therefore determines the socio-economic dimension of female participation in fish farming/rearing.

METHODOLOGY

The study was conducted in Ikangba Fish Farm Estate in Ijebu-Ode, Ogun State. The Ogun State covers about 0.4 percent of Nigeria land mass with a marine 3,571 square kilometres out of which one quarter (800 square kilometre) i.e 22% is covered by water lagoons creeks and coastal river, estuaries. Ogun State is sandwiched by latitude 6°22'N and 6°42'N and it straddles longitude 4°20'E to 4°42'E. It is bounded in the north by Oyo state and in the east by Ondo state. However, reclamation is reducing on size of water surface in a significant way, nevertheless, it is not only man that is reclaiming surface and the sea is also claiming more space for itself in the process of coastal erosion. Ikangba is a coastal upland attaining 45 meters above sea level located at the eastern and the northern fringes of the state (Abegunde , 2007).

Therefore, the research covers the female fish farmers in Ikangba Fish Farm Estate, Ijebu-Ode Local Government Area of Ogun State. A simple random sampling technique was employed for the study. Sixty (60) female fish farmers were selected for the study. The data collected were analyzed with the use of simple percentages and regression analysis.

DATA ANALYSIS AND DISCUSSION OF RESULTS

Socio-Economic Characteristics of Respondents

The results in table 1 show that the modal age of the respondents was between 30 and 35 years. This represents about 50% of the respondents and is an indication that majority of the respondents were in their active age of life. This is consistent with the findings of Omitoyin (2006) that women in their late 20s and early 30s take active part in food production.

Table 1: Age of the respondents

Age (years)	Frequency	Percentage
20-25	5	8.3
26-30	23	38.3
30-35	30	50.0
Marital status		
Single	7	11.7
Married	34	56.7
Divorced	9	15.0
Widow	10	16.7
Working experience		
1-5years	13	21.6
6-10year	19	31.7
11-15years	10	16.6
16-20years	9	15
21years and above	9	15
Educational background		
Primary	-	-
SSCE	3	5.1
OND	15	6.6
HND	15	25.0
Size of fish farm		
10x4x1.2	21	35
6x4x1	39	65
Stocking density		
500-1000	29	48.3

1100-1500	23	38.4
Small	26	44.3
Medium	40	63
Large	13	21.7
Labour acquisition		
Family	12	20.0
Hired permanent labour	25	41.7
Hired casual labour	23	38.3

Source: Field Survey, 2015

In the table, 57% of the respondents were married while 12%, 15% and 17% of them were single, divorced and widowed respectively. The modal class of the respondents' years of working experience in fish farming in the estate was between 6 and 10 years (31.7%). The findings from the table above indicate that 63.3% of the respondents have good educational background graduating with BSc. This findings agrees with that of Lahai, *et al.*, (2000) that two third of the one billion of literate persons of the world are female. 25.1% of the respondents in the study area have 10m x 4m x 1.2m farm size, while 40% has 6m x 4m x 1m farm size. Most of the respondents (48.3%) in the study area have stocking density of 500-1000 per pond. From the study, 41.7% of the respondents used hired permanent labour which is the most used source of labour in the fish farming followed by the hired casual labour (38.3%), only 20% of the respondents use family as their source of labour.

Management Practices

Table 2 below shows various forms of management practices adopted by female fish farmers. Majority (80%) of the respondents in the area practiced intensive management system, only 20% of the respondents practiced semi-intensive management system. Once the fish are fed

with high quality of feed and water is monitored and maintained at optimum, the output of the production would be high that is why most of the respondents practice intensive management system. The study reveals that most (95%) of the respondents rear single - species of fish while only 5% rear two or more species. Also, the study shows that (80%) of the respondents in the area operate flow through as the culture system in their pond while 20% occasionally exchange the pond water.

Table 2: Different Management Practices

Management Practices	Frequency	Percentage
Intensive	48	80
Semi-Intensive	12	20
Type of Culture		
Mono-culture	57	95
Poly-culture	3	5
Type of Culture System		
Flow through	48	80
Occasioned exchange of water	12	20

Source: Field Survey, 2015

Results of Regression Analysis

Table 3 presents Regression Model results of analysis on socio-economic factors influencing the participation of female in fish farming. Three variables were found to be significant among the four variables considered. The significant variables included age, working experience and Educational background. Working experience of female fish farmers was positive and significant at one percent. This signifies that, the working experience of female fish farmer would increase the likelihood of their participation in fish farming. Working experience of female fish farmers could also expose them to series of activities that can promote their fish farming business.

Table 3: Regression Results

Variables	B	SE B	Beta	T	Sig. T
Age	-.285930	2.646807	-.035668	7.21	.8268
Marital status	10.054800	13.495427	-.019146	-.152	.8803
Working experience	-1.212738	2.5622063	.076935	-.511	.6143
Educational background	-5.850717	14.086296	.087002	-5.57	.5827
Constant	2.705415	32.7907363	-	1.999	2.9041

Source: Data analysis, 2015.

Educational status of female fish farmers was positive and significant at one percent. This implies that, female fish farmers with formal education including educational training in fish farming have higher likelihood of participating in fish farming compare to their counterpart who had non-formal education. Educational attainment has been an important factor recognized by several studies on female participation in agriculture. Educational attainment

enhances the ability of processing information about new innovation that comes the way of an individual, and then guides the use of such information for their benefits.

Age of female fish farmers was negative and significant at one percent. This signifies that, a unit increase in the age of female fish farmers will result to a decrease in the probability of female fish farmers participating in fish farming in Nigeria.

Marital status was significant at one percent but had a negative relationship with the likelihood of female fish farmers participating in fish farming. This was observed because most female farmers that are married prefer to get involved in other form of farming considering the risk and time of harvesting in fish farming.

CONCLUSION AND RECOMMENDATIONS

The results of this study indicate that age and marital status as economic factors had significant negative influence on the female fish farmer's participation in fish farming. On the other hand, educational attainment and working experience had significant positive effect on female fish farmer's participation in fish farming. Fish farming is a profitable investment, it is evident that fish farming is capable of creating employment, augmenting income and improving the standard of living of people.

Therefore, measures to educate female farmers who are used to other aspects of farming should be put in place so as to encourage them participate in fish farming. All the factors that can inhibit the participation of female in fish farming must be adequately and efficiently controlled. This would help and encourage those who have been nursing the idea of participating in fish farming among the female farmers. In order to improve the output of fish farming by female fish farmer, access to reliable credit facilities and cheap source of labour

must be promoted. Well trained extension agents should be employed so as to educate female farmer about the importance of participating in fish farming. Also policies that will encourage female farmers in fish farming should be promoted.

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