Occupational Competencies Needed By Retirees in Fish Production for Sustainable Livelihood in Delta State

[1]Olajide, K; [2]Oyibo, A.A and [2]Okechukwu, F.

[1]Kogi State College of Education (Tech), Kabba, Kogi State, Nigeria

**[2]Department of Agricultural Education, Federal College of Education (Tech),
Asaba, Nigeria**

ABSTRACT
This study was designed to identify occupational competencies needed by retirees in fisheries production for sustainable livelihood in Delta State. Four research questions and two hypotheses guided the study. The population of the study was 1300 respondents which comprised of 764 registered fish farmers who are retirees registered with Fadama III project Asaba, Delta State; 487 teachers of agricultural science in senior secondary schools and 49 extension agents. Sample used for the study was 465 respondents which comprised of three hundred (300) retirees that are fish farmers and one hundred and fifty (150) Agricultural Science Teachers and fifteen (15) Extension Agents. Data was collected from respondents using structured questionnaire. Data collected were analysed using means and standard deviation, while hypotheses were tested using t-test. The results of the analysis revealed that 11 out of 27 items were occupational competencies required by retirees for fish production enterprise in Delta State. Seven (7) occupational competency items were not possessed by retirees on fish pond management. Four (4) occupational competency items were not possessed by retirees in marketing Fish. Eleven (11) occupational competencies were needed by retirees in fisheries production for sustainable livelihood in Delta State. The null hypotheses stated were accepted. The study recommended among others that retirees in Delta State should be undergo training in the skill acquisition centres in fisheries production in the identified needed competencies.
Keywords: fisheries production, retirees, occupational competencies, re–engagement

INTRODUCTION
Fish and fish products are known worldwide as a very important diet because of their high nutritive quality and significance in improving human health (Amao, Oluwatayo and Osuntope, 2006). Fish plays a vital role in feeding the world's population and contributing significantly to the dietary protein intake of billions of the populace (Amao *et al.,* 2006). On a global scale, almost 16 percent of total average intake of animal protein was attributable to fish in 1988 (FAO, 1990). The Food and Agriculture Organization (FAO, 1991), recommended that an individual takes 35 grams per caput of animal protein per day for sustainable growth and development. Fish contributes 36.6 grams per day of net protein utilization in Nigerian homes (Adekoya, 2004). Fish and fish products provide more than 60% of the total protein intakes in adults especially in the rural areas in Nigeria (Adekoya, 2004). Regrettably, the supply of fish as food has been on the decline and it is due to consistent declines from the country's major source of fish food (Ugwumba & Chukwuji, 2010). Domestic fish production (farming) is put at 551,700 metric tonnes as against the present national demand of about 1.5 million metric tonnes estimated for 2011 (Osawe, 2013).
Fish farming is expanding rapidly in Nigeria and has a high potential for the provision of valuable protein in less developed countries (Little & Edwards, 2003). Due to global population expansion, demand for high quality animal protein, especially from aquatic sources, is rising. Increasing the aquaculture

production is clearly needed to meet this demand in the new millennium, especially as the capture fisheries resources are declining, due to over fishing, habitat destruction, and pollution (Dunham, Majumdar, Hallerman, Bartley, Mair, Hulata, Liu, Pongthana, Bakos, Penman, Gupa, Ratalishbweg & Hoestgen Schwark, 2001).

Fish production plays an important role in many developing economies. In Nigeria, fish is gaining increasing importance for employment creation and income generation, particularly in the socio-economically weaker communities of fishermen, which represents the poorest sections of the society in many developing countries (National Informatics Centre, NIC, 2007). Total fish production in Nigeria is estimated at about 30 percent of demand, thus scarce foreign exchange is devoted to the importation of large volumes of frozen fish (ThefishSite, 2012). With these advantages, fish production serve as means of employment and sustainable livelihood for fish farmers.

In Delta State, fish is consumed when roasted, boiled, fried or dried. The skin of some cat fish makes useful leather and polishing material; the stem of fishes yield substances that when coated are used as glass beads (Iwena, 2008). Fish oil is used for human consumption as well as in the manufacturing of soap. Some species of fishes are used to beautify aquarium; they are also used for educational and research purposes; Whale fish especially clupeid, anchovy and other species are used for fish meal or condiment (Olaitan and Omomia, 2009). For this reasons, the market and demand for fish in the locality is very high and could engage retirees for sustainable livelihood.

Olaitan, Ifeanyieze and Omeje (2008) stated that retirees are individuals that have disengaged from their initial employment after a long service but are still able and willing to continue their existence in any desirable but less strenuous occupation. Jerry (2000) emphasized that re–engagement of the retirees in a sustainable occupation requires some retirement plans to help provide a livable income when a person stops working. Some of these plans, according to the author, include government – sponsored retirement plans and individual savings plans. There is high possibility that retirees in Delta State can continue to sustain their livelihood if they are trained and guided to invest part of their savings or pension on viable and bankable occupations like fish production.

Production as explained by Uko (2003) is the rational combination of various input resources in order to create a stipulated output. It is the process of creating an output and making it get to the final consumers. Iwena (2008) referred to production as all economic activities which result in the creation of goods and services to certify human wants. Anyamouocha (2001) asserted that production is only said to be completed when the product gets to the final consumers. Kester, Osafero and Daramola (2007) categorized activities in fish production into pond management, breeding, health management, harvesting and marketing. Therefore, fish production is the combination of resource inputs for the purpose of obtaining table size fish as outputs and making them available to the final consumers. For retirees to be actively involved in fish production they have to be equipped with the competencies needed for the occupation.

An occupation, in the opinion of Olaitan (2001) is one's regular, daily and immediate business or job through which one earns a living or livelihood. Okorie (2000) stated that an individual who has occupation is said to have work, and that effective work of an individual worker in any occupation is based on interest, knowledge, skills, ability, attitude and value. This implies that the success of the retirees in fish production occupation is based on the level of their competencies in the activities involved. Competence, in the submission of Grove (1993), is the quality or state of being functionally adequate or having knowledge, skill or strength for a particular duty or respect. Olaitan (2003) stated that to be competent implies that an individual has acquired the knowledge, skills, attitude and judgment which he required in order to perform successfully at a specified proficiency level in a given work. In the context of this study, occupational competencies refer to the knowledge, skills, attitude and judgment that should be acquired and performed by retirees for success in fish production for sustainable livelihood.

In the observation of Amusa and Dumbiri (2010), most retirees lack basic occupational competencies for self re-engagement after service. As a result, they associate fear with livelihood challenges on retirement. Jerry (2009) clarified that the fear of life on retirement is due to lack of productive competencies. In Delta state, the researchers observe that most retirees are frequently depressed by the uncertainty of how to

continue to make sustainable livelihood on retirement. The majority of them, therefore, end up in highly strenuous and flexible business with high level of risks of failure which in most cases lead to hypertension and in extreme cases death of the individual. Due to improper retirement plans and problems associated with retirement packages provided by the government, retirees in Nigeria face hardships such as financial insufficiency, poor feeding, and inability to pay life sustaining bills. Others include dysfunctional family matters as well as psychological or behaviour disorders like depression, hypertension, identity crisis, alcoholism, loneliness, fast ageing and ill health occasioned at times by loss of good accommodation among others (Inaja, 2007). Also, Ayodeji and Theresa (2013) observed that many retirees in the Nigerian society and the problems they are facing draw the attention of all and sundry. These problems seem to range from sudden loss of life, loss of the usual monthly salary, anxiety about a residential home, lack of occupation, dwindling status, decreased strength and deteriorated health condition, physical disabilities and aging. However, Harris and Cole (1980) noted that retirement may be an advatange between one career and another; it may represent the opportunity to start one's real life work or to draw two pay checks. Meanwhile, Delta State FADAMA 111 (2010) reported that most women in Agriculture and retirees have indicated interest in fish production occupation because fish thrives well in the state while its supply to the market is lower than the demand by consumers and marketers who export it outside the state. Meanwhile, the above report implies that the effort of teachers of Agricultural science on students has not been effective in Delta State.

Teachers of agriculture are individuals that have been trained professionally to impart knowledge, skills and attitudes to students in the art of growing crops, rearing animals and processing them for man's use. The duties of the teacher also include assessment of students' performance in class instruction, processing the scores and storing them for future use (Olaitan, Alaribe and Mohammed, 2011). The duties of teachers of agricultural science in schools include imparting knowledge and skills to students in various areas of agriculture such as crop production, soil science, animal science, forestry, fisheries and agricultural management; stimulating students' interest to participate in agricultural activities in the school and encouraging students to promote the growth and development of agriculture in the school through co-operative and clubs among others (Olaitan and Mama, 2001). The impact of the aforementioned responsibilities of teachers of Agricultural science in the society is most observed if the secondary school leavers are able establish and manage either animal or crop farms especially with the help of agricultural extension agents.

Agricultural extension agents, in the opinion of Nagel (1997), are professionals who assist farmers through educational procedure, in improving farming method and techniques, increasing production efficiency and income, bettering their levels of living and lifting social and educational standards. The author further explained that extension agents provide assistance to farmers to help them identify and analyze their production problems and become aware of the opportunity for improvement. Davis (2008) opined that extension agents are individuals set to support and facilitate people engaged in agricultural production to solve problems and obtain information, skills and technologies to improve their livelihoods and well-being. It was in the expectation of the researcher that the extension agents could train individuals such as retirees to establish and manage fish production business for sustainable livelihood but no such record exists. It is against this background the study seeks to identify occupational competencies needed by retirees in fish production for sustainable livelihood in Delta State.

Objectives of the Study

The main purpose of this study is to identify the occupational competencies needed by retirees in fish production for sustainable livelihood in Delta State. Specifically the objective sought to:

1. determine occupational competencies required by retirees for fish production enterprise as perceived by the Agriculture Science teachers and extension agents in Delta State;
2. find out the extent to which retirees possess occupational competencies needed to manage fish pond;
3. examine the extent to which retirees possess occupational competencies needed to market fish;
4. determine the occupational competencies needed by retirees in the various aspects of fish production enterprise in Delta State.

Research Questions
The following research questions guided the research work:
1. What occupational competencies are required by retirees for fish production enterprise as perceived by the Agriculture Science teachers and extension agents in Delta State?
2. To what extent do retirees possess occupational competencies needed to manage fish pond?
3. To what extent do retirees possess occupational competencies needed to market fish?
4. What occupational competencies are needed by retirees in the various aspects of fish production enterprise in Delta State

Hypotheses
The following hypotheses were examined by the study

HO_1: There is no significant difference in the mean ratings of teachers of Agricultural Science and Extension Agents on competencies required by retirees for fish production enterprise

HO_2: There is no significant difference between the mean rating of rural and urban retirees on competencies needed in various aspects of fish production enterprise

METHODOLOGY
The research work adopted descriptive survey research design and functions of industry designs. Olaitan, Ali, Eyo and Sowande (2000) stated that descriptive survey research design is a plan, structure and strategy that an investigator adopts in order to obtain solution to research problems using questionnaire in collecting, analyzing and interpreting the data. Olaitan, Nwachukwu, Onyemachi, Igbo, and Ekong (1999) stated that functions of industry design is one in which development of a training programme is derived from the basic functional area of an industry. These designs are suitable because the study made use of questionnaire developed from literature and functions of industry to collect data from the respondents.

The population for the study is 1300 respondents which comprised of 764 registered fish farmers who are retirees registered with Fadama III project (FADAMA, 2010) and 487 teachers of agricultural science in senior secondary schools (Ministry of Education Asaba, 2013) and 49 extension agents (Delta State Agricultural Development Project, 2013).

The sample used for the study was 465 respondents which comprised of three hundred (300) retirees that are fish farmers and one hundred and fifty (150) Agricultural Science Teachers and fifteen (15) Extension Agents. Purposive and stratified sampling technique was employed to determine the sample. One hundred (100) retirees, fifty (50) Agricultural Science Teachers, and five extension agents were purposively selected from each of the three Senatorial Districts (Strata) that make up Delta State.

Structured questionnaire was used for data collection in this study. The questionnaire has two parts. Part one collected personal or demographic information of the respondents while part two collected information on occupational competencies needed in fish production for sustainable livelihood**.**

Part two was divided into five sections with letter A-D based on the specific purpose of the study. Section A elicited occupational competencies required by retirees for fish production enterprise as perceived by the Agriculture Science teachers and extension agents in Delta State; Section B elicited the extent to which retirees possess occupational competencies required to manage fish pond; Section C elicited the extent to which retirees possess occupational competencies required in harvesting fish and Section D elicited the extent to which retirees possess occupational competencies required to market fish.

Direct need assessment was used to determine the occupational competencies needed by retirees in fish production. Therefore the instrument was structured as follow:

Section A of the instrument consisted of column of level of required scaled as 5, 4,3,2,1, corresponding to Very High Required, Highly Required, Moderately Required, Slightly Required and Not Required. Agricultural Science Teachers and extension agents were requested to indicate what is required in this section. Section B – D consisted of column of level of possession scaled as 5,4,3,2,1, corresponding to Very Highly possessed, Highly possessed, Moderately possessed, Slightly possessed and Not possessed. Retirees were requested to respond to these sections.

Items identified as required by the experts (agric teachers and extension agents) become the items posed to retirees and used to measure the level of possession (Sections B-D). Items not possessed by retirees are

regarded as needed by them. Three experts from the Department of Vocational Education (Agric unit), Delta State University, Abraka validated the questionnaire.

Data for testing the reliability of the instrument was generated through a single administration of the instrument to a sample of the respondents comprising of 30 Senior Secondary Agricultural Science Teachers and 10 Agricultural Extension agents both in Edo State. Split half method and Cronbach alpha statistical package were used to establish the reliability coefficient of 0.94. The high coefficient showed that the instrument designed for the study measured what it intends to measure and therefore reliable for the study. Four hundred and thirty five (155-Teachers and extension agents), (280-retirees) (93.5%) copies of the questionnaire distributed were duly completed and returned.

Data collected from the field were analyzed using the statistical tools: Mean, percentage, frequency, standard deviation. Items with mean value of 3.0 and above were accepted while items with less mean value were rejected. The hypotheses will be tested using t-test at 0.05 level of significance to determine acceptance or rejection. Hypotheses were rejected when the calculated t-value is greater than the critical or table value at 0.05 level of significance; otherwise the hypothesis will be accepted.

RESULTS
Table 1: Characteristics of Experts (Agric teachers and extension agents) (N=155)

Characteristics	Frequency	Percentage
Job Type		
Extension Officer	12	7.74
Agricultural Science Teacher	143	92.25
Gender		
Male	107	69.03
Female	48	30.96
Job Experience [Years]:		
1 – 3	15	9.67
4 – 6	50	32.25
7 – 9	31	20.00
10 – 12	45	29.03
Above 12	14	9.03

Source: Field Work, 2016

Table 1 shows that most of the experts were agricultural science teachers (92.25%) while 7.74% were extension agents. Response on gender indicates that 69.03% of the respondents were males while 30.96% were females. Response on Years of job experience, indicates that 9.67% had 1 – 3 years of experience, 32.25% had 4 – 6 years, 20% had 7 – 9 years, 29.03 had 10 – 12 years, and 9.03 had above 12 years of experience

Table 2: Characteristics of Retirees (N=280)

Characteristics	Frequency	Percentage
Gender		
Male	244	87.14
Female	36	12.86
Location		
Urban	116	41.43
Rural	164	58.57
Number of years in-service before retirement		
1 – 10	-	-
11 – 20	15	5.36
21 – 30	58	20.71
Above 30	207	73.93
Number of years post-retirement		
1 – 5	134	47.86
6– 10	51	18.21
11 – 15	36	12.86
16 – 20	45	16.07
20 and above	14	05.00
Nature of retirement		
Compulsory Retirement	156	55.72
Voluntary Retirement	24	08.57
Mandatory Retirement	100	35.71
Number of years in fish farming		
1 – 2	109	38.93
3 – 4	68	24.28
5 – 6	58	20.71
9 years and above	45	16.07

Source: Field Work, 2016

The result presented in Table 2 shows that most of the retirees are male (87.14) while 12.86 are female. Response on location indicates that most of the retirees live in rural areas (58.57%) while 41.43% live in urban areas. Response on years spent in active in-service indicates that none of the retirees spent between 1 – 10 years, 5.36% of the respondents spent 11 – 20 years, 20.71% spent 21 – 30 years, while 73.93% spent above 30 years in service before retirement. Response on years of post-retirement indicates that 47.86% had spent 1 – 5 years of post retirement, 18.21% spent 6 – 10 years, 12.86% spent 11 – 15 years, 16.07% spent 16 -20 years, and 5% had spent 20 years and above after retiring from service. Response on nature of retirement indicates that 55.71% were had compulsory retirement while 8.57% voluntarily retired while 35.71 had mandatory retirement from active service. Response on years in fish farming

indicates that the respondents have spent 1 – 2 years, 24.28% have spent 3 – 4 years, 20.71% have spent 5 – 6 years, and 16.07% have above 12 years of experience in fish farming

Research Question 1

What occupational competencies are required by retirees for fish production enterprise as perceived by the Agriculture Science teachers and extension agents in Delta State?

Table 3: Mean Responses of Agricultural Science Teachers and Extension Agents on Competencies Required by Retirees for Fish Production Enterprise (N=155)

S/N	Statement items	Mean	S.D	Remark
	Fish pond management			
1	Prepare bottom soil with river sand	3.51	0.76	Required
2	Fill the pond with water	3.03	0.73	Required
3	Stock it with the right fish in the right quantity	3.72	0.62	Required
4	Remove rough vegetation such as bushes	4.14	0.88	Required
5	Lime the pond with calcium materials when needed	3.51	0.71	Required
6	Check the water level regularly to avoid water is running through the outlet	3.50	0.81	Required
7	Attend to any repairs to outlets and inlets after properly checking them	3.81	0.65	Required
8	Feed the fish and keep the water fertilized	3.08	0.68	Required
9	Fill cracks, replace worn brick or concrete and paint wooden parts with creosote or solignum	3.72	0.72	Required
10	Keep 6 to 9 inches freeboard is necessary according to the size of the pond	4.01	0.95	Required
11	Combine appropriate mixture of cow and poultry dung to make plantoon bloom in the pond	2.52	0.75	Not Required
12	Change feeding spots from time to time	3.83	0.74	Required
13	Use suitable plants to provide shade for the pond	3.91	0.81	Required
14	Use vegetative foods one a week e.g lettuce leaves, spinach and carrot tops	3.03	0.72	Required
	Marketing Fish			
15	Determine the type of fish acceptable in the environment	3.64	0.77	Required
16	Tag price according to size or grade			
17	Determine how much sales change when prices change	3.91	0.84	Required
18	Pay attention to the details of customers requirements	3.03	0.92	Required
19	Prepare fish prepared in various ways to enhance value	3.88	0.88	Required
20	Ability to ascertain festive periods due to increase in number purchase done within that time	3.91	0.81	Required
21	Prepare production towards festive periods	3.08	0.86	Required

22	Distribute fish to customer when they need it	4.12	0.83	Required
23	Package fish inform it will look attractive to customers	2.22	0.76	Not Required
24	Ensure a clean environment where fish sales is done	3.04	0.82	Required
25	Store unsold fish in adequate storage equipment or machine	3.55	0.85	Required
26	Determine and use fish market channel	3.74	0.83	Required
27	Evaluate the opportunity of moving downstream in the supply chain by adding value to fish with a small-scale processing enterprise	3.31	0.78	Required

Source: Field Work, 2016

The result in Table 3 shows that the twenty (27) items had a mean range of 2.22 to 4.12. Most of the means were above the cut-off point of 3.00. Items 11 and 23 were below the cut-off point. The respondents agreed that 25 out 27 items were occupational competencies required by retirees for fish production enterprise in Delta State. The standard deviation of the items ranged from 0.54 to 0.98. This indicated that respondents were unanimous in their responses.

Research Question 2

To what extent do retirees possess occupational competencies required to manage fish pond?

Table 4: Mean Responses of Retirees on the Extent Retirees Possess Occupational Competencies Required to Manage Fish Pond (N= 280)

S/N	Statement items	Mean	S.D	Remark
1	Prepare bottom soil with river sand	3.51	0.63	Possessed
2	Fill the pond with water	3.31	0.72	Possessed
3	Stock it with the right fish in the right quantity	3.56	0.74	Possessed
4	Remove rough vegetation such as bushes	3.51	0.78	Possessed
5	Lime the pond with calcium materials when needed	2.61	0.68	Not possessed
6	Check the water level regularly to avoid water is running through the outlet	2.03	0.54	Not possessed
7	Attend to any repairs to outlets and inlets after properly checking them	2.45	0.67	Not possessed
8	Feed the fish and keep the water fertilized	2.01	0.73	Not possessed
9	Fill cracks, replace worn brick or concrete and paint wooden parts with creosote or solignum	2.00	0.68	Not possessed
10	Keep 6 to 9 inches freeboard is necessary according to the size of the pond	2.77	0.71	Not possessed
11	Change feeding spots from time to time	3.00	0.66	Possessed
12	Use suitable plants to provide shade for the pond	2.31	0.74	Not Possessed
13	Use vegetative foods one a week e.g lettuce leaves, spinach and carrot tops	3.94	0.80	Possessed

Source: Field Work, 2016

Table 4 shows that the identified items had a mean range of 2.00 to 3.94. Items 1, 2, 3, 11 and 13 had means below the cut-off point of 3.00, which implies they were not possessed by the retirees. Most of the identified competencies on fish pond management were possessed by the retirees as their means were above the cut-off point. The standard deviation of the items ranged from 0.63 to 0.80. This indicated that respondents were unanimous in their responses.

Research Question 3

To what extent do retirees possess occupational competencies required to market fish?

Table 5: Mean Responses of Respondents on the Extent Retirees Possess Occupational Competencies Required in Marketing Fish (N= 280)

S/N	Statement items	Mean	S.D	Remark
1	Determine the type of fish acceptable in the environment	3.09	0.78	Possessed
2	Tag price according to size or grade	3.45	0.82	Possessed
3	Determine how much sales change when prices change	2.40	0.74	Not Possessed
4	Pay attention to the details of customers requirements	4.02	0.90	Possessed
5	Prepare fish in various ways to enhance value	2.78	0.75	Not Possessed
6	Ability to ascertain festive periods due to increase in number purchase done within that time	4.31	0.99	Possessed
7	Prepare production towards festive periods	3.74	0.91	Possessed
8	Distribute fish to customer when they need it	2.67	0.87	Not Possessed
9	Ensure a clean environment where fish sales is done	3.71	0.88	Possessed
10	Store unsold fish in adequate storage equipment or machine	2.45	0.93	Not Possessed
11	Determine and use fish market channel	3.16	0.86	Possessed

Source: Field Work, 2016

The result in Table 5 indicated that the identified had a mean range of 2.40 to 4.31. Seven out of eleven items were above the cut-off point of 3.00. However, items 3, 5, 8 and 10 were not possessed by the retirees in marketing fish. The standard deviation of the items ranged from 0.74 to 0.99. This indicates that the respondents were unanimous in their responses.

Research Question 4

What occupational competencies are needed by retirees in the various aspects of fish production enterprise in Delta State?

Table 6: Mean Responses of Respondents on Occupational Competencies Needed in Various Aspects of Fish Production Enterprises by Retirees (N= 280)

S/N	Statement items	Mean	SD	Remark
	Fish Pond Management			
1	Lime the pond with calcium materials when needed	2.61	0.68	Needed
2	Check the water level regularly to avoid water is running through the outlet	2.03	0.54	Needed
3	Attend to any repairs to outlets and inlets after properly checking them	2.45	0.67	Needed
4	Feed the fish and keep the water fertilized	2.01	0.73	Needed
5	Fill cracks, replace worn brick or concrete and paint wooden parts with creosote or solignum	2.00	0.68	Needed
6	Keep 6 to 9 inches freeboard is necessary according to the size of the pond	2.77	0.71	Needed
7	Use suitable plants to provide shade for the pond	2.31	0.74	Needed
	Marketing Fish			
8	Determine how much sales change when prices change	2.40	0.74	Needed
9	Prepare fish prepared in various ways to enhance value	2.78	0.75	Needed
10	Distribute fish to customer when they need it	2.67	0.87	Needed
11	Store unsold fish in adequate storage equipment or machine	2.45	0.93	Needed

Source: Field Work, 2016

The result in Table 6 showed that the items had a mean range of 2.00 to 2.78. The means were below the cut-off point of 3.00. This implies that 11 occupational competencies were needed by retirees for in various aspects of fish production enterprises. The standard deviation of the items ranged from 0.54 to 0.93. This indicated that respondents were unanimous in their responses.

Hypothesis 1

Ho_1: There is no significant difference in the mean ratings of teachers of Agricultural Science and Extension Agents on competencies required by retirees for fish production enterprise

Table 7: t-test Analysis of the Mean Ratings of Teachers of Agricultural Science Teachers and Extension Agents on Competencies Required by Retirees for Fish Production Enterprise

Job Type	N	Mean	SD	t-cal	t-tab	Decision
Teachers	143	3.43	0.72	1.82	1.96	Accepted
Extension Agents	12	3.21	0.86			
Total	**155**					

Source: Field Work, 2016

Table 7 shows the t-test analysis of teachers of agricultural science and extension agents on competencies required by retirees for fish production enterprise in Delta State. The t-calculated value of 1.82 is less than the t-critical or table value of 1.96. Therefore the stated null hypothesis is accepted. This shows that there was no statistical difference between the mean response of teachers of agricultural science and extension agents on competencies required by retirees for fish production enterprise.

Hypothesis 2

HO_4: There is no significant difference between the mean rating of rural and urban retirees on competencies needed in various aspect of fish production enterprise

Table 8: t-test Analysis of the Mean Ratings of Rural and Urban Retirees on Competencies Needed in Various Aspect of Fish Production Enterprise

Location	N	Mean	SD	t-cal	t-tab	Decision
Urban	116	3.09	0.72	1.78	1.96	Accepted
Rural	164	3.15	0.65			
Total	**280**					

Source: Field Work, 2016

Table 8 showed the t-test analysis of urban and rural retirees on competencies needed in various aspect of fish production enterprise. The t-calculated value of 1.78 is lesser than the t-table value of 1.96. The stated null hypothesis is accepted. This implies that there is no significant difference between the responses of rural and urban retirees on competencies needed in various aspect of fish production enterprise in Delta State

DISCUSSION OF THE FINDINGS

Occupational Competencies Required by Retirees for Fish Production Enterprise as Perceived by the Agriculture Science Teachers and Extension Agents in Delta State

The result in Table 3 indicated that teacher of agricultural science and extension agents percept that competencies in fish pond management, breeding Fish, harvesting fish, and marketing fish are occupational competencies required by retirees to be successful in fish production enterprise in Delta State. In line with the findings the Fisheries Society of Nigeria indicated that small scale fisheries provide more than 82 percent of the domestic fish supply, giving livelihoods to one million fishermen and up to 5.8 million fisher folks in the secondary sector through their activities in breeding, marketing and distribution, and good pond management (FAO, 2010). In support to the finding, Frank (1993) indicated that land, water, capital, a market, and management skills are essential to successful fish farming. Knowledge of these requirements will help anyone to plan and develop your Fish production enterprise. This implies that retirees who acquire competencies in these areas will be successful in fish production business.

Extent Retirees Possess Occupational Competencies Needed to Market Fish

The result in Table 4 indicated that most of the identified occupational competencies in marketing fish were possessed by the retirees. However, competencies such as: determining how much sales change when prices change, preparing fish in various ways to enhance value, distributing fish to customer when they need it, amongst others. In line with the findings, Adedeji and Owoigbe (2005) observed that apart from seasonality, scarcity and means of preservation which are the main problems of fresh fish marketing, distribution is also observed to be a major problem in fish marketing in Nigeria. It is important that retirees equip themselves with marketing so as to get the reward of labour through sales of product.

Occupational Competencies Needed by Retirees in the Various Aspects of Fish Production Enterprise in Delta State

Table 5 showed the 11 items which cut across fish pond management and marketing were occupational competencies needed by retirees in the various aspects of fish production enterprise in Delta State. In line with the finding, Ofuku (2006) reported that fish farming involves performance of certain management skills such construction of fish pond, provision of clean water free from toxic substances, provision of healthy fingerlings, feeding of the fish, disease and pest control, control of predators, desalting of the

pond, changing water in the pond at intervals and controlled harvesting of the matured fish (cropping). Also, Ndem and Elom (2016) stated that fish farming comprised the skills ranging from site selection where the fish pond will be constructed to harvesting and marketing of fish and fish product. Ndem and Elom (2016) further stated that civil or public servants who acquire these skills in fish farming will use the skills to establish and manage a fish farm which will provide financial security when he retires. It is important that the retirees are equipped with these needed competencies to be proficient and sustainable in their business.

Hypotheses
The result in Table 6 showed that there was no statistical difference between the mean response of teachers of agricultural science and extension agents on competencies required by retirees for fish production enterprise. This implies that their nature of job did not influence the way they perceive the issue.

Table 7 indicated that there is no significant difference between the responses of rural and urban retirees on competencies needed in various aspect of fish production enterprise in Delta State. The groups had same perception of the issue irrespective of differences in location.

CONCLUSION
In Delta State, it was observed that retirees are anxious to get engaged in any profitable business especially as most of them faced compulsory retirement from work due to age and limited years in the civil service. Fish is observed to be highly consumed by households in Delta State because of its nutritive values. This made its demand higher than its supply in the market. Hence, fish production is lucrative and bankable such that retirees can invest their little savings or pension in the occupation safely. The study found out that 11 competencies are needed in pond management and marketing by retirees in fisheries production for sustainable livelihood.

RECOMMENDATIONS
1. Retirees in Delta State should be trained by competency or skill acquisition centres in fisheries production using the identified needed competencies.
2. The identified needed competencies should be used by extension agents to build the capacity of livestock farmers in fisheries production

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