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Training Needs of fish farmers in Afijio Local Government Area of Oyo State, Nigeria

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Abstract
This study examined the training needs of fish farmers in Afijio Local Government Area of Oyo State, Nigeria. Objectives of the study were to determine the personal and socio-economic characteristics of fish farmers as well as to determine factors, influencing their training needs. Interview schedule was used to elicit information from the respondents. Data were analysed using frequent counts, mean, and percentages. Chi-square was further used to test stated hypotheses. The study reveals that fish farmers who practiced fish farming were majorly male dominated. Fifty percent (50%) of the respondents have been engaged in fish business between 11-15 years. Also 78.3 percent of the respondents sourced their information through friends. The test of hypotheses established significant relationships between some variables and their training need, marital status (χ^2 – 143.200; $p < 0.05$), education ($\chi^2 = 31.650$, $p < 0.05$), and sources of information ($\chi^2 = 55.30$, $p < 0.05$). from these results, it is recommended that fish farmers should be encouraged to form and belong to an association so as to assist each other and share ideas and solve problems arising from their training needs.

Keyword: Fish, Fish farmers, Training needs, Afijio LGA, Nigeria.

INTRODUCTION

Fishing like other hunting activities has been a major source of food for human race and has put an end to unexpected outbreak of anaemia, kwashiorkor and so on. It accounts for about one fifth of the world total supply of animal protein and this has risen five fold over the last forty years from 20 million metric tonnes to 98 million metre tonnes in quantity and projected to exceed 150 million metre tones by the year 2010 (Food and Agricultural Organisation of the United Nations (FAO, 1991)..

Fish farming activities in Nigeria started about 50 years age with the establishment of small experimental station at Onikan Lagos and an Industrial farm about 20ha at Panyan in Plateau State by the Federal Government. This generated a lot of interest in fish farming with the involvement of the levels of government and some private establishments. Fisheries occupy a unique position in the agricultural sector of the Nigeria economy. In terms of Gross Domestic Product (GDP), the fishery sub-sector has recorded the fastest growth rate in agriculture to the GDP. The contribution of the fishery sub sector to GDP in rose from 76.76 billion in 2001 to 162.61 billion in 2005 (Central Bank of Nigeria, Report 2005). Fish is an important source of protein to large farming population of Nigeria. Fish provides 40% of the dietary intake of animal protein of the average Nigerian. According to Adekoya (2004) fish and fish products constitute more than 60% of the total protein intake in adults, especially in rural areas. Nigeria is a large consumer of fish with demand estimated at 1.4 million metric tones.

However, a demand supply gap of at least 0.7 million metric tonnes exists naturally with import making up of the short fall at a cost of almost ₦0.5billion per year. Domestic fish production of about 500,000 metric tones is supplied by artisan fisher folks (85%) despite over fishing in many water bodies across the century (Adekoya, 2004). Nigeria has a land area of 923,768km with a continental shelf area of 47,934km and a length of coast line of 853km. It also has a vast network of inland waters, flood plain, natural and manmade lakes and reservoirs. The inland water mass was estimated to be about 12.5 million hectares of inland waters capable of producing 512,000 metric tonnes of fish annually. Oyo State has a fair share of the vast fishery resources. This

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includes rivers, dams and ponds where fishing activities take place.

Despite the considerable high potentials, local fish production has failed to meet the country's domestic demand. This fish industry remains the most virgin investment in Nigeria compared with the importation of frozen fish in the domestic market. A sure means of substantially solving the demand supply is by organizing training on wide-spread small-scale fish production. Since farmers are generally encouraged to increase their income and consequently their outlook therefore, the need to improve their skill and knowledge in fish farming is of paramount importance. Training need is the difference between what is and what ought to be. This implies a gap between the two conditions, what the farmer knowns and what he is expected to know. Training need is defined as the skill, knowledge and attitude an individual requires in order to overcome problems as well as to avoid creating problem situations (Ekokotuand Ekelemu, 1999).

It is against this background that the study investigates the training needs of fish farmers in Afijio Local Government Area of Oyo State, Nigeria. Specifically, the study attempts to:

i. describe the personal and socio-economic characteristics of the fish farmers in the study area;
ii. identify the sources of information of fish farmers in the study area and
iii. ascertain fish farmers' training needs.

HYPOTHESES OF THE STUDY

The formulated null hypothesis of the study is:

$H0_1$: There is no significant relationship between socio-economic characteristics of fish farmers and their training needs

METHODOLOGY

The study was conducted in Afijio Local Government Area of Oyo State, Nigeria. The target population of the study comprised farmers engaged in fish farming activities in Afijio local Government Area of Oyo State.

The respondents for the study were selected through multi-stage random sampling technique. Seven (7) major towns constitute the Local Government Area, out of which 50% were selected through simple random sampling technique. The four sampled towns were Iware, Jobele, Akinmorin, and Fiditi. Coincidentally, they were the major fish producing areas. The list of fish farmers obtained from the Local Government Secretariat Jobele indicates that Iware, Jobele, Akinmorin and Fiditi had 56, 48, 77 and 64 fish farmers respectively. Fifteen fish farmers were selected randomly from each of Iware, Jobele, Akinmorin and Fiditi giving a sample size of 60 fish farmers.

Table 1. Selection of Respondents for the study.

Major Towns Total (T)	Total No. of fish farmers	Number of fish farmers selected
7 (Seven) Towns	56	15
	48	15
	77	15
	64	15
	245	60

Source: Local Government Secretariat Jobele (year).

The data for the study were collected through the use of interview schedule to obtain information from the fish farmers. Data collected were subjected to both descriptive and inferential statistics. Respondents indicate their areas of training needs from a list that was provided. For each item, they indicated intensity at which they needed training. Data collected were analysed using frequency distribution and percentages. These were used to describe the demographic and other variables of the study. The stated hypothesis was tested using chi-squre and Person's Product Moment Correlation (PPMC).

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Table 2. Socio-economnic characteristics of the respondents (n = 60).

Age	**Frequency**	**Percentage**
Below 30 years	4	6.7
31-40 yers	9	15.0
41-50yers	24	61.7
51-60 years	18	30.0
Above 60 years	5	8.3
Total	60	100.0
Sex		
Male	40	66.7
Female	20	33.3
Total	60	100.0
Education		
No former education	9	15.0
Primary certificate	19	31.7
WAEC	15	25.0
OND	3	5.0
HND	7	11.7
B.Sc	7	11.7
Total	60	100.00
Experience		
Below 5 years	1	1.7
5-10 years	28	46.7
11-15 years	30	50.0
16-20 years	1	1.7
Total	60	100.0
Mode of operation		
Automated	7	11.7
Manual	52	86.7
Manual and Automated	1	1.7
Total	60	100.0
Source of fingerlings		
Government	1	1.7
Private	33	55.0
Self	26	43.0
Total	60	100.0
Source of information		
Government	1	1.7
Private	33	55.0
Self	26	43.0
Total	60	100.0
Area of training need		
Adequate	39	65.0
Not always adequate	21	35.0
Total	60	100.0

Personal Characteristics of the Respondents
Age

As shown in Table 2, 15.0% of the respondents were between 31-40years of age. Also, 40.0 percentage of them were between the ages of 41-50, 30.0 percent were between the age group of 51-60 while 8.3 percent were above 60 years of age. This implies that majority of (61.7%) of the respondents were not more than 50 years. This suggests that fish farmers in the study area were still in their active age years hence they should be desirous of training for improved productivity. This result is supported by the findings of Laogun (1985).

Sex: Table 2 revealed that majority (66.7%) of the respondents were male, while 33.3% were female. This implies that fish production on the study area was male dominated.

Education: In Table 2, majority (85%) of the responents were educated. This suggested that fish farmers in the study area should be able to identify areas in which training would be required for improved fish production..

Experience: Results in table 2 shows that 50.0 percent of the respondents have been engaged in fish business for between 11-15 years. This high level of experience might probably enable them to discern areas of fish production where their competence could be improved through training as supported by earlier works of Adereti *et al*. (2006). Also, 46.7 percent have been engaged in the business between 5-10 years while 1.7% of the respondents have been into the business below 5 years.

Mode of operation: Table 2 shows that majority of the respondents (86.7%) were operating manually, 11.7% operated automatically while 1.7% operated manually and automatedly. This is an indication that fish production in the study area was still at the peasant level. Therefore fish farmers in the study area should be trained on simple operations beyond manual operations. This supports the views of Ajayi *et al*., (2003) that woman needed training on improved technologies in fishery operations.

Source of fingerlings: Table 2 reveals that majority of the respondents (55.0 percent) sourced their fingerlings from private forms 43.3% produce their own fingerlings while 1.7 percent got source from the government. This implies that majority of the respondents should be desirous of training in the area of fingerlings production.

Source of Information: Table 2 shows that majority of the respondents (65.0%) confirmed the information received was adequate while 35.0 percent noted otherwise. This finding is contrary to the views of Akagbo (1997) that information to fish farmers was inadequate.

Areas of Training Need: Table 3 shows the different level of need of empowerment in terms of training by the respondents in the study area.
The major areas of need for training as indicated by majority of the respondents were water management (58.3%), Fertilizer management (100.0%), handling fish 66.7%, management of predators (93.3%), pest identification and control (100.0%). Disease Diagnose and control (98.3%), Marketing (60.0%), Poll culture management (Breeds of fish) as mixed together or different services), desilting and pond cleaning (76.7%) and desilling and pond cleaning (58.3%). Please provide brief information on these.

Table 3. Indicating area of fish production in which the farmers required empowerment inform of training (n-60).

Site selection	**Frequency**	**Percentage**
No need	35	51.7
Little need	25	41.7
Great need	4	6.7
Total	**60**	**100.0**
Pond construction		
No need	17	28.3
Little need	37	61.7
Great need	6	10.0
Total	**60**	**100.0**
Stocking		
No need	3	5.0
Little need	39	65.0
Great need	18	30.0
Total	60	100.0
Sorting		
No need	20	33.3
Little need	37	61.7
Great need	3	5.0
Total	60	100.0
Water Management		
No need	11	18.3
Little need	14	23.3
Great need	35	58.3
Total	60	100.0
Fertilizer management		
Great need	60	100.0
Handling fish		
No need	10	16.7
Little need	10	16.7
Great need	40	66.7
Total	60	100.0
Transportation of fish		
No need	2	3.3
Little need	9	15.0
Great need	49	81.7
Total	60	100.0
Management of Predators		
Little need	4	6.7
Great need	56	93.3
Total	60	100.0
Harvesting		
Little need	43	71.7
Great need	17	28.3
Total	60	100.0
Fingerlings production		
No need	17	28.3
Little need	33	55.0
Great need	10	16.7
Total	60	100.0
Storage		
No need	4	6.7
Little need	50	83.3
Great need	6	10.0
Total	60	100.0
Preservation techniques		
Little need	51	85.0

Great need	9	15.0
Total	60	100.0
Packaging		
No need	11	18.3
Little need	48	80.0
Great need	1	1.7
Total	60	100.0
Marketing		
No need	5	8.3
Little need	19	31.7
Great need	36	60.0
Total	60	100.0
Pest identification & control		
Total	60	100.0
Disease Diagnose & Control		
Little need	1	1.7
Great need	59	98.3
Total	60	100.0
Poll Culture management breeds of fishes mixed-together or different species)		
Little need	14	23.3
Great need	46	76.7
Total	60	100.0
Disilting & pond cleaning		
No need	1	1.7
Little need	24	40.0
Great need	35	58.3
Total	60	100.0
Prophylactic (prevent) & therapeutic treatement control of diseases		
No need	10	16.7
Little need	36	60.0
Great need	14	23.3
Total	60	100.0

Source: Field Survey, 2021

Table 4. Test of Hypothesis: Tehre is no significant relationship between socio-economic charcatersitics of the respondents and their training needs.

Variables	Chi-square χ^2	p-value	Decision
Marital status	143.20	0.042	Significant
Education	31.65	0.034	Significant
Age	132.37	0.061	Not significant
Source of fingerlings	98.74	0.073	Not significant
Source of information	55.30	0.025	Significant

Level of significance $p \leq 0.05$

The findings on Table 4 reveal that marital status (χ^2 = 143.20, $p \leq 0.05$) is signfiacint on training needs of the fish farmers. The options that maritals status of the farmers should be taken into consideration when considering training of farmers. In most cases, single farmers would have more time for training with minimal family distractions on ascertained by Ajayi *et al.,* (2003).

Further, levelof education of the farmers was found to be significant to training needs (χ^2 = 31.65; $p \leq 0.05$). this implies that the more educated the farmers, the more easier it is for them to identify their areas of need and assimilate faster what they were supposed to know as attested to by Adekoya (2005).

Also in this study, the source of information was found to be significant to training needs (χ^2 =

55.30, $p \leq 0.05$). This implies that the more informed the farmers are, the more they are aware of the areas of fish production on which they need training. This is in tanden with the ascertion of Ndu (2006) that information is vital to effective performance in fish farming.

CONCLUSION

The study concludes that fish farmers in the study area required training in some aspects of fish production such as water management, fertilizer management, handling fish, management of predators, marketing, pest identification and control, disease diagnose and control, poll culture management (breeds of fishes mixed together or different species), dissolving and pond cleaning. It is believed if fish farmers are properly and adequately trained in all these areas of fish management practices, volume fish production would be enhanced leading to increased yield. This would in turn enhance profitability level of the fish farmers leading to better life for them and their household.

Training is therefore considered as a perquisite enhanced productivity in the fishery sub-sector.

RECOMMENDATIONS

On the basis of the findings of this study, the following recommendations are proffered:

1. Solid Government intervention should be made for credit facilities to fish farmers to enable them takeadvatnage ofbenefits of trainings received from specialists.
2. Government and non governmental organizations should embark on effective training programmes farmers in specific areasof need of the farmers in fishery oeprations and management through periodical seminars, conferences and workshops.
3. Fish farmers should be encouraged constitute themselves into formidable groups and organizations to allow for easy reach and proper training on their areas of needs in fish production practices.
4. Fishery Extension Agents should also be properly technologically applied through in-service training programmes. This will have positive impact on their training-the-trainer exercises for improved dissemination of innovations to fish farmers.

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