

EMPLOYABILITY AND VOCATIONAL SKILLS REQUIRED BY UNIVERSITY GRADUATES FOR EMPLOYMENT IN FISH PRODUCTION IN DELTA STATE

BY

¹ONWUDIWE NIKEJAH, ²FIDELE ENOIDE M UDOH
AND ³ETOP NKEREUWEM ESSIEN (Ph.D)

^{1&2} Department of Crop Science,
University of Nigeria, Nsukka

³Department of Vocational Education (Agric Unit),
University of Uyo, Akwa Ibom State

Abstract

The study was designed to identify employability and vocational skills required by University graduates for employment in fish production in Delta State. Three research questions and one hypothesis guided the study. The population comprised 426 respondents made up of three hundred and forty four (344) registered fish farmers and 82 agricultural extension agents in Delta State. Simple random sampling technique was used to obtain a sample of 200 respondents. Data was collected from respondents using structured questionnaire and hypotheses were tested at 0.05 level of significance using t-test. The results of the analysis revealed that university graduates required being equipped with interpersonal, communication, critical thinking, personal development and numerical skills to be employable in fish production enterprise. Water control management, repairs of damaged aspects of pond, stocking ability, good feeding regime, security amongst others are vocational skills required by university graduates for employment in fish pond management. Good draining and use of net, use of suitable harvesting equipment, transportation of table size fish were vocational skill required by university graduates to be employable in harvesting fish among others. Employability and vocational skills items identified in the study should be used in skill acquisition centers and training programme in the State to train university graduates.

Introduction

Recent developments in Nigeria showed that, about 80% of the graduates from Nigerian universities find it difficult to get employment every year (Uwaifo, 2009). The unemployment problem has therefore injected negative impact on the Nigeria youths and has made them to be used for different unethical vices like area boys, armed militants, thugs, armed robbery, petty thieves and others. Available information by the National University Commission (NUC, 2004) has also reiterated the massive unemployment of Nigerian graduates in the country. This problem is said to be traceable to the curriculum of the higher institutions which lay emphasis on training for white collar jobs

and this has eventually created a miss-match between labour market requirements and employable skills possessed by the graduates (Diejumah and Orimolade, 1991; Diabalen, Oni and Adekola, 2000).

Government establishments, which used to be the major employer of the university graduates have few vacant positions to accommodate these graduates. The graduates therefore, have to look for non-government jobs in the private sector that are not readily available. The situation has posed great challenge to the very existence of individuals in most developing countries like Nigeria, thereby calling for the training of educated men and women who can

function effectively in the society in which they live. In order to produce graduates that match the economic challenges posed by unemployment, universities have to introduce vocational and entrepreneurship education so as to prepare the recipients of their training with both competence in their various professions and also provide them the opportunities for self-employment.

Vocational education has been described by different authorities. Anao (2008) states that vocational education is a kind of education that is geared towards the production of the educated men who can effectively work with his head, heart and hands. Olaitan (1998) sees vocational education as a kind of education or training that equips the learner with saleable skills, while Ginzberg (2001) also opines that vocational training is a type of education which has to do with productive work. Assessing the term vocational education from the view point of these authors, it can be deduced that this type of education equips the beneficiary with saleable vocational skills that would save them all the frustration of searching for non-existing white collar jobs or employment.

Employability skills was defined by Hillage and Pollard (2004) as the transferable skills needed by individuals to make them 'employable' along with good technical understanding and subject knowledge, employers often outline a set of skills that they want from an employee. It is also referred as critical skills one need in the workplace whether one is self-employed or working for others. These skills are believed to equip the employee to carry out their role to the best of their ability. Employability skills are the foundation of career building blocks and they are frequently referenced in the media as lacking in school-leavers, graduates and those already in employment. Organisations spend a lot of time and money training staff, not in job specific areas but in general and basic skills.

Vocational education provides specific skills in vocational areas such as textile and clothing, catering services, crop production, livestock production and others. One lucrative aspect in livestock production has been fish production. The unemployed and graduates from institutions can get employed in fish farming enterprise.

Fish has been recognized to contribute 55% to the protein intake in Nigeria. However, local fish production has been below consumption with imports accounting for about US\$48.8m in 2002 (Central Bank of Nigeria, 2004). Despite the increase in the major sources of animal protein such as livestock and poultry industries, the problem of protein deficiency still continues unabated. The protein deficiency in diet is equally associated with the inability of fish farming industry to supply the required quantity of fish. The situation causes poor health, low efficiency, low productivity and poor standard of living and decline in the contribution of fishery industry's to the Gross Domestic Product (GDP). The industry now contributes only 2.0% of the GDP and accounts for 0.2% of the total global fish production. Nigeria is one of the largest importers of fish with a per capita consumption of 7.52kg and a total consumption of 1.2 million metric tonnes with imports making up about 2/3 of the total consumption. This indicates the large deficit in fish supply in Nigeria (Olapade and Olaokun, 2005).

In Delta State of Nigeria, there is growing demand for protein food as farmers have resorted to growing of culturable fish. Fish production in Delta State is nowhere near optimum when compared with the positive natural endowments for greater fish production. Being a rainforest zone, Delta State has virtually uninterrupted year round environmental conditions for the growth of fish and other aquatic organisms (Amaefula,

Onyekweaku and Asumugha, 2010). There is abundant rainfall, effective harvesting and storage of surface water run-off which has made it suitable for fish production.

Fishing production in Delta State although has a long and impressive history, but has not significantly contributed to domestic fish production. However, it has the potential of creating jobs and generating revenue to unemployed university graduates (Adikwu, 1999). The study therefore, seeks to identify employability and vocational skills required by University graduates for employment in fish production in Delta State.

Objectives of the Study

The general purpose of this study is to identify the employability and vocational skills required by University graduates for employment in fish production in Delta State. Specifically, the study seeks to:

1. identify the employability skills required by university graduates for employment to run fish production enterprise;
2. determine the vocational skills required by university graduates in fish pond management; and
3. Assess the vocational skills required by university graduates in fish harvesting and marketing.

Research Questions

The following research questions guided the research work

1. What employability skills are required by university graduates for employment to run fish production enterprise?
2. What vocational skills are required by university graduates in fish pond management?

3. What are the vocational skills by university graduates in fish harvesting and marketing?

Hypothesis

The following null hypothesis was formulated to guide the study

H₀₁: There is no significant difference between the mean ratings of agricultural extension agents and fish farmers in employability and skills required by university graduates to run fish production enterprise.

Methodology

The study adopted a descriptive survey research design. The population is 426 respondents made up of three hundred and forty four (344) registered fish farmers and 82 agricultural extension agents in Delta State, Nigeria (ADP, 2012). Simple random sampling technique was used to obtain a sample of 200 respondents.

The instrument was validated by experts and reliability coefficient of 0.91 was obtained using the test-retest method. The value was high enough to support the use of the instrument in the research (Inomiesa, 1993). One hundred and ninety two copies (96%) of the questionnaires distributed were duly returned.

Items with mean score of 2.5 and above were accepted while items with less mean weight were rejected. The questionnaire was coded with nominal values designed for each response that was expected from the respondents. Each of the items was scored on the basis of the following code. The items are on point scale of strongly required-1 (SR), Required-2 (R), moderately required-3 (MR), not required-4 (NR). The data were analysed using means, standard deviation while t-test was used to analyse the hypothesis.

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Results

Research Question 1

What employability skills are required by university graduates for employment to run fish production enterprise?

Table 1: Employability skills required by university graduates for employment in fish production enterprise (N= 192)

S/N	Statement items	Mean	S.D	Remark
Interpersonal skills				
1	Satisfy customers and clients' expectations	2.71	0.73	Required
2	Ability to negotiate with customers	3.81	0.71	Required
3	Ability to make critical decisions in the farm	3.56	0.61	Required
4	Manage time efficiently	3.01	0.63	Required
5	Take responsibility in the farm	2.91	0.61	Required
6	Work effectively with other employees or employer in the farm	3.50	0.72	Required
Communication skills				
7	Ability to communicate both verbally and in writing with a wide variety of people	3.81	0.85	Required
8	Maintain good eye contact with customers when communicating	3.08	0.68	Required
9	Write clearly and succinctly	2.72	0.84	Required
10	Demonstrate a varied vocabulary and tailor your language to your customers	2.03	0.74	Not required
Critical thinking skills				
11	Evaluate information for a variety of solutions to a problem in the pond	3.91	0.89	Required
12	Ability to gather reliable information	3.03	0.72	Required
13	Able to effectively plan and organize	3.52	0.75	Required
Personal development skills				
14	Adaptable to situations	3.51	0.76	Required
15	Flexible to change	2.52	0.77	Required
16	Avoid potentially negative emotions	2.88	0.81	Required
Presentation skills				
17	Assess and present risk assessments and strategic documents when needed	3.44	0.65	Required
18	Ability present business plans	3.09	0.77	Required
Numeracy skills				
19	Ability to understand and analyse data in different formats	2.51	0.88	Required
20	Understanding value for money when purchasing and ordering supplies	2.98	0.65	Required

Source: Field Work, 2015

The result presented in Table 1 showed that the identified statement items were agreed by the respondents to be employability skills required by university graduated for employment in fish production enterprise. However, item 10 was

disagreed by the respondents as it was below the cut-off point 2.50. The standard deviation of the items ranged from 0.61 to 0.89. This indicated that respondents were unanimous in their responses.

Research Question 2

What vocational skills are required by university graduates in fish pond management?

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Table 2: Vocational skills required by university graduates for fish pond management (N= 192)

S/N	Statement items	Mean	S.D	Remark
1	Check the water level and see that no water is running through the outlet. Fill or adjust furrow if necessary	3.13	0.86	Required
2	Attend to any repairs to outlets and inlets after properly checking them	2.98	0.93	Required
3	Check the outlets and inlets and all screens for clogging and remove rubbish from screens.	2.75	1.01	Required
4	Fill cracks, replace worn brick or concrete and paint wooden parts with creosote or solignum	2.83	0.97	Required
5	Crop the pond by removing the fish	3.05	0.82	Required
6	Keep 6 to 9 inches freeboard that is necessary according to the size of the pond	2.88	1.00	Required
7	Fill and drain water carefully and slowly to avoid fish jumping or drained out of the pond	3.65	0.84	Required
8	Provide security for predators	3.88	0.94	Required
9	Make a point of noting any observations on fish - spawning, feeding, nesting, etc.	1.94	1.02	Not Required
10	Apply lime when needed	2.34	0.82	Not required
11	Stock pond according to size	3.87	0.99	Required
12	Change feeding spots from time to time	3.45	0.80	Required
13	Use suitable plants to provide shade for the pond	3.03	0.87	Required
15	Use vegetative foods one a week e.g lettuce leaves, spinach and carrot tops	3.45	0.96	Required
16	Combine appropriate mixture of cow and poultry dung to make plantoon bloom in the pond	2.22	1.00	Not required

Source: Field Work, 2015

The result in Table 2 shows the statement items had a mean range of 1.94 to 3.88. Most of item

means were above the cut-off of 2.50. Items 9, 10 and 16 were below the cut-off value of 2.50

and were not required. This implied that the respondents agreed that most of the identified items were vocational skills required by University graduates to employ through fish

pond management. The standard deviations of the statement items ranged from 0.80 to 1.02, which indicated that the respondents' responses were close to one another.

Research Question 3

What are the vocational skills by university graduates in fish harvesting and marketing?

Table 3: Vocational skills required by university graduates for harvesting and marketing fish (N=192)

S/N	Statement items	Mean	S.D	Remark
Harvesting skills				
1	Harvest through partial draining or use of net	2.88	0.65	Required
2	Ensure water temperature of 60-65° F before harvesting	2.97	0.86	Required
3	Pull net with hand, truck or tractor where necessary	2.33	0.76	Not Required
4	Select harvest by fish size	3.03	0.73	Required
5	Ensure seine length should be about 1-1/2 times greater than pond width	3.09	0.91	Required
6	Utilize suitable seine net with regards to the make up	3.09	0.83	Required
7	Adjust net to the size (bar or square measure) needed to catch the minimum fish size desired	3.89	0.87	Required
8	Select suitable harvest equipment for different ponds	3.12	0.73	Required
9	Use live fish of suitable size to adjust mesh size so as to harvest fish with same size	3.05	0.60	Required
10	Use suitable and equipment to transport Table size fish to the market	3.44		
Marketing skills				
11	Tag price according to size or grade	3.09	0.90	Required
13	Ability to determine how much sales change when prices change	3.76	0.81	Required
14	Ability to prepare fish prepared in various ways	3.80	0.75	Required
15	Prepare production towards festive periods	3.91	0.83	Required
16	Distribute fish to customer when they need it	3.67	0.76	Required
17	Package fish inform it will look attractive to customers	2.10	0.87	Not Required
18	Ensure a clean environment where fish sales is done	3.48	0.77	Required
19	Store unsold fish in adequate storage equipment or machine	3.87	0.83	Required
20	Ability to identify fish market channel	3.01	0.88	Required

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Source: Field Work, 2015

The result presented in Table 3 shows that the twenty (20) items had mean range of 2.10 to 3.91. Most of the mean scores were above the

cut-off point of 2.50. Items 3, 17 means were below the cut-off point. The result indicated that the respondents accepted that most of the

identified items were vocational skills required by required by university graduates to be employed in harvesting and marketing fish. The

standard deviation of the items ranged from 0.65 to 0.91. This indicates that the respondents were close to one another in their responses.

Hypothesis

Ho₁: There is no significant difference between the mean ratings of agricultural extension agents and fish farmers in employability skills required by university graduates for employment to run fish production enterprise.

Table 4: t-test analysis of the mean responses of agricultural extension agents and fish farmers in employability skills required by university graduates for employment to run fish production enterprise

Designation	N	Mean	SD	t-value	t-tab	Decision
Extension Agents	67	3.20	0.74	1.86	1.98	
Fish farmers	125	3.39	0.78			Accepted
Total	192					

Source: Field Work, 2015

Table 4 shows the t-test summary analysis of agricultural extension agents and fish farmers in employability skills required by university graduates for employment to run fish production enterprise. The data showed that the t-value was less than the t-tab at 0.05 level of significance. This indicates that there is no significant difference between the mean ratings of agricultural extension agents and fish farmers on employability skills required by university graduates for employment to run fish production enterprise. Therefore the null hypothesis is accepted.

Discussion of the findings

Employability skills required by university graduates for employment in fish production enterprise. The findings in Table 1 showed that university graduates required being equipped with interpersonal, communication, critical thinking, personal development and numerical skills to be employable in fish production enterprise. This implies that the employability skills are not technical skills but salable skills required for graduates to secure employment or

run fish business. U.S. Department of Education (2012) opined that employability skills are general skills that are necessary for success in the labor market at all employment levels and in all sectors. Also, the findings agrees with the opinion of Kelvin, Stuart, Dely and Jon (2011) who stated that employers expect graduates to have technical and discipline competences from their degrees but require graduates also to demonstrate a range of broader skills and attributes that include team-working, communication, leadership, critical thinking, problem solving and managerial abilities. These skills have a number of names - soft skills, workforce readiness skills, career readiness skills- but they all speak to the same set of core skills that employers want. It was found out from the result that the use of varied vocabulary to tailor your language to your customers is not a requirement. This is so as customers especially less educated one will preface simple English for easy communication. The use of various vocabularies may be difficult to understand,

and where there is no communication there is likely no business to be transacted.

Vocational skills required by university graduates for fish pond management

The result in Table 2 indicated that water control management, repairs of damaged aspects of pond, stocking ability, good feeding regime, security amongst others are vocational skills required by university graduates for employment in fish pond management. Good pond management practices equals successful culture and high yield of fish. In with the findings Akankali, Abowei and Eli (2011) found out that the simplest and best way to manage a pond is to: Prepare bottom soil, fill the pond with water, stock it with the right fish in the right quantity, feed the fish and keep the water fertilized, Keep the pond in good order, crop the pond by removing the fish. Sivalingam (2002) asserted that in order to have good results frequent attention is necessary to see that all aspects mentioned are observed judiciously. It was found out that application of lime when needed was not required as a skill. The researcher observed in the field that most ponds in the study area were concrete pond and possibly did not require liming because of the component of cement (calcium compounds) used in making them.

Vocational skills required by university graduates for harvesting and marketing fish

The result in Table 3 indicated that good draining and use of net, use of suitable harvesting equipment, transportation of table size fish were vocational skill required by university graduates to be employable in harvesting fish. In line with finding Williams (2013) found out that ponds are seined and fish removed at regular intervals throughout the production season or over the entire year. Selective harvest, by fish size, is commonly practiced with the multiple harvest technique. The result also indicated that tagging price,

preparation of fish in various forms, distribution of harvested fish, ensuring clean environment, use of appropriate storage equipment, identification of fish market channel are marketing skills required by university graduates for employment in fish marketing. Marketing is an essential aspect of any production enterprise. Chuks (2015) reaffirmed that it is an aspect which assures the farmer that that he has engaged in a worthwhile venture; the income gained from the marketing process is the dividend of other technical skills he has applied in the course of raising the livestock. There it is a crucial aspect that university graduates need to equip themselves to be successful in fish production enterprise.

Hypothesis

The result in Table 4 showed that there was no significant difference among the mean ratings of Agricultural extension agents and fish farmers on employability skills required by university graduates for employment in fish production enterprise. This implies that the groups of respondents rated the statement items from same perspective.

Conclusion

Fish production enterprise has been identified by the study as an aspect of livestock production capable of employing unemployed University graduates due to its economic potential in the country and in Delta State that favour fish production. It was found that, for a university graduate to be employable or self employed in fish production enterprise he is expected to be equipped with general employability or sealable skills such as interpersonal, communication, critical thinking, personal development and numerical skills. Vocational skills in pond management, harvesting and marketing ensure successful culture and high yield in fish production enterprise.

Recommendations

1. Employability and vocational skills items identified in the study should be used in skill acquisition center programme in the State to train university graduates
2. Agricultural extension agents can use the findings to educate farmers in the field.

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