



OCCUPATIONAL DEFTNESS REQUIRED BY AGRICULTURAL GRADUATES IN DUCK PRODUCTION FOR INCOME GENERATION IN ABIA STATE, NIGERIA

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ABSTRACT

Even with the recompense in duck production, duck is yet to rise to a significant level in contributing to meat and egg production as chicken. This study was designed to find out the occupational deftness required by graduates of agriculture in duck (Muscovy) production for income generation in Abia State. Four Objectives guided the study, and four null hypotheses were also formulated and tested. A survey research design was adopted for the study and a structured questionnaire was developed and face validated by three validates all from Michael Okpara University of Agriculture and used for data collection. The questionnaire was tested for reliability and a reliability Cronbach's alpha value of 0.82 was obtained for the instrument. The population of the study was 220 comprising 119 poultry farmers and 101 extension agents in Abia State. The whole of the population was studied. The data collected were analyzed using mean and standard deviation to answer the research questions while t-test statistic was used for testing the null hypotheses at the probability of 0.05 level of significance. The findings from the study revealed that the identified 45 items of occupational deftness' were seen as required in duck production. Based on the findings of the study, the researcher recommended that the Abia state ministry of agriculture should make use of the findings of this study to organize capacity building programmes in the State to teach and enlighten farmers and graduates of agriculture on the 45 identified deftness which will ensure their increased efficiency in duck production.

Keywords: Occupational deftness, Graduates, Agriculture, Duck Production, Income generation

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INTRODUCTION

Agricultural graduates are open to so many prospects in Nigeria as they are believed to must have acquired skills and knowledge which would get them self-employed upon graduation. An agricultural graduate in the context of this study can simply be described as one who passed through a tertiary institution and acquired a wide range of knowledge, skills and attitude in agriculture and its practices such as horticulture, forestry, livestock production, conservation of natural resources, agricultural products and processing, production of food and fibre, aquaculture, and agricultural marketing among others. It is noteworthy that agriculture is still the principal sector in Nigeria's ailing economy as it provides close to 75% of employment to the population based on NBS (2007) findings. Agriculture is the strength of character of the economies of many developing countries such as Nigeria; it remains fundamental to Nigeria as a source of food for her increasing population as well as a leading employer of labour. The 2006 Nigeria population census estimated the Nigerian population to be about 140,003,542m. Thus, near to 75% of this estimated population is directly or indirectly reliant on agriculture for their source of revenue (Adofu, Abula, & Audu, 2010). In affirmation, Adegboye in Akanmu *et al.*, (2016) validates that over thirty percent of the nation's yearly Gross Domestic Product (GDP) is agricultural contribution, and it also employs about seventy percent of the labour force, accounts for over ninety percent of the nation's non-oil exports and provides over eighty percent of the country's food resources. Nevertheless, the depreciation in agricultural output is discouraging as highlighted by Mogues *et al.*, (2008). Education in agriculture based on Osinem's (2007) records is a course of passing on knowledge, attitudes, and skills in agriculture to the learner at any level. In Nigeria, the inability of graduates to get jobs after graduation is an economic problem. However, while it might be relatively difficult for graduates in other fields, graduates of agriculture can get self-employed in agricultural productions such as crop production and poultry production which include chicken and duck rearing among others.

Duck production is an easy, fascinating, and productive endeavour. CPDO in Ago and Nongugwa (2017) referred to ducks as waterfowls. Several advanced countries in temperate climates keep ducks in commercial quantities for meat, eggs and other products. In the case of egg production, ducks produce eggs for an extended period. Tai and Tai (2001) posited that duck eggs and meat products have an immense demand since they are an excellent source of iron and protein. People eat the meat of ducks not only because they like the taste, but also for its high nutritional value in terms of the best possible composition of essential amino acids as well as the favourable composition of fatty acids, with a high percentage of polyunsaturated fatty acids and a favourable ratio of omega 6 to omega 3-fatty acids (Pingel & Germany, 2011).

Presently, duck production is in its childhood stage in Nigeria. Duck is an infrequently utilized livestock in Nigeria regardless of the pleasant setting for its rearing in all agro-conservation zones and a readily obtainable huge market (Oguntunji & Ayorinde, 2015). An up-to-date record review of livestock in Nigeria exposed that duck is the third most extensively domesticated poultry following chicken and guinea fowl (Nwanta *et al.*, 2006). Local ducks In Nigeria are mostly reared along with the household chickens on free-range. Although

ducks are tougher and less vulnerable to diseases and ecological risks, they are in smaller quantities than the chickens mostly in consequence of cultural viewpoints which tend to represent the duck as an enigma bird (Agbo & Nongugwa, 2017). Exotic breeds of domestic ducks do exist. However, in Nigeria, Muscovy ducks popularly called local ducks are predominant as reported by Oguntunji & Ayorinde (2015). The author further explained that adaptability to the environment and acceptability among the populace was the principal reasons for the prevalence of Muscovy ducks in Nigeria.

The Muscovy duck belongs to the genus *Cairina* and originated in South America. It is a good multipurpose breed and has good flavour meat. It is a medium egg producer. The young are hardy and easy to rear (Bachan, 2016). Muscovy duck is occasionally misconstrued to be a goose. It feeds on grass and produces eggs identical to that of a goose (Sustainable agriculture, 1996). In South and Central America, it is a widespread duck just as it is in West Indies. Muscovy duck though a native of Brazil is now generally accepted even in Australia. It is known as “Pato” in the Philippines. It can take care of itself and calls for only minimum care and feeding. Muscovy is an outstanding mother and can hatch eggs from other mother ducks. The young Muscovy is exceptional for food, but the older birds have a “mildewed” taste (Bachan, 2016). The author further stated that the male Muscovy can turn out to be very large ranging from 4.5kg to 5.5 kg while the female is smaller ranging from 2.3kg to 2.8 kg.

Muscovy is different from other breeds as enumerated by Bachan (2016) in the following ways: it goes meditative and sits on and hatch eggs of other breeds in addition to its own; it flies and rests on roosts and trees; if previously mated with constituents of its type, it will not mate with members of another type; where cross-mating are doing well, the crossbred offspring are sterile and are known as ‘mules’, the drake, dissimilar to other breeds, it has no twist feathers in its tail; Male and female Muscovy ducks equally ‘hiss’ instead of ‘quack’; Muscovy ducks are low egg makers, that is, they may lay twenty eggs and pause before producing again and they arrange their eggs in clutches; its eggs take thirty-five (35) days to hatch, while eggs of other breeds take only twenty-eight (28) days. In addition, its meat has a minor fat substance than that of other ducks.

In Abia State, Muscovy ducks are typically reared on a free-range and concentrated in the hands of small-holder farmers. Thus, its production is a way of life for rural farming families. They keep a few ducks to get eggs and meat for home consumption and sell the surplus at the local market or among their neighbours to generate income. Income is the cash or fund that an individual or business receives in switch for a good or service or by investing capital. Income is used to fund day-to-day expenditures (Investopedia, 2018). For this study, income can be referred to as money realized from the sales of duck meat and eggs and other duck products. Rajendran and Mohanty (2003) posited that poultry farming must turn out to be leading among the auxiliary occupations of farmers to add to their incomes since it promises speedy returns, requires the smallest amount of space and investment, and can be carried out by ordinary farmers. Duck farms can be a vital tool to improve, households’

food security, and employment opportunity as there are prospects in choosing duck production as one's occupation.

Occupation can in a nutshell be seen as an individual's function or handiwork in a society. More exclusively, a profession or an action frequently performed in a swap for a sum ("for a living"). A set of professions whose key tasks and duties are characterized by a lofty extent of similarity forms an occupation (OECD, 2001). Occupation in the context of this study can be referred to as the set of jobs carried out during duck production such as housing, feeding, management and marketing among others, for income generation.

Duck in Abia State is not commonly reared in large quantities perhaps because of low support; even farmers who rear them do it on a free-range as such farmers do not border to possess 'deftness' in its rearing. Deftness is the ability, skillful practices, proficiency, or expertness engaged in carrying out a specific task. Osinem in Alawa and Dijeh (2014) opined that deftness is the practiced ability and expertness, or aptitude showcased in carrying out a task. It is worth expressing that deftness may mean different things in different fields of life; therefore, in the context of this study, deftness can be referred to as the ability and competency acquired through practice in rearing and management of ducks as well as marketing. Ducks are reared in a controlled environment which varies from open-sided naturally ventilated sheds to completely closed climate-controlled subway ventilated dwellings. Duck production is therefore a full-time specialized business requiring skills for its efficiency. According to Coates *et al.* (2000), for efficiency and effectiveness in duck production, skills should be acquired in duck housing, feeding, management, marketing, and mating among others. Duck always has been of less considerable in accounting for meat production than chickens in consequence of the basic discoveries in the managing skills related to duck production (Cherry in Alfred & Agbede, 2012). Hence, attempts should be made in identifying the required 'deftness' for its efficient production.

STATEMENT OF THE PROBLEM

Livestock production is an imperative supplementary occupation that adds-on the income of smallholder farmers and rural households. Amid livestock-based professions, poultry production has taken a key position as a profitable activity with a massive prospective for rapid fiscal expansion. Poultry meat and egg are important sources of edible animal protein. However, the demand for protein food is progressively growing with the improvements in society's income and population growth. To fulfil the protein requirements of the people, there is a compelling need to go into duck production in Abia State. Surprisingly, despite the advantages and prospects in duck production, duck is yet to rise to a significant level in contributing to meat and egg production as chicken in Abia state. Therefore, there seems to be a limiting factor which among others could be the dearth of required 'deftness' for its occupation which is evident in most agricultural graduates roaming the streets in search of white-collar jobs instead of getting self-employed in duck production to aid the meeting of the demand for protein food in the state. There is a call to identify and prescribe the required skills and practices that would enhance its production and thereby contribute to the mobilization and sensitization of agricultural graduates for

greater attention to duck production in the State. This is the concern of the researcher. This study, therefore, tends to bridge this gap in identifying the required occupational skills for duck production.

PURPOSE OF THE STUDY

The purpose of this study was to find out occupational skills required by graduates of agriculture in duck production for income generation in Abia State. The specific objectives of this study were to:

1. identify the occupational deftness required by agricultural graduates in the housing of ducks,
2. find out the occupational deftness required by agricultural graduates in the feeding of ducks,
3. find out the occupational deftness required by agricultural graduates in the management of duck, and
4. find out the occupational deftness required by agricultural graduates in the marketing of duck

RESEARCH QUESTIONS

The following research questions were raised to be answered:

1. What is the occupational deftness' required by graduates of agriculture in the housing of ducks?
2. What is the occupational deftness' required by graduates of agriculture in the feeding of ducks?
3. What is the occupational deftness' required by graduates of agriculture in the management of ducks?
4. What is the occupational deftness' required by graduates of agriculture in the marketing of ducks?

HYPOTHESES

1. There is no significant difference in the mean responses of farmers and extension officers on the occupational deftness required by graduates of agriculture in the housing of duck
2. There is no significant difference in the mean responses of farmers and extension officers on occupational deftness required by graduates of agriculture in the feeding of duck
3. There is no significant difference in the mean responses of farmers and extension officers on the occupational deftness required by graduates of agriculture in the management of duck
4. The mean responses of farmers and extension officers on the occupational deftness required by graduates of agriculture in the marketing of duck does not differ significantly

LITERATURE REVIEW

THEORY OF FOOD PRODUCTION

This theory was propagated 224 years ago by Thomas, Robert and Malthus in the year 1798. The theory states that the population increases in a geometric progression while food production increases in arithmetic progression thereby making it inevitable that the planet would be at some time or the other, unable to produce enough food for all its inhabitants. Although this theory proved false later because other variables which he did not conceive emerged especially technological advances applied to agriculture and food production. However, this theory is pointing at the identified gap in the demand for protein foods such as poultry, and its supply in the context of this study. Thus, if left unresolved, would lead to the danger of insufficient protein food

production. It is therefore believed that identifying the Occupational deftness' necessary for success in duck production would go a long way to a bridge the gap and consequently, increase agricultural sustainability.

METHODOLOGY

The study adopted a survey research design. The design is considered appropriate because it permits the generalization of the results gotten from a representative sample using a questionnaire. The study was carried out in Abia state consisting of three agricultural zones namely, Umuahia, Aba and Ohafia. The population of the study was 220 comprising 119 poultry farmers and 101 extension agents in Abia State (Agricultural Development Programme, Abia State, 2020). The entire population was used leading to the use of the census sampling technique. A well-structured questionnaire titled: Occupational Deftness in Duck Production for Income Generation Questionnaire (ODIDPFIGQ) was used to collect data from the respondents. The questionnaire was divided into sections A, B, C, D and E of the respondent's details, occupational deftness required by graduates of agriculture in the housing of ducks, occupational deftness required by graduates of agriculture in the feeding of ducks, occupational deftness required by graduates of agriculture in management of duck and occupational deftness required by graduates of agriculture in the marketing of duck respectively. The questionnaire was structured on a 4-point scale using Highly Required (HR) as 4 points, Slightly Required (SR) as 3 points, Required (R) as 2 points and Not Required (NR) as 1 point. The survey instrument was reviewed for face validity by a panel of three validates; one from the Department of Animal Science, one from the Department of Agricultural Education and the other from the Department of Agricultural Economics and Extension all from Michael Okpara University of Agriculture Umudike (MOUUAU). Twenty copies of ODIDPFIGQ were administered to twenty poultry farmers in Abia State to establish the reliability instrument which gave a reliability value of .82 using Cronbach alpha. Two hundred and twenty copies of the ODIDPFIGQ were administered to the respondents. However, two hundred and eleven copies of ODIDPFIGQ were only retrieved representing approximately 9.6% retrieval rate. The data were analyzed using arithmetic mean and standard deviation to answer research questions. In answering the research questions the real limit of numbers was: Highly Required (3.5-4.0); Slightly Required (2.5-3.49); required (1.5-2.49); Not Required (1.0-1.49). The real limit of numbers was used for decision making based on the response options. T-test statistic was used to test the null hypotheses at 0.05level of significance.

RESULTS AND FINDINGS

Research Questions 1: What is the occupational deftness' required by graduates of agriculture in the housing of duck?

Table 1: Mean Rating, Standard Deviation and t-test Analysis of Respondents on the Occupational Deftness Required by Graduates of Agriculture in Housing of Duck in Abia State (N=211)

S/N	Statement	X	SD	t-value	Sig	Rmk	
1	Select a suitable site for the building of the duck house	3.82	.38	1.62	.106	HR	NS
2	Develop building plan	3.82	.36	1.537	.129	HR	NS
3	Construct the building based on the plan	3.77	.42	.834	.406	HR	NS
4	Gather material for the building	3.74	.46	.471	.638	HR	NS
5	Prepare the tethering peg	3.45	.61	1.294	.280	HR	NS
6	Lay out brick block dwarf wall	3.45	.59	-.392	.696	HR	NS
7	Use wire gauze at the half up of the wall to permit ventilation	2.79	.84	-.189	.850	SR	NS
8	Roof open end at the top to avoid accumulation of ammonium	2.81	.81	1.519	.131	SR	NS
9	Construct footbath at the entrance of the building	3.59	.49	0.54	.957	HR	NS
10	Fence the building to avoid unwanted access	3.58	.52	1.570	.119	HR	NS

*Significant at 0.05 level

Key: HR=highly required; SR= slightly required; RMK=Remark; NS = Not Significant.

The findings from Table 1 revealed that respondents agreed that 8 items in the occupational deftness required by graduates of Agriculture in the housing of ducks in Abia State are highly required while two are slightly required based on the stated real limit of numbers. Table 1 also revealed that there is no significant difference in the mean responses of farmers and extension agents on the occupational deftness required by graduates of agriculture in the housing of ducks in Abia State. Where the degree of freedom (df) =210, the t-value ranges from .189 to 1.62 with the 10 items having $p>0.05$; therefore, the null hypothesis states that there is no significant difference in the mean responses of farmers and extension officers on the occupational deftness required by graduates of agriculture in the housing of duck is retained.

Research Questions 2: What is the occupational deftness' required by graduates of agriculture in the feeding of duck?

Table 2: Mean Rating, Standard Deviation and t-test Analysis of Respondents on the Occupational Deftness Required by Graduates of Agriculture in Feeding of Duck in Abia State (N=211)

S/N	Statement	X	SD	t-value	Sig	RMK	
1	Provide concentrate feeds to duck in the morning before allowing them out and in the evening before allowing them in	3.73	.64	1.596	.113	HR	NS
2	Construct a swimming pool for duck	3.24	.65	1.165	.246	SR	NS
3	Provide clean water for drinking and bathing duck regularly	3.48	.57	.152	.880	SR	NS
4	Provide for duck roughages like Napier and carpet grass	3.73	.72	.960	.339	HR	NS
5	Clean the feeding troughs regularly with disinfectants	3.65	.57	1.654	.101	HR	NS
6	Refill the swimming pool with water for drinking and bathing	3.50	.76	1.042	.299	HR	NS
7	Provide vitamins to boost their appetite for food	3.90	.51	.492	.623	HR	NS
8	Keep duckling indoors to provide feeds and water in other to avoid the loss	4.16	.80	.442	.659	HR	NS

**Significance at 0.05level*

Key: HR=highly required; SR= slightly required; RMK=Remark; NS = Not Significant.

Among the 8 items on the occupational deftness required by graduates of Agriculture in the feeding of duck in Abia State, table 2 shows that the respondents agreed that 6 is highly required while 2 is slightly required. Table 2 also revealed that there is no significant difference in the means response of duck farmers and extension agents on the 8 listed items in table 2; where the degree of freedom (df) =210, t-value ranges from .152 to 1.596 with the 8 items having $p > 0.05$ level of significance hence the null hypothesis which states that there is no significant difference in the mean responses of farmers and extension officers on the occupational deftness required by graduates of agriculture in the feeding of duck was therefore retained.

Research Questions 3: What is the occupational deftness' required by graduates of agriculture in the management of duck?

Table 3: Mean Rating, Standard Deviation and t-test Analysis of Respondents on the Occupational Deftness Required by Graduates of Agriculture in Management of Duck in Abia State (N=211)

S/N	Statement	X	SD	t-value	Sig	Remark
1	Fence duck farm to avoid poachers and predators	3.65	.45	1.72	0.89	HR NS
2	Cover the floor with sawdust, wood shaving, and rice husk to absorb faeces	2.55	.52	3.922	.001	SR S
3	Observe duck regularly for any sign of disease	3.66	.34	1.108	0.11	HR NS
4	Clean duck housing regularly	3.80	.39	1.584	.518	HR NS
5	Isolate sick duck as soon as signs and symptoms are noticed	3.96	.54	-.695	.942	HR NS
6	Treat sick animals with recommended doses of drugs	3.75	.46	1.310	.194	HR NS
7	Observe duck for response to treatment	3.67	.55	-.26	.980	HR NS
8	Cull and bury diseased duck to avoid further infection	3.76	.37	.584	.561	HR NS
9	Debeak duck to avoid cannibalism and destruction of items on the farm	3.49	.60	.054	.957	SR NS
10	Separate ducklings from ducks after 2-3weeks to prepare for mating	3.69	.31	1.570	.119	HR NS
11	Deworm duck regularly against endo parasites for optimum production	3.88	.36	-.188	.085	HR NS

*Significant at 0.05 level

Key: HR=highly required; SR= slightly required; NS = Not Significant.

Table 3 shows that the respondents agreed that 9 out of the 11 items on the occupational deftness required by graduates of agriculture in management of duck is highly required while 2 are slightly required. Table 3 also shows that there is no significant difference in the mean responses of duck farmers and extension agents on the items number 1,3,4,5,6,7,8,9,10, and 11 as shown in table 3 but significant in item number 2 (Cover the floor with sawdust, wood shaving, rice husk to absorb faces with $p < 0.05$ level of significance); where the degree of freedom (df) =210, t-value ranges from -.188 to 3.922. Therefore, the null hypothesis which states that there is no significant difference in the mean responses of farmers and extension officers on the occupational deftness required by graduates of agriculture in the management of ducks was rejected on item number 20 but retained in others.

Research Questions 4: What is the occupational deftness' required by graduates of agriculture in the marketing of duck?

Table 4: mean rating and standard deviation of respondents on the occupational deftness required by graduates of agriculture in the marketing of ducks in Abia State (N=211)

S/N	Statement	X	SD	t-value	Sig	RMK	
1	Survey the market for the duck to determine the market value and demand	3.41	.28	-.912	.365	SR	NS
2	Sort and grade duck based on body size and weight	3.55	.32	-.648	.518	HR	NS
3	Tag prices for each grade based on market survey and demand	3.60	.48	.958	.672	HR	NS
4	identify distributing channels for marketing of duck	3.47	.51	1.663	.099	SR	NS
5	Register with the duck producer's association to access a wider market	3.40	.38	.177	.860	SR	NS
6	Seek promotion strategies for duck products	3.61	.40	.947	.345	HR	NS
7	Advertise duck products locally and through media to attract buyers	3.63	.39	1.443	.152	HR	NS
8	Sell products directly to buyers at the farm gate or transport the products to the market to sell at better prices	3.62	.56	2.676	.665	HR	NS
9	Distribute or sale products to buyers through middlemen	3.75	.50	2.497	.782	HR	NS
10	Ensure regular supply of duck products to buyers	3.76	.61	2.393	0.18	HR	NS
11	keep good relationship with customers	3.66	.30	1.123	.264	HR	NS
12	Review all the marketing strategies to meet the present condition	3.81	.26	2.452	.199	HR	NS
13	Seek out new relationships to meet high demand.	3.70	.63	1.646	.102	HR	NS
14	keep appropriate records of sales for expansion and sustainability	3.72	.38	1.310	.194	HR	NS
15	Calculate the expenditure and income to balance the profit and loss account	3.66	.32	1.581	.116	HR	NS
16	Manage finances obtained from duck production to give room for saving and reinvestment.	3.68	.39	1.712	.088	HR	NS

*Significant at 0.05 level

Key: HR=highly required; SR= slightly required; RMK=Remark; NS = Not Significant.

The result from table 4 revealed that respondents agreed that 13 items in the occupational deftness' required by graduates of agriculture in the marketing of duck in Abia State are highly required while 3 are slightly required based on the stated real limit of numbers. Table 4 revealed also that there is no significant difference in the mean responses of farmers and extension agents on the occupational deftness required by graduates of agriculture in

the marketing of ducks in Abia State. Where the degree of freedom (df) =210, the t-value ranges from -.648 to 2.676 with the 16 items having $p>0.05$ level of significance hence the null hypothesis which states that the mean responses of farmers and extension officers on the occupational deftness required by graduates of agriculture in the marketing of duck does not differ significantly was retained.

DISCUSSION OF FINDINGS

The findings of the study in table 1 show that the graduates of agriculture in Abia State require all the ten identified occupational deftness' in the housing of ducks for income generation. This finding is thus in agreement with the submission of William and Tirat (2014) that duck housing is of great significance. According to William and Tirat (2014), When properly designed and managed, modern duck housing provides ducks with a high degree of protection from the detrimental effects of extremes in weather and entry of duck diseases. William and Tirat (2014) further stressed that good duck housing in addition to allowing year-round production and marketing at an earlier age, benefits also include improved feed conversion and more predictable and usually better weight gain. In addition, in a study conducted by Oguntunji and Ayorinde in 2015 on 'duck production in Nigeria: flock characteristics, management and mortality, it was found that about two-thirds (74 %) of duck farmers provided housing or night shed for ducks. This indicates the importance of housing in duck production.

Table 2 revealed that the respondents agreed to the 8 identified deftness in duck feeding as required for duck production for income generation with item 8 (Keep duckling indoors to provide feeds and water in other to avoid loss) having the highest mean rating of 4.16. In this agreement with the finding of this study, FAO 2009 established that farmers in Cambodia held that grazing ducklings and ducks reduce the cost of feeding. Consequently, 70 percent of farmers use grazing with supplementation and 30 percent use full confinement together with their non-Muscovy duck flocks.

In table 3, the result shows that the respondents established that all the 11 identified items deftness' in management of duck for income generation are required with item number 5 (Isolate sick duck as soon as signs and symptoms are noticed) having the highest mean rating of 3.96. This is why Oguntunji and Ayorinde (2015) highlighted that Various management activities encompassing nutrition, housing and health management exert remarkable effects on the well-being and general performance of the flock. The importance of proper management practices in duck production is needless to be overstressed; this is because poor management would result in a high mortality rate of the birds and consequently, low or no income would be generated.

The findings of this study as highlighted in table 4, pointed out that the agreement of the respondents is also in line with the work done by Ngozi (2016) on a study on entrepreneurship skills required for the training of youths in fish breeding enterprise for self-employment in Anambra state, where it was found that all the thirty-five entrepreneurship skills identified were required for the training of the youths in the fish breeding enterprise. These earlier findings confirm the credibility of the findings of this study.

CONCLUSION AND RECOMMENDATION

Duck has not been of great significance in Abia State due to people believing that its meat and egg are of less value than chicken. However, since the advent of the growing demand for protein food because of the improvements in society's income and population growth, duck production by graduates of agriculture that might not have known the necessary occupational deftness required for duck production in the State became necessary to serve as a substitute when the generally accepted chicken products are not within the reach of the people. The researcher found out from the study that there is 45 occupational deftness required for duck housing, feeding, management and marketing that would aid the success of the Agricultural graduates that are going into the duck production business.

It is therefore recommended that the ministry of agriculture should make use of the findings of this study to organize capacity building programmes in the State to teach and enlighten farmers and graduates of agriculture on the 45 identified skills (10 in housing, 8 in feeding, 11 in management and 16 in the marketing of duck) which will ensure their increased efficiency in duck production.

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