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Entrepreneurship Skills of Small and Medium Scale Poultry Farmers in Central Agricultural Zone of Nasarawa State Nigeria

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Abstract

The study assessed the level of entrepreneurship skills of small and medium scale poultry farmers in central agricultural zone of Nasarawa State. A simple random sampling technique was used to select 70% of the listed poultry farmers in each of the four LGAs in the zone which gave a sample size of 55 respondents. Data collection was by a structured interview schedule. Data were analysed using both descriptive and inferential statistics such as mean scores, percentage and linear regression analysis. The results show that majority (78.2%) of the respondents were males, the mean age of the respondents was 41 years, most (58.1%) of them had tertiary education and most (47.3%) of them had between 6-10 years experience in poultry business. The average number of birds kept by the respondents was 260. Majority (85.5%) of them were not members of any group while the average number of extension contacts in a year was 3 and their mean monthly income was N27, 730.91. The respondents were rated high (M> 3.0) in 21 out of the 30 areas of entrepreneurship skills presented with an overall 70% level of competency. Results of the regression analysis show that extension contact, farm size and training had significant positive effects on level of entrepreneurship skills. The major constraints faced by the respondents were high cost of poultry feeds, inadequate capital and poor extension services. It was recommended that the Nasarawa Agricultural Development Programme (NADP) extension staff in the zone should focus more attention on small and medium scale poultry farmers in the area by mobilising them to form associations/cooperatives groups for self help.

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They should also be given training on local feed formulation to cut production costs.

Key words: Entrepreneurship Skills, Poultry Farmers in Nasarawa State.

Introduction

Poultry is a collective name given to a group of birds reared or hunted for useful purposes. They are domesticated birds kept for egg or meat production which include chickens (domestic fowls) turkeys, ducks and geese. The poultry sub-sector is the most commercialized (capitalized) of all the sub-sectors of the Nigerian agriculture. The types of poultry that are commonly reared in Nigeria are chickens, ducks, guinea fowls, turkeys, pigeons and more recently ostriches. Those that are of commercial or economic importance however, are chicken, guinea fowls and turkeys amongst which the chickens predominate (Adene and Oguntade, 2006). It is generally observed that most poultry production enterprises in Nigeria and in Nasarawa state in particular, are run by small scale farmers.

Small scale poultry refers to those operations in which the farmers frequently have difficulty to obtain sufficient inputs to allow use of technical inputs available to medium and large scale farmers. Small scale poultry are mostly found in the rural areas where production inputs are difficult to obtain and marketing outlet are not well organized while medium scale poultry farms are usually found in the urban and semi urban areas where there is access to adequate production facilities and marketing outlet (Adeyemo and Onikoyi, 2012). According to Omotosho and Oladele (1998), small scale poultry production is made of farms having less than 1,000 birds while medium scale farms are those having between 1,000 and less than 5,000 birds. This classification was adopted in selecting respondents for this study.

The total demand for poultry birds in Nigeria as at 2016 stood at 200 million birds while supply was 140 million birds. The demand-supply gap is filled by illegal imports that enter the Nigerian markets at lower prices than domestic producers (Federal Ministry of Agriculture and Rural Development, 2016). This calls for synergy between stakeholders in the poultry value chain to improve productivity so as to meet up with the ever increasing demand for poultry products (meat and eggs). Acquisition of the much needed entrepreneurship skills is therefore critical for the growth and sustainability of the poultry in Nigeria.

The term entrepreneurship is derived from a French word "*entrepreneur"* meaning one who undertakes tasks in a production process. It could also be defined in terms of specific functions which the entrepreneur performs or in terms of characteristics or activities generally associated with the entrepreneur (Okoli, 2013). Gana (2008) defines entrepreneurship as the willingness and ability of an individual to seek out investment opportunities in an environment and be able to establish and run an enterprise successfully based on the identified opportunities. On the other hand, Amusa and Dumbiri (2010) defined entrepreneurial skills as the required capacities to perceive business opportunities, take advantage of the scare resources, control and coordinate available human and material resources for success in any production enterprise. It is evident that there is a positive relationship between entrepreneurship skills and level of business success.

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It is possible to identify a set of skills that can be characterised as 'entrepreneurship skills' which are distinct from management and leadership skills. Entrepreneurship skills are associated with competence in the process of opportunity identification (and/or creation), the ability to capitalise on identified opportunities and a range of skills associated with developing and implementing business plans to enable such opportunities to be realised. In the context of this study, entrepreneurial skills are defined as the capacities required by poultry farmers to envision business opportunities in the poultry industry and explore, allocate, coordinate and efficiently manage the input resources for optimum productivity.

Several scholars (Gana, 2008; Michelmore and Rowley,2013; Hayton, 2015 and Patel, 2015) have identified various entrepreneurship skills necessary for business success. Michelmore and Rowley (2013) identified six main entrepreneurial competences which include the following:

i) identification and definition of a viable market niche;

ii) development of products or services appropriate to the firm's market niche / product innovations;

iii) idea generation;

iv) environmental scanning;

v) recognising and envisioning taking advantage of opportunities, and;

vi) formulating strategies for taking advantage of opportunities.

Hayton (2015) on the other hand, summarised the entrepreneurial skills to include the following: Ability to identify customer needs; Technical opportunities and market opportunities. A successful entrepreneur may find (or create) an opportunity and then develop skills to capitalise on the opportunity. Patel (2015) identified 17 skills which must be acquired by every entrepreneur who wants to be successful in business. These include the followings:

1. the ability to manage money.
2. the ability to raise money.
3. the ability to relieve stress.
4. the ability to be productive.
5. the ability to make entrepreneur friends.
6. the ability to identify strengths and weaknesses.
7. the ability to hire effective people.
8. the ability to train new staff.
9. the ability to manage staff.
10. the ability to conduct basic SEO.
11. the Ability to A/B split test.
12. the ability to connect via social networking.

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13. the ability to focus on your customers.
14. the ability to close a sale.
15. the ability to spot new trends.
16. the ability to deal with failure.
17. the desire to improve your world.

Entrepreneurship is a key factor in promoting economic development, innovation, competitiveness and job creation, yet little is known about the skills required for successful entrepreneurship especially among small scale agricultural producers in Nigeria. This has resulted to poor attitude towards entrepreneurship skills acquisition by most small scale producers in Nigeria with the resultant slow growth of such businesses. In view of the foregoing the following research questions were raised:
i. what are the socioeconomic characteristics of small and medium poultry farmers in the Central Agricultural Zone of Nasarawa State?
ii. what is the level of entrepreneurship skills of the respondents?
iii. what are the effects of respondents' socioeconomic characteristics on their level of entrepreneurship skills?
iv. what are the factors militating against entrepreneurship skills acquisition by the respondents?

Objectives of the Study

The broad objective was to assess the level of entrepreneurship skills of small and medium scale poultry farmers in the Central Agricultural Zone of Nasarawa State. The specific objectives were to:

i) describe the socioeconomic characteristics of the respondents;
ii) assess the level of entrepreneurship skills of the respondents;
iii) determine the effects of respondents' socioeconomic characteristics on their level of entrepreneurship skills, and
iv) identify the factors militating against entrepreneurship skills acquisition by the respondents.

Methodology

The study was conducted in the Central Agricultural Zone of Nasarawa State, Nigeria between October and November, 2016. The zone covers four LGAs including Akwanga, Kokona, Nasarawa-Eggon and Wamba. A preliminary survey was carried out in each of the four LGAs to ascertain the total number of small and medium scale poultry farmers in the area. A simple random sampling technique was used to select 70% of the listed poultry farmers in each of the four LGAs which gave a sample size of 55 respondents. A structured interview schedule was administered with the help of some ADP Extension staff in the zone. Data were analysed using both descriptive and inferential statistics such as mean scores, percentage and regression analysis.
A set of 30 Entrepreneurship skills needed for successful small/medium scale poultry production in Nigeria were selected and used in assessing the respondents in this study.
Level of entrepreneurship skills of the respondents was measured using a 5-point Likert scale with the mean value of 3.0. Any variable with a mean score less than 3.0

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implies low level of competence, equals to 3.0 implies average level of competence while those greater than 3.0 imply high level of entrepreneurship skills respectively.

A linear regression model was used to estimate the effects of selected socioeconomic characteristics of the respondents on their level of entrepreneurship. The model is represented thus:

$y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, \mu)$ where:

y= Level of entrepreneurship skill (Total score in 30 items using a 5 point Likert scale)

x_1 = Age of respondent (years)

x_2 = Sex (Male = 1, Female= 2)

x_3 = Years of schooling

x_4 = Farm size (Number of birds kept)

x_5 = Membership of poultry association/cooperative (Yes =1, No = 0)

x_6 = number of extension visits received in 1 year

x_7 = Attended poultry training (Yes =1, No = 0)

x_8 = Monthly income level (Naira)

μ = Error term

Results and Discussion

Socioeconomic Characteristics of Respondents

The socioeconomic characteristics of the respondents are summarised in Table 1. The results show that the majority (78.2%) of the poultry farmers in the study area were males implying that the sector was male dominated. The mean age of the respondents was 41 years. This implies that participants in the industry were mostly middle aged people who are supposed to have more strength and vigour and mental ability to learn and accept innovations than the older people. The respondents' mean household size was 9 members implying that most of them had relatively small household size. This might adversely affect the operation of family poultry enterprises which are usually labour intensive and thereby requiring many hands to be engaged. Agwu (2004) reported that one of the most important factors conditioning the level of production and productivity of small scale farms is the composition and size of the family. He argued that the relatively large family is an obvious advantage to the farmer since it may likely enable the farmer to use family labour, thereby reducing production costs. The majority (58.1%) of the respondents had tertiary education. This implies that poultry production in the study area was in the hands of educated farmers. According to Okoye, *et al*. (2004), educated farmers are expected to be more receptive to improved farming techniques, while farmers with low level of education or without education would be less receptive to improved farming techniques. The mean years of experience of the respondents was 7 years which implies that most of the poultry farmers in the area were new entrants in the poultry production and therefore might lack certain entrepreneurship skills that are acquired through years of experience on the job. Majority (85.5%) of the respondents were not members of any poultry association/cooperative group. This might negatively affect their skills acquisition because some associations usually organise in house trainings for their members during meetings where certain entrepreneurship skills and technologies could be taught. The average number of extension visits

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received by the respondents within one year was 3 visits. This shows that extension services to poultry farmers in the area was very poor. Extension agents are expected to educate farmers on the application of proven technologies. The absence of such services may affect farmers' entrepreneurship skills. The majority (56.4%) of the respondents relied on their fellow poultry farmers for information on entrepreneurship skills with only 3.6% using radio/television as sources of poultry information. This implies that they might have inadequate technical information that can improve their skills. The average monthly income of the respondents was N27, 730.91. This implies that most of the poultry farmers in the study area were earning above the current N18, 000 national minimum wage for workers in Nigeria. It also implies that poultry production was worthy enterprise in the area. It is therefore important for the farmers to acquire more entrepreneurship skills to operate most successfully.

Table 1: Socioeconomic characteristics of respondents

Variables	Percentage	Mean
Sex		
Male	78.2	
Female	21.8	
Age (years)		
21-40	40.0	**41years**
41-60	58.2	
Above 60	1.8	
Household size		
1-5 members	23.6	**9 members**
6-10 members	40.0	
Above 10 members	36.4	
Level of education		
Primary school	14.6	
Junior secondary school	9.1	
Senior secondary school	18.2	
Tertiary institution	58.1	
Farming experience (years)		
1-5	38.2	**7 years**
6-10	47.3	
Above 10	14.5	
Farm size (No. of birds kept)		
< 500 birds	82.4	**260 birds**
500 – 1,000 birds	14.0	
Above 1,000 birds	3.6	
Membership of poultry association		
No	85.5	
Yes	14.5	
Use of farm credit		
No	83.6	
Yes	16.4	
Extension visits received in 1yr		
1-5	96.4	**3 visits per year**
6-10	3.6	
Sources of poultry information		
Extension workers	30.9	
Poultry associations	7.3	
Fellow poultry farmers	56.4	
Inputs dealers	1.8	
Radio/Television	3.6	
Attended poultry training		
No	74.5	
Yes	25.5	
Income level per month (N)		

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1,000-50,000	85.5	**N27, 730.91**
51,000-100,000	9.1	
Above100,000	5.5	

Level of Entrepreneurship Skills

Table 2 shows that the respondents were rated high (M>3.0) in 21 entrepreneurship skills out of a set of 30 skills presented. These include the following: Ability to manage money (M = 3.4); Ability to save money for investment (M =3.7); Ability to make entrepreneur friends (M = 3.4); Ability to identify your strengths and weaknesses (M = 3.1); Ability to secure adequate access to production inputs (M =3.1); Ability to source poultry production/ market information (M = 4.4); Identification of a viable market niche (M = 3.2); Linkage with other poultry farmers to monitor market prices (M = 3.6); Ability to respond quickly to increased demand by expanding production (M = 3.1); Reduction of price to increase sales (M = 3.1); Ability to endure and cope with difficulties in the business (M = 3.8); Ability to explore various marketing strategies (M = 3.3); Standards and branding mechanisms of high-quality poultry products (M = 3.2); Good communication/Rapport with customers (M = 4.0); Ability to manage risk and shoulder responsibility (M = 3.2) Enthusiasm, motivation and persistence in the job (M = 3.2); Self confidence, Self-belief and trust in own judgement (M = 3.5); Ability to focus on your customers (M = 3.9); Ability to spot new business trends (M = 3.5); Ability to deal with failure (M = 3.2), and ; Ability to keep proper business records (M = 3.9). This implies that the poultry farmers in the study area were highly skilled in most of the entrepreneurship skills which will likely enhance their business performances.

Table 2: Distribution of respondents according to their levels of entrepreneurship skills

Entrepreneurship Skill	Mean score
Ability to manage money	3.4*
Ability to save money for investment	3.7*
Ability to relieve stress	2.8
Ability to connect via social networking	2.8
Ability to make entrepreneur friends	3.4*
Ability to identify your strengths and weaknesses	3.1*
The ability to hire effective people	3.0
Ability to secure adequate access to production inputs	3.1*
Ability to source poultry production/ market information	3.4*
Identification of a viable market niche	3.2*
Linkage with other poultry farmers to monitor market prices	3.6*
Product differentiation to create niche markets	2.7
Ability to respond quickly to increased demand by expanding production	3.1*
Reduction of price to increase sales	3.1*
Idea generation / envisioning	3.0
Ability to endure and cope with difficulties in the business	3.8*
Ability to identify and explore new business opportunities.	2.9
Ability to explore various marketing strategies	3.3*
Standards and branding mechanisms of high-quality poultry products	3.2*
Good communication/Rapport with customers	4.0*
Recognition of social / market need	2.9
Effective participation in poultry farmers' association/Cooperative	2.4
Ability to manage risk and shoulder responsibility	3.2*
Enthusiasm, motivation and persistence in the job.	3.2*
Self confidence, Self-belief and trust in own judgement	3.5*
Ability to focus on your customers	3.9*
Ability to close a sale	3.0
Ability to spot new business trends	3.5*
Ability to deal with failure	3.2*
Ability to keep proper business records	3.9*

High Level of skill (M > 3.0)

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Effects of Respondents' Socioeconomic Characteristics on Level of Entrepreneurship Skills

Table 3 shows the results of the linear regression analysis of the effects of respondents' socioeconomic characteristics on their level of entrepreneurship skills. The adjusted R^2 of 69% implies that the overall effects of the independent variables accounted for 69% of the changes in the dependent variable (Level of entrepreneurship skills). However only three factors (Farm size, extension visit and training) showed significant positive effects on the level of entrepreneurship skills. This implies that the higher the levels of these factors, the higher the level of entrepreneurship skills and vice versa.

Table 3: Factors affecting entrepreneurship skills

	Unstandardized Coefficients		Standardized Coefficients		
Variables	B	Std. Error	Beta	t	Sig
(Constant)	412.886	57.567		7.172	.000
Age	-1.918	.973	-.304	-1.972	.055
Sex	-21.982	25.384	-.130	-.866	.391
Years of schooling	1.838	2.641	.105	.696	.490
Farm size (No of birds)	.005	.020	.052	.256	.799*
Membership of association	35.357	30.693	.178	1.152	.255
No .of extension visits	.204	6.704	.004	.030	.976**
Trainings attendance	6.281	25.668	.039	.245	.808*
Income level	.000	.000	.130	.629	.532

- *P≤ 0.05 R square = 20.7% Adjusted R square = 69%*

Factors Militating against Entrepreneurship Skills Acquisition

Table 4 shows the percentage distribution of respondents according to factors militating against entrepreneurship skills acquisition. The majority (69.1%) agreed that high cost of poultry feeds was a major constraint followed by inadequate capital (52.7%), inadequate extension services (45.6%) and high interest rates on loans (43.6%) among others. This implies that several factors were militating against the acquisition of entrepreneurship skills of small and medium scale poultry farmers in the area.

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Table 4: Factors militating against entrepreneurship skills acquisition

Factors	Percentage
Low level of education	23.6
Non participation in poultry workshops/seminars	**41.1***
Non participation in poultry Association	38.2
Not aware of training opportunities	32.7
Inadequate capital for investment	**52.7***
High cost of feeds	**69.1***
Shortage of Veterinary officers in the area	23.6
Inadequate land space for expansion	27.3
Difficulty in getting credit facilities from banks	40
High interest rates on loans	**43.6***
Shortage of labour	12.7
Unstable power supply	40
High cost of transportation	25.5
Poor storage facilities	16.4
Poor marketing structures	36.4
Inadequate extension services	**45.6***

- Serious constraints (> 40%). *Multiple responses allowed*

Conclusion and Recommendations

Small and medium scale poultry farmers in the Central agricultural zone of Nasarawa state had high level of entrepreneurship skills. However, certain factors such as high cost of poultry feeds; inadequate capital; inadequate extension services; high interest rates on loans and lack of participation in poultry workshops/seminars were the major factors militating against entrepreneurship skills acquisition by the respondents.

Poultry farmer's association should organise training on local feed formulation for their members to reduce the over dependent on commercial feeds in order to cut production costs. Poultry farmers in the area should be encouraged to form cooperative thrift and loan societies that can help to provide credit facilities to them. There an urgent need for the state government to revitalise the ADP in other to reposition it for improved extension service delivery.

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