



DETERMINANTS OF WEALTH STATUS OF POULTRY ENTREPRENEURS IN ABA AGRICULTURAL ZONE OF ABIA STATE, NIGERIA

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ABSTRACT

The study dwelt on determinants of wealth status of poultry entrepreneurs in Aba agricultural zone of Abia State, Nigeria. Multi-stage random sampling method was used for the study. Data were collected from a randomly sampled 60 poultry entrepreneurs using a structured questionnaire. Descriptive statistics and OLS regression model were used to analyze the data. The findings of the study showed that 50% of poultry entrepreneurs were within the age bracket of 36-45 years with mean age of 46.13. Results of the respondents' marital status showed that 63.3% of entrepreneurs were married; 73.3% had secondary education and 66.7% of the respondent's belonged to cooperative society. The results of the ordinary least square (OLS) showed that age, stock size and breeding stock were negatively related to the wealth status of the poultry entrepreneur at $P \leq 0.05\%$ significance level, implying that as age of the respondents increased, wealth status of the poultry operators decreased. Marital status and amount of credit received positively influenced wealth status of poultry enterprise at $P \leq 0.01\%$. Also, household income was positively related to wealth status and significant at $P \leq 0.1\%$ level. The R^2 value of 0.819 implied that wealth status of the respondents was explained by all the explanatory variables by about 82%. It was concluded that all the explanatory factors had positive influence on wealth status of the respondents except the age of the entrepreneurs that showed negative influence. The study recommended that government should assist by enacting policies that would compel formal financial institutions to give adequate credit to poultry farm owners' increase their stock size. Investors who are married should stock improved breeds of poultry to enhance their income, savings and wealth.

Keywords: Entrepreneurs, Poultry, Resources, Respondents, Wealth Status.

INTRODUCTION

In Nigeria, poultry enterprises represent appropriate investment to feed the fast-growing population and play an important role in household food security (Ogbonna and Emerole, 2018). In spite of Nigeria numerous human and natural resources, it still remains among the least consumers of animal protein in Africa. A report from Central Bank of Nigeria (CBN, 1993) revealed that an average Nigerian consumes 7.5 g of animal protein per day which is below the recommended level of 27 g/head/day. Resources used in agricultural production are very vital but are in limited supply leading to competition in use by many farm enterprises (Fassasi, 2006).

One major problem facing most rural entrepreneurs in Nigeria is that of optimal utilization of their major resources to raise their income level, savings or reserves and consequently their living standards. The rural entrepreneurs are not able to exploit full opportunities for capital formation, improved resource base and higher productivity. These entrepreneurs are faced with the challenges of rationing scarce resources among intended activities (Olayemi and Onyenweaku, 1999). According to Bakure (2003), resource endowment reflects the past course of private investment decisions and policies which strongly



is related to their individual entrepreneurial profile. Entrepreneur's resource endowment favourably complimented with improved socio-economic profile leads to increased productivity.

In developing countries, the measurement of wealth status is challenging (Worrall *et al.*, 2003); albeit the specific definition and what constitutes a rich or a poor entrepreneur would depend on the local conceptions of poverty (Bellon, 2001). The traditional approach to measure household wealth status has been through use of standardized household interview surveys (Worrall *et al.*, 2003). Worrall *et al.* (2003) also observed that the generally accepted "gold standard" approaching estimation of household welfare is the use of their data on income and expenditure. Collectively, the income and expenditure approach to wealth status measurement has variously been criticized on grounds that it is likely to be associated with the difficulty of obtaining accurate data from respondents, either because they inherently will be unwilling to provide certain data or that they may be highly biased when they provide them (Worrall *et al.*, 2003; and Hargreaves *et al.*, 2007). Reddy (1997) has identified among the shortcomings of the income/expenditure approach the fact that household's assets like buildings and land are fixed and may not provide continuous flows of income under all circumstances and other income sources will not be captured under assets. For certain reasons, households may tend to underestimate or overestimate their income and/or expenditure. An alternative measure has been the use of wealth status, measured as household ownership of assets, as proxy for income and expenditure. In this regard, initial effort was the use of single assets, like ownership of radio or television (Worrall *et al.*, 2003) or indices made up of multiple assets (Worrall *et al.*, 2003; and Hargreaves *et al.*, 2007). In this instance, the aggregation of data has been achieved through simple count, weighting of variables based on local consultation, or through application of statistical procedures like principal component analysis (Worrall *et al.*, 2003; and Hargreaves *et al.*, 2007). The asset index approach has its own potential problem arising from differences in the assets used across surveys, or that even the studies that use a common asset index cannot be readily compared (Worrall *et al.*, 2003).

An assessment of wealth status of entrepreneurs in a business is relevant as it will help to understand the kind of advantage the enterprises can offer. This suggests the need to identify factors that influence wealth accruable to poultry farmers in an agrarian State like Abia. However, we could not locate any previous study on the wealth status of poultry entrepreneurs in Abia State. This was a problem that necessitated the current study on the wealth status of the poultry farmers in Abia State. The problem in poultry production centers on level of resources at their disposal and on how efficiently the entrepreneurs use resources on their farms as explained by how socio-economic factors influence their endowments.

This quest therefore, raises research questions of what constitutes factors influencing the wealth status of poultry entrepreneurs in the study area with specific objective of ascertaining the factors that determine the wealth status of poultry entrepreneurs in Aba Agricultural zone. The hypothesis of the study in alternate form was: H₁: wealth status of poultry entrepreneurs is positively influenced by value of the output of poultry, age, education, stock size, poultry rearing experience, marital status, amount of credit received, breeding stock, and household total income and negatively influenced by household size, cost of labour and household total expenditure.

MATERIALS AND METHODS

The Study Area

The study was carried out in Aba Agricultural Zone of Abia State Nigeria. The Abia agricultural zone is one of the three (3) Agricultural Zones in the State consisted of seven Local



Government Areas (LGAs) namely; Aba North, Aba South, Ukwa East, Ukwa West, Obingwa, Osioma and Ugwuagbo.

Sampling Techniques

The respondents were selected via multi stage random sampling method. In the first stage, three LGAs were randomly drawn from Aba agricultural zone. The selected LGAs were Aba North, Obingwa and Ukwa east. In the second stage, two (2) communities were randomly drawn from each of the three selected LGAs in the agricultural zone. The selected communities were Ehere-ogbor and Umuola community from Aba North, Mgboko Itungwa and Mgboko Umuanunu community from Obingwa Local Government Area (LGA) and Umuihueze-Akwete and Ikwueke community from Ukwa east LGA. The third stage involved selection of two (2) villages from each of the selected communities. The selected villages were Ehere and Ogbor village from Ehere-Ogbo community, Umuokahia and Umuola village from Umuola community. Others were Ika-ala and Itungwa village from Mgboko Itungwa community, Azuogwugwu and Umuaro village from Mgboko Umuanunu community. Also Umukamalu and Umuodike village from Umuihueze-Akwete community and Obunku and Ohanso village from Ikwueke Community from each of the chosen villages, five (5) poultry entrepreneurs were chosen randomly giving a total of 60 poultry entrepreneurs.

Data Collection

Primary data was collected from the 60 poultry entrepreneurs via the administration of a structured questionnaire. Primary data collected among others included amount of credit received, number of poultry birds, age of the entrepreneur, household size, level of formal education, cost of labour used, household expenditure, and value of poultry output. The questionnaire was pre-tested to ensure its reliability with a reliability of 89.6% recorded. This suggests that the instrument was reliable.

Analytical Technique

Data obtained were analyzed using descriptive and inferential statistics. Descriptively, data were analyzed using frequency distribution, mean, and percentages. Inferentially, the Ordinary Least Squares (OLS) multiple regression technique was used. The Ordinary Least Squares regression model used in estimating the determinants of the wealth status of poultry entrepreneurs in the study area is specified as follows:

$$LQ = f (X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}) \quad \dots(1)$$

where;

LQ = depreciated value of assets (Naira) for poultry entrepreneurs

X₁ = value of the output of poultry in Naira.

X₂ = Age of respondents measured in years;

X₃ = Level of formal education measured in years;

X₄ = Stock size measured in number of birds kept

X₅ = Household size measured by the number of persons living in a house

X₆ = Marital status (married =1; otherwise = 0)

X₇ = Poultry rearing experience measured in years

X₈ = Amount of credit received measured in Naira

X₉ = Cost of labour in Naira.

X₁₀ = Breeding stock (exotic =1; local = zero)

X₁₁ = Household total expenditure;

X₁₂ = Household total income (Naira);

X₁₃ = Sex

U = Error term.



Four (4) functional forms were applied to the data. The model that provided the best fit was chosen as the lead equation on the basis of the following:

- i. Magnitude of the coefficient of multiple determinants (R^2),
- ii. Magnitude and statistical significance of the regression coefficients, and
- iii. Signs of the regression coefficients as they conform to a priori expectations.

RESULTS AND DISCUSSION

Socio-economic Characteristics of Poultry Entrepreneurs

The distribution of poultry entrepreneurs in Abia State by age (Table 1) showed that 50% of poultry entrepreneurs were within the age bracket of 36 – 45 years. This indicates that the poultry entrepreneurs were dominated by adults that are matured enough to understand the rudiments of involving in risk of poultry entrepreneurship. These findings conform to the observation of Adaigbo *et al.* (2012) that youths especially university graduates are currently dominating the poultry entrepreneurship in rural Nigeria. Table 1 further showed that 70.0% of Poultry entrepreneurs in the study area were males and 30.0% females. This implies that males dominated the poultry entrepreneurship in Abia State. The distribution by marital status showed that 63.3% of entrepreneurs were married. This finding is consistent with Afolabi (2010) who in his study argued that marriage makes most individuals to be responsible to engage more in ventures that help them cater for the needs of their family members.

The distribution by level of education (Table 1) revealed that 73.3% entrepreneurs in Abia State had secondary education. This supports the findings of Onubuogu *et al.* (2014) who asserted that individuals with higher educational attainment usually adopt improved farm-based technologies. The distribution of entrepreneurs in Abia State by membership of cooperative society in Table 1 showed that 66.7% entrepreneurs in Abia State were members of cooperative societies while 33.3% of them do not belong to any of such societies or associations. Membership of cooperative society affords poultry entrepreneurs opportunity of sharing information on state of the art production techniques, purchasing inputs in bulk as well as exchanging labour. The result supports the findings of Esiobu *et al.* (2014) who reported that membership of cooperatives help agribusiness entrepreneurs to have information and project a collective demand. The results of respondent's access to credit showed that 60.0% of entrepreneurs had no access to credit. Increased access to credit predisposes an entrepreneur to use better resources that increases business output and; hence, leads to higher revenue generation. This is in line with the findings of Onu and Iliyasu (2008) and Ogbonna *et al.* (2016) that access to credit is important to farmers to enable them acquire improved technology which promotes financial performance and efficiency.



Table 1: Socio-economics Characteristics of Poultry Entrepreneurs in the Study Area

Variables	Frequency	Percentage
Age		
26 – 35	25	41.7
36 – 45	30	50.0
46 – 55	3	5.0
56 – 65	2	3.3
Mean		46.13
Sex		
Male	42	70.0
Female	18	30.0
Marital status		
Married	38	63.3
Single	11	18.3
Divorced	1	1.7
Widowed	9	15.0
Separated	1	1.7
Level of education/schooling		
No schooling	4	6.7
Primary	6	10.0
Secondary	44	73.3
Tertiary	6	10.0
Cooperative membership		
No	20	33.3
Yes	40	66.7
Access to credit		
No	36	60.0
Yes	22	36.7

Source: Field survey data, 2019

Factors Affecting Wealth Status of Poultry Entrepreneurs

The ordinary least square multiple regression estimates of the determinants of the wealth status of poultry entrepreneurs in Aba agricultural zone is shown in Table 2. The magnitude of the coefficient of multiple determinations (R^2), the signs of the regression coefficients as they conform to theoretical expectation and the number of significant variables, gave the semi-log functional form edge over others and was selected as the lead model (Table 2). The model showed that the independent variables included in the model explained about 81.9% of the observed variation in the performance of the poultry enterprise. The F-statistics was significant and confirms the significance of the entire model. Age, marital status, stock size, amount of credit, breeding stock and household income were significant socio-economic factors that influenced the wealth status of poultry entrepreneur in the study area. Age of respondents was negatively related to the wealth status of the poultry entrepreneur at 5% significance level, an indication that the wealth status of the poultry operators decreased as age of the respondents increased and vice versa. How old a business owner is will influence the number of hours dedicated for the day-to-day management of the business as well as its ability to cope with the complications of poultry production and to adopted new innovation. Elderly farmers were more likely to be risk averse; old age will probably reduce the prospect for increase poultry production and thus decrease the performance of the entrepreneur. This is why wealth status of poultry enterprise decreases as age of the entrepreneur increase.



Table 2: Factors that Influenced Wealth Status of Poultry Entrepreneurs

Variable	Linear	Exponential	Double-log	Semi-log ⁺
Age	-64451.69 (-0.595)	0.025 (0.606)	-0.887 (-0.460)	-13510247 (-2.672)**
Educational level	745239.5 (3.583)***	0.123 (3.258)***	0.029 (2.171)**	1311374 (1.222)
Marital status	1845552 (2.689)**	0.330 (0.807)	0.683 (2.553)**	4574080 (3.965)***
Stock size	125952.9 (2.226)*	-0.076 (-0.366)	0.578 (0.480)	7419243 (2.351)**
Household size	194368.9 (-0.704)	0.130 (3.253)***	0.774 (0.604)	-4003608 (-1.191)
Experience	195024 (0.418)	-0.002 (-0.011)	-0.642 (-0.556)	2714663 (0.896)
Amount of credit	1922.58 (2.325)**	0.001 (1.969)*	1.453 (3.478)***	4990441 (4.555)***
Labour cost	-2.980 (-0.276)	-5.16E-06 (-1.279)	-0.700 (-1.993)*	-1156021 (-1.255)
Breeding stock	-4857724 (-2.154)**	-1.670 (-1.977)*	0.683 (0.51)	4544098 (2.416)**
Household income	0.273 (0.269)	4.98E-07 (1.311)	0.304 (0.943)	1559779 (1.847)*
Household expenditure	-1039.699 (-0.215)	0.004 (2.292)**	1.277 (2.323)**	-1926562 (-1.336)
Constant	6990591 (1.330)	10.266 (5.216)***	8.881 (1.486)	27897572 (1.780)*
R-Squared	0.650	0.729	0.631	0.819
Adj. R-Squared	0.633	0.708	0.617	0.795
F-statistic	32.630**	23.809***	33.164***	45.670***

***, ** and * significant at 1%, 5%, and 10% levels, respectively. Figures in parentheses are t-values and + means lead equation.

Source: Field survey data, 2019

Marital status as presented in Table 2 was positively related to wealth status of poultry enterprise at 1% significance level, an indication that being married increases wealth status of poultry enterprise. Marriage makes an individual to become responsible and married people must cater for their family needs and thus pays better attention to whatever business they do that generates income for the family. More so, the plethora of married people according to Ironkwe and Olajede (2012) is an advantage for family labour supply. Increase attention given in rearing chickens by married entrepreneur will culminate into increase output and hence generate higher revenue for the entrepreneur. This is probably why the level of wealth status of poultry enterprise owners increases with their being married. Stock size was positively related to the wealth status of poultry enterprise at 5% level of significance, an indication that the wealth status of poultry enterprise owner increased with increase in stock size (measured by the number of birds kept). The use of labour and other working capital good are likely to increase as stock size increases. Working capital good are used up in the production process and the quantities required will depend on the scale of production. According to Onyebinama and Onyejelem (2010), increase in farm size will translate into higher output and hence more revenue for the entrepreneur.



The amount of credit received in poultry production (Table 2,) was positively related to the wealth status of poultry enterprise at 1% significance level. This implies that the wealth status of poultry enterprise owners increased with increase in amount of credit needed for investment in the poultry production by the poultry entrepreneurs. Large amount of credit for poultry production may imply a high level of purchase of equipment, medications veterinary services, chemical and quality breeding stock for production purpose as a result, wealth status of the poultry enterprise increases with amount of credit in poultry production. This in line with the findings of Ogbonna *et al.* (2016) who agreed that with increase amount of credit supplied to the farmer, this will surely help him expand and increase his agribusiness.

Breeding stock was positively related to the wealth status of the poultry enterprise owners at 5% significance level, an indication that wealth status of the poultry enterprise owners increased with increase in breeding stock introduced into the farm business. This agrees with Nnamerenwa (2012) and Ogbonna and Osondu (2015) who asserted that in poultry production, the increase of better breeding stock and infrastructures would translate to high level of increase in output and hence increase the wealth status of the poultry enterprise. Household income was positively related to wealth status and significant at 10% significant level. This implies that increase in household total income of poultry entrepreneur will result to an increase in the wealth status of poultry enterprise and vice versa. This finding agrees with Nwibo and Mbam (2013) who posited that farmers with long experience in farming tend to have wider experience and are more inclined to saving and investment in agricultural activities whose rate of returns are higher.

CONCLUSION AND RECOMMENDATIONS

The study concludes that the poultry farmers in the study area had stock of their resources that accounted for their wealth; age, marital status, stock size, amount of credit, breeding stock and household income were the determinants of the wealth of poultry entrepreneurs in the study area; and that all the explanatory factors had positive influence on wealth status of poultry farmers except the age of the entrepreneurs that showed negative influence. The study recommended as follows:

- (i) That government should assist by enacting policies that would compel formal financial institutions to give adequate credit to poultry farm owners' increase their stock size.
- (ii) Investors who are married should stock improved breeds of poultry to enhance their income, savings and wealth.

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