ISSN 0189-0514
J. Anim. Prod. Res. (2019) 31(1):201-206

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AN ASSESSMENT OF SOCIO-ECONOMIC CHARACTERISTICS OF POULTRY FARMERS IN PLATEAU STATE NIGERIA

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ABSTRACT

This study examined the socio-economic characteristics of poultry producers, their production practices and constraints to production amongst urban poultry farmers in Plateau State. A two-stage sampling technique was used to select the respondents for the study. Primary data were collected with the aid of structured questionnaire and analyzed using descriptive statistics. The results obtained revealed that majority (70%) of the producers are males and 36.7% fell within the age bracket of 47-56 years, majority (51.7%) of the producers are married, and those with larger household sizes (6-10) produced more poultry products. Respondents who had tertiary education were the major producers of poultry products (66.7%) and 70.0% were Civil servants. From the results of the production practices, 41.6% of the respondents produce layer chickens followed by broilers (40.0%), both broilers and layers (16.7%) and cockerels (1.7%). Majority (90.0%) of the respondents raised their birds on deep litter, followed by battery cage (6.7%). Family and hired labour were the predominant sources of labour (50%) respectively. Commercial feed was majorly (83.5%) utilized, while 16.7% fed self-compounded feed. Also, 61.6% of the respondents provided medication monthly, while 31.7% provided medication bi-monthly, followed by 6.7% which provided medication quarterly. The results also revealed that the major constraint to production was the high cost of feed (42%). This study therefore recommends that farmers should come together to form cooperatives thereby combining their resources to establish a feed mill and overcome the high cost of feed.

Key words: Poultry production practices, Socio-economic characteristics of poultry producers

INTRODUCTION

The poultry industry is the most commercialized of all the livestock sectors in Nigeria. The poultry types commonly reared in Nigeria are chicken, duck, guinea fowl and turkey, however chicken and turkey are reared commercially unlike the others (Daniel, 2009). Poultry production is of economic significance to Nigerians as it serves as a source of income and employment to both male and female farmers (Ogunlade and Adebayo, 2009). Besides its economic benefits, poultry production plays an important role in human nutrition as it supplies a rich source of animal protein (Gueye, 2009; Billah *et al*., 2013). Other advantages of poultry production are; poultry droppings provide organic manure used to improve soil fertility, while the egg shell can be used as a source of calcium in livestock diets.

There has been a consistent increase in the cost of production of cattle, sheep and goat (Onuekwusi, 2001) as such consumer preferences are shifting towards poultry meat (white meat) especially in urban centers who are more educated on the health benefits it has over other livestock (Gueye, 2002). Despite the numerous benefits of poultry production, it is

plagued with some challenges which has affected maximum productivity, these include; high cost of feed, imbalanced feeds, poor housing, diseases, parasites as well as predators.

There are three management types involved in poultry production which are; intensive, extensive and semi-intensive, these managements types are differentiated based on flock size, input and output relationship (Sonaiya, 2005). Most researches in the recent past have focused on the socio-economic characteristics and constraints of rural poultry farmers, very few have concentrated on the production/management practices and constraints of small scale, intensive poultry production. Therefore, this study is undertaken to address issues with regards to socio-economic characteristics, production practices as well as constrains of poultry farmers in Plateau state, Nigeria.

MATERIALS AND METHODS

Study Location

This study was carried out in Jos South and Barkin Ladi local government areas of Plateau state, Nigeria. Jos South has a latitude of 9.7651^{o}N, and longitude 8.8142^{o}E. Barkin Ladi is located on latitude 9.5626^{o}N and longitude 8.9687^{o}E.

Sampling Technique

A two-stage sampling technique was adopted to select respondents for the study. Three villages were purposively selected in Jos South and Barkin Ladi local government areas of Plateau state Nigeria. This was followed by a random selection of 10 households from each selected village, making a total of 60 respondents for the survey.

Data Collection

Data was collected with the aid of well-structured questionnaires. Information on the socio-economic characteristics of respondents, production practices (used in rearing their chickens), as well as constraints to production were collected.

Data analysis

Descriptive statistics such as frequency and percentages were used to describe the socio-economic characteristics (age, marital status, household size, level of education, primary occupation and years of experience) and production practices (type of poultry reared, housing type, source of capital, source of labour, average flock size, type of feed used and medication) while bar chart was used to analyze the constraints to production.

RESULT AND DISCUSSION

Table 1 shows the socio-economic characteristics of poultry producers in plateau state. From the result, majority (70%) of the producers were males and 36.7% fell within the age bracket of (47-56) years, while 21.7% of the producers were within the age bracket of 37-46 years. Others (18.3%) fell within the age bracket of 16-26 and 27-36 years respectively. This indicates that all categories (young and old) are actively involved in poultry production in the study area.

The results of Table 1 also showed that majority (51.7%) of the producers are married, it also revealed that those with larger household sizes (6-10) are more involved in the enterprise followed by those with household size of 1-5 (48.3%). This observation suggests that married people are actively involved in poultry production as a source of economic empowerment and food security for better life.

Civil servants were major producers (70.0%) compared to other occupations. Furthermore, respondents who had tertiary education (66.7%), had stronger preference for poultry production followed by those who had secondary school education (23.3%), implying that it will be much easier to diffuse innovation to this group of poultry farmers related to animal husbandry through extension agents.

These results are in agreement with Hai *et al.* (2008) who reported that increased literacy influences poultry production activities.

Table 1: Socio-Economic Characteristics of Poultry Producers

Parameters	Frequency	Percentage
Gender		
Male	42	70.0
Female	18	30.0
Age		
16-26	11	18.3
27-36	11	18.3
37-46	13	21.7
47-56	22	36.7
57-66	3	5.0
Marital Status		
Single	29	48.3
Married	31	51.7
Household size		
1-5	29	48.3
6-10	31	51.7
Level of Education		
Primary Education	6	10.0
Secondary Education	14	23.3
Tertiary Education	40	66.7
Primary Occupation		
Farming	8	13.3
Civil Servant	42	70.0
Trading/Business	8	13.3
Student	1	1.7
Clergy	1	1.7
Years of Experience		
1-5	31	51.7
6-10	17	28.3
11-15	7	11.7
16-20	2	3.3
20 and above	3	5.0

Table 2 shows the production practices of poultry farmers in the study location. Those who produce layer chickens constituted (41.6%) of the respondents, followed by broilers (40.0%), both broilers and layers (16.7%) and cockerels (1.7%). It can be implied that the different poultry types reared may be a reflection of the extent of knowledge of poultry

production and financial solvency of producers. Majority (90.0%) of the respondents raised their birds on deep litter, followed by battery cage (6.7%). The preference for deep litter implies that it is cheaper and easier to manage as compared with the battery cage. From the results, 88.3% of the respondents sourced their capital from personal savings, others 8.3% and 3.4% sourced theirs from bank loans and gifts from friends respectively, implying that most of the poultry farmers preferred to save their personal incomes rather than obtain loans from the banks which attract high interest rates. Family and hired labour were the major sources of labour (50%) respectively.

The results of table 2 also showed that most (45%) of the respondents had a flock size of 100-500 birds followed by 28.4% which had a flock size of (501-2000) while 18.3% of the respondents had a flock size of (2001-10,000). The small-scale production of poultry in this location represents one of the few opportunities for savings, investment and security against risk. This result was in agreement with Mozumdar *et al*. (2009), who stated that small scale poultry production significantly develops the socio-economic status of farmers. Only 8.3% of the respondents had a flock size above 10,000. Majority (83.3%) of the respondents fed their birds with commercial feed, while 16.7% fed self-compounded feed. From the results, 61.6% of the respondents provided medication monthly, while 31.7% provided medication bi-monthly, followed by 6.7% which provided medication quarterly. This indicates that poultry farmers in this location had good knowledge of disease prevention and control and could apply the knowledge in a beneficial way.

Table 2: Production Practices of Poultry Farmers

Parameters	Frequency	Percentage
Type of Poultry Reared		
Broilers	24	40.0
Layers	25	41.6
Both Layers and Broilers	10	16.7
Cockrels	1	1.7
Housing Type		
Battery Cage	4	6.7
Deep Litter	54	90.0
Battery cage and Deep Litter	2	3.3
Source of Capital		
Personal Savings	53	88.3
Loan from Banks	5	8.3
Gift from friends	2	3.4
Source of Labour		
Hired Labour	30	50
Family Labour	30	50

Average Flock size		
Small (100-500)	27	45.0
Medium (501-2000)	17	28.3
Large (2001-10,000)	11	18.3
Very Large (Above 10,000)	5	8.3
Type of Feed used		
Self-Compounded	10	16.7
Commercial Feed	50	83.3
Medication		
Monthly	37	61.6
Bi-Monthly	19	31.7
Quarterly	4	6.7

Figure 1 shows the constraints to poultry production in the study location. High cost of feed (70%) was the major constraint to production followed by lack of capital (18.3%) and poor management (10%). The high cost of feed may have resulted from the rising prices in feed ingredients. This result is in agreement with Billah *et al*. (2013) who stated that some of the major constraints to poultry production include high cost of housing, feeding and disease incidence.

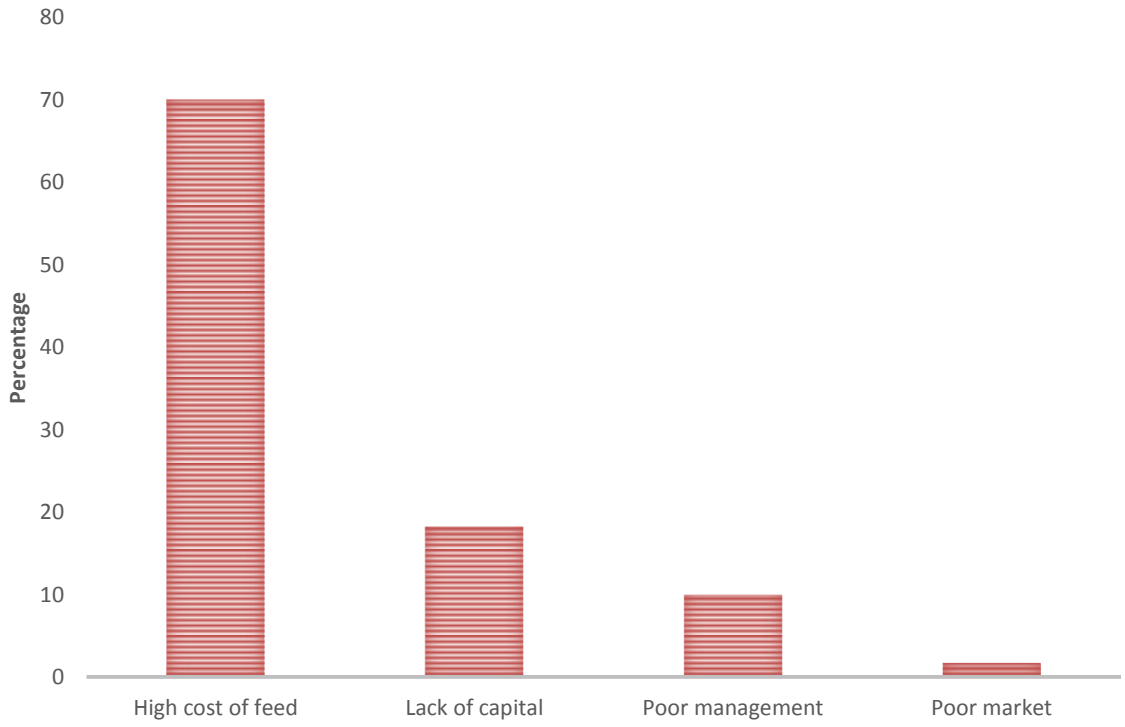


Figure 1: Constraints to poultry production

CONCLUSION AND RECOMMENDATIONS

Men are more involved in the business of poultry production in the study area and most of the poultry producers are educated up to tertiary level. Deep litter system of production was predominantly used by the farmers. The farmers reported cost of feeding as the major constraint to poultry production. Farmers are encouraged to collectively source ingredients and formulate least cost feed through cooperative ventures.

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