ANALYSIS OF LOCAL CHICKEN PRODUCTION AMONG RURAL WOMEN IN MALAM MADORI LOCAL GOVERNMENT AREA, JIGAWA STATE

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ABSTRACT

The study examined local chicken production among rural women in Mallam Madori Local Government Area of Jigawa State. Multistage sampling procedure was used to select 69 rural women engaged in local chicken production. Data for the study were collected using structured questionnaire. Simple descriptive statistics such as mean, frequency distribution table and bar charts were used to analyzed the data collected for the study. The results shows that majority (71%) of the rural women were between 31 to 51 years of age with mainly secondary education. 78.26% of the rural women engaged local chicken production were married. About 69.56% had 1-10 years of local chicken production experience. 84.06% had earned between N5,000-N19,500 from local chicken production per annum. The common disease affecting local chicken production were fowl cholera (44.92%) and new castle disease (36.25%). Disease incident (78.25%) was the leading cause of mortality of local chicken. The leading constraints to local chicken were lack of training (30.43%) and vaccination costs (27.57%). The study concludes that local chicken production development inhibited by diseases, lack of training and cost of feedings. Therefore, it is recommended that the underlying inhibitors to growth and development of local chicken production among rural women should be addressed.

KEYWORDS: Local, Chicken, Rural, Women and Mallam Madori

INTRODUCTION

Livestock production constitutes an important component of the agricultural economy in developing countries and it is an instrument of socioeconomic change, improved income and quality of rural life in Nigeria (Anosike *et al.,* 2018). Poultry, as a part of livestock production outstrips all other forms of livestock in Nigeria and not surprisingly is found throughout the country especially rural areas. Nowadays, poultry production has developed from backyard business to a commercially oriented industry. Its offer of highest turnover rate and quick returns to investment outlay in the livestock enterprises has made it unique (Anosike *et al.,* 2018). Small scale poultry production represents one of the few opportunities for saving, investment and security against risks. It accounts for approximately 90% of total poultry production (Aromolaran *et al.,* 2013). Challenges of food insecurity and hunger worldwide and in developing countries like Nigeria in particular have continued to receive attention from experts and governments. Consequently, several conferences and world Food summit on human nutrition have brought to the fore deliberations on issue of eradicating poverty and hunger (Aromolaran *et al.,* 2013). Nigeria has the largest market for poultry products in Africa because the poultry sector contributes about 80 billion ($600 million) to the economy of Nigeria and the size of the sector is approximately 165 million birds, which produces about 0.65 million metric tonnes of eggs and 0.29 million metric tonnes of poultry meat. However, local/traditional chickens constitute the majority (about 84.2%) of Nigeria's poultry population thus, providing the largest share of poultry meat in Nigeria (Robert et al., 2020). This survey was conducted to examined local chicken production in Mallam Madori Local Government Area, Jigawa State.

MATERIALS AND METHODS

The research was carried out in Malam Madori, a Local Government Area in Jigawa State, Nigeria. The study was carried out in four villages within the Malam Madori Local Government Area. Villages include

Gandun sarki, Gandun bundugoma, Babbar riga, and Jigawar kasim. It is located in northern Nigeria, at latitude 12.5601 or 12°33′36.3″North and longitude 9.986 or 9°59′ 9.6″East. According to the 2006 census, it has a land area of 766 km2 and a population of 164,791 people. Malam madori was previously spoken, but it is now extinct. Malam Madori is in the Sudan Savannah, with a touch of Guinea Savannah in the south. The most common activities are farming, business, poultry, and cattle rearing. A multi-stage sampling procedure was used to select respondents for the study. The first stage involved identifying four (4) communities in Malam Madori Local Government Area that had a high concentration of rural women rearing local chickens. The communities identified were Gandun sarki (27), Gandun bundugoma (25), Babbar riga (25), and Jigawar kasim (25). Giving a total of 202 local chicken producers in total. The second stage involved proportionate simple random selection of a sample size of 69 was calculated using ROA soft sample size. The second stage involved a simple random sample of respondents from the four communities listed in the table below.

S/N	Community	Sample Frame	Sample Size
1	Gandunsarki	27	18
2	Gandun bundugoma	25	17
3	Babbar riga	25	17
4	Jigawar kasim	25	17
	Total	**102**	**69**

RESULTS AND DISCUSSION

Age, Household Size, Marital Status and Education Level

Respondents' age, household size, marital status and education level were presented in Table 1. The age varies from 21 to 50 and above years with majority between 31- 40 years (43.48%) while above 50 years group were the least with 8.70%. This result indicated that older aged group disengages themselves from poultry production and hand over it to younger generation. Small household sizes (2-5) were the highest and constituted 44.93% while 21 above were the lowest with 1.45%. Marital status shows that 78.26% were married while 2.90% were divorced. All of the respondents in the study location had some level of education except few with 5.79%, secondary school education was the highest with 43.47% followed by tertiary school education with 15.94%. The age group 31-40 years obtained in this study is higher than that reported by Dahiru *et al.* (2022) on utilization of Roselle husks by Ruminant farmers in Hadejia Emirate, Jigawa State and Abdurrahaman *et al.* (2015) on feeding of Kargo to small ruminant in Jigawa state. The result obtained on marital status (married) in this study was higher than that was reported by Dahiru *et al.* (2022). Participation of married farmers than divorced and single in recent study was in agreement with Abdurrahaman *et al. (2015)*. Modern education level in this study was encouraged as related to study of Abdurrahaman *et al. (2015)* this as a result of awareness given by extension workers across the state.

Table 1: Age, household size, marital status and education level

Variables	Frequency	Percentage
Age (years)		
21-30	7	10.14
31-40	30	43.48
41-50	26	37.68
Above 50	6	8.70
Total	***69***	***100***
Household Size (Number of persons)		
2-5	31	44.93
6-10	28	40.58
11-15	5	7.25
Above 21	1	1.45

Total	***69***	***100***
Marital status		
Single	6	8.70
Married	54	78.26
Widow	7	10.14
Divorce	2	2.90
Total	***69***	***100***
Education level		
None	4	5.79
Non formal education	7	10.14
Primary education	8	11.59
Secondary education	30	43.47
Tertiary education	11	15.94
Islamic education	9	13.04
Total	***69***	***100***
Access to Vetinery services		
Access	32	46.3
No access	37	53.36

Distribution of Stock Size

Figure 1 present the distribution of stock size of the local chicken produce by rural women in Auyo Local Government Area. The result shows that 40.58% had 11-20 local chicken, 28.29% were having 1-10 chicken whereas 17.39% having 21-30 chicken. The aggregate results shows that majority (68.85%) had between 1-20 chickens.

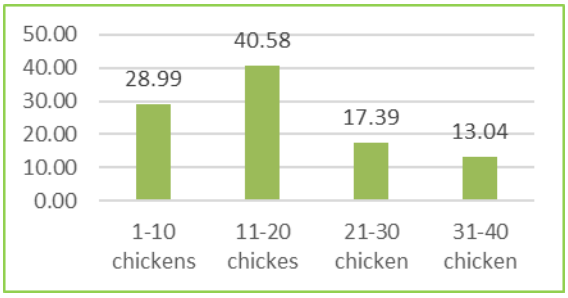

Figure 1: Distribution of stock size

Experience and Average Annual Income

Poultry production experience and average annual income from chicken were presented in Table 2. All the respondents had some experience in poultry production from 1 to 20 years. Majority were within 6 – 10 years of experience with 39.13%, while the least were those 16 to 20 years of experience with 4.35%. Those with 16,000 to 20,000 annual incomes were the highest and constitute 43.48% while the least were those with above 20,000 annual income and constituting 4.35%. Rearing experience of the respondents 6 – 10 years as obtained in current study was in line with the findings of Dahiru *et al* (2022) and Abdurrahaman *et al* (2015).

Table 2: Poultry production experience and average annual income from chicken

Variables	Frequency	Percentage
Poultry production experience		

1-5 years	21	30.43
6-10 years	27	39.13
11-15 years	18	26.09
16-20 years	3	4.35
Total	***69***	***100***
Average annual income from local chicken		
1000-4,900	7	10.14
5,000-14,900	28	40.58
15,000-19,500	30	43.48
20,000-24,900	3	4.35
Total	***69***	***100***

Common Disease and Causes of Mortality

Common disease and causes of mortality in poultry production were presented in Table 3. Respondents met exposed that Fowl cholera is the major common disease that affected their birds with 44.92%, followed by Newcastle disease with 36.23%. Diseases are the main causes of mortality in the study location which constituted about 78.25% among all the causes of mortality. High rate of disease and pest attack as a major challenge in poultry production was also reported by Anosike *et al* (2018).

Table 3: Common disease and causes of mortality in poultry production

Variables	**Frequency**	**Percent**
Common diseases		
Coccidiosis	7	10.14
Fowl cholera	31	44.92
Newcastle	25	36.23
Others	1	1.44
Total	***69***	***100***
Causes of mortality		
Climate hazard	7	10.14
Diseases	54	78.25
Pecking	2	2.89
Predator	4	5.79
Total	***69***	***100***

Constraints of Local Chicken Production

Figure present the of constraints affecting local chicken production among rural women in Mallam Madori.

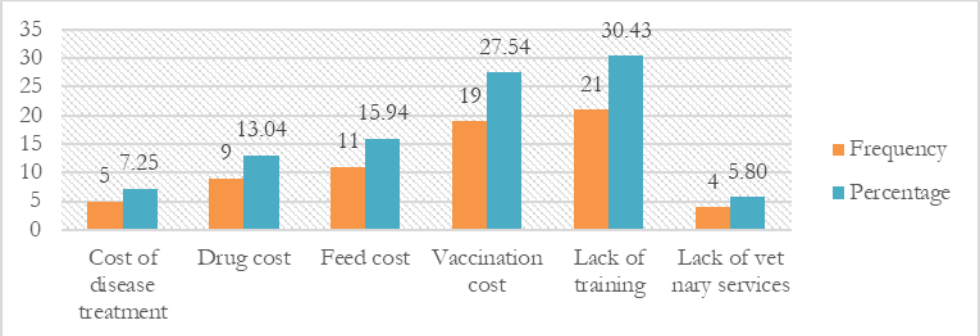

Figure 2: Distribution of constraints affecting local chicken production

The result shows that 30.43% lacked training in poultry production and management, 27.54% experienced vaccination cost while 15.94% had feed costs. The result shows that major hinderance to the local chicken production were lack of training, cost of vaccinations and cost of feeds. The implication of this is that chicken producers without the appropriate knowledge will not optimize resources while cost of vaccination and feeds will to great in loss in productivity of the local chicken production enterprise.

CONCLUSION AND RECOMMENDATION

The study looked into local chicken production among rural women in Jigawa State's Mallam Madori Local Government Area. The local chicken producers were of productive age and primarily had a basic education. The majority of local chicken producers had small stock sizes, and fowl chlore was the leading cause of death for local chickens in the study area. The most significant constraints to local chicken production were a lack of training, feed, and the cost of vaccination. It was suggested that local chicken producers be trained in basic poultry management practices, feeds and feed management practices, and be connected to cost-effective vaccinations and poultry medications.

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