

# Assessment of Rural Poultry Production in Getso Ward, Gwarzo Local Government of Kano State, Nigeria

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## Abstract

The study was conducted to assess rural poultry production in Getso Ward of Gwarzo Local Government, Kano State, Nigeria. Fifty (50) poultry farmers were selected and consulted with well structured questionnaire as a source of primary data. The data collected were analyzed using descriptive statistics. The results shows that majority (78%) of the respondents are female, married (84%), and have an average of 6-7 years of farming experience (76%). Majority (80%) is of age average of 31-50 years and have secondary school certificate (78%). The farmers don't have any association and have never received any extension agent. All the respondents reported rearing broilers using deep litter system and are all vaccinating their poultry but still experiencing diseases such as Coccidiosis and Newcastle diseases. Majority (94%) was self selling the harvestable size bird at home, and 92% reported that they are targeting festive period for their production. None of them were keeping the record of the production, but still have the perception of profitability of the business. Lastly, it was recommended that extension agent should be sent to area for sensitization and public enlightenment about poultry production procedures.

**DOI:** 10.7176/JBAH/12-9-01

**Publication date:** May 31<sup>st</sup> 2022

## Introduction

Poultry production is very important source of livelihood for most rural communities because it provides ready cash for emergency need (FASDEP, 2002). Poultry play a vital role in the socioeconomic development of many countries (Alders, 2004; Salam, 2005). Jens et al. (2004) stated that majority of rural and peri-urban societies in developing countries keeps chicken of a small flock under backyard management. Income generation, provision of animal protein and cultural/religious consideration are among the reasons for keeping poultry by the rural societies (Alders et al., 2009).

Gueye (2002) find out that consumers preference have shifted now for poultry meat (white meat) given the ecological, social, economic and health advantages it has over the other meat (red meat). Income sources and urbanization are the contributing factors of the rising demand for animal products in many part of developing world (Tadelle et al., 2003). About 28% of the total animal protein produced in 1997 was accounted by poultry meat and egg (Tadelle et al., 2003). Poultry are prolific in nature, have rapid turnover and easy to rear (Reta, 2009).

According to Sonaiya, (2005) village chickens were raised even among peoples with little fund below poverty line and small farming families through scavenging feed resources and were able to harvested the maximum benefit of meat and egg. Types of poultry, socioeconomic backgrounds of the farmer, health issues, feed and feeding, housing, sales and disposal are the factors that highly influenced poultry production system in Nigeria (Adedeji et al., 2013).

## Objectives

To assess the rural poultry production in Getso Ward.

To identify the prospect and constraints associated with rural poultry production in the area.

## MATERIALS AND METHODS

### Study Area Description

Getso is a ward in Gwarzo Local Government. Gwarzo is a Local Government Area in Kano State, Nigeria. It has coordinate of 11°55'N and 7°56'E with 3-digital postal code prefix of 704. It has a total area of 393 square kilometers and total population of 183,987 according to 2006 census (NPC, 2006).

### Source of Data

Primary data were used in this study and were sourced from structured questionnaire. Fifty (50) poultry farmers were selected and interviewed in the study area during the research.

### Data Analysis

Data collected were analyzed using descriptive statistical tools, where simple frequency and percentage are generated.

## RESULTS AND DISCUSSION

**Table1: Socioeconomic Status of the Respondents**

Variables		Frequency	Percentage
<b>Sex</b>	Male	11	22
	Female	39	78
<b>Marital status</b>	Married	42	84
	Widow	8	16
	Single	0	0
	Divorced	0	0
<b>Years of experience</b>	0-5	7	14
	6-10	38	76
	11-15	5	10
<b>Age</b>	10-30	7	14
	31-50	40	80
	51-70	3	6
<b>Education</b>	Primary	8	16
	Secondary	39	78
	Tertiary	2	4
	Qur'anic	1	2
<b>Flock size</b>	10-50	15	30
	51-100	26	52
	101-150	3	6
	151-200	6	12
	200-Above	0	0

**Table 2: Production Information**

Variables		Frequency	Percentage
<b>Any Poultry association?</b>	Yes	0	0
	No	50	100
<b>Presence of extension agent?</b>	Yes	0	0
	No	50	100
<b>Poultry type</b>	Broilers	50	100
	Layers	0	0
<b>Poultry house</b>	Deep litter	50	100
	Battery cage	0	0
<b>Production reason</b>	Sales	47	94
	Consumption	3	6
	Saving	0	0
<b>Do you vaccinate?</b>	Yes	50	100
	No	0	0
<b>Adhered to vaccination schedule?</b>	Yes	28	56
	No	22	44
<b>Mortality rate</b>	0-25%	32	64
	26-50%	8	16
	51-75%	7	14
	76-100%	3	6
<b>Season of mortality</b>	Hot dry	41	82
	Harmattan	9	18
<b>Diseases experienced</b>	Newcastle	20	40
	Coccidiosis	27	54
	Gumboro	3	6

**Table 3: Sales and Disposal Information**

Variables		Frequency	Percentage
<b>Marketing</b>	Self	47	94
	Retailer	2	4
	Wholesaler	1	2
<b>Selling point</b>	Home	39	78
	Market	11	22
	Others	0	0
<b>Period of high demand</b>	Festive period	46	92
	Others	4	8
<b>Advertisement for sale</b>	Errand boy	42	84
	Phone call	8	16
	Social media	0	0
<b>Sales record</b>	Yes	0	0
	No	50	100
<b>Profitability perception</b>	Highly	6	12
	Averagely	37	74
	Not profitable	4	8
	Saving money	3	6

**Table 1:** The results of the study show that majority (78%) of the rural poultry farmers in the study area are females and married (84%). This might probably be due to the level of rural poverty and lack of potentials of their husband to take the full responsibilities of the house, this might necessitate females to involve themselves in some businesses to sustain their lives. This disagrees with Adedeji *et al.* (2004) who reported majority (84.21%) of poultry farmers are male in Ilesha West Local Government of Osun State. Majority (76%) reported to have at least 6-10 years of farming experience, 14% has 0-5 years, while 10% has 11-15 years. It also support the finding of Onyebinama (2004) that previous experience in farm business management enable farmers to set realistic time and cost targets, allocate, combine and utilize resources efficiently and identify production risk. The result of the study revealed that majority (80%) are of age average of 31-50 years. This indicates that they are at matured stage and have a life experiences which will help them to handle the production with vital hand. The present finding is slightly in line with (Wondu *et al.*, 2013) who concluded that above 42% of the household have an age of between 20-50, and the lowest (5%) were range 61-70 years in Northern Gondar, Amhara region state, Ethiopia. This closely agreed with Sani *et al.* (2007) that majority of farmers within the age range of 41 to 50 years are still in their active age and more reception to innovation.

In consideration with their educational background, it was shown from the result that majority (78%) of the respondents has secondary school education, 16% have primary, 4% have tertiary education, while 2% went Qur'anic school. This will really help them in the poultry management activities. However, according to the result of the study, majority (52%) of the respondents are having 51-100 birds, 30% of them are having 10-50 birds, while 12% are having 151-200 birds. This shows that all of the respondents are small scale farmers in consideration with their flock size. This agrees with Jens *et al.* (2004) who reported that nearly all rural and peri-urban societies in developing countries keep a small flock of chicken. Also, earlier reported by Okonkwo and Akubuo (2001) shows that poultry production is mostly at subsistence level.

**Table 2:** The poultry farmers in the study area don't have any poultry association and they have never host and extension agent in their production time. Absence of poultry farmers association might be due to the fact that all the respondents are small scale farmers and are doing the business for sustaining their lives, while taking extension agent in to consideration might be due to the Nigerian policy of concentrating agricultural activities on crop production for hunger eradication.

The result also shows that all (100%) the respondents are rearing broilers due to their rapid turnover of the investment and are (100%) using deep litter system of production. The pattern at which the respondents practiced poultry keeping were similar to Sonaiya (2005) who revealed that intensive management system is mostly practiced by the farmers. Majority (94%) of them is raising the poultry for selling and they only consume when there is a casualty of disease when the birds are moribund. The finding of the present study is in line with Halima *et al.* (2007) who illustrated that, income generation and household consumption are the main production objectives of keeping village chicken in Ethiopia. All (100%) the respondents were vaccinating their poultry but only 56% adhered to vaccination schedule while 44% were vaccinating against some selected diseases.

Majority (64%) of the respondents reported death rate of 0-25%, and 82% of the respondents reported hot dry season as the time of such high incident. This means that temperature and climatic change play a crucial role on the level of mortality as we are in the tropical region. Most rural communities luck required husbandry skills, training and opportunities to effectively improve their production (Mlozi *et al.*, 2003). More so, 54% reported experiencing Coccidiosis disease, 40% Newcastle, where as 6% Gumboro. Thi finding was similar to that of

Adedeji *et al.* (2004) who reported that Coccidiosis and Newcastle diseases were the prevalent diseases affecting birds. This clearly crystal shows that there were low biosecurity measures which caused the high prevalence of Coccidiosis. Small scale farms are characterized by low level of biosecurity and are more prone to the introduction of infectious agent (Akidarju *et al.*, 2010). Hence, mortality is caused by harsh weather and disease which are correlated.

**Table 3:** Marketing and it's channels is among very important in any business which could determine the profitability of the business. Result of this study revealed that majority (94%) of the respondents are themselves selling the harvestable size bird to the customers/consumers, where 4% reported to be selling to retailers while 2% to the whole sellers. Considering the selling point, availability of the customers is the determining factor of where to sell

Those with available customers used to sell at home while others have to reach market before selling. With regards to that, majority (78%) of them are selling at home while the remaining 22% reported selling at the market. With even the customers demand also matters, 92% reported that they are always targeting a festive periods such Sallah festival and marriages, because of high demand of poultry while others (8%) reported the demand in other period

Due to the nature of the busines and environment, majority (84%) are advertising their product through an errand boy, while 26% are using phone calls to available customers. It was learned that none of them were using social media; this might be due to the level of their civilization and productivity. Hellin *et al.* (2005) reported that understanding of village chicken functioning and marketing structure are a prerequisite for developing market opportunities for rural households and could be used to inform policy makers and development workers in considering the commercial and institutional environment in which village chicken keepers have to operate.

After sales, none of them were keeping the record. But majority (74%) have the perception that the business is profitability is average, 12% highly profitable, where as 8% not profitable, while 6% were considering the business as just for saving money.

## Conclusion

The farmers were experiencing some diseases and mortality despite of the vaccination that they were administering. There is low level of biosecurity measures that helps to the occurrence of the diseases, even the way how they are administering the vaccine is highly doubtful and might lead to failure. Marketing situation of the respondents is local market as they are small scale producers, this has enforced them to slightly disengage themselves from associating with wholesalers. The farmers were targeting festive season as they are experiencing high demand of the product at that time.

## RECOMMENDATIONS

- i. Extension agent should be sent to the area for sensitization on production and vaccination to avoid vaccination failure
- ii. Government should be helping the agribusiness association with soft loan, this will encourage them to create association.
- iii. There should be a public enlightenment about biosecurity by professional

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