



## LIVELIHOOD ATTRIBUTES OF POULTRY FARMERS IN ILORIN, KWARA STATE, NIGERIA


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Article info	Abstract
<b>Received:</b> 2024-08-12 <b>Accepted:</b> 2024-09-29 <b>Published:</b> 2024-12-31	Poultry production is an essential source of livelihoods as it provides food, income and employment opportunities for several people who are involved in poultry value chain activities in Nigeria. This study assessed the livelihood attributes of poultry farmers in Ilorin, Kwara State, Nigeria. Three-stage sampling was used to select 150 farmers for this research work. Descriptive statistics such as frequency, percentage, and mean were employed to analyze the data. The findings showed that the radio, internet/social media, and family were key sources of information on poultry production. Also, involvement in other income-generating activities (mean=4.14) was the highest-ranked financial asset. Owned/leased poultry pens/houses and possession of smart phones (mean=4.15) were the highest-ranked physical assets. Networking with other poultry farmers/agencies for resources (mean=4.37) was the highest-ranked social asset. Being physically fit to manage poultry production activities (mean=4.55) was the highest-ranked human asset. Access to water for poultry production (mean=4.31) was the highest-ranked natural asset. The livelihood status of the poultry farmers (3.93±0.93) was categorized as high. The study concluded that poultry production is a vital means of livelihood for the farmers. It therefore recommends supporting extension services for all poultry farmers to enhance their livelihoods and incomes. It is also
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essential for the government to provide livelihood incentives such as financial support and tax relief, as well as to subsidize poultry farming equipment to ensure that the farmers have the needed resources/assets to boost their productivity.

**Keywords:** Livelihoods, Attributes, Poultry Farmers.

## خصائص سبل العيش لمربي الدواجن في إيلورين، ولاية كوارا، نيجيريا

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### الخلاصة

إن إنتاج الدواجن مصدرًا أساسيًا للعيش، حيث يوفر فرص العيش والتوظيف في أنشطة سلسلة قيمة الدواجن في نيجيريا. قيمت هذه الدراسة سمات سبل العيش لمزارعي الدواجن في إيلورين، ولاية كوارا، نيجيريا. جمعت العينات من ثلاث مراحل من 150 مزارعًا لهذا العمل البحثي. استخدمت الإحصاءات الوصفية مثل التردد والنسبة المئوية والمتوسط لتحليل البيانات. أظهرت النتائج أن الراديو والإنترنت/ وسائل التواصل الاجتماعي والأسرة كانت مصادر رئيسية للمعلومات حول إنتاج الدواجن. كما كانت المشاركة في أنشطة أخرى مدرة للدخل (المتوسط = 4.14) هي الأصول المالية الأعلى تصنيفًا. حظائر/منازل الدواجن المملوكة/المستأجرة (المتوسط = 4.15) كانت الأصول المادية الأعلى تصنيفًا. كان التواصل مع مزارعي/وكالات الدواجن الأخرى للحصول على الموارد (المتوسط = 4.37) هو الأصل الاجتماعي الأعلى تصنيفًا. كانت اللياقة البدنية لإدارة أنشطة إنتاج الدواجن (المتوسط = 4.55) هي الأصول البشرية الأعلى تصنيفًا. كان الوصول إلى المياه لإنتاج الدواجن (المتوسط = 4.31) هو الأصول الطبيعية الأعلى مرتبة. صنفت حالة معيشة مزارعي الدواجن (3.93 ± 0.93) على أنها مرتفعة. واستخلصت الدراسة أن إنتاج الدواجن كان مصدر رزق حيوي للمزارعين وتوصي بدعم خدمات الإرشاد لجميع مزارعي الدواجن لتعزيز سبل عيشهم ودخولهم. حيث الضروري أن توفر الحكومة حوافز معيشية مثل الدعم المالي والإعفاء الضريبي، فضلاً عن دعم معدات تربية الدواجن لضمان حصول المزارعين على الموارد/الأصول اللازمة وتعزيز إنتاجيتهم.

**كلمات مفتاحية:** سبل العيش، خصائص، مربي الدواجن.

## Introduction

Poultry production contributes significantly to the incomes of the farmers in Nigeria and is a vital source of nourishment for the populace. It also helps in ensuring that the majority of Nigerians are food and nutrition-secured. The poultry sub-sector contributes about 25% to Nigeria's agriculture GDP (16), and is the most commercialized livestock sector in the country (6 and 19). According to (6) the poultry industry in Nigeria produces an estimated 200 million birds, 300 metric tonnes of meat, and 650 metric tonnes of eggs annually and employs approximately 85 million people. Nigeria is the 5<sup>th</sup> largest producer of chicken meat in Africa at about 238.3 metric tonnes annually (22). According to the (16) Nigerians consume about 1.9 kg of chicken meat per capita a year, which is relatively low compared to the USA (49.3kg), South Africa (32.98kg), and Ghana (7.67kg). Also, Nigerians consume on average about 65 eggs per annum compared to 279 for the USA (16).

Livelihood refers to the process of making a living (5). Accordingly, a livelihood is considered manageable when 'it can deal with and recover from strains, sustain or improve its capacity, while not depleting the natural resource base' (21). (23) idealized sustainable livelihoods to be the outcomes in manageable opportunities for the next generation and providing net paybacks to other livelihoods. Although the sustainable livelihood framework (SLF) is broad it is a suitable model for investigating smallholder livelihoods (14). Sustainable livelihood is an active idea that offers means to eliminate poverty and how underprivileged persons organize their lives (4). Livelihood results are the achievements and returns that households anticipate to obtain through employment of specific activities and approaches. These results can also illustrate the expectations of the household (17).

There is a huge opportunity for the poultry sub-sector to boost the nutritional security of Nigerians, (7) especially with the existence of several viable commercial poultry farms located across the country (15). Due to the high demand for meat and egg in Nigeria, those unemployed have been encouraged to take up opportunities in poultry production to enhance their incomes. However, the Nigerian poultry industry is characterized by high production costs, low levels of technology, marketing issues, and high labour intensity (8). The high cost of poultry feed and medication has been reported to constitute substantive input costs in the poultry industry (7). These would limit the income and output of poultry farmers in Nigeria. Hence, it is essential to carry out a study on the livelihoods of poultry farmers that would favorably influence government policy towards them and other actors in the industry. Also, there is a lack of information on the livelihood attributes of poultry farmers in Kwara state, Nigeria which needs to be addressed. As such, this study investigated the livelihood attributes of poultry farmers in Ilorin, Kwara state, Nigeria. Specifically, its objectives were to:

1. Identify the socio-economic characteristics of the respondents in the study area.
2. Identify the sources of information on poultry production in the study area.
3. Assess the livelihood attributes of poultry farmers in the study area.

### Materials and Methods

This research was conducted in Ilorin, Kwara state Nigeria. Ilorin comprises five local government areas (LGA), namely Ilorin South, Ilorin East, Ilorin West, Moro, and Asa. The sampling process involved three-stages. The first involved random sampling of Ilorin South, Ilorin East, and Ilorin West, the second covered a random sampling of 5 communities within each LGA, and the third involved a random selection of 10 poultry farmers within each population. Altogether 150 poultry farmers were selected. The dichotomous survey method was used with Yes=1 and No=0. The livelihood attributes were measured based on the five livelihood outcomes representing financial, physical, social, human, and natural assets using a 5-point Likert scale with strongly disagree=1, disagree=2, undecided=3, agree=4, and strongly agree=5. To categorize the livelihood status, the scores for 1-5 were added and then divided by 5 to get 3  $(1+2+3+4+5/5)$  with scores of  $\geq 3.0$  and  $\leq 3.0$  representing High and Low status, respectively. The grand mean was the average of the mean scores of all the livelihood outcomes. The data collected was analyzed using frequency counts, percentages, and means.

### Results and Discussion

Socio-economic Characteristics of the Respondents: As seen in Table 1, 74.0% of the poultry farmers were male. This male-dominated feature could be attributed to the strenuous work involved in poultry production and conforms with the findings by (18), who found that male farmers were found to dominate the eggs production business. The average age was 40.6 years, indicating that most of the poultry farmers were young and active. This result concurs with (24) which stated that poultry farmers in Kwara state were young and active. Table 1 also reveals that more than half of the respondents or 54.7% were married. Marriage is expected to come with responsibilities that could significantly influence persons to innovate for the purpose of enhancing productivity and improving livelihood. About 46.0% had tertiary education, meaning that the farmers were able to read and comprehend instructions disseminated through extension workers that could translate into improved livelihood outcomes. This finding agrees with (12 and 20) who found that egg producers in Kwara state, Nigeria were literate. The average income of the farmers was N1,660,213.33 implying that poultry farming is a lucrative venture as also noted by (2) which stated that livestock enterprises are productive and profitable farm enterprises in Nigeria.

About 67.3% of the farmers had no access to extension services indicating that a high number of respondents has no contact with extension workers. This implies that extension service delivery and coverage for the poultry farmers is poor. This is similar with the findings of (1) for farmers in Niger state. About 53.3% of the respondents' main motive for poultry farming was both for consumption and commercial purposes, meaning that poultry production is an important source of their food and livelihoods. About 92% of the respondents leased/rented the poultry houses/pens used for production.

**Table 1: Socio-economic Characteristics of the Poultry Farmers (n=150).**

Variables	Frequency	Percentage	Mean	Std. Deviation
<b>Gender</b>				
Male	111	74.0		
Female	39	26.0		
<b>Age (years)</b>				
≤30	32	21.3		
31 – 40	51	34.0	40.6	11.68
41 – 50	39	26.0		
Above 50	28	18.7		
<b>Marital Status</b>				
Single	20	13.3		
Married	82	54.7		
Separated	36	24.0		
Widowed	12	8.0		
<b>Educational level</b>				
No formal education	0	0.0		
Primary education	33	22.0		
Secondary education	48	32.0		
Tertiary education	69	46.0		
<b>Annual Income (Naira)</b>			1,660,213.33	423,634.39
≤ 1,000,000	51	34.0		
1,000,001 – 2,000,000	99	66.0		
<b>Access to Extension Services</b>				
Yes	49	32.7		
No	101	67.3		
<b>Main Purpose of Poultry Production</b>				
Consumption	21	14.0		
Commercial	49	32.7		
Both consumption and commercial	80	53.3		
<b>Poultry House/Pen Ownership Type</b>				
Owned	12	8.0		
Lease/Rent	138	92.0		

Source: Field survey, 2024.

Sources of Information on Poultry Production: The findings in Table 2 show that radio (96.0%) is the most important means of receiving information on poultry production. About 89.3% of the respondents received information from family members and 85.3% through television. This implies that the farmers use diverse sources to access poultry information. This might be attributed to the fact that all the respondents had formal education. This result confirms the findings of (3) who reported that quail farmers in Kwara state, Nigeria explored diverse sources for information on quail production.

**Table 2: Sources of Information of the Poultry Farmers.**

Source of information	Yes Frequency	Percentage
<b>Poultry Farmers Associations</b>	87	58.0
<b>Ministry of Agriculture</b>	54	36.0
<b>Radio</b>	144	96.0
<b>Cooperative societies</b>	99	66.0
<b>Family members</b>	134	89.3
<b>Television</b>	128	85.3
<b>Newspapers/magazines</b>	111	74.0
<b>NGOs</b>	40	26.7
<b>Neighbours/Friends</b>	103	68.7
<b>Internet /social media/phone</b>	125	83.3
<b>Religious organizations</b>	69	46.0

Source: Field survey, 2024.

Livelihood Attributes of the Poultry Farmers” The finding presented in Table 3 show that in terms of financial assets, the poultry farmers’ involvement in other income-generating activities ( $4.14 \pm 1.08$ ) was ranked first. For physical assets, owning/leasing a poultry pen/house and possessing smart phones ( $4.15 \pm 0.78$ ) were the highest-ranked assets. For social assets, the ability to network with other farmers/agencies for resources ( $4.37 \pm 0.92$ ) ranked highest. For human assets, being physically fit to carry out poultry farming activities ( $4.55 \pm 0.67$ ) was the highest-ranked asset as it was for natural asset access to water for poultry production ( $4.31 \pm 0.93$ ).

The findings indicate that the income obtained through other income-generating activities could be invested in poultry farming. Also, the poultry farmers’ access to assets could increase their chances of participating in other business ventures for enhancing their output and income. Access to poultry pens/house is an important asset for the farmers as they provide shelters for the birds. The result showed that access to water is also an important asset for poultry production as water is needed for all year-round farming activities. This result denotes that poultry farming is a vital source of livelihood to the farmers as several resources/assets were utilized to enhance their productivity. This further infers that poultry production contributes to the livelihood of the poultry farmers in the study area.

This result agrees with (9 and 23) who stated that agricultural enterprises are the key sources of income and livelihoods for most people in developing nations. The findings further divulge that the overall livelihood status of the poultry farmers ( $3.93 \pm 0.93$ ) can be categorized as high or that they have high livelihoods. The high livelihood status is expected to have positive effects on their standard of living. The reason for the high livelihood status could be attributed to the farmers having formal education, access to information through diverse sources, involvement in other income-generating activities, and the ability to network with other farmers. This finding concurs with (10) that most farmers of the South-eastern states of Nigeria have high livelihood status.



**Table 3: Livelihood Attributes of the Poultry Farmers.**

Livelihood Outcomes	Strongly Disagree	Disagree	Undecided	Agree	Strongly agree	Mean (SD)	Rank
<b>Financial Assets</b>							
Income can meet basic needs	6 (4.0)	10 (6.7)	25 (16.7)	101 (67.3)	8 (5.3)	3.63±0.85	4 <sup>th</sup>
Able to save money from poultry farming	3 (2.0)	10 (6.7)	24 (16.0)	99 (66.0)	14 (9.3)	3.74±0.80	3 <sup>rd</sup>
Access to access credit through cooperative society and banks	16 (10.7)	14 (9.3)	49 (32.7)	38 (25.3)	33 (22.0)	3.39±1.23	2 <sup>nd</sup>
Involved in other income-generating activities	6 (4.0)	3 (2.0)	32 (21.3)	32 (21.3)	77 (51.3)	4.14±1.08	1 <sup>st</sup>
<b>Physical Assets</b>							
Possess poultry farming inputs/equipment	6 (4.0)	4 (2.7)	10 (6.7)	86 (57.3)	44 (29.3)	4.05±0.91	3 <sup>rd</sup>
Own/lease a poultry pen/house	3 (2.0)	3 (2.0)	9 (6.0)	89 (59.3)	46 (30.7)	4.15±0.78	1 <sup>st</sup>
Live in cement and zinc roof house	9 (6.0)	12 (8.0)	3 (2.0)	67 (44.7)	59 (39.3)	4.03±1.13	4 <sup>th</sup>
Possess power generator	6 (4.0)	39 (26.0)	12 (8.0)	68 (45.3)	25 (16.7)	3.45±1.16	7 <sup>th</sup>
Possess radio/tv	3 (2.0)	15 (10.0)	19 (12.7)	51 (34.0)	62 (41.3)	4.03±1.06	5 <sup>th</sup>
Possess smart phone	3 (2.0)	19 (12.7)	9 (6.0)	41 (27.3)	78 (52.0)	4.15±1.12	1 <sup>st</sup>
Possess freezer/cold room for preservation	7 (4.7)	18 (12.0)	56 (37.3)	38 (25.3)	31 (20.7)	3.45±1.09	7 <sup>th</sup>
Possess car/motorcycle/tri-cycle for transportation	54 (36.0)	24 (16.0)	26 (17.3)	42 (28.0)	4 (2.7)	2.45±1.30	10 <sup>th</sup>
Possess poultry-product processing equipment	54 (36.0)	29 (19.3)	13 (8.7)	46 (30.7)	8 (5.3)	2.50±1.38	9 <sup>th</sup>
Use of solar energy to power house	18 (12.0)	11 (7.3)	10 (6.7)	47 (31.3)	64 (42.7)	3.85±1.36	6 <sup>th</sup>
<b>Social Assets</b>							
Ability to network with other farmers/agencies for resources	6 (4.0)	0	10 (6.7)	51 (34.0)	83 (55.3)	4.37±0.92	1 <sup>st</sup>
Membership of poultry farmer-related associations	3 (2.0)	0	12 (8.0)	96 (64.0)	39 (26.0)	4.12±0.71	4 <sup>th</sup>
Ability to attract customer/markets	6 (4.0)	7 (4.7)	14 (9.3)	91 (60.7)	32 (21.3)	3.91±0.92	6 <sup>th</sup>
Ability to connect with extension agents/experts for poultry production	9 (6.0)	0	4 (2.7)	65 (43.3)	72 (48.0)	4.27±0.99	3 <sup>rd</sup>
Participation in social gatherings	3 (2.0)	4 (2.7)	15 (10.0)	43 (28.7)	85 (56.7)	4.35±0.91	2 <sup>nd</sup>
Holds executive position in social/community organizations	3 (2.0)	3 (2.0)	22 (14.7)	85 (56.7)	37 (24.7)	4.0±0.810	5 <sup>th</sup>
<b>Human Assets</b>							
Possess fish farming knowledge and skill competency	0	5 (3.3)	68 (45.3)	45 (30.0)	32 (21.3)	3.69±0.84	5 <sup>th</sup>
Possess good health condition	3 (2.0)	0	12 (8.0)	96 (64.0)	39 (26.0)	4.12±0.71	4 <sup>th</sup>
Physically fit to carry out poultry farming activities	0	3 (2.0)	9 (6.0)	51 (34.0)	87 (58.0)	4.55±0.67	1 <sup>st</sup>
Knowledge of how to obtain credit facilities and grants	0	7 (4.7)	10 (6.7)	47 (31.3)	86 (57.3)	4.48±0.70	2 <sup>nd</sup>
Knowledge of how to secure the farm from theft	3 (2.0)	9 (6.0)	3 (2.0)	58 (38.7)	77 (51.3)	4.41±0.81	3 <sup>rd</sup>
<b>Natural Assets</b>							
Access to water for poultry production	0	9 (6.0)	12 (8.0)	57 (38.0)	72 (48.0)	4.31±0.93	1 <sup>st</sup>
Access to secure and safe area for poultry production	6 (4.0)	3 (2.0)	6 (4.0)	86 (57.3)	49 (32.7)	4.28±0.85	2 <sup>nd</sup>
Access to land for production in a climatic and environmentally conducive area for farming	3 (2.0)	6 (4.0)	9 (6.0)	99 (66.0)	33 (22.0)	4.13±0.89	3 <sup>rd</sup>
Access to an area that has basic facilities like motorable road, electricity etc.	0	6 (4.0)	12 (8.0)	84 (56.0)	48 (32.0)	4.02±0.79	4 <sup>th</sup>
<b>Grand Mean Score</b>	<b>*3.93±0.93</b>						

Figures in parentheses are percentages.

Source: Field Survey 2024.

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## Conclusions

Based on the results, the study found that most of the poultry farmers were male, and that poultry production is a viable means of livelihood. Radio, family members and television were important information sources for the farmers. Poultry production is an important means of livelihood for the farmers who enjoy high livelihood status.

Recommendations:

Based on the findings of the study it is recommended that:

1. There is a need to support extension services to reach all the poultry farmers to enhance their livelihoods and productivity.
2. There is a need for the government to provide livelihood incentives such as financial support, tax relief, and to subsidize poultry farming equipment to ensure that the poultry farmers have the needed resources/assets and to boost their productivity.

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No Supplementary Materials.

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All authors contributed equally to this research.

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The study was conducted according to the protocol authorized by the Phoenix University Agwada, Nigeria.

### Informed Consent Statement:

No Informed Consent Statement.

### Data Availability Statement:

The study was based on primary data collected from respondents.

### Conflicts of Interest:

The authors assert that the absence of any conflicts of interest during the information-gathering phase was essential to completing this research project.

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