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Rural Youth Involvement in Poultry Production in Ido Local Government Area of Oyo State, Nigeria

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Authors' contributions

This work was carried out in collaboration between all authors. All authors read and approved the final manuscript.

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ABSTRACT

The study was conducted to examine the involvement of youth in poultry production in Ido Local Government Area of Oyo State. A total of one hundred and twenty five respondents were randomly selected for the study. Data were collected with the use of questionnaire and analysed using descriptive statistics such as frequency count percentages and mean. Test of hypothesis was done using chi square. Findings show that more than half (59.2%) of the respondents were male, married (52.8%) while less than half (46.4%) had secondary school education with an average of 6 years farming experience. Most of the respondents (64%) were involved in poultry production specifically broiler production (86.4%). There was considerable high level of involvement in poultry production (64.0%). Years of farming experience ($\chi^2 = 8.12$, $p \leq 0.05$) was found to be significantly related with rural youth involvement in poultry production. The study therefore recommends that more youth should be encouraged in poultry production in other to improve their socio-economic status as well as enhancing animal protein sufficiency.

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1. INTRODUCTION

Agricultural sector plays a significant role in the development and growth of most developing nations of the world. The sector employs approximately two-thirds of the country's total labour force and provides a livelihood for about 90 per cent of the rural population and food for human race. The livestock sector is an important component of the agriculture that provides animal protein to the populace. The increasing demand for animal protein according to [1] remains critical in the global food basket crisis. The increased demand has led to a rise in the production of foods of animal origin all around the globe, especially from poultry and pigs [2].

The poultry industry has remained the most dynamic and fastest growing segment in the animal husbandry subsector. In Nigeria, poultry is about 58.72 per cent of the total livestock resources which consist of 13,885,813 Cattle; 34,453,724 Goat; 22,092,602 Sheep; 3,406,381 Pigs; 104,247,960 poultry [3]. It is surprising that Nigeria is low in dietary protein consumption. The consumption according to [4] is 9.3 g/day as against the 35g/day recommended by the Food and Agricultural Organization (FAO) being the minimum requirement for growth and development of the body. The poultry sub-sector occupies a prominent position in providing the needed animal protein, minerals and vitamins to balance the human diet [5]

Apart from the provision of needed protein, the poultry industry is of considerable economic relevance because it serves as source of income, employment and poverty alleviation [6]. The prolific nature of poultry gives it an edge advantage other farm animals. The types of poultry that are commonly reared in Nigeria are chickens, ducks, guinea fowls, turkeys, pigeons and more recently ostriches. Those that are of commercial or economic importance given the trade in poultry, however, are chickens, guinea fowls and turkeys, amongst which the chickens predominate.

Production of poultry is seen to be a part of rural life in most rural Africa where youth form part of the workforce. Approximately 80% of rural households are involved in smallholder poultry production [7]. Youths which constitute part of the rural household are very important resources for sustaining agricultural productivity. Studies have shown that children and youths contribute significantly in agricultural activities [8]. According to [9,10,11] youth possess unique capabilities, dynamism, strength, adventure, ambition, hilarity among others which are positive features for livestock production. Since youth play vital role in agriculture, it is therefore important to examine their involvement in poultry production. The study examined specifically the following objectives:

i. describe the personal characteristics of rural youth;
ii. examine the level of involvement of youth in poultry production;
iii. ascertain the bird species reared among rural youth;
iv. identify the sources of capital for poultry production;
v. examine the constraints to rural youth involvement in poultry production.

1.1 Hypothesis of the Study

Ho: There is no significant relationship between socio-economic characteristics of the youth and their involvement in poultry production

2. METHODOLOGY

The study was carried out in Ido Local Government Area (LGA) of Oyo State. The Local Government Area shares boundary with Oluyole, Ibarapa East, Akinyele, Ibadan south-west, Ibadan North-west LGAs and Odeda LGA in Ogun State. Ido Local Government Area has a land mass of about 986km square with extensive fertile soil, which is suitable for agriculture. There are also large hectares of grassland which are suitable for animal rearing. The study was carried out using a non-experimental design. Five villages were selected from the existing seventy (70) villages using simple random sampling technique. Twenty-five respondents were selected each from the five villages using a simple random sampling technique making a total of one hundred and twenty five. Primary data were collected through the use of structured and validated questionnaire and interview guide to elicit information on the objectives. Data on involvement in poultry production activities was collected by on three point likert scale of always = 2, occasionally = 1 and not at all = 0. Mean

was used to group the overall level of involvement into high and low.

Data analysis was done using descriptive statistics such as percentages and mean while hypothesis of the study was tested with chi square.

3. RESULTS AND DISCUSSION

3.1 Personal Characteristics of the Respondents

Findings in Table 1 reveal that more than half of the respondents (59.2%) were male. Sex plays a vital role in agricultural production. The male dominance in poultry production may be attributed to high demand in both time and energy required to work in poultry. It was also shown that 46.4% of the respondents had secondary school education, 44.8% had tertiary education while 8% had primary school education. Education is gives opportunity for reasoning and creative thinking as well as management of useful agricultural information. It is a needed tool for adoption of new innovations especially in poultry production. Information on marital status of the youth show than more than half (52.8%) of the respondents were married, 46.4% were still single and very small percentage (0.8%) were divorced. Marriage confers some levels of responsibility and commitment on individuals who are married [12] and [13]. This implies that majority of the respondents were married and they have to find some income generating activities such as poultry to provide for the family. The results also show that majority of the respondents (64.0%) were Christians while 36.0% were muslim. This implies that the respondents were predominantly Christians. Findings in Table 1 further reveals that 50.4 percent of the respondents had between 15 years farming experience, 44.8% had 6-10years farming experience while 1.6% had 16 and more years of framing experience. The average farming experience was found to be 6 years. The more the farming experience, the more the knowledge a farmer is likely to gathered to overcome some challenges associated with farming which may translate to better output. This is in line with [14] summit that the more the years of farming experience, the more the ability to have better production output.

3.2 Involvement in Poultry Production

The findings in Table 2 inferred that youth involvement in poultry production were directly focused on packing, sorting and grading of eggs ($\bar{x}$= 1.95). Other poultry activities that were fully involved by the youth include feeding of birds ($\bar{x}$ = 1.94), culling of birds ($\bar{x}$= 1.86), vaccination and medication ($\bar{x}$ = 1.80), preparation of feeds and brooding ($\bar{x}$ = 1.71 each). The overall results show that rural youth were more involved in poultry production as indicated by 64.0% of the respondents. The involvement in various poultry production activities implies some level of interest among the youths as their source of livelihood. However, the findings tend to agree with the results of [15,16,17], on the active involvement of rural youths in agricultural activities. Also, the results are corroborated by the findings of [18] that youths participated in poultry business because of incentives attached to the business.

Table 1. Personal characteristics of respondents (n=125)

Variables	Frequency	%	Mean
Sex			
Male	74	59.2	
Female	51	40.8	
Educational background			
Primary education	11	8.8	
	58	46.4	
Secondary education	56	44.8	
Tertiary education			
Marital status			
Married	66	52.8	
Single	58	46.4	
Divorced	1	0.8	
Religion			
Christianity	80	64.0	
Islam	45	36.0	
Years of farming experience			
1-5	63	50.4	
6-10	56	44.8	6years
11-15	4	3.2	
16 and above	2	1.6	

Source: Field survey, 2015

3.3 Types of Bird Species Reared

Findings in Table 3 Show that broiler ($\bar{x}$= 2.87) was the major bird species reared by the youth. The growth period for broiler is usually eight weeks which translates to short period of recovery of investment cost. This may be one of the reasons for choice of broiler as the most widely reared bird species among rural youth. It was also noted that laying hens ($\bar{x}$= 2.62) was the second type of bird species reared. This is because it takes relatively longer period before the commencement of egg production, its profitability may account for its acceptability among rural youth. This is in line with the findings of [19] on profitability analysis of laying hens production. However, local birds ($\bar{x}$= 1.18) and geese ($\bar{x}$= 1.08) were the least of bird species reared. This may be attributed to low acceptability and probably low profitability of the birds.

3.4 Sources of Capital for Poultry Production

Information in Table 4 indicate that personal savings ($\bar{x}$= 1.82) as well as friends and family ($\bar{x}$= 1.53) constituted the major source of capital for poultry production. The insistence on no collateral however makes personal savings and friends and family the mostly preferred source of capital [20]. Others such as cooperative society ($\bar{x}$ = 0.37) and commercial Banks ($\bar{x}$= 0.24) were not really patronized for the production of poultry. The high interest rate and need for collateral impose much difficulty in accessing needed capital through commercial banks.

3.5 Constraint to Involvement in Poultry Production

Constraints to youth involvement in poultry production as found in Table 5 reveal that high cost of transportation ($\bar{x}$ = 1.42) constituted the major constraint. High cost of transportation will have negative influence on profit margin of poultry production. Other identified constraints include insufficient capital ($\bar{x}$= 1.40), high cost of feeding ($\bar{x}$ = 1.39), insecurity/theft ($\bar{x}$= 1.31), poor and unstable of prices ($\bar{x}$= x 1.23), inadequate technical information ($\bar{x}$= 1.19) and inconsistence policy ($\bar{x}$= 0.98). The results show that poultry production is usually confronted with many constraints which can cause threat to the involvement rural youth. The findings are corroborated by [21] who categorized the constraints of rural youth involvement in agriculture as economic, social and environmental. The results further reveal that economic based constraints seem to be the most important factor.

3.6 Test of Hypothesis

Test of hypothesis found shows that years of farming experience (χ^2 = 8.12, df = 3) was significantly related with the involvement of youth in poultry production at 5% level of significance. The implication of this is that years of experience play significant roles in rural youth involvement in poultry production. This means that poultry production requires some level of expertise in terms of knowledge which is accumulated over a considerable period.

Table 2. Involvement in poultry production (n=125)

Poultry production activities	Always	Occasionally	Not at all	Mean	SD	Rank
Feeding	118(94.4)	7(5.6)	-	1.94	0.23	2
Packing and sorting of eggs	119(95.2)	6(4.8)	-	1.95	0.22	1
Vaccination/Medication	104(83.2)	17(13.6)	4(3.2)	1.80	0.48	4
Brooding	92(73.6)	30(24.0)	3(2.4)	1.71	0.51	6
Hatchery	59(47.2)	50(40.0)	16(12.8)	1.34	0.70	8
Packing and replacement of litters	28(22.4)	59(47.2)	38(30.4)	0.92	0.73	11
Feed production	90(72.0)	34(27.2)	1(0.8)	1.71	0.47	5
Transportation of poultry products	38(30.4)	47(37.6)	40(32.0)	0.98	0.79	10
Marketing of poultry	51(40.8)	57(45.6)	17(13.6)	1.27	0.69	9
Keeping of records	57(45.6)	60(48.0)	8(6.4)	1.39	0.61	7
Culling of birds	110(88.0)	13(10.4)	2(1.6)	1.86	0.39	3

Overall level of involvement: High 80(64.0), Low 45(36.0)
Source: Field survey, 2015
Figures in parentheses are percentages, SD= Standard deviation

Table 3. Types of bird species reared (n=125)

Types of poultry reared	Always	Occasionally	Not at all	Mean	SD	Rank
Local birds	1(0.8)	21(16.8)	103(82.4)	1.18	0.41	6
Broilers	108(86.4)	16(12.8)	1(0.8)	2.87	0.34	1
Laying hens	100(80.0)	3(2.4)	22(17.6)	2.62	0.77	2
Cockerel	78(62.4)	23(18.4)	24(19.2)	2.43	0.80	3
Turkey	31(29.6)	59(47.2)	29(23.1)	1.97	0.73	4
Geese	2(1.6)	6(4.8)	117(93.6)	1.08	0.33	7
Quail	5(4.0)	14(11.2)	106(84.8)	1.45	2.89	5

Source: Field survey, 2015
Figures in parenthesis are percentages
SD = Standard Deviation

Table 4. Sources of capital for production (n= 125)

Sources of capital	Always	Occasionally	Not at all	Mean	SD
Personal savings	112(89.6)	4(3.2)	9(7.3)	1.82	0.54
Commercial bank	-	3(2.4)	122(97.6)	0.24	0.15
Friends and family	67(53.6)	57(45.6)	1(0.8)	1.53	0.52
Cooperative society	11(8.8)	24(19.2)	90(72.4)	0.37	0.64

Source: Field survey 2015
Figures in parenthesis are percentages, SD= Standard deviation

Table 5. Constraints facing youth involvement in poultry production (n= 125)

Constraints	Very serious	Serious	Not serious	Mean	SD	Rank
Insufficient capital	49(39.2)	63(50.4)	13(10.4)	1.40	0.67	2
Poor and unstable prices	92(73.6)	31(24.8)	2(1.6)	1.23	0.46	5
High cost of transportation	40(32.0)	69(55.2)	16(12.8)	1.42	0.71	1
High cost of feeding cost	44(35.2)	65(52.0)	16(12.8)	1.39	0.71	3
Insecurity/theft	18(14.4)	73(58.4)	34(27.2)	1.31	0.87	4
High incidence of disease	87(69.6)	17(13.6)	21(16.8)	0.97	0.55	8
Poor government policy on poultry	71(56.8)	26(20.8)	28(22.4)	0.98	0.66	7
Lack of access to information	71(56.8)	39(31.2)	15(12.0)	1.19	0.63	6

Source: Field survey, 2015

Table 6. Test of relationship between socio-economic characteristics and youth involvement in poultry production

Variables	χ^2 Value	df	p-value	Decision
Religion	0.22	1	0.64	Not significant
Marital status	4.54	2	0.10	Not significant
Educational background	1.16	3	0.76	Not significant
Years of farming experience	8.12	3	0.44	Significant

4. CONCLUSION AND RECOMMENDATION

The study concludes that rural youths were involved in poultry production with broiler being the major birds reared. Their involvement was constrained with many factors such high cost of transportation and shortage of capital which will lower the production level of poultry for human consumption. Based on the findings it is recommended that rural youth should be encouraged the more through creation of enabling conditions. This will go a long way in improving the socio-economic status of the youth as well as enhancing animal protein sufficiency.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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