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SHORT COMMUNICATION

KNOWLEDGE, ATTITUDES AND CONSTRAINTS FACED BY POULTRY WORKERS IN KWARA STATE, NIGERIA.

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ABSTRACT

Management competencies of poultry workers have been identified to be crucial to successful poultry production, and many works have been carried out to determine the competencies of the poultry workers in poultry management. However, little attention has been paid to the knowledge, attitudes and constraints faced by these workers in poultry management, though, these are also crucial for a successful poultry enterprise. To bridge this gap, this research adopted a multi-stage sampling method to select its respondents; with the first stage involving the selection of 2 Local Government Areas from each of the four Agricultural Development Programme zones of Kwara State, Nigeria followed by a selection of 3 poultry farms from each of the selected Local Government Areas. In the last stage, a proportionate sampling of 70% of the sample population was used to select a total number of 156 poultry workers from all farms selected. Data collected were analyzed using frequency counts, percentages, mean statistics and Pearson Product Moment Correlation. Findings revealed that 70.5% of the respondents knew nothing about the poultry work before being employed, and their highest interval of training was monthly (49.4). They have a positive attitude towards the need for better motivation and treatment of the workers (4.69 and 4.72 respectively), while their major constraints to effective production were Insufficient training (2.90), Poor motivation (2.72), and little income received (2.57). Fortnight training and additional income, and other motivational benefits for the workers are recommended.

Keywords: Poultry enterprises, Management skills, Livestock, Protein

INTRODUCTION

The Agricultural sector in Nigeria, being the next most important economic activity after oil, is the largest employer of the labour force, employing about 70% of the country's workforce and contributing about 25% to the Gross Domestic Product (Chastney, 2020). Nigeria's livestock population consists of 3.7 million pigs, 27 million sheep, 16.3 million cattle, 40.8 million goats and 151 million poultry (Nasiru *et al.* 2012). Going by this figure, however, it is well-established that poultry alone constitutes more than 60% of the total livestock population in Nigeria. This indicates the dominance of the poultry sub-sector in the livestock industry (Adeyonu *et al.* 2016).

Commercial and rural family poultry are thought to attract private investors, although the sector is the most fragile of the livestock component which has a high risk (Hafez *et al*. 2020). Studies have shown that most poultry farmers find it difficult to maximize profit because of the risks and challenges associated with poultry management (Egbe 2015). In this era of climate change where heat stress poses a severe challenge to the poultry farmers (Liverpool-Tasie *et al*. 2019), carelessness on the part of the workers in the poultry farms will plunge the owners of the farms into more losses.

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Nigeria with a population of over 200 million people and an estimated national population growth rate of 2.58% per annum (Worldometer 2021), and also with an average economic growth rate of 2.59% per annum (Trading economics 2021), meeting the protein requirements of this increasing population is a necessity. In addition, the majority of the Nigerian staple foods are plant-based, and it is characterized by low-quality protein, and a lack of lysine amino acid (de Vries-Ten Have *et al*. 2020). Adding foods from animal sources has the capability of bridging the protein deficiency owing to the dominance of plant-based foods in the diets of Nigerians. In achieving this, the poultry sector as an industry stands to be an easier means by which the prevailing protein deficiency gap can be bridged (Apantaku 2006; Anosike *et al*. 2018).

Nevertheless, Kerlinger (1973**)** has defined attitude to be the degree of negative or positive feelings that has an association with many psychological objects. In its definition, Fishbein and Ajzen (1975) see attitude as an informed predisposition that aids responses, whether unfavourable or favourable way, towards a situation, an idea, object or people. Upon this, Paul *et al.* (2011) remarked that the success or failure of any developmental programme, activity or idea, to a large extent, depends upon the attitude of its clientele who are to implement and bring out the best of the program.

Experiences drawn from different studies have demonstrated that the people having required knowledge and a favourable attitude towards a program reflect a cumulative positive effect in the form of boon reactions (van Giesen *et al*. 2015). Since management problem and eventual poultry farm collapse has been described as one of the major problems associated with poultry production in Nigeria (Hafez *et al*. 2010), there should be proper care and attention to the poultry workers' attitudes, constraints and knowledge as these would reveal their inner disposition towards the work, having been responsible for the majority of the activities on the poultry farm. Against this background, this study answered the following questions. What is the knowledge level of the poultry workers? What are the sources of information of poultry workers on poultry production? What are the attitudes of the poultry workers towards the work? What are the constraints militating against their effective performance? What is the relationship between the selected socioeconomic relationships of the respondents and the constraints militating against their effective production?

MATERIALS AND METHODS

The project was carried out in Kwara State, Nigeria. Kwara State is located between 8.9669° N and 4.3874° E. It is located in the North Central Geopolitical Zone of Nigeria, and it has a population of about 3.1 million people. The sample population involved all the poultry workers in the State. The research adopted the multi-stage sampling technique, with the first stage involving a purposive selection of two local governments (with the highest poultry activities) from each of the four Agricultural Development Programmes (ADP) zones in the study area. The second stage involved a purposive selection of three poultry farms from each of the selected local governments, while the last stage involved the selection of poultry workers using a proportionate sampling of 70% of the sample population. 156 respondents were selected, and the Instrument validation was done with a reliability coefficient of 0.831 obtained using a test-retest method implying a reliable instrument. Descriptive statistics were used to analyze the respondents' knowledge of poultry farming. Respondents' socioeconomic characteristics were measured with the use of descriptive statistics. In determining the attitudes of the respondents towards Poultry work, about 10 attitudinal statements that followed Lin *et al*. (2017) and reports from a reconnaissance survey were generated which were rated on a 5-point Likert-type scale of strongly agreed = 5, agreed = 4, undecided = 3, disagreed = 2, and strongly disagreed = 1. The mean scores were determined, and the benchmark of 3 was calculated. Mean below the benchmark were considered low attitude while those above were considered positive attitude. For the constraints militating against their effective performance, a list of factors

affecting their performance according to Kshash and Oda (2019), and others from a reconnaissance survey were generated on a 3-point scale of not serious = 1, serious = 2, very serious =3 respondents specified their preference, the mean of each factor was determined and the one with the highest frequency was identified. The weighted values were added (i.e. 3+2+1= 6/3=2). Any mean score of less than 2 was regarded as a minor constraint, while the mean score of greater than 2 was regarded as a major constraint respectively. Pearson Product Moment Correlation (PPMC) was used to determine the relationships between respondents' socioeconomic characteristics towards effective poultry management.

RESULTS AND DISCUSSION

Respondents' Socioeconomic Characteristics

From Table 1, the mean age of the poultry workers was 25.54, with the majority of them (73.6%) falling between the age group of 21-30. This shows that many of the workers were youths, and were in their active stage; though they were a bit lower than the average age of farmers in Nigeria which was put at 33 by IFAD as identified by Arslan (2019). This makes them workers that can bring their best when properly guided.

Their highest level of education was secondary level (51.3%). Their choice of being poultry workers might be due to their low level of education. However, education has been identified to positively affect the output of agricultural production as it enhances better management of larger farm sizes and the application of different farming (Ninh 2021). Even with secondary education being the highest education level of the majority of them, the chance of being able to be tutored is still very apparent.

The mean work experience of the respondents is 3.37 years with the majority of them falling between 1-3years. Farming experience has been identified for its usefulness in the early stages of innovation adoption, especially when the innovations are being tested for their expected benefits (Ainembabazi & Mugisha, 2014). With this mean farming experience, however, adopting new effective management

Table 1: Socioeconomic Characteristics of Respondents

Variables	Frequency	Percentage	Mean
Age (years)			
10 – 20	22	14.1	
21 – 30	115	73.6	
31 – 40	17	10.8	25.54
41 and above	2	1.3	
Total	156	100.0	
Educational Level			
No formal education	7	4.5	
Primary education	31	19.9	
Secondary education	80	51.3	
Tertiary education	36	23.1	
Vocational education	2	1.3	
Total	156	100.0	
Work Experience (years)			
1-3	110	70.5	
4-6	38	24.4	
7-9	4	2.5	3.37
10 and above	4	2.6	
Total	156	100.0	
		1	

Source; Authors' field survey

Table 2: Knowledge and Information Sources Among Respondents

	Frequency	Percentage
Knowledge of poultry farming before employment?		
No	110	70.5
Yes	46	29.5
Total	156	100.0
Training after employment		
No	3	1.9
Yes	153	98.1
Total	156	100.0
Improvement training of worker		
No	3	1.9
Yes	153	98.1
Total	156	100.0
Interval of Training of Poultry workers		
Daily	24	15.4
Weekly	42	26.9
Monthly	77	49.4
Yearly	2	1.3
When due	11	7.1
Total	156	100
Sources of Information of respondents		
Farm training	110	70.5
Parents	17	10.9
Friends and neighbours	16	10.3
Self training	0	0
Workshop and seminar	13	8.3
Total	156	100

Source; Authors' field survey

practices and being consistent with the practices on which their experiences have been built might be with little stress.

Knowledge Level of Poultry Workers

From Table 2, the majority of the respondents (70.5%) did not know about poultry work management before being employed in the poultry farm activities. This may imply that these poultry workers working at a poultry farm may not be out of interest, but a necessity. The majority of people, particularly young school leavers or some married women engage in the work for economic reasons. However, the few of them who have known about poultry management before being employed might have worked in a smaller poultry farm before or had the traditional knowledge of poultry management. Brzozowski (2009) has identified that breed selection, brooding and care of chick, chicken health, nutrition, general poultry management and facilities among others are required knowledge for successful poultry management, unfortunately, many of these types of knowledge require training and can hardly be known without prior experience. Furthermore, about 98.1% of the respondents reported that they were exposed to training after having employment, which is a required on-the-job training (OJT). OJT is the primary method that is used for imparting necessary employee skills to ensure effective service discharge and enhance the expected productivity (Barron *et al*. 1997). Generally, OJT has been identified to have a general reputation, and it is most effective for enhancing the capacity of newly employed workers. Nevertheless, the majority of the workers also reported that the poultry farms

organize improvement training to ensure up-to-date skills. This reveals that the poultry workers were being exposed to the training required for good performance on the poultry farms, and as such effective management practices are expected. The majority of the respondents (49.4%) were trained monthly by their farms, while 26.9% of the respondents were trained weekly, and 15.4% undergone daily training. According to Singh *et al*. (2013), monthly training has been identified as the adopted interval of training poultry producers of Barabanki and Raebareli districts in Uttar Pradesh, India, while Ram *et al*. (2017) stressed that training has a significant contribution to skills and the ability of poultry producer to enhance a successful production. Further, the table shows the sources of information of the respondents about poultry management. It reveals that the majority of the respondents (70.5%) receive their knowledge of poultry management through training on the farms where they were employed. This is a confirmation of the earlier response of the respondents that the majority (98.1%) receive training of poultry management after employment. None of the respondents undertook self-training, which implies that the majority of the respondents were not hobbyist poultry workers. This might also imply that the workers were involved in poultry work to meet their financial needs, as self-development, which is a manifest of passion, is lacking among the respondents. Van Woerkom and Meyers(2018 identified that the personal growth of the individual workers in a farm or establishment is central to the need of individual's productivity, and it's also a key requirement for the success of an organization. However, 17% of the respondent received their knowledge of poultry work from their parents, 16% from their friends and neighbours, and 13% of the respondents received their knowledge through workshops and seminars. These findings are however contrary to that of Jiriko (2018), where the majority of the poultry farmers receive poultry information through friends and neighbours.

The Attitude of poultry workers toward the poultry work

Table 3 shows the attitudes of the respondents towards the poultry work. However, only four out of the fifteen statements received negative attitudes showing that they believe that poultry work neither requires prior poultry experience (2.77), nor a higher educational certificate (1.81). They also believe that neither does the work belittle their personalities (2.69) nor are they doing the work out of circumstance (2.33). This shows that the majority of them are confident in the job, and this is a factor toward effective service discharge. However, they believe that the work exposes them to a lot of risks (3.97), which confirms the work of Paul *et al* (2011) that identified poultry farming as a highly sensitive industry to diseases. They are also positive about the fact that, as workers, they need better motivation (4.69), and treatment (4.72). This is a good determinant of their zeal to work because, if they are not well motivated, they may not bring out the best in them, and this might be among other reasons for poor management in Poultry farms by the workers. Lastly, they believed that Poultry farming ensures professionalism, which means, it is a venture that can stand as a reputable means of income. This also corroborates with the findings of Paul et *al (*2011).

Constraint to poultry workers' performance

Table 4 shows the perceived constraints that contribute to poultry workers' non-effective performance. The severest of their constraints was lack of adequate training (2.90), and it is ranked first. This is evident in their intervals of training which they claimed were monthly. This is followed by the poor motivation of workers (2.72), and little income received as salaries and allowances (2.57), which were assumed to be major causes of poultry collapse as identified by Kshash and Oda (2019). A wide communication gap (2.38) was ranked fourth, while not severe constraints were low-level of education (1.39), lack of extension support (1.48) and old and outdated equipment used (1.67).

Table 3: Attitude of poultry workers toward the poultry work

Attitudinal Statement	Frequency (Percentages)					Mean (SD)	Decision
	SA	A	U	D	SD		
Poultry work requires prior poultry knowledge	3 (19.9)	61 (39.1)	4 (2.6)	50 (32.1)	10 (6.4)	3.34 (1.29)	Positive
Poultry work requires prior poultry experience	16 (10.3)	43 (27.6)	9 (5.8)	65 (41.7)	23 (14.7)	**2.77** (1.28)	Negative
Higher educational certificate is necessary in poultry work	0 (0.0)	11 (7.1)	24(15.4)	46 (29.5)	75 (48.1)	**1.81** (0.94)	Negative
Regular training is necessary in poultry work	80 (51.3)	74 (48.7)	0 (0.0)	0 (0.0)	0 (0.0)	**4.51** (0.50)	Positive
Poultry work ensures professionalism	12 (7.7)	141 (90.4)	0 (0.0)	3 (1.9)	0 (0.0)	**4.04** (0.39)	Positive
Poultry workers need better motivation	108 (69.2)	48 (30.8)	0 (0.0)	0 (0.0)	0 (0.0)	**4.69** (0.46)	Positive
Poultry workers needs better treatment	112 (71.8)	44 (28.2)	0 (0.0)	0 (0.0)	0 (0.0)	**4.72** (4.51)	Positive
Poultry workers should form an association	14 (9.0)	98 (62.8)	35(22.4)	6 (3.8)	3 (1.9)	**3.73** (0.76)	Positive
I am thinking of establishing a poultry farm	62 (39.7)	91 (58.3)	1 (0.6)	0 (0.0)	2 (1.3)	**4.35** (0.63)	Positive
I am happy as a poultry worker	35 (22.4)	110 (70.5)	5 (3.2)	6 (3.8)	0 (0.0)	**4.12** (0.63)	Positive
I communicate freely with the manager/supervisor	62 (39.7)	94 (60.3)	0 (0.0)	0 (0.0)	0 (0.0)	**4.40** (0.49)	Positive
Poultry work need better source of information e.g ICT	35 (22.4)	71 (45.5)	50 (32.1)	0 (0.0)	0 (0.0)	**3.90** (0.74)	Positive
Poultry work exposes one to a lot of risk	43 (27.6)	87 (55.8)	4 (2.6)	22 (14.1)	0 (0.0)	**3.97** (0.93)	Positive
Poultry work belittles my personality	11 (7.1)	31 (19.9)	17(10.9)	92 (59.0)	5 (3.2)	**2.69** (1.05)	Negative
I am doing the work out of circumstance	12 (7.7)	12 (7.7)	15 (9.6)	94 (60.3)	23 (14.7)	**2.33** (1.07)	Negative

SA= Strongly agree, Agree, U=undecided; D= disagree, Strongly disagree, Freq.= Frequency, SD = Standard deviation

Source: Authors Field Survey

Results presented in table 5 showed that age at $p \leq 0.05$ was positively related to the constraints faced by the poultry workers. This implies that as the age of respondents increase, the more the constraints that will affect the poultry workers' effectiveness in delivering their duties. This is noted by Iheke (2010) who revealed that the risk-bearing abilities and innovativeness of a farmer, his mental capacity to cope with the daily challenges and demands of farm production activities and his ability to do manual work decrease with advancing age.

Also, the level of education at $p \leq 0.05$ has an inverse relationship with constraints to the poultry workers' performance. This implies that as the level of education of respondents increases, the less the constraints that will be faced by the poultry workers' effectiveness in delivering their duties. Education has been described as being pivotal to unlocking the entrepreneurial abilities of farmers and enhancing their ability to understand and

evaluate new production techniques (Iheke 2010; Nwaru *et al.* 2011).

CONCLUSION

The poultry workers knew nothing about poultry work before being employed as workers, and the fact that they received training after their employment accounts for the only means of their knowledge. They were very positive about the need for better motivation and treatment respectively, and that the work exposed them to a lot of risks. But, they have a negative attitude toward the claim that the work belittles their personalities or they were doing the job out of circumstances. The severest of the constraints is a lack of adequate training, poor motivation of workers, little income received, and communication gap, and these are assumed to be the major causes of poultry collapse. Poultry workers who were of older ages were more constrained in discharging effective poultry management, while educated respondents were less constrained. Though the research was carried out in Kwara State, Nigeria, it can be generalized to the Nigerian situation as the state is located within the Central states with active poultry enterprises, and the novelty of this work is the fact that attention were not paid to poultry managers

Table 4: Constraint to poultry workers' performance

Perceived constraints	Very serious	Serious	Not serious	Mean (S.D)	Mean rating
Insufficient Training	141(90.4)	14(9.0)	1(0.6)	**2.90**(0.325)	1
Poor motivation	113(72.4)	42(26.9)	1(0.6)	**2.72**(0.466)	2
Little income received	104(66.7)	37(23.7)	15(9.6)	**2.57**(0.663)	3
Communication gap	76(48.7)	63(40.4)	17(10.9)	**2.38**(0.675)	4
Insufficient inputs	58(37.2)	90(57.7)	8(5.1)	**2.32**(0.568)	5
Inconsistent Farm Admin Policies	48(30.8)	105(67.3)	3(1.9)	**2.29**(0.495)	6
Poor farm organization	46(29.5)	98(62.8)	12(7.7)	**2.22**(0.571)	7
Old and outdated equipment.	16(10.3)	73(46.8)	67(42.9)	**1.67**(0.654)	8
Poor Extension serv.	24(15.4)	27(17.3)	105(67.3)	**1.48**(0.749)	9
Low-level education	17(10.9)	27(17.3)	112(71.8)	**1.39**(0.678)	10

Source: Authors Field Survey (2017)

Table 5: Pearson Product Moment Correlation results of the relationship between selected socioeconomic characteristics of respondents and constraints to the performance of poultry workers

Variables	Pearson (r-value)	Significance (p-value)	Decision
Age	0.169*	0.035	Significant
Sex	-0.019	0.811	Not significant
Marital status	0.039	0.625	Not significant
Religion	0.060	0.458	Not significant
Education	-0.232**	0.004	Significant
Household size	0.064	0.424	Not significant
Experience	0.051	0.526	Not significant
Number of birds raised	-0.144	0.073	Not significant
Monthly Income	0.143	0.074	Not significant
Membership	0.014	0.867	Not significant

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Authors' Field Survey

but poultry workers who are always not considered in poultry management research. The implication of these findings to the poultry managers are that more attention should be directed towards training the workers when necessary, and better treatment of these workers should not be overlooked.

AUTHOR CONTRIBUTION

SI and LLA designed the study. MOO and LCN designed the questionnaire and analyzed the data. SI, CUI and JNO interpreted the data

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