

**NSAP****47th Annual Conference (JOS 2022)****CONFERENCE PROCEEDINGS**THEME
SECURING ANIMAL AGRICULTURE AMIDST GLOBAL CHALLENGES**PERCEPTION OF FARMERS ON THE EFFECT OF COVID -19 ON POULTRY PRODUCTION IN KUMBOTSO LOCAL GOVERNMENT AREA, KANO STATE*****¹Akure, C. O., ²Vantsawa P.A., ¹Ayodele, J.T., ¹Omodona, S. and ¹Olafemi, S.O.**¹Federal College of Forestry and Mechanization, Afaka, Kaduna²Department of Biological Sciences, Nigerian Defence Academy, Kaduna

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ABSTRACT

The study was carried out to determine the perception of farmers on the effect of COVID-19 on poultry production in Kumbotso Local Government Area (LGA) of Kano state, Nigeria. It specifically described the socio economic characteristics of poultry farmers in the study area and determined the perception of the poultry farmers on the effect of COVID-19 on poultry production. A multistage sampling procedure was used to select 150 respondents for the study. Structured questionnaire was used to elicit information from the respondents. Data collected were analyzed using descriptive statistics and likert scale. The results showed that the majority of the respondents (88.0%) were youth. Women were found to be more (54.7%) than men. Most (55.3%) of the respondents had primary school education. Most of the respondents (56.0%) were married. Majority (49.3%) of the farmers had between 1 to 5 years of experience in poultry farming. In addition the perception statement of "All Poultry farmers were negatively affected by COVID -19" was ranked first with the highest mean score (4.95). "There were distressed sales of animals" was ranked 9th with the least means scores of 4.30. The study concluded that majority of the farmers were aware that COVID-19 has negative effect on poultry production. It was recommended that more awareness on the effect of COVID -19 on poultry production should be created through various means of communication and the government should assist farmers with financial facilities and tax exemptions.

Key words: Perception, Effect, Poultry production, farmers and Covid-19.**INTRODUCTION**

The contribution of the poultry industry to livestock and rural agriculture forms a basis and integral drive towards attaining food security, enhancing poverty alleviation and securing national economic stability (FAO, 2020b). The survival of this industry is however, being threatened by the novel COVID-19 pandemic which is ravaging the world and its economy. Corona virus disease 2019 (covid-19) is an infectious disease of humans caused by a newly discovered corona virus: severe acute respiratory syndrome corona virus 2 (SARS-CoV2). This novel disease is easily transmissible, identified within December 2019 and declared pandemic by WHO on 11/march/ 2020 (WHO, 2020). The first infections were linked to the Huanan Seafood market in Wuhan, China (Li *et al.*, 2020). In the recent development, Zhou *et al.* (2020) used sequencing technology to shows that SARS-CoV2 and bat corona virus posses a similarity of gene sequence up to 96.2%, suggesting bats as the possible source of the SARS-CoV2. However, the COVID-19 pandemic that has spread rapidly and extensively around the world since late 2019 has had profound implications on poultry production, food security and nutrition. Already, before the outbreak of the pandemic, according to the latest state of food security and nutrition report by FAO (2020), some two billion people face food insecurity at the moderate or severe level. Since 2014, this number has been climbing, rising by sixty million over five years. This situation is frightening and needs urgent and workable actions. The purpose of this study therefore, is to determine the perception of farmers on the effect of COVID -19 on poultry production in Kumbotso LGA of Kano-State, Nigeria.

MATERIALS AND METHODS

The study was carried out in Kano State. Kano state is located in North Western Nigeria. It occupies an area approximately 20,131km². It is located on latitude 11° 30'N and longitude 8°30'E with an average altitude of 484m above sea level (KNARDA, 2011). The annual temperature ranges between 19.06°C to 33.19°C. A multi multistage sampling technique was used to select the respondents for the study. At the first stage a purposive selection of Kumotso LGA was done. At the second stage ten wards with more poultry farmers were selected. At the final stage random sampling was used to select fifteen poultry farmers from each ward. This gave a total of 150 respondents. Primary data was collected through the use of well structured questionnaires. Descriptive



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statistics such as frequency distribution, mean score, percentages and Likert scale were employed to achieve the objective of the study. The perception of farmers on the effect of COVID -19 on poultry production were measured by a given set of perception statements administered to respondents. Their responses were recorded using the five point Likert Scale of strongly agree (SA), agree (A), undecided (U), disagree (D) and strongly disagree (SD). These were scored 5, 4, 3, 2, and 1, respectively.

RESULTS AND DISCUSSION

Socio –economic characteristics considered in this study were presented in Table 1. Majority (51.3%) of the respondents was aged between 31-40 years, 8.7% of them were aged between 21-30 years, this implies that most of the farmers were youth which means the respondents had strength to carry out the poultry farming. furthermore, most of the respondents (54.7%) were female while (45.3%) were male. This shows that more women participated in poultry farming. This finding is in agreement with that of Akure *et al.* (2021) who in a similar study observed that more female (67.5%) than male were involved in poultry farming. This result however, contradicts the research of Adereti *et al.* (2021) which reported that there was more males (65.8%) practicing poultry farming than females (34.2%). Furthermore most of the sampled respondents were educated with 55.3% having attained primary education, 18.7% having secondary education and 8% having attained tertiary education. On marital status, the distribution shows that 56.00% of the respondents were married, 17.3% were single, 14.7 % divorced and 12.00% widowed. This implies that more than half of the farmers were married. Majority (53.3%) of the respondents had household size of about 6--10 persons per family, however 24.7% had between 1-5 household members, about 22% had between 11-15 and 3% persons per family. The year of experience of the respondents in poultry farming varies; the largest percentage (49.3%) of the respondents had been in poultry farming for about 1to 5 years. This implies that almost half of the farmers have been in the practice of poultry farming for a long period of about five years

Perception of farmers on the effect of COVID -19 on poultry production.

Table (2) shows the perception of the poultry farmers on the effect of COVID -19 on poultry production. The results were ranked using the mean score of each perception statement. The statement “All farmers were negatively affected by COVID -19” was ranked first with the highest mean score of 4.95. This implies COVID-19 had a damaging effect on all farmers. The statement “High cost of transportation due to movement restriction” was ranked second with the mean score of 4.90; this implies that farmers had difficulties in moving their animals, animal feeds, animal products and other related farm inputs from one point to another. The statement “The prices of animal feeds were higher during COVID-19” was ranked third with mean score of 4.84. Fourthly ranked is the statement “Health of poultry farmers were threatened by COVID-19” with the mean score of 4.71, this implies that farmers had issues with their health, probably because they work in close proximity to each other, making it difficult to maintain the appropriate social distancing recommended by COVID-19 guideline. Furthermore the statement “COVID-19 led to the death of many poultry birds was ranked fifth with mean score of 4.52. Also, the statement “COVID-19 led to the closure of many farms was ranked sixth with mean score of 4.45, this agrees with the findings of Hein (2020) who confirms that COVID-19 led to disease outbreaks among processing plant workers, leading to plant closures and affect up and down the food chain. The statement “COVID-19 is a serious pandemic” was ranked seventh with mean score of 4.40. The eighth ranked perception statement is “COVID-19 affected the productivity of poultry animals” with mean score of 4.34. “There were distressed sales of animals” had the least means scores of 4.30; this implies that farmers adopted negative coping mechanism by selling their birds at much reduced prices which would have long- term implications for their food security.



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Table 1: Socio economic characteristics of the respondents

Variables	Frequency	Percentage
Age		
10-20	12	8.0
21-30	43	28.7
31-40	77	51.3
41-50	18	12.0
Gender		
Male	68	45.3
Female	82	54.7
Level of education		
Primary Education	83	55.3
Secondary Education	28	18.7
Tertiary Education	12	8.0
Others	30	20.0
Marital status		
Single	26	17.3
Married	84	56.0
Divorced	22	14.7
Widow	18	12.0
Household size		
1-5	37	24.7
6-10	80	53.3
11-15	33	22.0
Years of experience		
1-5	74	49.3
6-10	46	30.7
11 and above	30	20.0

Field survey, 2021

Perception of Farmers on the effect of COVID -19 on Poultry Production.

Perception statements	SA	A	U	D	SD	MS	RANK
All Poultry Farmers were negatively affected by COVID -19	142	8	-	-		4.95	1 st
High cost of transportation due to movement restrictions	140	10				4.90	2 nd
The prices of animal feeds were higher during COVID 19	132	12	6	-		4.84	3 rd
Health of farmers were threatened							
COVID 19 led to the death of many poultry birds	96	40	22			4.71	4 th
COVID 19 led to the closure of many poultry farms	89	50	11	-		4.52	5 th
COVID 19 is a serious pandemic	89	40	21			4.45	6 th
COVID-19 affected the productivity of poultry animals	75	60	10	5		4.40	7 th
There were distressed sales of animals	64	73	13			4.34	8 th
	59	81	6	4			

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4.30

9th**Field survey, 2021****CONCLUSIONS AND RECOMMENDATION**

The study concluded that majority of the farmers were aware that COVID-19 has negative effect on poultry production. It was recommended that more awareness on the effect of COVID-19 on poultry production should be created through various means of communication. Also, the farmers should be encouraged to follow COVID -19 guidelines, farmers co-operatives should also be involved in helping farmers organize group sales and to get exemptions to movement restrictions to ensure the flow of food and feed materials and the government should assist farmers with financial facilities and tax exemptions.

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