

*Full Length Research Paper*

# Availability and use of poultry production data among farmers in Oyo State, Nigeria

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The study was conducted to determine the sources and utilization of poultry production information among poultry farmers in Oyo state. A multi-stage random sampling procedure was used to select 120 poultry farmers who were interviewed for the study. Findings revealed that majority of the poultry farmers were male within the age bracket 31 to 50 years and were literate. The farmers did not belong to any poultry association and 57% of them operated on a large scale poultry production. Sources of information on poultry keeping recommended practices identified and available to the farmers were veterinary officers, television, poultry association, agricultural extension officers, workshops/seminars, journals and friends/family. Majority became aware of recommended practices on poultry keeping through veterinary officers. Fifty percent always had access to poultry information. Radio was the top among the sources of awareness on poultry production practices. Radio was also ranked the first as preferred source of poultry information. However, family/friends were the most accessible source of information to poultry farmers. Also, 88.7% of radio users as information source, made use of information obtained. Inadequate capital was considered a severe problem to the poultry farmers while the level of use of information among poultry farmers was very high with 39.8%. There was a significant relationship between age, educational qualification, scale of operation and source of information.

**Key words:** Sources of information, utilization of information, poultry farmers.

## INTRODUCTION

Poultry is by far the largest group of livestock and estimated to be about 14000 million, consisting mainly of chickens, ducks and turkey in the world (FAO, 1999). Poultry in Nigeria has undergone tremendous changes over the past decades in genotypes, management and technological advancement. In the pre-independence era, poultry enterprise was mainly in the family backyard characterized by low productivity and primitive technology. This was gradually improved by colonial masters from the low output to a better performance through introduction of various poultry schemes. An example was the village poultry improvement schemes whereby imported cocks of improved breeds were mixed with the village hens for mating (while the native cocks were killed.) In the early post -independence, the western government changed from the traditional method to the present modern poultry keeping with the introduction of layers and broilers lines to meet the increasing demand for egg and meat production in the country. The success

recorded generated awareness and interest among farm settlers especially in the southwestern part of Nigeria, making government to set up poultry farms as models to stimulate the private sector in modern poultry farming. This served as a catalyst for private participation in commercial poultry production. Poultry industry in the oil boom period recorded an unprecedented growth, becoming big business. Farmers employed more capital than labour. Poultry products are highly nutritious and of enormous economic benefit to man both at homes and industries. Apart from meat, poultry egg serves a good source of animal protein, lipids and vitamins of high biological value to man. Alabi and Samuel (2002), asserted that poultry production should be of high priority rating because poultry meat has a better energy and protein conversion ratio than any other animal species and high net return on investment. The poultry industry specifically, has been described as the fastest means of bridging the protein gap prevailing in Nigeria (Apantaku et

al., 1998).

However, communication of information is the process by which people exchange ideas, feelings or impression so that each gains a common understanding of the meaning, intent and use of the message (Fenley et al., 1984). There are various sources by which information of newly improved technology could be delivered to the end users among which are interpersonal contact and mass media. Adams (1982) noted that the information channels used by farmers are mass media that include radio, television and newspaper, contact with extension agents or workers and with other farmers.

It is essential that farmers should have prompt access to information about the supply or availability of facilities or incentives for production in order to achieve the desired change in the industry. Okunmadewa (1999) opined that effective livestock extension programme will lead to rapid transformation of innovative techniques and help reduce hazards associated with local production management system. Adeokun and Agbelemoge (2002), reported that good communication does not only consist of giving only information but also helping farmers to improve their activities. The rationale for the production of poultry is predicated on the fact that it can be rapidly expanded to replace red meat in countries like Nigeria, with high growth rates, it improves human nutrition, generates regular income for women and other disadvantaged groups, supplies inputs (e.g manure) for crop production and is generally accepted by a majority of the population (Steinfeld et al., 2003). With the recent ban on importation of poultry and its products by Federal Government, there is the need to harness all the potentials of poultry industry in order to meet the anticipated growing demands for it. However, it is regrettable to note that this vital role of poultry production to both farmers and the nation cannot be achieved if there is no effective communication channel and unless adequate information which is central to all economic activities including farming is effectively disseminated to users. In spite of government efforts in the provision of subsidy on imported equipment and machinery, drugs and vaccines, ban on importation on frozen poultry meat and importation of equipment for parent stocks, establishment of research institutes e.t.c. to improve poultry production in Nigeria, the level of successes recorded cannot be compared to success and achievement obtained in crop production. This is because the agency responsible for information dissemination to farmers on livestock production are not knowledgeable in the area, the village extension agents under Agricultural Development Programme (ADP) are the sole agents responsible for information and education delivery to farmers both on crops and livestock. However, the village extension agents are known to be less knowledgeable in livestock production as their training is more biased in favour of crop production. More so that agricultural extension services at the Federal and State levels are

inadequate and often too thin on the ground for effective communication of research findings to users.

In view of these lapses, this study was carried out to examine the sources and utilization of information among poultry farmers in Oyo- State. Specifically, the study attempted to (i) find out the farmers sources of information; (ii) identify the preferred sources of information; (iii) ascertain the level of use of information and; (iv) determine the constraints being faced by the farmers.

## MATERIALS AND METHODS

The study was carried out in Oyo state, Nigeria. The state is located in the Southwestern part of Nigeria. It covers a total of 27249 km<sup>2</sup> of land mass with 33 Local Government Areas. The vegetation of the state ranges from rainforest to derived savanna with rainfall pattern ranging from 1300 to 1500 mm annual mean. A multi-stage random sampling technique was used to select farmers for the study. Four zones of the ADP comprising 9 cells were randomly selected. 5 cells were purposively chosen out the 9 cells due to the high concentration of poultry farmers within the areas. The areas covered include Akinyele, Lagelu, Egbeda, Ona-Ara, and Oluyole cells. Through the assistance of the of ADP officials, snowball technique was used in gathering the list of poultry farmers in the sampled cells and 180 poultry farmers' names and addresses were obtained. A total of 120 poultry farmers were randomly sampled for the study but questionnaires from 108 poultry farmers were analyzed for the study. Descriptive statistics was used to analyze the data while Chi-square and Pearson Product Moment Correlation were used to test the hypotheses.

## RESULTS AND DISCUSSION

The personal characteristics examined included age, level of education, religion, primary occupation, membership of poultry association, years of experience, scale of operation respondents' years of experience, and respondents' type of stock (Table 1). The results revealed that majority were within age range 31 to 50 years, 83.3% were male while all of them could read and write. This is an indication that all the farmers can benefit from the print media source of communication. The results further showed that the primary occupation of majority of farmers was poultry production while 24.1% had occupation such as trading, civil service and clergy as their primary occupation. This showed that poultry production can be relied upon as a major source of income for the family. However, 83.3% of the farmers did not belong to any poultry association indicating that the association had no benefits to the farmers hence, reason why they were reluctant to be members of poultry association. Fifty percent of them had between 1 and 5 years of experience as poultry farmers while 34% had while 34% had over 6 to 10 years of experience, an indication that they were experienced, which may be a reason while poultry farmers were reluctant to be members of poultry association. This is because their wealth of experience is much to rely upon for knowledge and act

**Table 1.** Personal characteristics of farmers.

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Sex</b>		
Male	90	83.3
Female	18	16.7
<b>Age (years)</b>		
20-30	10	9.3
31-40	48	44.4
41-50	30	27.8
>50	20	18.5
<b>Educational status</b>		
Adult Literacy	13	12.0
Primary School	07	6.5
Secondary School	48	44.4
Higher Education	40	37.3
<b>Religion</b>		
Christianity	68	63.0
Islam	40	37.0
<b>Primary occupation</b>		
Poultry Production	82	75.9
Crop Production	02	1.9
Trading	07	6.5
Civil Servant	08	7.4
Clergy	09	8.3
<b>Membership of poultry association</b>		
Yes	18	16.7
No	90	83.3
<b>Years of farming experience (years)</b>		
1-5	54	50.0
6-10	37	34.2
11-15	11	10.2
> 16	06	5.6
<b>Scale of operation</b>		
<500 birds	46	42.6
500-1000 birds	38	35.2
1000-5000 birds	24	22.2
<b>Type of stock</b>		
Breeders	04	3.7
Layers	87	80.6
Cockerels	14	13.0
Pullets	03	2.8

upon for poultry practices than joining poultry association for possible assistance. As regards farmers' year of experience in poultry production, a larger proportion (50%) of them had 1 to 5 years of experience, 34% had 6 to 10 years while 10% had 11 to 15 years of experience and 57% of the poultry farmers had large scale of production while the remaining 42% had low scale production. Eighty one percent of the poultry farmers stocked layer birds, an indication that they reared poultry birds for commercial egg production (Table 1). The sources of information on poultry keeping recommended practices available to farmers were veterinary officer, television, poultry association, agricultural extension agents, workshop/seminar, journals/magazines and family (Table 2) . A higher percentage (32.4%) of the farmers became aware of the recommended practices through the veterinary officers. On accessibility of farmers to information, 50.9% always had access to poultry information while 22.2 and 26.9% had access to information rarely and moderately respectively. This shows that a larger percentage of the poultry farmers had access to poultry information and hence they were expected to have better production practices. 96.3% said their source of awareness of poultry production practices is radio, 94.4% chose family and friends, 84.3% chose television, 72.0% chose veterinary officers, 69.4% chose feed millers while 59.3% chose clergy. Only a few got aware of information through extension agents (Table 2a-c). This is an indication that extension agents in the area had not been disseminating information on poultry production. On preferred source of information, radio ranked the first, followed by family/ friends, television, veterinary officers and poultry medicine sellers , extension agents and feed millers, poultry associations and workshops/ seminars were ranked least in that order. Table 2a-c also, showed that family/friends is the most accessible source of information to poultry farmers followed by radio, television, feed millers, poultry drug dealers, poultry association, veterinary officers, workshops while extension agents were the least accessible source of information to poultry farmers. However, Table 2a-c further shows that 57.4% of the poultry farmers always use radio as source of information while 67.6% seldom use family and friends as source of information. Moreover, majority of the farmers who had extension agents and workshops as their sources of information did not make use of information obtained (Table 3). Table 4 revealed that inadequate capital was a severe problem to poultry farmers while other problems such as the problem of getting quality feeds, diseases and pests, pilfering and theft were partially severe problem. However, insufficient water, inadequate labour supply and inadequate land were not severe at all. Table 5 shows that level of use of information among poultry farmers was very high with 39.8% while 30.6% said it was very low. The Table 6 shows that the level of availability of information among farmers is very high. Chi Square analysis revealed that

**Table 2a.** Poultry farmers' information related variables.

Variable	Frequency	Percentage
<b>A. Sources of information</b>		
Veterinary officer	33	30.6
Television	14	12.9
Poultry association	20	18.5
Agricultural Extension officer	15	13.9
Workshop/ Seminar	11	10.2
Journal/ Magazines	03	2.8
Family/ Friends	07	6.5
Other farmers	05	4.6
<b>B. Accessibly to Information</b>		
Always	55	50.9
Rarely	24	22.2
Moderately	29	26.9
<b>C. Poultry farmers' preference for information sources.</b>		
<b>Sources of information/ Frequency of use of sources</b>	<b>Frequency (%)</b>	<b>Rank</b>
Radio	*55 (50.9)	1st
Television	*35(32.4)	3rd
Extension agent	*23(21.3)	6th
Family/ friends	*36 (33.)	2nd
Workshops	*16(14.8)	9th
Veterinary officers	*24(22.2)	4th
Poultry association	*19( 17.6)	8th
Feed millers	*23(21.3)	6th
Poultry medicine sellers	*24(22.2)	4th

\* Indicate multiple responses.

**Table 2b.** Sources of awareness of poultry information.

Awareness sources	Yes	No	Row total (%)
Radio	104(96.3)	04(3.7)	108(100)
Television	91(84.30)	17(15.7)	108(100)
Extension agent	29(26.9)	79(73.1)	108(100)
Family/ friends	102(94.4)	06(5.6)	108(100)
Workshops	35(32.4)	73(67.6)	108(100)
Veterinary officers	78(72)	30(27.8)	108(100)
Poultry association	48(44.4)	60(55.5)	108(100)
Feed millers	75(69.4)	33(30.6)	108(100)
clergy	64(59.3)	44(40.7)	108(100)

**Table 2c.** Farmers' use of information sources.

Frequency of use of sources	Always use	Occasionally use	Never used	Row total (%)
Radio	62 (57.4)	39 (36.1)	07(6.5)	108(100)
Television	46 (42.6)	38 (35.2)	24(22.2)	108(100)
Extension agent	15 (13.9)	21 (19.4)	72(66.7)	108(100)
Family and friends	73 (67.6)	24 (22.2)	11(10.2)	108(100)

**Table 2c.** Contd.

Workshops	24 (22.2)	17 (15.7)	67(62.0)	108(100)
Veterinary officers	33 (30.6)	51 (47.2)	24(22.2)	108(100)
Poultry association	23 (21.3)	28 (25.9)	57(52.8)	108(100)
Feed millers	34 (31.5)	38(35.2)	36(33.3)	108(100)
clergy	27 (25.0)	33(30.9)	48(44.3)	108(100)

**Table 3.** Farmers' preference for information source.

<b>Use of information sources</b>	<b>Yes</b>	<b>No</b>
Radio	96(88.9)	12(11.1)
Television	86(79.6)	22(20.4)
Extension agents	17(15.7)	91(84.3)
Family/Friends	90(83.3)	18(16.7)
Workshops	25(23.1)	83(76.9)
Vet. officers	68(63.0)	40(37.0)
Poultry association	49(45.4)	59(54.6)
Feed millers	65(60.2)	43(39.8)
Poultry medicine sellers	59(54.6)	49(45.4)

**Table 4.** Constraints faced in poultry production by poultry farmers.

<b>Constraints</b>	<b>Not severe</b>	<b>Partially severe</b>	<b>Severe</b>
Lack of capital	11(10.2)	06(5.5)	91(84.3)
Lack of water	68(63.0)	33(30.6)	07(6.5)
Low quality and high cost of feeds	25(23.1)	51(47.2)	32(29)
Marketing problem	35(32.4)	42(38.9)	31(29.6)
Disease and pests	29(26.9)	52(48.1)	27(25.0)
Labour supply	50(46.3)	39(36.1)	19(17.6)
Inadequate timely information	38(35.2)	35(32.4)	35(32.4)
Inadequate land	41(38.0)	37(34.3)	30(27.7)
High cost of day old chicks	38(35.2)	33(30.6)	37(34.3)
Pilfering and theft	25(23.1)	50(46.3)	33(30.6)

**Table 5.** Poultry farmers' level of use of information.

<b>Category of information use</b>	<b>Frequency</b>	<b>Percentage</b>
Low (1 - 3)	33	30.6
Medium (4 - 6)	32	29.6
High (7 - 9)	42	39.8
Total	108	100.0

**Table 6.** Poultry farmers' categorization of availability of information.

<b>Availability of information</b>	<b>Frequency</b>	<b>Percentage</b>
Low (1-3)	15	13.9
Medium (4 - 6)	42	38.9
High (7 - 9)	51	47.2
Total	108	100.0

there was a significant relationship between age (chi-square value 14.38;  $P > 0.05$  c.c 0.344), education (chi-square value 16.30;  $P > 0.05$  c.c 0.367), scale of operation (chi-square value 11.87;  $P > 0.05$  c.c 0.315) and source of information. There was also a significant relationship between education (chi-square value 21.70;  $P > 0.05$  c.c 0.414), scale of operation (chi-square value 12.30;  $P > 0.05$  c.c 0.320) and information source available to farmers. This implies that education and scale of operation can determine the choice of source of information.

### CONCLUSION AND RECOMMENDATIONS

The study concludes that majority of the farmers were aware and adhered to poultry production recommended practices and that their sources of awareness of poultry production practices were radio, friends/family, television, veterinary officers, feed millers and poultry drug dealers. The study also concludes that the level of use of information among poultry farmers was very high. However, majority of the poultry farmers stated that they were not aware of poultry extension agents.

Based on the findings of the study, it is recommended that government should design feed production formula instead of poultry farmers relying on private millers composition formula. Livestock extension agents should be encouraged to intensify their poultry production programme towards the poultry farmers who are not aware of their existence. Also, poultry farmers should be encouraged to form or join association as this will bring unity among them and will enable them benefit in many ways from the association.

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