



## Role of Information Sources for Community Development among Poultry Farmers in Ikpoba-Okha Local Government Area of Edo State, Nigeria

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**Abstract.** This study assessed the role of information sources utilization for community development among poultry farmers in Ikpoba-Okha Local Government Area of Edo State. The specific objectives were to determine the socio-economic characteristics of the farmers in the study area, examine the level of availability of proven poultry technologies to the farmers, identify information sources through which farmers receive technologies. A multi-stage sampling techniques was used to solicit respondents from 120 poultry farmers with questionnaire. Data were analysed using frequency counts, percentages and means while hypothesis were test using PPMC and Chi-Square. Result showed that majority (57.5%) were males, most (81.7%) were married and a higher proportion (45.0%) stocked broilers. The most available technology to respondents was breed of a day-old chicks ( $\bar{X}$ =3.82). The highest perceived role of information sources was ( $\bar{X}$ =3.55). The most serious constraint faced by respondents was that the extension agent do not teach them at their levels. Household size ( $r=0.351$ ) had significant association with their roles. It was thus recommended that farmers should be encouraged to form cooperative societies for easy access to credit facility and inputs so as to enhance their productivity level.

**Keywords:** Information Source, Community Development, Poultry Farmers, Ikpoba-Okha

### 1. Introduction

Information has been identified as an important and crucial variable in the development process. This makes it imperative to provide adequate, relevant and up to date information in order to transform agricultural production in many developing countries.

Adebayo (2008) stated that agricultural information is no doubt central in enhancing agricultural productivity and facilitating poverty alleviation among farmers.

Nigeria's poultry sub-sector is emerging to become the fastest and most commercialized aspect of the livestock industry in the country (Adene and Ogundade, 2006. According to Kughur, Ortinidi and Katikpo (2015) revealed lack of education on the part of the farmers hinders his or her ability to access information. This is because the more a farmer is educated, the more likely he is to read and consult print media and the internet to get the latest and adequate agricultural information. According to Morek and Keaikitse (2013), across most developing nations, the coverage of agricultural extension institutions has been grossly inadequate, thereby affecting farmers' ability to access agricultural innovations. Considering the prominence of the poultry sector, there is the need to ensure that information reaching farmers from the limited outlets available to them is in consonance with the needs of the farmers and can substantially contribute to enhancing their performance. This will promote the effective management of the enterprise.

The importance of the poultry industry cannot be over emphasized, because of the vital roles it plays in human nutrition and creation of employment opportunity it provides for the teeming population. The industry if desired attention is paid by government at all levels, poultry industry can successfully absorb a large number of unemployment youth across the country currently searching for unavailable jobs. Through its chain of agro-allied activities; commercial feed mill, toll milling, poultry productions processing, poultry marketing, veterinary, pharmaceuticals, hatchery operation and breeder farming. In addition,

the industry if properly harnessed, can also serve as source of foreign earning, complementing the crude oil (our present main source of foreign earning) responsible for over 90% of our exports e.g. a product of the industry gives about 3.5g of the total 7.2g animals protein required for individual dietary need per day. Again, (broiler table meat chicken) is the toast of every fast food outlets across the country. This is because chicken meat is cholesterol free; compare to red meat beef, mutton, pork, veal, venison and others, which contains cholesterol [a chemical substance], responsible for the increasing rate of heart diseases amongst Nigerians in recent times. Among which to be mentioned poultry contribute to GDP and GNP of the country.

Furthermore, poultry industry at the moment is bedeviled by enormous problems. Among which are lack of government funding, lack of credit facility, high cost of feeding ingredients, diseases, increasing cost of medications, marketing and lacks of storage facility. Diseases are one of the major challenges to the industry, because of the economic importance of disease-causing organisms like bacteria, virus, fungal and protozoan, which poultry birds are susceptible to, bringing about devastating effects to both the flocks and the farmer. For instance, the outbreak of avian influenza otherwise known as bird flu, more than 50,000 wild birds died since October, 2021 mainly in Europe and America.

In Nigeria, the importance of poultry industry cannot be over emphasized based on the vital role it plays in human nutrition, source of employment, and income generation. Yet the poultry sub-sector of the economy in Nigeria remains chiefly primitive and responsible for less than 10% of employment, low contribution to GDP and GNP (Morris *et al*,2003). The Nigeria government in recognition of these facets i.e., problems in the industry and other sectors of agriculture comes up with the 7-point agenda for which food security was of paramount concern. It has been asserted that agricultural growth should occur through technology dissemination and adoption. It should be noted that information and communication are essential ingredients needed for effective transfer of technologies that are designed to boost agriculture (Baron 2008). This is the only avenue through which the poultry industry can be elevated from its present primitive stage. However, poultry farmers have been trying on their own to adopt proven agricultural technologies to improve their production.

Ajayi and Gunn (2009), observed that knowledge and information are essential for people to respond successfully to the opportunities and challenges of

social, economic and technological changes including those that help to improve agricultural productivity. These makes the basic role of Information sources on poultry production a matter of concern.

The general objective of the study was to assess perceived role of information sources among poultry farmers in Ikpoba Okha Local Government Area of Edo State. The specific objectives were to: examine the socio-economic characteristics of the farmers in the study area; examine the level of availability of proven poultry technologies to the respondents; identify information sources through which farmers receive technologies; ascertain respondents perceived role of different information sources; ascertain respondents perceived role of extension agents as information channel; and ascertain the farmers' perception of factors that constrain extension agents in communicating technologies to them. Null hypothesis formulated for the study is that, there is no significant relationship between poultry farmers' socioeconomic characteristics and their perceived roles of information sources.

## 2. Research Methodology

The study was carried out in Edo State. Edo state is one of the thirty-six states of Nigeria and it is located in the rain forest zone of south west region of the country. The state has a population of 3,21,8,322 people (N.P.C, 2006). The state is generally a low land which is a part of the coaster low lands of Nigeria with an annual precipitation of between 1500 mm - 3000 mm, and with about 200 rainfall day (Olari 1998).

A multi stage sampling techniques was used in this study. The first stage was the purposive selection of Ikpoba Okha LGA because of the concentrate of poultry farms in these LGA. The second stage was the selection of 5 communities from each LGA. This gave a total of 10 communities farm. The third stage was the random selection of 12 poultry farmers from each community. This gave a total of 120 respondents for the study. Poultry technology available to them. Poultry technologies include feeds, vaccine, drugs, advice, management processing, storage and marketing availability was measured in a 4-point rating scale of readily available. (can get it anytime) coded 4. Available (can get it between 1 week and 2 months) coded 3. Little available (can get it between 2 to 6 months) coded 2 and not available coded 1. A mean score of 2.5 and above was taken to mean that a particular technology was available.

Respondents were asked to indicate their sources of information on improved poultry technology from the following:

- Agricultural development programmes, extension agents, researchers,
- Ministry of agriculture, fellow farmers,
- Agric. Companies/representatives
- Cooperative Societies, friends and neighbours,

Respondents were asked to indicate yes or no to any information source that applies to them.

Eight roles of information source were identified, namely; raising awareness, sustaining consciousness in existing issue, help define problems, encourage me to ask questions, help identify, impact knowledge, impact skill, and ability etc. Respondent will be asked to indicate the level of each of the information sources as regards to the eight roles indicated. This was measured in a 4 point rating scale of very active role coded 4, active role coded 3, less active role coded 2 and no role code 1. A mean score of 2.5 and above will be taken to mean that a particular information source was active in the role indicated.

Respondents' perception of extension agents Constraints in communicating technologies to them such as inadequate transport, insufficient media of communication, etc and factors that constraint respondents from adopting proven poultry technologies disseminated to them e.g inadequate fund, poor exposure of farmers to appropriate agricultural information etc. was measured in a 5 point rating scale as follows: very serious coded 5, serious coded 4, undecided coded 3, little serious coded 2, and not serious coded 1. A mean score of 3.0 and above was taken to mean that the particular constraint was serious.

Frequency count, mean, standard deviation were used for analysis while Pearson correlation was used for test of hypothesis. Pearson product moment correlation. This correlation is between quantitative variables- correlation is defined as the degree of relationship existing between two or more variables, it could be linear or non-linear. The purpose for correlation analysis is to know the influence of one variable on the other also it is to know how well two variables move together whether weak or strong (Nzelibe, 1995). A correlation is a number between - 1 and + 1 that measures the degree of association between 2 variables (x and y).

Pearson correlation (r)

$$\frac{\sum Xi - Yi - nXY}{\sqrt{\sum Xi - nX^2} \sqrt{\sum Yi^2 - nY^2}}$$

Where:

$X_i$  =  $i^{\text{th}}$  value of X variable

$X$  = mean of X

$Y_i$  =  $i^{\text{th}}$  value of Y variable.

A null hypothesis formulated for the study was, there is no significant relationship between poultry farmers' socioeconomic characteristics and perceived role of information sources.

### 3. Results and Discussion

#### 3.1 Socio-economic characteristics

Results in Table 1 show that 57.5% of the respondents were male while about 52.5% were female. The findings show that male constitute the majority of people who rear birds either broilers or layers or any of the combination in the study area. The reasons for the male dominance may be attributed to the tedious nature of any agricultural enterprise, which normally requires enormous energy, which males are known capable of doing conveniently.

Analysis of the respondents' age shows that a higher proportion (37.5%) were found between 21 and 30 years. However, none of the respondents were found at 50 years and above. This means that most of the poultry farmers in the study area were still very active, thus, they would have the required energy to perform all the operations associated with poultry production and it is translation to community development as according to the World Bank of Group African Region, as cited by Directorate of Food, Road, and Rural Infrastructure (1991), involvement is agriculture positively support existing institutions for community development. It also implies that the domain of youth and adult development will be attainable as understanding and applying knowledge of growth and development over the life-span in the creation of environment which ultimises human capital (NOUN, 2008).

On the marital status, results show that only 8.3% of the respondents were single while the majority (81.7%) were in the married category. This could mean that most of the respondents were married. This may come with some benefits of being married as commitment and desires to carry out poultry operations with the aim of making profit may likely be higher based on the fact that the operators would have got some family responsibilities to meet with their poultry production operations, as community

development always achieve in group and not solely as a basic assumption.

Majority (63.3%) had secondary education and 4.2% had tertiary education. This reveals that most of the respondents were educated. The fact that they were mostly educated could be advantageous in the sense that administration of drugs and vaccines may be easier as instructions and procedures would be easily followed with this high level of education and consequently, productivity may be high. This would also have positive impact of the rate of mortality, which is a major problem with poultry production. The implication here as observed by IFAD (2016) that agricultural development often fills institutional voids in remote areas, that village-level committees and farmers' associations formed for agricultural training often evolve to manage other committees needs such as local security, conflict resolution between farmers and herders, and basic education.

Also, majority (66.7%) had between 5 and 7 persons as members of their households. This means that most of the respondents have moderately sized household size. This may be disadvantage of this is usually shortage of farm labour as family labour would be scarce, thereby making hired labour very important in carrying out farm operations.

Results further show that 43.3% had between 6 and 10 years of experience in poultry farming. The findings reveal that poultry farmers in the study area had reasonable number of experiences. The implication of this finding is that they would be technically competence to carry out poultry production activities conveniently with minimal technical supports from agricultural extension workers or animal scientists as their number of years of experience would have be a serious advantage to the farmers.

The farm size was measured and proxy by the number of birds reared. Results show that a higher proportion (41.7%) reared between 501 and 1000 birds while 24.2% reared 1000 birds and more. This shows that most of the poultry farmers in the study area reared above 500 birds. This is a huge number of birds and such farmers would have acquired the necessary experience in order to manage this large number of birds. IFAD (2016) noted that farming productively, rural economies become empowered, this creates local jobs, generate wealth, and improves food security, hence translation into community development as communities thrive through reduced poverty. Evidence from the results in Table 1 shows that (45.0%) reared broiler. Results of the combination of birds reared show that for the pullets and layers, 15.8% of the farmers were in this category, 7.5% reared pullets and broiler together, 10.0% reared pullets, layers and broiler at the same time while 5.0% reared layer and broilers together. This shows that many of the farmers reared more than one type of birds. This could be a coping strategy against some unpredicted occurrence as poultry production involves many unforeseen risks which may be averted when farmers engage in the production of more than one type of birds.

Results also show that income categorization of respondents and it was observed about 45.8% earned NGN500,000 and above annually. The findings reveal that many of the farmers earn amount that be maybe adequate to continue in business based on the prevailing economic situation in Nigeria. IFAD (2016) had observed that when local agriculture system shifts from subsistence to commercial scale, they anchor the regional economy as farmers' increased incomes translate directly to local spending. This assumes a positive effect on community development.

**Table 1:** Socio-economic characteristics

<b>Sex Respondents</b>	<b>Freq., n = 120</b>	<b>%</b>
Male	69	57.5
Female	51	42.5
<b>Age</b>		
Below 20	19	15.8
21-30	45	37.5
31-40	32	26.7
41-50	24	20.0
Above 50		
<b>Marital Status</b>		
Single	10	8.3

Married	98	81.7
Divorced		
Separate		
Widow	2	1.7
<b>Level of education</b>		
Non-formal Education	9	7.5
Primary School	30	25.0
Secondary School	76	63.3
Tertiary Institution	5	4.2
<b>Household size</b>		
Less than 4	9	7.5
5-7	80	66.7
8-10	31	25.8
Above 10		
<b>Farming Experience in year</b>		
Less than 5	30	25.0
6-10	52	43.3
11-15	24	20.0
16-20	14	11.7
Above 20		
<b>Farm size (Number of birds)</b>		
1-200	12	10.0
201-500	29	24.2
501-1000	50	41.7
1000 above	29	24.2
<b>Type of poultry birds</b>		
Pullet	8	6.7
Layer	12	10.0
Broiler	54	45.0
Pullets and layers	19	15.8
Pullet and broiler	9	7.5
Layer and broiler	6	5.0
Pullet, layers & broilers	12	10.0
<b>Estimate annual income</b>		
1000,000 less than	25	20.8
100,001-200,000	11	9.2
200,001.00-300,000.00	2	1.7
300,001.00-400,000.00	24	20.0
400,001.00-500,000.00	3	2.5
Above 500,000.00	55	45.8

*Source: Field Survey, 2025.*

### 3.2 Level of Availability of Proven Poultry Technologies

In Table 2, it was observed that day old chicks are readily available (Mean = 3.82), feeds was indicated to be readily available, which can be got any time (Mean = 3.64), vaccines (Mean = 2.15) was available and can be got between 1 week to 2 months while drugs (Mean = 2.55) was equally available and can be got along side with vaccines at the same duration and advice (Mean 1.35) was indicated to be little available gotten between 2 to 6 months while management practices (Mean = 2.06), and marketing (Mean = 2.53) were also available as they could be accessed between 1 week and 2 months. However, equipment (Mean = 0.99) and storage facilities (Mean = 0.86) were not available. This means that large scale production of poultry that involves equipment and storage may be practically difficult except there is a high level of investment on such enterprise by cooperate bodies and multinationals industries. The unavailability of equipment and storage may make the poultry enterprise not attractive to small scale farmers who will be interested in raising birds for commercial basis, this could be a negative effect in promoting community development.

**Table 2:** Availability of Proven Technologies

	Mean	Std. Dev
Day old chicks	3.82	0.36
Feeds	3.64	0.17
Vaccine	2.15	0.25
Drugs	2.55	0.44
Advice	1.35	0.42
Management practices	2.06	0.68
Control of diseases	1.97	0.13
Processing	1.63	0.27
Storage	0.86	0.46
Marketing	2.53	0.05
Equipment	0.99	0.12

*Source: Field Survey, 2025*

### 3.3 Information Sources on Improved Technologies

Results in Table 3 show that the major information sources to improved poultry technologies were identified as fellow farmers (100.0%), cooperative societies (59.2%) and friends and neighbours (100.0%). This means that the major sources of information available to poultry farmers on the improved poultry technologies in the study area were fellow farmers, cooperative societies and friends and neighbors. This means that sources where technical information could be assessed such as ADP extension agents, research institutes that houses the researchers, ministry of agriculture that should normally be at the front-liner in the information dissemination were rated very low. This is an indication that technical advice and proven technologies from research institutes would not be diffused easily to the society for the poultry farmers to utilize.

**Table 3:** Information Sources to Poultry Farmers

Information sources	Freq., n= 120	%
ADP extension agents	17	14.2
Researchers	9	7.5
Ministry of Agric.	7	5.8
Fellow farmers	120	100.0
Agric companies	23	19.2
Cooperative societies	71	59.2
Friends and Neighbours	120	100.0

*Source: Field Survey, 2025*

### 3.4 Perceived Roles of Information Sources

Analyzing the roles of information sources to poultry farmers (Table 4) shows that farmers positively perceived roles such as raising awareness (fellow farmers = 3.25; Mean = 2.74, and 3.14) among cooperative and friends and neighbours. This means that on the awareness raising, fellow farmers, cooperative and friends and neighbours were the information sources which the farmers perceived favourably. Furthermore, in terms of sustaining the consciousness in existing issues, results also indicated that fellow farmers (Mean = 3.08), companies (Mean =3.59) and friends and neighbours (Mean = 3.77) perceived roles were favourable. This means that information on poultry farming practices was properly disseminated by these information sources were regular and farmers benefited from the roles they played.

Hence, the high-level annual income (Table 1). Similarly, companies (Mean = 3.04), and friends and neighbours (Mean = 3.25) performed the roles of helping to define problems while fellow farmers (Mean = 3.15), companies (Mean = 3.15), companies (Mean = 3.11) and friends and neighbours performed the role encouraging farmers to ask questions. In the same vein, only the companies (Mean = 3.24) and friends and neighbours (Mean = 3.25) assisted in the performance of roles of helping to identified relevant issues while fellow farmers (Mean = 3.62), companies (Mean = 3.21), cooperative (Mean = 3.33) and friends and neighbours (Mean = 3.81) were the information sources where role of information provision was highly performed. Moreover, fellow farmers (Mean = 3.24), and companies (Mean = 3.01) were the information sources where impact knowledge was highly performed. Furthermore, companies (Mean = 3.31) was identified as the only information source that highly performed the role of impact skill and ability to perform well in the poultry farming practices in the study area.

**Table 4: Perceived Roles of Information Sources**

	ADP	Researchers	Ministry	Fellow farmers	Companies	Cooperative	Friends and Neighbours
Roles	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Raising awareness	1.63	1.53	1.36	3.25	1.38	2.74	3.14
Sustaining consciousness in existing issues	1.42	1.64	1.33	3.08	3.59	1.02	3.77
Help define problem	1.77	1.17	1.27	2.17	3.04	2.59	3.25
Encourage me ask question	1.53	1.53	1.42	3.29	3.15	3.11	3.19
Help identify relevant issues	1.63	1.22	1.22	1.64	3.24	1.54	3.25
Information provision	2.43	1.64	1.09	3.62	3.21	3.33	3.81
Impact knowledge	1.82	1.19	1.16	3.24	3.01	1.26	3.37
Impact skill & ability	1.07	1.24	1.33	2.55	3.31	1.72	2.18

*Source: Field Survey, 2025.*

### 3.5 Constraints to Poultry Farming

Results show (Table 5) that insufficient fund (Mean = 3.55), poor exposure to appropriate poultry technologies (Mean = 2.91), training programme are not conducted (Mean = 3.38), the extension agents do not teach us at all (Mean = 3.76), insufficient motivation from government (Mean = 3.49) and inadequate infrastructural facilities (Mean = 3.51). This means that all the identified constraints to poultry farming and information sourcing in poultry production were all significantly very serious. The implication of this finding is that poultry production information may be very scarce in the study area as technical information that require the deliberate government effort may not be available as the resources to produce them are serious constraints in the present study.

**Table 5: Constraints to Poultry Farming**

Constraints	Mean	Std. Dev
Insufficient fund	3.55	0.03
Poor exposure to appropriate poultry technologies	2.91	0.11
Training programmes are not conducted	3.38	0.30
The extension does not teach us at our level	3.76	0.08
Insufficient motivation from government	3.49	0.12
Inadequate infrastructural facilities	3.51	0.26

*Source: Field Survey, 2025*

Mean > 2.55 = Serious constraints

### Hypothesis Testing

#### Relationship between socio-economic characteristics and perceived roles of information sources

Results (Table 6) show that household size ( $r = 0.351$ ), farming experience ( $r = 0.539$ ), farm size ( $r = 0.299$ ) and estimated annual income ( $r = 0.372$ ) were the identified correlates of perceived information sources roles among the poultry farmers in the study area. This means that household size, farming experience, farm size and annual income were positive but significant imply that as the household size of the respondent increase, the perceived roles also increase. Also, farmers with a high estimated annual income may likely perceived roles of the information sources than those with low estimated annual income.

**Table 6: Relationship between socio-economic and roles of information sources**

	Correlations Coeff. (r)	Sign.
Age	-0.109	0.712
Household size	0.351*	0.052
Farming Experience in year	0.539*	0.021
Farm size (Number of birds)	0.299*	0.045
Estimate annual income	0.372*	0.054

*Source: Field Survey, 2023.*

\*Sign. at 0.05 level of significance and \*\*Sign. at 0.01 significant level.

#### 4. Conclusion and Recommendations

It was concluded that based on the findings of the study that almost equal proportion of male and female involved in poultry farming in the study area with many of them still in their prime age. Majority of them were married and educated. Most of them had adequate experience in poultry farming and they reared both broilers and layers, but mostly broilers. They earned at equivalent of the civil servant in Nigeria with the current national minimum wage. Day old chicks, feeds, vaccines were readily available while drugs and advice were a little available. The major information sources were through intrapersonal sources such as fellow farmers, neighbours, and sometimes companies that use the information sources to creating awareness, encouraging farmers, helping farmers, impacting skills, and sustaining the consciousness of existing issues among others to the farmers. It was found that household size, farming

experience, farm size and estimated annual income were the identified correlates of perceived information sources roles among the poultry farmers in the study area.

Based on the findings of the study, it was recommended that:

- Government must invest in agriculture with the aim of increasing poultry farmers' productivity through information dissemination that are compatible with the farmers' socio-economic situation and have the ability to disseminate proven technologies to the target audience;
- Agricultural extension workers must ensure that they take advantage of the intrapersonal means of information dissemination in order to reach the farmers with proven technologies;

- Farmers must be empowered to make use of the other information sources such as the research institutes through the researchers, universities, ministries of agriculture through effective and practically feasible linkage system.
- Farmers should be encouraged to form cooperatives for easy access to credit facility and inputs so as to enhance their productivity level.

## References

- Adene, D.F. and Oguntate A.E. (2006). The structure and importance of the commercial and village-based poultry systems in Nigeria. FAO, Rome, Italy pp 1-102.
- Kughur, P.G. Ortindi, P.I. and Katikpo. G. (2015). Factors affecting farmers accessibility to agricultural information in Gwen Local Government Area Benue State, Nigeria. *International Journal of Information and Communication Technology Research*, 5(10)
- Moreki J.C., Keaikitse J. (2013). Poultry Waste Management Practices in Selected Poultry Operations around Gaborone, Botswana. *International Journal of Current Microbiology and Applied Sciences* 2:240-248.
- Morris, E. Gupta, S and Belhass, A.R. (2003). Community Information Centre: An approach to Rural Development in Developing Countries *Nigerbiblios* 11 (1) P-15
- Olori, V.O (1998). Composition and shell quality of Nigeria Indigenous chickens. *Nigeria Journal Anim. Prod* 19:95-100