**Current Research in Agricultural Sciences**
*2015 Vol. 2, No. 2, pp. 73-80*
*ISSN(e): 2312-6418*
*ISSN(p): 2313-3716*
*DOI: 10.18488/journal.68/2015.2.2/68.2.73.80*


# CONSTRAINTS TO BROOD AND SELL POULTRY PRODUCTION AMONG FARMERS IN ENUGU STATE, NIGERIA

**Onwubuya, E.A[1] --- Ajani, E.N.[2]† --- Nenna M.G[3]**

[1]*Department of Agricultural Extension, University of Nigeria, Nsukka, Nigeria*

[2]*Department of Agricultural Extension and Communication, University of Agriculture, Makurdi, Nigeria*

[3]*Department of Agricultural Economics and Extension, Anambra state University Igbariam Campus, Nigeria*

## ABSTRACT

*The paper examined constraints to brood and sell poultry production among farmers in Enugu State, Nigeria. Structured interview schedule was used to collect data from a sample of fourty (40) respondents. Data was analyzed using frequency, percentage and mean scores. Results of the study showed that the respondents were young, educated and have acquired some experience over the years and were able to finance the poultry enterprise through self-help efforts. The study further revealed a gap in the information service delivery of extension systems and the prospects observed were still below standard for extension expectations of the recent times in some rural areas of Nigeria. The respondents were highly constrained by high cost of feeds and raw materials (85.0%), poor extension agents' contact (65.0%), inadequate drugs and veterinary services (65.0%), high infestation of diseases (60.0%) and difficulty in procurement of quality stocks (62.5%). It was concluded that Agricultural Development Programme (ADP) should integrate the activities of brood and sell poultry farmers into its programmes by providing the techniques involved to contact farmers. Efforts of government of Enugu State are highly needed in subsidizing farm inputs to farmers in order to ensure optimum productivity.*

**Keywords:** Prospects, Extension, Poultry production, Farmers, Enugu state, Nigeria.

## 1. INTRODUCTION

Poultry keeping makes an important contribution to livelihoods of most vulnerable rural households in developing countries, Nigeria in particular. Poultry has become a popular industry for the small holders that have great contribution to the economy of Nigeria. Low capital and short period of time is involved to make quick returns within weeks in brood and sell poultry production. The poultry profession has assumed greater importance in improving employment opportunity and animal food production [1].



† Corresponding author

Animal protein is very essential for the growth, development and maintenance of human life. This suggests why in Nigeria, the problems confronting the livestock industry is how to increase the production of animal protein to feed the ever growing population. The protein intake in Nigeria according to Obioha [2] is grossly below the minimum standards of 20g and less than the minimum requirement by the National Research Council of the United States of America.

In order to ensure adequate supply of protein to the rapidly growing population of Nigeria, the output of animal products has to be increased especially by short cycle animals such as rabbits, poultry, pigs, etc [3]. The development of poultry industry appears to be the fastest means of solving the problems of animal protein deficiency in the country. This is based on the special attributes of which includes short generation interval and rapid fecundity, rapid turnover of invested capital, small space requirement and low initial capital investment requirement [4].

A number of constraints to livestock development have been observed. Among these are vectors and animal diseases, feed and feeding research and development, manpower training and utilization, lack of data and information, finance and small flock size Ibe [5]. Oladiro, et al. [6] reiterated that there is downward trend of poultry production, especially brood and sell enterprise which is attributed to a lot of factors such as high cost of feed and poor knowledge or experience in management of the enterprise.

One of the ways to address these problems is through effective and efficient management of extension systems. This will ensure adoption and spread of innovation among farmers in rural areas. Also, with the increasing modern information technologies, farmers stand a better chance to access various and latest research information needed to enhance productivity. Ojo [7] stressed the need for improved poultry production technologies to be made available to brood and sell poultry farmers in order to raise their income as well as improve standard of living of members of their households. World Bank [8] observed that extension should forge new link to create a network for sharing knowledge and experience. In spite of several policy initiatives of the Federal Government of Nigeria manifested through different extension systems, the livestock sub-sector especially poultry has not recorded any significant growth due to the relative linkages and supports which characterized extension activities in this sector [9].

Brood and sell is a new poultry business which gives a day old chick a start in life until they are sold to other poultry farmers to rear up to market point. William [10] identified three major roles that livestock extension agents must play in the improvement of livestock production and management namely;

1. dissemination of relevant research results to farmers;
2. assisting farmers to make wise decision in livestock management; and
3. getting the farmers into a frame of mind and attitude conducive to the acceptance of technological change. Also, farm and home visits (individual contact) method if properly harnessed appears to be one of the most popular extension teaching methods.

The purpose of this study was therefore to examine constraints to brood and sell poultry production among farmers in Enugu State, Nigeria.

Specifically, the objectives were to:

a. identify socio-economic characteristics of the respondents;
b. ascertain sources of information on poultry management among the respondents;
c. identify extension services in brood and sell poultry production available to the respondents; and
d. ascertain problems limiting the activities of brood and sell poultry farmers.

## 2. METHODOLOGY

The study was conducted in Nsukka Agricultural zone of Enugu State, Nigeria. The zone was selected purposively as a result of having greater number of poultry farmers involved in brood and sell. The population of the study comprises all the poultry farmers involved in brood and sell in five communities of Isi Uzo local government area in Nsukka Agricultural zone of Enugu State, Nigeria. The communities include; Eha-Amufu, Ikem, Mbu, Neke and Umualor. Isi-Uzo Local Government Area is bounded in the North-West by Udenu L.G.A, in the South by Enugu-East L.G.A, North-East by Isi-Elu L.G.A of Ebonyi State. These communities were selected using simple random sampling technique. Eight (8) respondents in brood and sell poultry production were randomly selected in each of the five communities from a list of brood and sell poultry farmers obtained from the veterinary unit of Agriculture Department of Isi-Uzo L.G.A Headquarters at Ikem, giving a total of forty (40) respondents used for the study.

Structured interview schedule was used to elicit information from the respondents. Frequency, percentage and mean score were used for data analysis.

## 3. RESULTS AND DISCUSSION

### 3.1. Socio-Economic Characteristics of the Respondents

Distribution of respondents by sex in Table 1 showed that majority (70.0%) of the respondents was females while 30.0% were males. This is not far from expected as women in most traditional culture are known for keeping small livestock like poultry while the men folk keep larger livestock like goats, sheep and cattle. The Table also indicates that majority (65.0%) were within the ages of 31-40 years, 20.0% where aged between 41-50 years while 15.0% were in the age bracket of 21-30 years. The mean age of the respondents was 36 years. This indicates that the brood and sell poultry respondents were relatively young and middle aged. This is an added advantage for adoption and spreading of innovative practices since young people are likely to accept and serve better as agents of innovation transfer. The finding is supported by Onu, et al. [11] who noted that people in young ages were within a stage in life when their productivity would be at its peak given the enabling environment.

Entries in Table 1 also revealed that 60.0% of the respondents had secondary education; 25.0% attended primary school, 10.0% had no formal education while 5.0% had ordinary National Diploma and above. The findings imply that the respondents were literate. This stresses the role of education in increasing the adoption of improved agricultural technologies as indicated by Ozor

and Madukwe [12]. Majority (75.0%) of the respondents had between 1-10 years experience of brood and sell poultry business while 10.0% had 1-5 years with a mean experience of about 7 years. The finding is in agreement with Ozor and Madukwe [12] who observed that years of farming experience was positively correlated with adoption of innovation. The Table further showed that majority (65.0%) of the respondents obtain funds for their poultry production through personal savings, 27.5% source for funds from friends and relations, 5.0% from banks and 2.5% obtain loan from government. This indicates that the respondents obtained funds through self-help efforts. Another implication is that they cannot meet up with the collateral required by banks to obtain loans. Data in Table 1 also indicate that majority (95.0%) of the respondents got their poultry from distributors of day old chicks while only very few (5.0%) got theirs from hatcheries.

**Table-1.** Distribution of respondents according to socio-economic characteristics (n = 40)

| Socio-economic characteristics | Frequency | Percentage | MeanScore |
|---|---|---|---|
| Sex | | | |
| Male | 12 | 30.0 | |
| Female | 28 | 70.0 | |
| Age (years) | | | |
| 12-30 | 6 | 15.0 | |
| 31-40 | 26 | 65.0 | |
| 41-50 | 8 | 20.0 | 36 |
| Educational qualification (years) | | | |
| No formal education | 4 | 10.0 | |
| Primary school | 10 | 25.0 | |
| Secondary school | 24 | 60.0 | |
| OND, NCE, HND/BSc | 2 | 5.0 | |
| Years of experience (years) | | | |
| 1-5 | 10 | 25.0 | |
| 6-10 | 30 | 75.0 | |
| 11-15 | - | - | 6.8 |
| Sources of fund | | | |
| Personal savings | 26 | 65.0 | |
| Loan from banks | 2 | 5.0 | |
| Loan from friends & relations | 11 | 27.5 | |
| Loan from government | 1 | 2.5 | |
| Sources of stock | | | |
| Distributors of day old Chicks | 38 | 95.0 | |
| Hatcheries | 2 | 5.0 | |
| Stocking rates | | | |
| 0 – 500 | 28 | 70.0 | |
| 501 – 1000 | 10 | 25.0 | |
| 1001 – 2000 | 2 | 5.0 | 438 |
| Annual income (₦) | | | |
| 20,000 – 25,000 | 2 | 5.0 | |
| 25,001 – 30,000 | 6 | 15.0 | |
| 30,001 – 35,000 | 10 | 25.0 | |
| 35,001 – 40,000 | 22 | 55.0 | 34,000.5 |

This implies that the respondents got day old chicks mostly from distributors who serve as middlemen; this may cause some problems for them in terms of hiking the prices. Also, 70.0% of the respondents kept a stock size of 0 - 500 birds; 25.0% kept between 501-1000 birds and only 5.0% kept up to 1001-2000 birds. Majority (55.0%) earned an annual income of N35001 - N40,000 while the remaining earned between N20,000-N35,000, annually. The mean annual income of the respondents was N34, 000.5. This finding indicates high economic returns, which would attract more people into the business, considering the initial capital investment involved and inducing diffusion of innovation.

### 3.2. Sources of Information on Poultry Management

Table 2 revealed that 32.5% obtained information from extension agents on poultry management while the rest 67.5% had from other sources. About 25% of the respondents got information from fellow poultry farmers, 15.0% got from day old chicks dealers, 10.0% got from veterinary doctors, among others. This indicates a gap which could be filled through intensification of extension service delivery. This finding gave credence to Davidson, et al. [13] who reported that three out of four Asian farmers had no contact with agricultural extension services. This necessitated the use of contact farmers to help disseminate information to other farmers in countries that practice T & V extension system. It was observed that mass media such as radio and television recorded low score. This confirms Agwu [14] who reported that mass media such as radio and television did not play a leading role in informing farmers about improved production technologies.

**Table-2.** Distribution of respondents according to sources of information on poultry management (n = 40)

| Source of information | Frequency | Percentage |
|---|---|---|
| ADP extension agents | 13 | 32.5 |
| Day old chicks dealers | 6 | 15.0 |
| Fellow poultry farmers | 10 | 25.0 |
| Radio and television | 3 | 7.5 |
| Veterinary doctors | 4 | 10.0 |
| Journals | 2 | 5.0 |
| Livestock magazines | 1 | 2.5 |
| Newspapers | 1 | 2.5 |

### 3.3. Extension Services Available to the Respondents on Brood and Sell Poultry Production

Data in Table 3 revealed the available extension services to the respondents. It showed that the respondents received 30.0% information of research results from extension agents. This finding corroborates that of Santucci [15] who found that most Nigerian farmers depend on public agricultural extension agents for information from research centers. Others as perceived by the respondents include dissemination of innovation (22.5%), management decision (17.5%) and source of market (10.0%). The findings on supply of inputs and credit supports that of Santucci

[15] who reported that agricultural extension service agencies in Syria participate in farm input delivery and credit provision. This implies that prospects of extension services in improving brood and sell poultry production in the area needs to be addressed and intensified in order to live up to its expectations and also enable the poultry farmers reap the dividend embodied in extension service delivery systems of the recent times.

**Table-3.** Distribution of respondents according to available extension services on brood and sell poultry enterprise (n= 40)

| Extension services | Frequency | Percentage |
|---|---|---|
| Dissemination of research results | 12 | 30 |
| Management decision | 7 | 17.5 |
| Dissemination of innovation | 9 | 22.5 |
| Supply of inputs and credits | 2 | 5.0 |
| Provision of veterinary services | 5 | 12.5 |
| Source of market | 4 | 10.0 |

### 3.4. Problems Limiting the Activities of Poultry Farmers

Data in Table 4 showed constraint variables limiting the activities of brood and sell poultry enterprise. The major constraints include high cost of feeds and raw materials (85.0%), poor extension agents contact (65.0%), difficulty in procurement of quality stock (62.5%), high infestation of diseases (60.0%), while illiteracy, inadequate housing, lack of labour and inappropriate record keeping were regarded as minor constraints. The finding is in consonance with a study carried out by Soyoola [16] which revealed that high cost of feeds and raw materials have constrained poultry industry in Nigeria. Anyanwu, et al. [17] reiterated that low level of extension agents as a result of low extension agent/farmer ratio pose a serious problem to poultry farmers in Nigeria.

**Table-4.** Distribution of respondents according to problems limiting the activities of poultry farmers (n= 40)

| Problems | Major problem | Moderate problem | Minor Problem |
|---|---|---|---|
| Illiteracy | 5.0 | 15.0 | 80.0 |
| High cost of feeds and raw materials | 85.0 | 10.0 | 10.0 |
| Inadequate drugs and veterinary services | 65.0 | 20.0 | 15.0 |
| High infestation of diseases | 60.0 | 30.0 | 10.0 |
| Difficulty in procurement of quality stock | 62.5 | 25.0 | 12.5 |
| Inadequate housing | 5.0 | 30.0 | 65.0 |
| Lack of labour | 2.5 | 17.5 | 80.0 |
| Poor extension agents contact | 65.0 | 25.0 | 10.0 |
| Inappropriate record keeping | 10.0 | 10.0 | 80.0 |

## 4. CONCLUSION AND RECOMMENDATIONS

The study found that the poultry enterprise was dominated by young, educated people who have acquired some experience which serves as an added advantage for acceptance of innovation

and adoption of modern technologies involved in brood and sell poultry production. Also, most of the farmers were able to finance the business through self-help efforts and got stocks mainly from distributors of day old chicks. The respondents were highly constrained by high cost of feeds and raw materials, poor extension agents' contact, difficulty in procurement of quality stock, high infestation of diseases, among others. The study further showed that the prospects of extension service delivery systems in the area are beyond expectation when compared to the extension service delivery systems of the recent times. Based on the findings of the study, it is recommended that Agricultural Development Programme (ADP) of Enugu State, Nigeria should develop a programme for brood and sell poultry farmers using contact farmers, which would ensure multiplier effects. Government should address the problems of the brood and sell poultry farmers by subsidizing farm inputs and encouraging them through provision of loans in order to increase productivity as well as enhancing household income.

## REFERENCES


[1] F. I. Olagunju and R. O. Babatunde, "Impact of credit on poultry productivity in Southwestern Nigeria," *ARPN Journal of Agricultural and Biological Science*, vol. 6, pp. 58-65, 2011.

[2] F. C. Obioha, *A guide to poultry production in the tropics*, 1st ed. Enugu: Acena Pub., 1992.

[3] N. Ozor and M. C. Madukwe, "Adoption of improved rabbit technologies by farmers in Nsukka L.G.A: Implication for livestock extension meeting the challenges of animal production in the new millennium," in *Proc. of the 6th Annual Conference of Animal Science Association of Nigeria, September 17–19. University of Maiduguri*, 2001, pp. 199 – 202.

[4] National Agricultural Extension Research and Liaison Services (NAERLS), *Poultry management handbook extension bulletin No. 63, livestock series No.15.* Zaria: Pub. NAERLS, A.B.U, 1993.

[5] S. N. Ibe, "Livestock production in the South Eastern zone," presented at the Prospects and Strategies in the New Millennium and Extension Workshop in South Eastern Nigeria, Umudike. 9-12 November, 1999.

[6] A. W. A. Oladiro, L. O. Sanusi, A. O. Ojedapo, and I. O. Adesiyan, "A cooperative analysis of poultry feed production using alternative and convectional ingredients in Ibadan," in *Proceedings of 31st Conference of Nigeria Society for Animal Production (NSAP)*, 2006.

[7] S. O. Ojo, "Analysis of the risk factors in commercial poultry production in Osun State," in *Proceedings of 27th Annual Conference of Nigeria Society of Animal Production, FUTA*, Akure, 2002.

[8] World Bank, *Agricultural extension: The next step.* Washington D.C., 1990.

[9] O. O. Oyebanji, "UAES and livestock extension," presented at the A Keynote Address at South East Livestock Programme Review Meeting Held at FACU Regional Office, Enugu May 17-19, 1994.

[10] S. K. T. William, *Poultry abstracts cambrian printers.* Aberystwyth, 1987.

[11] M. O. Onu, M. C. Madukwe, and A. C. Agwu, "Factors affecting job satisfaction of frontline extension workers in Enugu State agricultural development programme, Nigeria. Agro-science," *Journal of Tropical Agriculture, Food, Environment and Extension*, vol. 4, pp. 19-22, 2005.

[12] N. Ozor and M. C. Madukwe, "Obstacles to the adoption of improved rabbit technologies by small-scale farmers in Nsukka L.G.A of Enugu state," *Agro-Science, Journal of Agriculture, Food, Environment and Extension*, vol. 4, pp. 70 - 73, 2005.

[13] A. P. Davidson, M. Ahmad, and T. Ali, *Delimmas of agricultural extension in Pakistani: Food for thought. Agricultural research and extension network paper No. 116.* London: Overseas Development Institute, 2001.

[14] A. E. Agwu, "Diffusion of improved cowpea technologies in the North East Savanna zone of Nigeria," A Ph.D. Thesis Department of Agricultural Extension, University of Nigeria, Nsukka, 2000.

[15] F. M. Santucci, *Agricultural research and extension in Syria. Agricultural research and extension network newsletter No. 45.* London: Overseas Development Institute, 2002.

[16] A. C. Soyoola, *Planning for profitable egg production*: Agricultural Experimental Station Publication, 1997.

[17] A. C. Anyanwu, A. E. Agwu, and J. E. Okatta, "Factors affecting job satisfaction of field extension workers in Imo State agricultural development programme," *Africa Journal of Agricultural Teacher Education*, vol. 9, pp. 135 – 142, 2000.

## BIBLIOGRAPHY

[1] R. A. Cossley, T. Lent, D. Propper Decallegon, and C. Sethare, "Innovative financing for sustainable forestry," *Procedure of Workshop Held in Preteria, South Africa*, 2004.