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Review Article

Prospects of Extension Services in Improving Brood and Sell Poultry Production among Farmers in Enugu State, Nigeria



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Abstract

The paper analyzed prospects of extension services in improving 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 were analyzed using frequency, percentage and mean scores. Results of the study showed that they were dominated by young, educated people that have acquired some experience and were able to finance the small-scale enterprise with high net economic returns. The study further revealed a gap in the information service delivery of extension systems and the prospects observed were still below standard of 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 the inputs to farmers in order to ensure optimum productivity.

Keywords: Prospects; Extension; Poultry production; Farmers; Enugu state; Nigeria

Introduction

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 [1] 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 Ozor & Madukwe [2]. 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 Naerls [3].

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 [4]. One of the ways to address these problems is through effective and efficient management of extension systems. This will

ensure mass adoption and spread of innovation among farmers in rural areas. Also, with the increasing modern information technologies, farmers stand a better chance of access to various and latest research information. World Bank [5] 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 has not recoded any significant growth due to the relative linkages and supports which characterized extension activities in this sector Oyebanji [6]. Brood and sell are 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.

Williams [7] identified three major roles that livestock extension agents must play in the improvement of livestock production and management namely;

- A. Dissemination of relevant research results to farmers;
- B. Assisting farmers to make wise decision in livestock management; and
- C. 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.

D. The purpose of this study was therefore to examine the prospects of extension in improving brood and sell poultry production among poultry 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 prospects of extension services in improving brood and sell poultry production available to the respondents; and
- D. Ascertain problems limiting the activities of poultry farmers.

Methodology

The population of the study comprises all the poultry farmers involved in brood and sell in five communities of Isi Uzo local government area within 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. Eight respondents in brood and sell poultry production were randomly selected in each of the five communities from a list of broods and sell poultry farmers obtained from the veterinary unit of Agricultural Department of Isi-Uzo L.G.A Headquarters at Ikem. Generally, a total of forty (40) respondents in brood and sell enterprise were used.

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

Result and Discussion

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 such as 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 findings are supported by Onu et al. [8] 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 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 stress the role of education in increasing the adoption of improved agricultural technologies as indicated by Ozor & Madukwe [9]. 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 [9] 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 selfhelp 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 birds from distributors of day-old chicks while only very few (5.0%) got theirs from hatcheries. 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 (Table 1).

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

Socio-economic Characteristics	Frequency	Percentage	Mean Score
Sex			
Male	12	30	
Female	28	70	
Age (years)			
12-30	6	15	
31-40	26	65	
41-50	8	20	36

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Educational Qualification (Years)				
Non- formal education	4	10		
Primary school	10	25		
Secondary school	24	60		
OND, NCE, HND/B.Sc.	2	5		
Years of Experience				
1-5	10	25		
6-10	30	75		
11-15	-	-	6.8	
Sources of Fund				
Personal savings	26	65		
Loan from banks	2	5		
Loan from friends & relations	11	27.5		
Loan from government	1	2.5		
Sources of Stock				
Distributors of day-old Chicks	38	95		
Hatcheries	2	5		
	Stocking Rates			
0-500	28	70		
501-1000	10	25		
1001-2000	2	5	438	
Annual Income (₦)				
20,000-25,000	2	5		
25,001-30,000	6	15		
30,001-35,000	10	25		
35,001-40,000	22	55	34,000.50	

Sources of information on poultry management

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
Fellow poultry farmers	10	25
Radio and television	3	7.5
Veterinary doctors	4	10
Textbooks	2	5
Livestock magazines	1	2.5
Newspapers	1	2.5

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. [10] 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 [11] who reported that mass media (radio and television) did not play a leading role in informing farmers about improved production technologies (Table 2).

Problems limiting the activities of poultry farmers

Data in Table 3 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%) and while illiteracy, housing, labour and record keeping were minor constraints. The finding is in consonance with a study carried out by Soyoola [12] which revealed that high cost of feeds and raw materials have constrained poultry industry in Nigeria. Anyanwu et al. [13] reiterated that low level of extension agents was as a result of the low extension agent/farmer ratio pose a serious problem to poultry farmers in Nigeria (Table 3).

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Table 3: Distribution of respondents according to problems limiting the activities of poultry farmers (n=40).

Poultry Operation	Major Problem	Moderate Problem	Minor Problem
Illiteracy	5	15	80
High cost of feeds and raw materials	85	10	10
Inadequate drugs and veterinary services	65	20	15
High infestation of diseases	60	30	10
Difficulty in procurement of quality stock	62.5	25	12.5
Inadequate housing	5	30	65
Lack of labour	2.5	17.5	80
Poor extension agents contact	65	25	10
Inappropriate record keeping	10	10	80

Prospects of extension services for the respondents

Data in Table 4 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 [14] who found that most Nigerian farmers depend on public agricultural extension agents for information from research centers. Others as perceived by the brood and sell operators include acceptance of new innovation (22.5%), management decision (17.5%) and source of market (10.0%). The position of the supply of inputs and credit finding supports that of Santucci [14] who reported that agricultural extension service in Syria participates 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 gains embodied in extension service delivery systems of the recent times (Table 4).

Table 4: Distribution of respondents according to prospects of extension services on broad and sell poultry enterprise (n=40).

Prospects of Extension Services	Frequency	Percentage
Dissemination of research results	12	30
Management decision	7	17.5
Acceptance of new innovations	9	22.5
Supply of inputs and credits	2	5
Provision of veterinary services	5	12.5
Source of market	4	10

Conclusion and Recommendation

Analysis of socio-economic characteristics of the respondents showed that the enterprise was dominated by young, educated people who have acquired some experience which serves as an added advantage for adoption of modern technologies. Also, most of the farmers were able to finance their poultry 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 Sethare et al. [15]. 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 will ensure multiplier effects. Government should assist brood and sell poultry farmers by subsidizing farm inputs and encouraging them through provision of loans in order to increase productivity as well as enhance income.

References

- 1. Obioha FC (1992) A Guide to poultry production in the tropics (1^{st} edn), Acena Pub, Enugu, Nigeria, pp. 1-10.
- Ozor N, Madukwe MC (2001) 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. Proc of the 6th Annual Conference of Animal Science Association, University of Maiduguri, Nigeria, pp. 199-202.
- 3. Naerls (1993) Poultry management handbook extension. Bulletin No 63, Livestock Series No 15, p. 62.
- 4. Ibe SN (1999) Livestock production in the South Eastern zone; Prospect and Strategies in the new millennium and Extension Workshop in South-Eastern Nigeria, Umudike, Nigeria, pp. 12-24.
- World Bank (1990) Agricultural extension: The next step, Washington DC, USA.
- Oyebanji OO (1994) UAES and livestock extension: A keynote address at South East livestock programme review meeting held at FACU Regional Office, Enugu May, Nigeria, pp. 2-3.
- William SKT (1987) Poultry Abstracts Cambrian printers, Aberystwyth, Wales, UK, pp. 10-45.
- 8. Onu MO, Madukwe MC, Agwu AC (2005) Factors affecting job satisfaction of frontline extension workers in Enugu state agricultural development programme, Nigeria. Agro Science African Journals OnLine 4(1): 19-22.
- 9. Ozor N, Madukwe MC (2005) 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 4(1): 70-73.
- Davidson AP, Ahmad M, Ali T (2001) Delimmas of agricultural extension in Pakistani: Food for thought. Agricultural Research and Extension Network Paper No.116, Overseas Development Institute, London, UK.
- 11. Agwu AE (2000) 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, Nigeria.

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- 12. Soyoola AC (1997) Planning for profitable egg production. Agricultural Experimental Station Publication.
- $13.\,Anyanwu\,AC, Agwu\,AE, Okatta\,JE\,(2000)\,Factors\,affecting\,job\,satisfaction$ of field extension workers in Imo State Agricultural Development Programme. African Journal of Agricultural Teacher Education 9(1&2): 135-142.
- 14. Santucci FM (2002) Agricultural research and extension in Syria, Agricultural Research and Extension Network Newsletter. No. 45, London, p. 4.
- 15. Cossley RA, Lent T, Propper DD, Sethare C (2004) Innovative financing for sustainable forestry.



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