



RESEARCH ARTICLE

Analysis of Extension Service Needs of Livestock Farmers in Imo State, Nigeria

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ABSTRACT

The study analyzed the extension service needs of the livestock farmers in Imo State, Nigeria. The study used primary data from a cross section of livestock farmers. In all, 100 respondents were collected for the study using multistage sampling procedure. Data was obtained with the aid of a questionnaire and analysed using descriptive statistics. The study revealed that farmers average age, house hold size, years spent in school and farming experience were 42.6years, 7 persons, 13 years and 8 years respectively. Seventy two percent (72.00%) of the farmers were females and had access to credit respectively; about 58.00% of them were married while 70.00% of the farmers had received an extension visit in the year 2011 and also were aware of improved technologies associated with livestock production. Personal sources were ranked highest by farmers as a means of financing their business. In the aspect of information dissemination, the extension workers were ranked highest (30.00%), followed by community leaders (20.00%) and then family members and radio (10.00%). Despite these, majority of the farmers (98.00%) needed the services of the extension agents in administering medications to their animals and brooding system in poultry production respectively. Overwhelming percentages of 96.00, 88.00 and 82.00% of the farmers needed education on feed formulation, major disease of poultry and sanitation respectively. Also, 76.00 and 74.00% of the farmers needed information regarding sources of hybrid as well as knowledge on hatching eggs respectively. However, the study recommended that the efficiency of the extension services should be improved through continuous training and evaluation of the impact of training should receive a high priority.

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INTRODUCTION

Agricultural Extension Service is an educational process that is aimed at communication of useful information to farmers and helping them to learn how to use the resources within their reach to solve their own problem. In 1985, international decade for livestock development was declared by the United Nations (Eddy, 2002). This step was taken in other to encourage nations, government organizations, international agencies, research and educational institutions to give priority to the development of livestock farming. Food and Agricultural Organization of the United Nation (FAO, 1990) emphasized the need for livestock farming to be integrated into any programme designed to develop the agricultural sector.

According to Williams (1998), livestock farming role in agriculture is assumed to be low and only supportive of its counterparts, crop farming.

Most models for the integration of livestock into national extension system will require cross-training of crops specialists staff in livestock production and vice versa. However, studies have shown that most livestock farmers are rural people (William, 19990) and are responsible for the production of 80 percent of the meat in Africa (Development Commission Report, 2003). The FAO, (2002) estimate shows that livestock contributes over 40 percent of the total agricultural labour force in two-third of 82 developing countries in the World. Osuala (2002), states that livestock farmers are significantly involved in subsistence agricultural, while Eddy (2002), Olayide and Bello (2000) classified livestock as the backbone or pillar of small scale farming in Nigeria. Williams *et al.* (1998) assert that education is one of the variables for achieving economic growth and extension educational task of disseminating useful modern agricultural information to farmers.

Livestock production is a source of employment and livelihood in Nigeria agriculture. A large percentage of rural people satisfy their subsistence needs through livestock production which involves the rearing and marketing of livestock. These classes of animals include cattle, sheep, goats, pig, and poultry.

According to Kekeocha (2006), Nigeria's livestock resources include 13,866, 813 cattle, 344,53,724 goats, 29,092,602 sheep, 3,406,381 pigs and 104,247,960 poultry. Traditionally managed stock is over 85% for all species while commercially managed is only significant for poultry at 13.8% and a lesser extent for pigs at 3.24%.

Livestock diseases in Nigeria hence seriously influenced the productivity of livestock population. As a result of the devastating outcome of livestock disease, animal protein output has not been able to meet with national demand. Livestock diseases can be infectious or non-infections. Livestock diseases can also be communicable; such diseases are transmitted from one host to another through direct contact whether by inhalation or body contact.

In spite of all the efforts the extension agents from the Imo Agricultural Development Programme (ADP) had been making towards enhancing the livestock farmers, inefficiency of the extension agents to reach livestock farmers in rural areas is still a limiting factor. Most rural farmers that engage fully on livestock production are unable to unite themselves as a group in order to enable the extension agent easy access to contact them in order to communicate their needs to the change agent (Ajayi *et al.*, 2005).

MATERIALS AND METHODS

The study was carried out in Imo State, Nigeria. Imo State was selected because of proximity, cost and familiarity. The state is located in the South Eastern region of Nigeria and shares common boundaries with Abia on the East and Northeast, Rivers State on the West and Northeast. The state lies between latitude 5°45'N and 6°35'N of the equator and longitudes 6°35'E and 7°28'E of the Greenwich Meridian (Microsoft Corporation, 2009). It has a total land area of about 5,067.20km² (Ministry of Lands Owerri, 1992). The state has an average annual temperature of 28°C, an average annual relative humidity of 80%, average annual rainfall of 1800 to 2500mm and an altitude of about 100m above sea level (Imo ADP, 1990). The state has three agricultural zones (Orlu, Owerri and Okigwe Agricultural zones). These divisions are for administrative and extension services and not for any agro-ecological difference (Nwajiuba *et al.*, 2008). It is also delineated into 27 local government areas. The population of the state is 3,934,899 persons with many subsisting in farming (NBS, 2007).

The population of the study includes all the livestock farmers in the state. The three ADP zones which are Owerri, Orlu and Okigwe were considered. Then a simple random selection of 3 local government areas (LGA) per ADP zone to make a total of 9 LGAs was done.

Furthermore, eleven livestock farmers from eight of the selected LGA were randomly selected while twelve livestock farmers were randomly selected from the ninth LGA for the study.

This resulted in total sample size of 100. Both primary and secondary data were collected and used for the study primary data were collected using a set of structured and pretested questionnaires.

Completed instruments were retrieved and analysed using a combination of inferential and descriptive statistics.

RESULTS AND DISCUSSION

Socio-economic characteristics of respondents

The result in Table 1 indicated that majority of the farmers (50.00%) fall within the age bracket of 41-50years while 10% falls within the age bracket of 51-60years. The mean age of the respondents farmers was 42-6years. This implies that the livestock farmers are mainly young farmers indicating that the farmers could adopt improved livestock management technologies.

The distribution shows that 72.00% of the farmers were male. This implies that livestock keepers are more of male. Thus male headed households engage in livestock farming more than female headed households. The majority of the farmers were married with both partners alive, this may be as a result of the support given by members of the family in the production (Obinne, 1989) and partly due to the expected benefits derived in feeding members of their family from what they produce.

The highest household sizes of the farmers were 5-8 persons (50.00%) while the least was greater than 12 persons (4.00%). The mean household size was 7 persons; this large number is in line with the findings of Obinne (1989) who opined that large household is advantageous to farming as labour may be derived from the members of the family.

Approximately 24.0, 40.0 and 26.0 percent had primary education, secondary education and tertiary education. Most of the farmers (90%) received formal education, following this result, respondents could be said to be mainly literates. This literate proportion of the respondents implies that adoption of improved management practices of livestock keeping will be favoured as education affects adoption of new technologies positively.

Majority of the farmers (72.00%) had access to agricultural credit while the remaining 28.00% had no access. Accessibility to farm credit induces of the farmers received extension visit in 2011, this is favourable for the adoption of livestock technologies extension is an important source of information and knowledge while 54.00 had farming experience of 5-8years while the mean farming experience of the farmers is 8years. The implications is that they are capable of adopting agricultural technologies like improved management practices of livestock keeping because of their experience in farming and knowledge about its importance of improved agricultural production technologies.

Farmers' awareness of improved technologies associated with livestock production

Table 2 shows that majority (70.00%) of the farmers were aware of improved technologist associated with livestock production. With the level of awareness of some of the livestock management technologies there is likely

Table 1: Socio-economic characteristics of respondents

Variable	Frequency	Percentage (%)
Age (years)		
Less than 30	20	20.00
30 – 34	20	20.00
41 – 50	50	50.00
51 – 60	10	10.00
Total	100	100.00
Gender		
Male	72	72.00
Female	28	28.00
Marital status		
Married	58	58.00
Single	32	32.00
Divorced	10	10.00
Widowed	10	10.00
Total	100	100.00
Household size (number of persons)		
1 – 4	14	14.00
5 – 8	50	50.00
9 – 12	32	32.00
Greater than 12	4	4.00
Total	100	100.00
Educational level (years)		
No formal education (0)	10	10.00
Primary education (0)	10	10.00
Primary education (1-6)	24	24.00
Secondary education (7-12)	40	40.00
Tertiary education (12-18)	26	26.00
Total	100	100.00
Access to credit		
Access	72	72.00
No access	28	28.00
Total	100	100.00
Farming experience (years)		
1 – 4	38	38.00
5 – 8	54	54.00
9 – 12	9	8.00
Total	100	100.00

Average age of respondents = 42.6years, mean household size = 7persons, mean duration of education = 11years; source: field survey, 2012.

Table 2: Awareness of improved technologies associated with livestock production

Variable	Frequency	Percentage(s)
Awareness		
Yes	70	70.00
No	30	30.00
Total	100	100.00
Source of information		
Extension workers	30	30.00
Community leaders	18	18.00
Family members	12	12.00
Neighbours	6	6.00
Traders	4	4.00
Radio	20	20.00
Television	6	6.00
Extension letters	4	4.00
Total	100	100.00
Need of extension service		
Yes	98	98.00
No	2	2.00
Total	100	100.00

Source: Field survey, 2012

to be high adoption of these technologies, since farmers should be aware of a given technology before adoption.

Ascertaining their source of information on improved technologies, majority of the respondents (30.00%) said they got their information from the extension workers while the least (4.00%) got information from extension leaflets.

Information on respondent's response whether extension service is needed showed that almost all the respondent farmers (98.00%) are in need of extension services. Improvement in livestock production, productivity and sustainability will depend on farmers' willingness and access to new technology; this is the reason why almost all the farmers needed extension service. Agricultural extension services play a pivotal role in ensuring that the clientele (farmers) have access to improved and proven technologies and that their concerns and needs are properly addressed by relevant service providers.

Aspect of services needed most by the farmers

Table 3 showed multiple response from the respondent farmers. It revealed that 98.00% needed the service of extension agents in administering medications to their animals and brooding system in poultry production respectively. Another overwhelming percentages of 96.00%, 88.00% and 82.00% of the farmers needed education on feed formulation, major diseases of poultry and sanitation respectively. Also, 76.00% and 74.00% of the farmers needed information regarding sources of hybrids as well as knowledge on hatching eggs respectively. This distribution reveals that the farmers truly need the services of extension agents in managing their farms.

Conclusions and recommendations

The farmers are mainly young, married and educated men with moderate household size. Almost all the farmers in the area are aware of improved technologies associated with livestock production. Extension agents featured as the main source of information on improved technologies associated with livestock production. But an important aspect of the study is farmers' great submission on the need of extension service after being aware of all the technologies associated with livestock.

This is attributable to the fact that they have not fully adopted the technologies. The reason for this misnomer could be broadly on the model of extension services in use in the area. This calls to a more pluralistic approach to extension delivery in the area.

The study shows limited use of mass media by the farmers in obtaining farm information. Only radio featured regular agricultural programmes and it was the most often used mass medium by the farmers. Television and newspapers were hardly accessible and used by farmers.

In order to solve the problem of low availability and accessibility or complete unavailability and inaccessibility of mass media as channels of agricultural information to rural farmers, the available mass media in the study area including: radio, television, newspapers, should devise ways of reaching out to the rural areas instead of concentrating their operations or attention to urban centres.

Table 3: Frequency distribution of farmers responses on the aspect of service needed

Service Needed	Frequency	Percentage (%)
Introducing hybrid	76	76.00
Education on feed formulation	96	96.00
Medication	98	98.00
Sanitation	82	82.00
Hatching	74	74.00
Brooding system in poultry	98	98.00
Major disease of poultry	88	88.00

Source: Field survey, 2012

Extension today, must be pluralistic and inclusive (involve various players using knowledge, skills and various tools) to be able to react to the needs of agricultural industry. In order to develop the integrated pluralistic system the following needs to be done:

- the concept and process of the integrated approach should be developed and disseminated to help change mind sets,
- proper information and data base of service providers as well as farmers should be developed,
- to improve the efficiency of extension services, continuous training of extension agents and evaluation of the impact of training should receive a high priority,
- decentralize the planning process in agricultural extension and prepare independent flexible plans for the local level. This includes the preparation of realistic short and long term human capital development plan anticipating both pre and in-service education and training needs, opportunities and facilities in agricultural research, agricultural extension and agricultural education means,
- adopt extension methods that can provide accurate and fast information to a large number of farmers even in the face of dwindling financial resources.

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