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PERSPECTIVE OF AGRICULTURAL EXTENSION IN LIVESTOCK PRODUCTION IN KADUNA STATE

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ABSTRACT

The study was conducted to ascertain the perspective of extension in livestock production in Makarfi, Ikara and Kudan Local Government Areas of Kaduna State. Purposive sampling was used to select wards, multi-stage sampling was adopted to choose villages and simple random sampling to pick 240 responding farmers. Majority of the producers were between 21-40 years of age, literate, married with the mean years of experience of 12 years and mostly non-members of cooperative societies. The main source of extension services was the private sector and the services rendered were educational, health, technical, management and marketing. The extension communication methods used were visits, demonstration, workshop, training and excursion. The benefits of extension services were introduction of livestock species, marketing information, feed and feed ingredient supply, disease and pest control, and liaison services. Constraints to the use of extension services in livestock production were insufficient fund, ineffective research extension linkage, poor veterinary services, shortage of feed and grazing land and the attitude of the producers towards extension services.

Keywords: Agricultural extension, Livestock, Production, Purposive sampling

INTRODUCTION

Livestock are domesticated animals raised for the production of meat, eggs, fiber, dairy, wool, leather and a source of farm energy which include cattle, horses, sheep, goats, pigs and chickens to mention a few. Transmission of the information on livestock production has rarely been a priority in the centralized extension services in the developing nations but centered on annual crops and animal health. Livestock extension services provide information on animal integration in local levels, livestock health clinics or camps, access and respond to various livestock producer's needs (Nuru, 1986). According to Fakoya (2007) livestock are used for the production of meat to supply dietary protein and energy; dairy production for milk, yoghurt, cheese, butter and ice cream; Fiber production for textile industry; wool production from sheep and goats; leather production from the skin of cows, sheep and deer. The hooves, bones and horns are used for animal feed, glue and adhesives. The dung and dropping of livestock are used as manure for the production of annual crops and fertilizer for fish feed. Livestock generate energy for farm operations and transportation. Livestock graze on weeds as well as undergrowth. Carcass of livestock are used for chalk, the offal and non-edible parts are materials used for fish and animal feed, and often transformed into fertilizer for tobacco and tea. Livestock are easily handled and can be raised in enclosures, pastures, bans and pens. Constraints to the use of extension in livestock production were lack of sufficient fund, ineffective research extension linkage and lack of veterinary services. Shortage of feed, feed ingredients and grazing land as well as the

perception of farmers on the services (Getahun, 2012).

Objectives of the Study

The broad objective of the study is to ascertain the perspectives of agricultural extension in livestock production in the study area. The specific objectives were to:

1. To determine the socio-economic characteristics of livestock producers in the study areas;
2. To examine the sources of extension services;
3. To assess the types of extension services rendered;
4. To verify the communication methods used for extension service delivery;
5. Evaluate the benefits of extension services to livestock production and
6. Describe the constraints to the provision of extension services in the study areas.

Justification of the Study

Veterinary extension services improve the profitability of livestock farming activities, living standard of farmers through imparting them with knowledge, skills and change of attitude. Introduces improved livestock species, farming technology, practices and marketing strategies (Oladele, 2008). Animal and plant protein rich in minerals are required for human physical and intellectual development and the immunity against diseases (Nwosu, 1979). Nigeria has the capacity to support livestock production but lags behind in meeting the food and non-food requirement of the people as a result of poverty (Placid, 2006). Extension information in the developing countries has been centered on annual crops and animal health rather than livestock production (Scarborough, 1996).

Livestock extension service is constrained by insufficient fund, weak collaboration among the stock holders, insufficient expertise, very weak research and extension personnel linkage, inadequate infrastructural facilities and inconsistent policy (Adebayo et al., 2002). This study would advance the appropriate policies for the provision of Livestock extension services to increase the rate of production, generate employment, revenue, food and raw materials to develop the agricultural sector and the national economy. Modern methods for breeding, livestock husbandry, veterinary extension services, technology adoption, effective marketing strategies and dissemination of livestock information would be made a priority in agricultural extension services to boost livestock production in Nigeria.

MATERIAL AND METHODS

The Study Area

The study was conducted in Makarfi, Ikara and Kudan Local Government Areas of Kaduna State. The coordinates of Kaduna state are 10°20'N 7°45'E and 10.33°N 7.75° E. The state has a total land area of 48,473.2 sq km, a population of 6,066,512 and consisted of twenty three Local Governments Areas. Makarfi, Ikara and Kudan being three of them (NPC, 2006). It shared border with the Federal Capital Territory (FCT) Abuja, Kano, Katsina, Niger, Bauchi, Plateau, Nasarawa and Zamfara States. The State has two distinct seasons, the wet and dry seasons. The wet season covered April to October and the dry season covered November to March. The average rain fall in state was 1,485mm/Annum. The temperature ranged between 28 to 36°C during the humid period and 10 to 23°C in the harmatan period (KADP, 2009). The people living in the areas were predominantly farmers raising cattle, sheep and goats, rearing chickens and quail, and growing crops such as maize, Guinea corn, millet, rice, potatoes, yam, tomatoes, lettuce, sugar cane and ground nuts among others.

Sampling Procedure and Size

Purposive sampling method was used to select six wards, two from each Local Government area. Multi-stage sampling procedure was adopted to choose twelve villages two from each ward and simple random sampling technique was employed to pick 240 responding farmers.

Data Collection

Both primary and secondary data were collected for this study. Structured questionnaire and interview methods were used to solicit for primary data and the secondary data was collected from relevant documented literatures related to the study.

Analytic Techniques

The analytic technique used was the descriptive statistics involving mean, frequency distribution and percentages.

Variables for Measurement

The variables measured were the dependent and independent variables. The dependent variables being the livestock produced. The independent variables were the inputs used for the production of the livestock such as feed, drinkers, feeders etc.

RESULTS

Results have shown that 70% of the livestock producers were males and 30% females. The ages of the producers were 63% between 21-40 years, 27% above 40 years and 10% below 20 years with 33 years as the mean of age. About 67% of the sampled farmers were married and 33% singles. On education 64% had secondary school education, 21% tertiary and 15% primary school education. The occupation was 65% livestock production, 20% civil service, 11% trading and 4% schooling. The years of experience were 55% 1-10 years, 30% 11-20 years and 15% above 20 years with 12 years as mean. On cooperative membership 61% were non-members and 39% members. The sources of extension services were 48% private sector, 24% cooperatives, 21% Government and 7% the non-governmental organizations. The extension services rendered were 35% educational, 29% health, 12% technical, 11% management and 5% marketing. The radio was the common extension communication method used by all producers while 60% were visits, 25% demonstration, 8% workshop, 5% training and 2% excursion. The benefits of extension services in livestock production were 28% introduction of livestock species, 25% marketing information, 20% feed and feed ingredients supply, 15% disease and pest control, and 12% liaison services. Constraints to the use of extension services by livestock producers were 42% insufficient fund, 31% ineffective research extension linkage, 18% poor veterinary services, 5% shortage of feed and grazing land and 4% the attitude of the producers to extension services.

DISCUSSION

Livestock production cut across both sexes without barrier checking gender oppression. The producers were mostly youth full of energy, vitality and ideas to develop the community and solve the delinquency problem (Mustapha, 2007). The producers were educated with the ability of learning entrepreneurship and industrial skills to generate wealth, create job opportunities and improve national economic growth (Sharma, 1990). The mean years of experience of the producers was twelve, enough to broaden their ability to adopt the most appropriate managerial skills and technology in their production system (Arjan and Gerard, 2012). Most of the producers were not members of cooperative societies as such could not enjoy the pooling together of resources to achieve a common goal, generate profit and wield marketing power (Ebony, 2002). The private sector was the major source of extension services as supported by (Trish and Florence, 2002). Educational activities topped the extension services provided in line with (Getahun, 2012). The introduction of a variety of species was the major benefit of livestock extension services in the study areas in compliance with (Morton and Mathewman, 1995). The leading constraint to the use of agricultural extension services by livestock producers was insufficient fund in agreement with (Adebayo et al., 2002).

Table 1: Socio-economic Characteristics of the Livestock Producers

Variable	Frequency	Percentage
Sex		
Male	140	70
Female	60	30
Age in Years		
Below 20	20	10
21 - 40	126	63
Above 40	54	27
Marital Status		
Married	134	67
Single	66	23
Educational Level		
Primary	30	15
Secondary	128	64
Tertiary	42	21
Occupation		
Livestock Production	130	65
Civil Service	40	20
Trading	22	11
Schooling	8	4
Years of Experience		
1 - 10	110	55
11 - 20	60	30
Above 20	30	15
Membership of Cooperative Society		
Members	78	39
Non-members	122	61

Table 2 : Sources of Extension Services

Variable	Frequency	Percentage
Private Sector	96	48
Cooperatives	48	24
Government	42	21
Non-governmental Organization	14	7

Table 3 : Extension Services Provided

Variable	Frequency	Percentage
Educational	80	40
Health	58	29
Technical	30	15
Management	22	11
Marketing	10	5

Table 4 : Methods of Extension Communication

Variable	Frequency	Percentage
Visit	120	60
Demonstration	50	25
Workshop	16	8
Training	10	5
Excursion	4	2

Table 5 : Benefits of Extension Services in Livestock Production

Variable	Frequency	Percentage
Introduction of Livestock Species	56	
Marketing Information	50	25
Feed and feed supplement Supply	40	20
Disease and Pest Control	30	15
Liaison Services	24	12

Table 6 : Constraints to the use of Extension Services in Livestock Production

Variable	Frequency	Percentage
Insufficient fund	84	42
Ineffective research extension service	62	31
Poor veterinary services	36	18
Shortage of feed and grazing land	10	5
Attitude of livestock producers	8	4

CONCLUSION

Results of the study revealed that livestock producers were using extension services to boost their production through the supply of a variety of livestock species, feed and feed supplements, drugs and vaccine, marketing and extension information. The producers were literate and energetic youth full of progressive ideas to develop the society given the opportunity. Majority of the sampled farmers were not members of cooperative societies, thus, were not enjoying cooperatives services much. The sources of extension services in the study areas were the private sector, cooperatives, government and non-governmental organizations. The extension services provided were on education, health, technical, management and marketing. Visits to offices, farms and homes, demonstrations, workshops, training and excursion were the major means of communication between extension personnel and farmers. The constraints to the use of extension services by livestock producers were insufficient fund, ineffective research extension linkage, poor veterinary services, shortage of feed and grazing land and the attitude of the producers towards extension services.

Recommendations

In view of the results of the study the following recommendations are made:

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