Effectiveness of Agricultural Extension Agents in Rendering Advisory Services to Poultry Farmers in Anambra State

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ABSTRACT

The study assessed the effectiveness of agricultural extension agents in rendering advisory services to poultry farmers in Anambra state Nigeria. The specific objectives were to: ascertain poultry farmers' main sources of technical information, assess the level of effectiveness of extension agents in rendering advisory services, assess the level of use of advisory services among poultry farmers in the study area. A multi stage random procedure was employed to select 72poultry farmers and 48 extension agents total 120 respondents. Primary data were collected using a structured questionnaire and analyzed with percentage and mean. Findings revealed assessment of level of advisory services use was very high with grand mean of 2.05. Poultry farmers mainly source their information from feed dealers. Extension agents are poorly rendering advisory services to poultry farmers in the study area with the mean score of 3.05. Furthermore, the level of use of advisory service was very high with the mean score of 3.05. The study concluded that effectiveness of agricultural extension agent in rendering advisory services to poultry farmer is a viable means of sustainable and efficient poultry production. The study recommended agricultural extension agents should look for a better way to heighten their contacts with the poultry farmers

Keywords: Agricultural Extension Agents, Advisory services, Poultry Farmers

Introduction

Agricultural extension and advisory services are critical means of addressing rural poverty, since they have the mandate to transfer technology, support farmers in problem-solving and enable farmers to become more actively embedded in the agricultural knowledge and information system (Christopolos and Kidd, 2000). Agriculture occupies a key position in the Nigerian economy judging by its critical role of providing food security, provision of employment, revenue generation and provision of raw materials for industrial development. There are almost one billion small-scale farmers worldwide that extension is responsible to (Davis, 2006). Majority of these farmers are

found in Africa where the dominant occupation is farming (New Partnership for African Development, NEPAD, 2013).

The Nigerian agricultural extension service has been over time developed and tried have many approaches towards serving the needs of the myriads of farmers spread across the country. Among these approaches are the ministry-based general extension approach, Training and Visit extension approach, the integrated approach, University-based extension approach, animation rural approach, commodity-based approach and the private extension approach. The traditional extension approaches were criticized for providing a 'one size fits all' approach (Birner*et al.,* 2006) which failed due to factors in the diverse socioeconomic and institutional environments faced by farmers, or non-involvement of farmers in the development of technologies and practices appropriate to their contexts. Ultimately, extension is considered to have failed in achieving its main objective of improvements in farm productivity and in reaching the poor, particularly in Africa (Anderson and Crowder, 2000; Birkhauser, Evenson and Feder, 1991).

Consequent upon this has been the search for more participatory approaches which enable farmers' self-learning and sharing and also allow those facilitating farmer training as well as agricultural researchers further upstream to learn from the farmers (Birner*et al.,* 2006).

Omokhaye (2000) reported that the main problem of agricultural development in Nigeria is not the lack of technologies and scientific findings needed for economic and social change, but inadequate information on the usage of the improve technologies. Odebode (2008) also claimed that in many developing countries, including Nigeria, lack of appropriate technological and scientific knowledge application limits agricultural and economic progress. Idachaba (1995) confirmed that there are enough packages on the technological shelves and that the missing link is an effective agricultural system to disseminate available technologies.

Although the Anambra State government is promoting access to agricultural extension and advisory services by previously disadvantaged farmers, lack of access is still a reality at the grassroots level. When the Department of Agriculture (DOA) revised agricultural extension and advisory policies after 1994, a feasibility study was conducted to determine the appropriate model (s) suitable for amalgamated extension. The new extension models (approaches) were expected to include previously disadvantaged farmers who were segregated by the apartheid government

(DOA, 2005). The study recommended that Participatory Programme Extension Approach (PPEA) would be the main model suitable for the Anambra State context (DOA, 2005). In the end, it was concluded that there was no single model or approach suitable for all the regions of Anambra State, as a result other models or approaches such as technology transfer, advisory approach and project approach were adopted. However, the question was which extension approaches are practiced in the areas where farmers have access to agricultural extension and advisory services?

Lack of skills and knowledge about modern farming techniques has been identified as one of the major challenges facing emerging poultry farmers in Nigeria, mainly due to lack of access to information and skills regarding modern farming techniques. This is attributed to the fact that majority of emerging farmers in Anambra State do not have adequate support from the government through the provision of agricultural extension and advisory services. Thus, it leads to food insecurity in the rural communities where agriculture is the key economic driver, which predisposes rural people to reliance on government financial support services such as social grants.

The success or failure of extension delivery is widely based on the level of adoption without considering the effectiveness of extension service delivery. Oguremi and Olatunji (2013) describe extension service delivery as the process by which extension providers bring extension services in form of advice on technology, credits and other farm inputs, on marketing and on all other innovation from the research institutes to the farmer. They stressed that extension providers have the responsibility of providing learning situations, making farmers aware of research findings and persuading them to change their behaviours in favour of the services. The effectiveness of an extension programme is therefore based on the change in the behaviour of farmers towards adopting extension services.

Madukwe (2006) stresses that the failure of the various extension delivery approaches in developing countries to effectively engineer significant and sustainable productivity and net income growth has become a major concern to all stakeholders, including the donor community. The concerns according to him have been fuelled by the wave of pluralism, market liberalisation and globalisation sweeping across the world and giving rise to initiatives that will enhance efficiency and effectiveness of not only the sub-components of extension delivery but the entire system of technology generation, dissemination and use.

With a rapidly expanding population, environmental degradation, political instability, economic failure and the declining budget, there is, therefore, need to re-assess donor driven extension delivery in particular and its effectiveness and sustainability in the face of an almost non-existent agricultural extension policy. Extension agents, sought to empower local communities and improve government's capacity to reach out specifically to the poor and vulnerable groups (Nwachukwu&Ezeh, 2007). However, many studies (Ogbonna&Agwu, 2013; Agwu, Ekwueme and Anyanwu, 2008; Agwu, 2004) have pointed out the low level of extension contacts with rural farmers. This raises concerns as to farmer's involvement and access to extension services offered by extension agents. Has extension agents achieved its purpose of helping the federal government to boost access to extension services? Or do we need, yet again, other extension agents? Therefore, this study was conceived to assess the level of effectiveness and the approaches of delivery of agricultural extension and advisory services to poultry farmers in Anambra State.

The general objective of the study was to assess effectiveness of agricultural extension agents in rendering advisory services to poultry farmers in Anambra state.

The specific objectives were to;

i. ascertain poultry farmers sources of technical information.
ii. assess the level of effectiveness of Extension agents in rendering advisory services to farmers;
iii. assess level of use of advisory services among poultry farmers in the study area

Material and Methods

The study area is Anambra State, South East Nigeria, It comprises 21 Local Government Area, and is located within Latitudes 6° 27' 10" (6.4528°) North, and Longitude 7° 30' 37" (7.5103°) East (Mapcarta, 2017). South East Nigeria is a region of Nigeria that borders Cameroon to the east and the Atlantic Ocean to the south. The zone occupies a total land mass of 10,952,400 hectares with a population of 5,309,7689 (NPC 2006)

The Population of this study comprises all poultry farmers and extension agents in Anambra state

Sample Size and Sampling Technique

The multistage sampling procedure was used to select the respondents

The first stage was a purposive selection of two agricultural zones based on proximity

Stage two was the purposive selection of three blocks from each of the selected agricultural zones, giving a total of six (6) blocks.

Stage 3 involved selection of four (4) circle each giving a total of twenty four (24) circles.

The fourth stage involvedsimple random sampling of three (3) poultry farmers giving a total of seventy (72) poultry farmers.

For the extension agents, there was simple random sampling of eight (8) extension agents from the already selected six (6) blocks giving a total of forty eight (48) extension agents for the study.

Method of Data Collection

Primary data was collected using structured questionnaire from farmers using value chain actors.

Data Analysis

Objectives i, ii, and iii were realized using frequency count, percentage and means.

Results and Discussion

Poultry Farmer' Main Sources of Information

The result of Poultry Framers Main Sources of information is presented in the table 1

Table 1: Poultry Farmers' Main Sources of Information

Area of Technical Advice	Fellow Farmers	Feed Dealers	Chick Suppliers	Extension Agents	Ministry of Agriculture	Veterinary Doctors
Housing of Poultry	43(59.7)	9(12.5)	0(0.0)	20(27.8)	0(0.0)	0(0.0)
Stocking of Poultry	30(41.7)	20(27.8)	7(9.7)	15(20.8)	0(0.0)	0(0.0)
Brooding of birds	20(27.8)	27(37.5)	16(22.2)	9(12.5)	0(0.0)	0(0.0)
Feed formulation	25(34.7)	38(52.8)	7(9.7)	2(2.8)	0(0.0)	0(0.0)
Feeding of Poultry	8(11.1)	51(70.8)	11(15.3)	2(2.8)	0(0.0)	0(0.0)
Sanitation of Poultry environment	19(26.4)	27(37.5)	16(22.2)	10(13.9)	0(0.0)	0(0.0)
Poultry Vaccination	25(34.7)	9(12.5)	24(33.3)	2(2.8)	0(0.0)	12(16.7)
Poultry Disease and Pest Management	16(22.2)	28(38.9)	9(12.5)	7(9.7)	0(0.0)	12(16.7)
Management of Poultry Products	21(29.2)	24(33.3)	8(11.1)	15(20.8)	4(5.6)	0(0.0)
Marketing of Poultry Products	32(44.4)	10(13.9)	24(33.3)	6(8.3)	0(0.0)	0(0.0)

Key: Field Survey, 2021. Figures in parenthesis = percentages.

The result shows poultry farmers main source of information. The analysis shows that the respondents source information about housing of poultry from fellow farmers with the percentage of (59.7%), stocking of poultry from fellow farmers (41.7%), brooding of birds from feed dealers (37.5%), feed formulation from feed dealers (52.8%), feeding of poultry from feed dealers (70.8%), sanitation of poultry environment from feed dealers (37.5%), poultry vaccination from fellow farmers (34.7%), poultry disease and pest management from feed dealers (38.9%), management of poultry products from feed dealers (33.3%), marketing of poultry products from fellow farmers (44.4%), therefore poultry farmers main source of income is from the feed dealers.

Access to Advisory Service from Extension Agent

The result of the method used by poultry farmers to access advisory services for extension agents is presented in the table 2

Table 2: Methods used by poultry farmers to access advisory services from extension agents

Area of Technical Advice	Demonstration	Radio	Television	Extension Guide	Farm/Home Visits	Phone Calls
Housing of Poultry	7(9.7)	15(20.8)	11(15.3)	21(29.2)	15(20.8)	3(4.2)
Stocking of Poultry	12(16.7)	7(9.7)	20(27.8)	9(12.5)	20(27.8)	4(5.6)
Brooding of birds	7(9.7)	10(13.9)	26(36.1)	3(4.2)	22(30.6)	4(5.6)
Feed formulation	11(15.3)	16(22.2)	22(30.6)	4(5.6)	13(18.1)	6(8.3)
Feeding of Poultry	7(9.7)	14(19.4)	17(23.6)	18(25.0)	14(19.4)	2(2.8)
Sanitation of Poultry environment	3(4.2)	21(29.2)	19(26.4)	9(12.5)	20(27.8)	0(0.0)
Poultry Vaccination	4(5.6)	18(25.0)	17(23.6)	18(25.0)	15(20.8)	0(0.0)
Poultry Disease and Pest Management	6(8.3)	7(9.7)	26(36.1)	18(25.0)	15(20.8)	0(0.0)
Handling of Poultry Products	6(8.3)	13(18.1)	21(29.2)	12(16.7)	20(27.8)	0(0.0)
Marketing of Poultry Products	7(9.7)	11(15.3)	27(37.5)	12(16.7)	15(20.8)	0(0.0)

Key: figures in parenthesis = percentages.

Table shows the methods used by poultry farmers to access advisory services from extension agents in the study area. The results shows that extension guides were used to access housing of poultry with percentage of 29.2%, television and farm/home visit to access stocking of poultry (27.8%), television to access brooding of birds (36.1%), television to access feed formulation (30.6%), extension guides to access feeding of poultry (25.0%), radio to access sanitation of poultry (29.2%), radio and extension guides to access poultry vaccination (25.0%), television to access poultry disease and pest management(36.1%), television to access handling of poultry products (29.2%), television to access marketing of poultry products(37.5%).

Effectiveness of Extension Agents in Rendering Advisory services to Poultry Farmers

The effectiveness of extension agents in rendering advisory services to poultry farmers is presented in table 3 below

Table 3: Effectiveness of extension agents in rendering advisory services to poultry farmers

Area of Technical Advice	Very High	High	Moderate	Low	Very Low	Mean	Remark
Housing of poultry	4(5.6)	12(16.7)	40(55.6)	15(20.8)	0(0.0)	3.07	High
Stocking of poultry	0(0.0)	15(20.8)	46(63.9)	10(13.9)	1(1.4)	3.07	High
Brooding of birds	1(1.4)	7(9.7)	43(59.7)	21(29.2)	0(0.0)	2.80	Low
Feed formulation	0(0.0)	13(18.1)	29(40.3)	30(41.7)	0(0.0)	2.76	Low
Feeding of poultry	0(0.0)	14(19.4)	32(44.4)	26(36.1)	0(0.0)	2.83	Low
Sanitation of poultry environment	0(0.0)	13(18.1)	49(68.1)	10(13.9)	0(0.0)	3.04	Low
Poultry vaccination	0(0.0)	7(9.7)	26(36.1)	39(54.2)	0(0.0)	2.56	Low
Poultry disease and pest management	0(0.0)	13(18.1)	46(63.9)	13(18.1)	0(0.0)	3.00	Low
Handling of poultry products	0(0.0)	10(13.9)	34(47.2)	28(38.9)	0(0.0)	2.75	Low
Marketing of poultry products	0(0.0)	6(8.3)	37(51.4)	29(40.3)	0(0.0)	2.68	Low
Grand Mean						2.86	

Key: Field Survey, 2021. Decision Rule = 3.05

The table shows the result of effectiveness of agricultural agents in rendering advisory services to poultry farmers. Housing of poultry with the mean score of 3.07, stocking of poultry (X=3.07), brooding of birds (X=2.80), feed formulation(X=2.76), feeding of poultry(X=2.83), sanitation of poultry environment (X=3.04), poultry vaccination(X=2.56), poultry disease and pest management (X=3.00), handling of poultry products (X=2.75), marketing of poultry products (X=2.68).

Conclusion

The study concluded that effectiveness of agricultural extension in rendering advisory services to poultry farmer is a viable means of sustainable and efficient poultry production which will lead to increase in farmers' income and reduction in poverty.

Recommendations

Based on the findings of this study, the following recommendations were made from the specific objectives to assist the extension professionals and NGO in decision making;

1. Extension agents should look for a better way to heighten their contacts with the poultry farmers.

2. There is need for government to take serious look into the lapses of ADP over poor rendering of advisory services to poultry farmers and ensure there are ways to reach poultry farmers

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