MEDWIN PUBLISHERS
Committed to create value for Researchers

Open Access Journal of Agricultural Research
ISSN: 2474-8846

Assessment of the Constraints to Effective Delivery of Agricultural Extension Services in Lagos State, Nigeria

Agoda S, Nwanade CF*, Udefi IO, Benson OB and Ajayi AO

Nigerian Stored Products Research Institute, Nigeria

***Corresponding author:** Nwanade CF, Nigerian Stored Products Research Institute, Lagos State, Nigeria, E-mail: chuk.fidel@yahoo.com; nwanadecf@nspri-ng.org

Research Article

Volume 2 Issue 4

Received Date: September 29, 2017

Published Date: October 26, 2017

Abstract

This study assessed the constraints to effective delivery of agricultural extension services in Lagos State, Nigeria. A sample size of forty (40) respondents was interviewed. Data for this study were collected through interview schedule using structured questionnaire. Results of the data analysis showed that majority (57.5%) of agricultural extension staff in the state were males while (42.5%) were females. The identified constraints to effective delivery of agricultural extension services in the State were; inadequate trained agricultural extension staff, inadequate training and re-training programme for agricultural extension staff, inadequate ratio of agricultural extension agents to farm families, poor motivation of agricultural extension staff, inadequate funding by government, information and communication technology (ICT), Government commitment to implementation of policies and programmes including high level of illiteracy among farmers. It is recommended that the ratio of agricultural extension agents to farm families in the state be increased, regular training and re-training of agricultural extension staff be carried out to enhance their performance, there should be provision of incentives to motivate agricultural extension agents and government commitment to timely implementation of policies and programme will enhance effective delivery of agricultural extension services in the state.

Keywords: Assessment; Constraints; Extension services; Effective delivery; Extension agents

Introduction

Agricultural extension and advisory services played an important role in agricultural development and can contribute to improving the welfare of farmers and other people living in the areas. Agricultural extension and advisory services was put into practice in order to provide farmers' needs regarding the information, experience and technical methods adequately and timely at the field level [1]. The goals of agricultural extension include transferring from the global knowledge base and from local research to farmers, enabling them to clarify their own goals and possibilities, educating them on how to make better decisions, and stimulating desirable agricultural development [2]. Thus, extension services provide human capital- enhancing inputs, including information flow that can improve rural welfare.

Technical Centre for Agricultural and Rural Co-operation, CTA (2011) [3] and United States Agency for International Development, USAID (2005) [4], maintained that agricultural extension and advisory services were

designed to help farmers boost crops and livestock production. These services enable farmers to adopt new technologies for increase in production and profitability. According to them the specific objectives of agricultural extension and advisory services are to:

i. Provide advice to farmers on problems or opportunities in agricultural production, marketing, conservation and family livelihood.

ii. Facilitate development of local skills and organizations, and to serve as links with other programmes and institutions.

iii. Transfer new technologies to farmers and rural people;

iv. Address public interest issues in rural areas, resource conservation, health and food security, monitoring food safety, nutrition and family education as well as youth development.

Under the present extension arrangement in Nigeria, the Agricultural Development Project (ADPs) in each State and Abuja are responsible for most of the agricultural extension services in the country. The ADP concept is built on the premise that a combination of factors consisting of the right technology, effective extension services, access to physical production inputs, adequate and complimentary infrastructure facilities are basic to the improvement in the living standard of the agricultural producers and rural dwellers.

However, these services have been facing various constraints which this study wants to identify and profess possible solution. Effective delivery of agricultural extension services is expected to play a significant role in agro-production, processing, storage and marketing of food commodities. This study would provide information to farmers, government and policy makers on constraints to effective delivery of agricultural extension services. This information will guide them in making policies that will enhance the performance of agricultural extension agents and increased in productivity of the farmers.

Objective of the study

The general objective of the study was to assess the constraints to effective delivery of agricultural extension services in Lagos State. The specific objectives were to:

i. describe the demographic characteristics of the agricultural extension personnel

ii. identify the constraints to effective delivery of agricultural extension services in Lagos State

iii. Examine the strength of Lagos State Agricultural Development Authority Linkages with agricultural institutions / organization.

Justification of the Study

Effective delivery of agricultural extension services is expected to play a significant role in agricultural production, processing, storage and marketing of food commodities. This study would provide information to farmers, policy makers and government on constraints to effective delivery of agricultural extension services. This information will guide in making policies that will enhance performance of agricultural extension personnel, farmers and increase in productivity.

Materials and Methods

This study was carried out in Lagos State. The state is located in the south western geopolitical zone of Nigeria with geographical co-ordinates of 6° 27' 11" North, 3° 23' 45" and latitude 6.5833°N and 3.7500°E with a total area of 8,547 Km^2 (5,310sqm). In order to achieve effective agricultural extension services delivery, Lagos State is divided into three (3) agricultural zones; Eastern zone, western zone, and Far Eastern zone. The Eastern zone has four (4) agricultural extension blocks with thirty-two (32) cells, Western zone and far East has six (6) agricultural extension blocks each with forty-eight (48) cells respectively.

Simple random sampling techniques done on a multi-stage basis was used to select extension blocks, cells and respondents. The first stage involved random selection of two (2) extension blocks from each of the three (3) agricultural zones. This gave a total of six (6) extension blocks with forty-eight (48) cells. The second stage involved random selection of ten (10) cells each from the two (2) blocks in the three (3) agricultural zones. This gave a total of thirty (30) cells. The third stage involved random selection of ten (10) respondents from Eastern zone selected cells and fifteen (15) respondents each from Western and Far East zones cells respectively. This gave a sample size of forty (40) respondents that were interviewed. The sample size selection is shown in Table 1.

Agric. Zones	No. of Blocks	No. of Selected Blocks	No. of Extension Blocks	No. of Selected Cells	No. of selected Respondents Interviewed
Eastern Zone	4	2	16	10	10
Western Zone	6	2	16	10	15
Far East Zone	6	2	16	10	15
TOTAL	**16**	**6**	**48**	**30**	**40**

Table 1: Sample Size Selection.

Data for this study were collected by the use of structured questionnaire / interviewed schedule. Data were analyzed using frequency counts, percentages and mean scores of Likert type scale responses.

Results and Discussion

Variables	Frequency	Percentage	Mean
Gender:			
Male	23	57.5	
Female	17	42.5	
Age:			44
29 – 38	6	15	
39 – 48	26	65	
49 – 58	8	20	
Marital Status:			
Married	32	80	
Single	5	12.5	
Divorced	_	0	
Widow	3	7.5	
Educational Level:			
SSCE	1	2.5	
OND/NCE	4	10	
HND/B.Sc.	26	65	
Post-graduate Degree	9	22.5	
Household Size:			6
1 – 4	12	30	
5 – 8	25	62.5	
9 – 12	3	7.5	
Years of Working experience:			13.5
1 – 10	11	27.5	
11 – 20	26	65	
21 – 30	3	7.5	

Table 2: Demographic Characteristics of Respondents (N= 40).

S no.	Statement	Mean Score	Ranting	Decision
1	Trained Agricultural Extension staffs are inadequate.	2.88	4	Agreed
2	Training and re-training programme for Agricultural Extension staffs are inadequate.	2.68	6	Agreed
3	Agricultural Extension staff has sufficient knowledge, attitudes and skills that can contribute to excellence work.	3.05	2	Agreed

4	The ratio of Agricultural Extension agents to farm-families in Lagos State is adequate.	2.03	15	Disagreed
5	Socio-cultural belief and religion affect Agricultural Extension Services.	2.33	11	Disagreed
6	Improved Agricultural technologies that enhance productivity are disseminated appropriately to farmers.	3.15	1	Agreed
7	Agricultural Extension agents are well motivated.	2.28	14	Disagreed
8	Government funding of Agricultural Extension Services are inadequate.	2.95	3	Agreed
9	Effective delivery of Agricultural Extension services is influenced by gender issues.	2.35	10	Disagreed
10	Information and communication technology (ICT) affect Agricultural Extension Services.	2.63	7	Agreed
11	Poor linkages between Agricultural Research Institute and Lagos State Agricultural Development Project (LADP). Disagreed	2.25	13	Disagreed
12	Non-existence/inadequate farmer's co-operative associations affect Agricultural Extension Services Disagreed	2.33	11	Disagreed
13	Poor government commitment to implementation of policies and programmes in agriculture affect Agricultural Extension Services. Agreed	2.85	5	Agreed
14	Farmers lack of interest in participating in extension programmes affect Agricultural Extension Services.	2.63	7	Agreed
15	High level of illiteracy among farmers affects Agricultural Extension Services.	2.50	9	Agreed

Table 3: Mean Score of Respondents by Perceived Constraints to Affective Delivery of Agricultural Extension Services in Lagos State (N = 40).
Source: Field Data, 2015
NB: 2.50 above = Agreed
Below 2.50 = Disagreed

Major Categories of Extension Staff	No. of Male/Female Staff		Total	Percentage
	Male	Female		
Senior Management Staff	20	11	31	22.3
Subject Matter Specialists	14	9	23	16.55
Field-level Extension Staff	36	18	54	38.85
Information Technology & Communication Support Staff	14	3	17	12.23
In-Service Training Staff	5	9	14	10.07
Total	**89**	**50**	**139**	**100**
Percentage	**64.03**	**35.97**		**100%**

Table 4: Number of Extension Staff by Category of Position.
Source: Field Data 2015

S No.	Institutions	Mean Score	Ranking	Remark
1	Agricultural Research Organization	3.6	1	Good
2	Agricultural Universities	2.98	4	Poor
3	Agricultural School/Colleges	2.78	7	Poor
4	Private Sector Inputs Supply Firm	3.03	3	Good
5	Private Sector markets/exporters	2.85	6	Poor

6	NGOs involved in Extension Activities	2.65	8	Poor
7	Local Government Agencies	2.53	9	Poor
8	Co-operative/Consumer Organization	3.23	2	Good
9	Banks/Micro-credit institutions	2.93	5	Poor
10	Other public/Semi-public extension Organization, specify	2.1	10	Poor

Table 5: Mean Score of Respondents on Strength of Lagos State Agricultural Development Authority Linkages with Institutions / Organizations (N= 40).
Source: Field Data 2015
NB: 3.0 above= Good
Below 3.0= Poor

Demographic Characteristics of the Respondents

The demographic data were gender, age, marital status, educational level, household size and working experience as shown in table 2.

Gender: Majority (57.5%) of the respondents were males while 42.5% were females. This implies that male agricultural extension personnel in Lagos State are more than the female. This finding is similar to report by Beintema (2006) [5] that only "one in five agricultural researchers in the developing world are female. The end result is fewer women than men filling the ranks of extension agents and agricultural scientists. They also take on a limited range of occupations in these services [6]. UNESCO (2003) [7] also reported that in 2000, women made up 20 percent of the agriculture students in African and Arab countries compared with 47 percent in Europe.

Age: Majority (65%) of the respondents belongs to the age group of 39 – 48 years old and the average age of the respondents was 44 years. Result by Fagbohungbe (2009) [8] shown that age is a factor of experience and it largely determines the level to which an individual perceived the happening in the environment in which he / she lives to make meaning out of it.

Marital status: A high proportion (80%) of the respondents were married, single (12.5%), divorced (0%) and widow (7.5%). The high proportion of the respondents that were married implies that most of them have family responsibilities that need financial commitment [9].

Educational level: Majority (65%) of the respondents had first degree and its equivalent (HND/B.Sc.), Post graduate degree (22.5%), OND/NCE (10%) and SSCE (2.5%). Generally, education is thought to create a favorable mental attitude for the acceptance of new practices especially of information-intensive and management-intensive practices [10].

Household size: Majority (62.5%) of the respondents had household size of between 5 – 8, 1 – 4 (30.0%) and 9 - 12 (7.5%). The average household of the respondents was 6.

Years of working experience: The percentage working experience of the respondents were; 1 -10 years 927.5%), 11 – 20 years (65%) and 21 – 30 years (7.5%). The average working experience of the respondents was 13.5 years. This implies that the respondents were experienced.

In Table 3, the respondents agreed that trained agricultural extension staff for effective delivery of agricultural extension services in Lagos State were inadequate (X= 2.88), the respondent agreed that training and re-training programme for agricultural extension staff were inadequate (X= 2.68), the respondent agreed that agricultural extension staff in Lagos State have sufficient knowledge, attitude and skills that can contribute to excellent work (X=3.05), the respondents disagreed that the ratio of agricultural extension agents to farm families in Lagos State were adequate (X= 2.03), the respondents disagreed that socio-cultural belief and religion affected agricultural extension services (X= 2.33), the respondents agreed that improved agricultural technologies that enhances productivity were disseminated appropriately to farmers (X= 3.15), the respondents disagreed that agricultural extension agents were well motivated (X= 2.28), the respondents agreed that government funding of agricultural extension services were inadequate (X = 2.95), the respondents disagreed that effective delivery of agricultural extension services was influenced by gender issues (X = 2.35), the respondents agreed that information and communication

technology (ICT) affected agricultural extension services (X = 2.63), the respondents disagreed that poor linkages between agricultural research institutes and Lagos State Agricultural Development Project affected agricultural extension services (X = 2.25), the respondents disagreed that non-existence / inadequate farmers' co-operative associations affected agricultural extension services (X = 2.33), the respondents agreed that poor government commitment to implementation of policies and programmes in agriculture affected agricultural extension services (X = 2.63) and respondents agreed that high level of illiteracy among farmer affected agricultural extension services in Lagos State (X = 2.50). The findings are similar to work done by Ajani and Onwubuya (2013) [11], who report that extension agents performance in Anambra State, Nigeria are highly constrained by several factors such as low incentives, poor communication skills, low educational attainment, cultural factors, and farmers' illiteracy and lack of interest. Sociocultural factors are leading constraints to the effectiveness of extension [12].

The result in Table 4 showed that senior management staffs of agricultural extension in the Lagos State Agricultural Development Authority were (22.30%), Subject Matter Specialists (SMSs) were (16.55%), Field-level Extension Staff (38.85%), Information Technology and Communication Support Staff (12.23%), Service Training Staff (10.07%) and majority of this categories of extension staff (64.03%) were males while 35.97% were females. Vijayaragavan and Singh (1998) [12] reported that inadequate numbers and qualifications of staff remain a difficult problem for public-sector extension organizations. Salaries and benefits are rarely competitive with those of comparable private.

In Table 5, the respondents agreed that Lagos State Agricultural Development authority had good linkages with Agricultural Research Organization (X= 3.60), poor linkages with Agricultural Universities (X= 2.98), poor linkages with Agricultural schools/colleges (X= 2.78), good linkages with Private sector inputs supply firm (X= 3.03), poor linkages with private sector market / exporters (X= 2.85), poor linkages with NGOs involved in extension activities (X= 2.65), poor linkages with Local government agencies (X= 2.53), good linkages with co-operative / consumer organization (X = 3.23), poor linkages with Banks and Micro-credit Institutions (X= 2.93) and poor linkages with other public / semi-public extension organization (X= 2.10). The findings are in agreement with Peterson (1997) [13], who reported that communication between extension and education organizations is poor. As a result, extension commonly has staffing problems.

Conclusion and Recommendations

In view of the findings of this study, it can be concluded that the majority of agricultural extension staff in Lagos State, Nigeria were males. The identified constraints to effective delivery of agricultural extension services in the State were; inadequate trained agricultural extension staff, inadequate training and re-training programme for agricultural extension staff, inadequate ratio of agricultural extension agents to farm families, poor motivation of agricultural extension staff, inadequate funding by government, information and communication technology (ICT), Government commitment to implementation of policies and programmes including high level of illiteracy among farmers. It is recommended that the ratio of agricultural extension agents to farm families in the state be increased, regular training and re-training of agricultural extension staff be carried out to enhance their performance, there should be provision of incentives to motivate agricultural extension agents and government commitment to timely implementation of policies and programme will enhance effective delivery of agricultural extension services in the state.

Acknowledgement

We hereby acknowledged the management of Lagos State Agricultural Development Authority (LSADA) and staff of the Department of Agricultural Extension for making available all data that were used for this study.

References

1. Anderson JR (2007) Agricultural Advisory Services: Background Paper for the World Development.

2. Van den Ban AW, Hawking HS (1996) Agricultural Extension 2nd (Edn). Oxford: Blackwell Science.

3. CTA (2011) Three Steps towards Modernization of Agriculture; Spore: Special Edition pp 18-22.

4. USAID (2005) Rice Fact Sheet.

5. Beintema N (2006) Participation of Female Agricultural Scientists in Developing Countries. Agricultural Science and Technology Indicators Brief. Washington DC: IFPRI.

6. Manfre C, Rubin D, Allen A, Summerfield G, Colverson K, et al. (2013) Reducing the gender gap in agricultural extension and advisory services. How to find the best fit for men and women farmers. MEAS discussion paper series on good practices and best fit approaches in extension and advisory service provision. MEAS discussion paper 2: 1-28

7. United Nations Educational, Scientific, and Cultural Organization (UNESCO) (2003) Gender and Education for All: The Leap to Equality. Paris: UNESCO.

8. Fagbohungbe BO, Longe SO (2009) An Introductory Psychology: Concepts and Principles, Kotleb Consult, Lagos, Nigeria.

9. Ifejika PI, Akinbile LA, Ifejika LI, Oladeji JO (2008) The Socio-economic Effects on Adoption of Agriculture Technologies among Fist Farmers in Anambra State. Nigeria. Journal of Agricultural Extension 2: 74-86.

10. Caswell M, Fuglie K, Ingram C, Jans S, Kasca k (2001) Adoption of Agricultural Production Practices: Lessons Learned from the Area Studies Project. Washington D.C., US Department of Agriculture, Resource Economics Division, Economic Research Service, Agricultural Economic Report No. 792.

11. Ajani EN, Onwubuya EA (2013) Constraints to Effective Communication among Extension Agents in Anambra State, Nigeria. Journal of Agricultural and Food Information 14(1): 18-25.

12. Vijayaragavan K, Singh YP (1998) Managing human resources within extension. In Swanson BE, Bentz RP, Sofranko AJ (Eds.) Improving agricultural extension: A reference manual. Rome, Italy: Food and Agriculture Organization of the United Nations. Pp: 182-192.

13. Peterson W (1997) The context of extension in agricultural and rural development. Improving agricultural extension: A reference manual. Food and Agriculture Organization of the United Nations, Rome, Italy.

14. Doss CR, Morris ML (2001) How does gender affect the adoption of Agricultural innovation? The case of improved maize technologies in Ghana. Journal of Agricultural Economics 25(1): 27-39.

15. Overfield D, Flemming E (2001) A note on the influence of gender relations on the technical efficiency of small holder coffee production in Papua, New Guinea. Journal of Agricultural Economics 52(1): 153-156.