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Farmers' perception of the effectiveness of extension agents of Delta State Agricultural Development Programme (DADP)

A. Aphunu and C. S. O. Otoikhian

Department of Agricultural Extension and Management, School of Agriculture, Delta State Polytechnic, Ozoro, Nigeria

Department of Animal Science (Faculty of Agriculture) Ambrose Alli University Ekpoma, Edo State, Nigeria

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ABSTRACT: The paper sought to determine farmers' perception of the effectiveness of extension agents of Delta Agricultural Development Programme (DADP). Structured interview schedule was used in collecting data from one hundred and twenty-eight food crop farmers randomly selected from the area. Descriptive statistics and chi-square were used for statistical analysis. The findings indicated that majority (71.1 %) of the farmers were female and belong to the age bracket of 30-49 years old which accounted for 81.2% percent of the respondents, About 62% had contact with extension agents on a monthly basis. Respondents perceived extension agents to be vast in knowledge of subject matter and they integrated theories with practicals well. However, respondents were not impressed with extension agents in regards to teaching and communication skills. There was a significant association between the effectiveness of extension agents and the adoption of technologies. These findings suggest that for extension to be effective and assist in reducing poverty in Nigeria, there is need for extension agents to be retrained to keep them abreast with model teaching techniques.

Key Words: Perception, Extension Agents, Agricultural Development Programme.

Introduction

Agriculture remains the nation's main economic bedrock employing 70-80 percent of the total population, mostly on a subsistence level (Asiabaka and Owens, 2002). However, in spite of the potentialities and prospects of producing food for home consumptions and export, the World Bank's (1997) report revealed that achieving a balance between food and population growth is a serious problem in Nigeria today.

According to Agbamu (2005), sequel to the food situation in many developing societies, which are predominantly agricultural, finding how to raise productivity among the rural poor in these countries has become one of the two or three most urgent questions confronting the international development community today. Agricultural development implies a shift from traditional methods of production to new, science- based methods of production that include new technological components, such as new varieties, cultural practices, commercial fertilizers and pesticides as well as new crops and new farming systems (Madukwe and Erie, 1999). Consequently, a wide range of policies and approaches have been formulated in most of these countries (Nigeria inclusive) to reverse the worsening food and agricultural trends towards sustained agricultural growth. This has necessitated putting in place a combination of factors comprising

the right technology, effective extension, access to physical inputs, adequate market support services and some infrastructures to improve agricultural productivity and raise the standard of living of rural dwellers. However, a common feature of these strategies according to Poole (1994), is that government runs agricultural extension services devoted to augment small holder productivity by promoting the adoption of new scientific farming practices through educational procedures.

The agricultural extension service operates from the backdrop belief that increased agricultural productivity depends primarily upon the acceptance of improved cultural and technological change at the rural farm level and that peasant farmers can achieve higher farm yields only if they adopt recommended scientific farming techniques in place of their traditional practices. But Asiabaka, *et al* (2001) have expressed the view "'that for farmers of different agricultural zones to adopt a new technology, they must be aware of the technology, have a valid and up-to-date information on the technology, the applicability of the technology to their farming system and receive the technical assistance necessary for the technology". Thus,Obinne and Anyanwu. (1991) and Rogers (1995), have posited that successful adoption of improved farming techniques is predicated upon rural farmers acquiring the required knowledge and understanding of these technologies, a process most effectively accomplished by the agricultural extension service.

The Agricultural Development Programme (ADP) extension Strategy was based on the premise that a combination of essential factors comprising of the right technology, effective extension, access to physical production enhancing inputs, adequate market and other infrastructural facilities are essential ingredients to get agriculture moving and to improve productivity in order to raise the living standards of rural dwellers (Braimah, 1992). However, there seems to be a yawning gap existing between these strategies and the utilization of the many impressive research results at the production end and hence no appreciable impact on the overall agricultural production (Omotayo, *et ai*, 2001). Preconditions for extension agents to be effective include ability to communicate, attitude to extension work, frequency of contact with farmers and field responsibility, which are examined from the viewpoint of the farmers. The proposition is that the accomplishment of extenSion service (ADP) goals depends primarily on the effectiveness of the extension agents achieving the programme objectives. This study therefore sought to determine farmers perception of the effectiveness of extension agents of Delta ADP.

The purpose of this study is to determine how farmers perceived the effectiveness of extension agents of Delta Agricultural Development Programme in performing their duties.
The specific objectives:

1. determine the socio-economic characteristics of contact farmers in the area.
2. determine the frequency of contact between contact farmers and extension agents.
3. determine respondents' assessment of the extension agents' performance in teaching and communication; and
4. determine the relationship between perceived effectiveness of extension agents and the adoption of innovations.

Materials and Methods

The study was conducted in Delta State, which lies in the south-south part of Nigeria. Delta ADP (DADP) for administrative convenience, divided the state into three agricultural zones which corresponds to the senatorial zones- Delta North Agricultural zone with 9 extension blocks, Delta central zone with 10 extension blocks and Delta South Zone with 6 extension blocks. The target population was the food crop farmers. A multi-staged random sampling technique was used for the study because the sampling units occurs in strata of blocks and cells. The first stage was the purposive selection of Delta Central zone being the largest of the zones as it has 10 extension blocks of the total 25 extension blocks and with the largest concentration of food crop farmers. This was followed by a. random selection of five blocks (Ughelli North, Sapele, Ethiope East, Isoko North and Udu blocks respectively) from the ten blocks in the Delta central zone. The third stage was the random selection of two cells from eight cells in each block to make a total of ten cells sampled. The last stage was the random selection of 15 farmers from each cell, which are mainly ADP registered farmers. A total of 150 farmers formed the sample name but only 128 copies of respondents' questionnaires were useful for analysis.

The instrument for data collection was a structured interview schedule, which was validated by staff of

the Delta ADP (DADP). It was pre-tested using a small sample of 15 respondents from Uvwie block of DADP central zone that was not included in the study. The reliability of the instrument was r=0.88. The instrument was structured to have a 5-point Likert type scale and was used to elicit responses nom respondents on demographic characteristics, level of contact, teaching and communication efficiency and adoption of technologies.

Data collected were analysed using descriptive statistics which include frequency counts, percentages and mean scores. Chi-square was used to test the relationship between some variables.

Results and Discussion

Social-Economic Characteristics of Respondents

Table 1 shows the socio-economic characteristics of the respondents. The result shows that majority (71.1 %) of the respondents are female which is an induction that female farmers may likely dominate the workforce in Delta State agricultural sector. This supports Adisa et al (2005) assertion that Nigerian women are responsible for 60-80 percent of the food produced in the country in addition to the traditional reproductive and community management roles. The result also shows that majority (81.2%) of the respondents belong to age bracket of 30-49 years, which means that majority belonged to active age as only few (12.5%) are above 50 years. The mean age was 40.95 years indicating that most of the respondents were young and able bodied women. Age factor is very important in farming as a primary occupation since it requires people of age group that have zeal and are independent (Obinne and Anyanwu, 1991),

Table 1 also shows that a high proportion (89.8%) of the respondents were married, Education is important in creating positive mental attitude towards adoption of modem farming innovations (Benor et al, 1997). However, the result in Table 1 indicates a low level of respondents" educational qualification as a majoring (69.5%) of the respondents had only primary education and only 3,1 % had tertiary education. This implies that extension guides, bulletins and technical papers cannot be read by majority of the respondents. All the respondent are full time farmers but a few (6.2%) are into trading and civil service as their main occupation and a large proportion (60.9%) also have 11-30 years of farming experience with a majority (73.%) being small scale farmers according to the classification of Shaib *et al* (1997) in Agwu (2004),

Extension Agents' Contact with Respondents

Table 2 indicates that majority (61.7%) of the respondents have contact with extension agents on a monthly basis. Only 16% of them are being contacted fortnightly which is the T and V system of extension's recommendation, while 22% reported being visited once in every two months. Cleaver (1997) stated that a positive and a significant relationship exist between frequencies of extension agents' contact and the adoption of improved farm practices. Undoubtedly, the low frequency of contact between extension agents and farmers must have been due to lack of funds for logistics which came after the Wodd Bank withdrawal ftom the counterpart funding of ADPs nation wide. Kamilu (2001) reported "that after the World Bank and the Federal Government reduced or withdrew their financial support, many Nigerian ADPs are no more viable".

Communication skills and knowledge of adult learning principles.

The findings of this study has a lot of implications for extension especially now that there is an urgent need to reduce hunger and poverty in Nigeria. Agricultural extension service has a role to play in ensuring that Nigeria achieves the millennium development goals of reducing poverty by half by 2015 (Eremie, 2006). One of the implications of the result is that national agricultural extension system has not improved on its unsatisfactory delivery of services to farmers, especially after the withdrawal of the World Bank funding (Omotayo, 2001). There is therefore the need for regular training, in form of workshops, seminars, confluences and in-service training for extension agents so that reasonable knowledge and experience in adult learning principles could be acquired to enhance their effectiveness. Government should also mobilize local funds and allocate more funds to ADPS to enhance their activities, in terms of transport and logistic facilities and operating materials and improve the frequency of visits by extension agents.

Table 1: Percentage distribution of respondents according to their socio-economic characteristics (n = 128)

Socio-economic variables	Frequency	Percentage	Mean
Sex			
Male	37	28.9	
Female	91	71.1	
Age (years)			
Less than 30	8	6.3	
30 - 39	47	36.7	40.95
40 - 49	57	44.5	
Above 50	16	12.5	
Marital status			
Married	115	89.5	
Single	13	10.2	
Education			
No formal education			
Primary education	89	69.5	
Secondary education	35	27.9	..
Tertiary education	4	3.1	
Occupation			
Farming	128	100	
Non-farming			
Non-trading	5	3.9	
Civil service	3	2.3	
Others			
Fanning experience (years)			
1-10	44	34.4	
11 - 20	67	523	13.86
21 - 30	11	8.6	
Above 30	6	4.7	
Fann size (hectare)			
Less than 0.5	5	3.9	
0.5 - 1.0	38	29.7	
1. 1 - 1.5	42	32.8	1.43
1.6 - 2.0	8	6.3	
2. 1 - 2.5	27	21.1	
Above 2.5	8	6.3	

Table 2: Respondents' Contact with Extension Agents

Frequency of Contact	Frequency	Percentage
Fortnightly	21	16.4
Monthly	79	61.7
Two months	28	21.9

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