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PERCEIVED ROLES OF AGRICULTURAL EXTENSION AGENTS BY FARMERS' COMMUNITY ORGANIZATIONS IN OWERRI AGRICULTURAL ZONE OF IMO STATE, NIGERIA

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Abstract

The study assessed the perceived roles of extension agents by farmers' community organizations in the Owerri Agricultural Zone of Imo state, Nigeria. Specifically, it examined the socioeconomic characteristics of the farmers, identified major sources of agricultural information available to the farmers, ascertained the roles of extension agents, determined the perceived level of satisfaction with the roles and identified the perceived constraints to the effectiveness of extension agents in the study area. Multistage sampling technique was used to select a sample of 100 farmers. Data were collected using structured questionnaire and were analyzed using mean, frequency counts and percentages. Results show that 55% of the farmers were males, 71% were married and the farmers belong to one or more farmers' community organization. The result also indicated that extension agents ($\overline{X} = 2.67$), farmer cooperatives ($\overline{X} = 2.62$) and friends/neighbours ($\overline{X} = 2.22$) were the major sources of information to the farmers. It was revealed that training of farmers ($\overline{X} = 2.16$), assisting farmers obtain loans ($\overline{X} = 2.16$), and creation of awareness on agricultural innovations ($\overline{X} = 2.05$) were the perceived roles of extension agents in the study area. Furthermore, the result showed that the farmers were satisfied with the creation of awareness on agricultural innovations ($\overline{X} = 2.05$), helping farmers obtain loans ($\overline{X} = 2.14$) and the training of farmers ($\overline{X} = 2.14$). Shortage of well-trained extension agents ($\overline{X} = 2.90$), lack of motivation of the extension agents ($\overline{X} = 2.97$), inadequate extension visits ($\overline{X} = 2.74$) and low involvement of farmers in programme planning ($\overline{X} = 2.74$) militated against the effectiveness of extension service delivery in the area. It was recommended among others that more extension agents should be recruited and deployed to the rural areas to improve extension coverage.

Key words: Roles, Extension Agents, Farmers, Nigeria

1.0: Introduction

Today's farmers are under unprecedented pressure. The world's population is closing in on seven billion, and it is projected to reach nine billion by 2050 (Towery and Werblow, 2010). Poverty eradication and food security have moved to the centre stage of the global development agenda. These are the greatest global challenges and their redress is an indispensible requirement for sustainable development in developing countries, particularly in Africa (Boon and Ahenkar, 2002).

The state of rural areas is determined by a combination of factors involving unavailability of physical and institutional infrastructure, low standard of living resulting in low agricultural productivity as their main source of income, substandard education and poor health services among others (Shiru, 2008).

This, in a bid to solve the individual farmer's problem and that of the society at large, the government opened up an agency (Agricultural Extension Service) in the Ministry of Agriculture and Natural Resources (MANR). According to Nwachukwu (2005), this agency is responsible for extending scientific knowledge, improving the skills and changing the attitude of rural farmers as well as increasing their income and enhancing their living standard by their own efforts, using their own resources, efforts and manpower. Agricultural extension has often been conceptualized as an educational process which promotes learning. It uses the combined findings of biological sciences and principles of social

science to bring about change in knowledge, skill and attitude, in and out of school setting (levbooye, 2004). According to Christoplos (2010), various extension methods and approaches have been employed to ensure that technology gets to its user. He pointed out that one important function of the extension agency is to produce competent and well-informed agents, who will regularly and frequently visit farmers with relevant technical massages and bring back farmer's problems to research. Bringing farmer's problems to research and taking inventions to farmers is better achieved when the farmers are organized.

Farmers' community organizations are groups of rural farmer producers coming together to form organizations based on principles of free membership to pursue specific common interest of their members – developing technical and economic activities that benefit the members and maintaining relations with partners operating in their economic and institutional environment. Aguirre and Namdar (1992) viewed community as a group of people sharing a common understanding, who revealed themselves by using the same language, manner, laws and traditions. Organization, according to Long (1992), is a group of people or other legal entities with explicit purpose and written rules. Farmers' organizations are sometimes organized by extension service to serve as a link, through which individual farming members could be helped to accept improved technologies on a suitable basis.

It is assumed that extension agents perform quite a large number of roles ranging from advisory services, technology transfer, organizing farmers, training and educating farmers and linking them to financial institutions among others (Totilola, 2008). But their roles are not being performed effectively due to a number of reasons. Their mandate is clear as they focus mostly on data collection and limited in advisory work without engaging in other activities related to their field of work, shortage in the extension agents available. Orekoyo (2009) also pointed out that several issues ranging from non availability of necessary facilities for effective implementation and functioning of extension work to poorly motivated staff, resulting in low morale, non-unified strategy, and lack of training for extension personnel and skill upgrading in extension. Consequently, one of the possible ways of

addressing these problems is to mobilize farmers' community organizations. However, the extent to which these roles are performed by the extension agents is yet to be validated through a systematic study. This has consequently created a gap in knowledge. It is this gap in knowledge that this study strives to address, and as such ascertain why the extension system is not keeping pace with the changing demand of the agricultural sector as it concerns the farmers' organizations. Therefore the specific objectives of the study included to;

1. examine the socio-economic characteristics of the farmers in the area of study,

2. identify major available sources of agricultural information to the farmers,

3. ascertain the roles played by extension agents to the farmers,

4. determine farmers' level of satisfaction with the roles played by the extension agents and

5. identify perceived constraints to the effectiveness of extension agents in playing their roles.

2.0:   Methodology

The study was conducted in Owerri Agricultural Zone of Imo State, Nigeria. A total of ten (10) Local Government Areas (L.G.As) make up the Owerri Agricultural Zone. The L.G.As are Aboh Mbaise, Ahiazu Mbaise, Ezinihite Mbaise, Ikeduru, Mbaitoli, Ngor Okpala, Ohaji/Egbema, Owerri Municipal, Owerri North and Owerri West. Multistage sampling technique was used to select the sample. The first stage comprised the purposive selection of all the ten LGAs in the state to enhance representativeness. The second stage involved the selection of two communities from each of the selected LGAs to give a total of 20 communities, using simple random sampling technique. The third stage comprised the selection of five farmers from the farmers' community organizations who are members of the selected communities to give a total of 100 farmers, using simple random sampling technique. The list of communities and farmers' community organizations were supplied by community development officers and extension agent respectively in the L.G.As.

Data were obtained from both primary and secondary sources. A set of structured questionnaire were used to elicit data from the

respondents. Data were analysed using frequency counts, percentages and mean represented in tabular form. This was used for objective 1. Likert type scaling was used for objectives 2, 3, 4, and 5. The likert scaling type measuring instrument is represented by the formula:

$$\overline{X} = \frac{\sum Fx}{N}$$

Where X = mean score

$\sum$ = summation sign

F = frequency

N = no of respondents.

x = no of nominal value of each response category

Three different scaling statements were used namely: 'available', 'partially available', and 'not available'; 'strongly agree', 'agree' and 'not agree'; 'very satisfied', 'satisfied' and 'not satisfied'; 'very serious', 'serious', and 'not serious' for objectives 2, 3, 4 and 5 respectively. The mean of the scaling statement was found as

$$\frac{3+2+1}{3} = \frac{6}{3} = 2$$

Therefore, 2 is the weighed mean of the scaling statement.

Decision rule: Any mean value greater or equal to 2 is positive.

Mean value less than 2 is negative

3.0: Results and discussion

3.1: Socio-economic characteristics of the farmers

Table 1 shows that majority (55%) of the farmers were female, a greater proportion (34%) were within the age range of 40 – 49 years, majority (71%) were married, 83% had formal education and 73% had a household size of 4-8 people. It also showed that all the farmers belonged to one or more farmers' community organizations. According to Aderinto and Adisa (2006), social organizations are avenues where experience and information are shared among members.

Table 1: The Socio-economic characteristics of respondents (N=100)

Socioeconomic characteristics.	Frequency	Percentage	Mean($\overline{X}$)
Sex			
Male	55	55.0	
Female	43	45.0	
Age (in years)			
20-29	4	4.0	
30-39	28	28.0	41
40-49	34	34.0	
50-59	22	22.0	
60-above	12	12.0	
Marital Status			
Single	5	5.0	
Married	71	71.0	
Divorced	3	3.0	
Separated	4	4.0	
Widow	12	12.0	
Widower	5	5.0	
Level of education			
Primary	20	20.0	
Secondary	50	50.0	
Tertiary	13	13.0	
None	17	17.0	

Household size

0-3	5	5.0	
4-8	73	73.0	
9-12	16	16.0	6
13 and above	6	6.0	

Extension visit (in two (2) months)

Zero (0)	27	27.0
1-2	57	57.0
3-4	16	16.0

Farmers' Community Organization Membership

Idinotu Obuoma	25	25.0
Chimereze Umunama	19	19.0
Fadam Umunama Umuogbo	13	13.0
Owerri North/Ngor Okpala	21	21.0
Adara Ubo Emekukuku	21	21.0

Farming Experience (in years)

1-5	4	4.0	
6-10	19	19.0	
11-15	33	33.0	12
16-20	27	27.0	
21-above	17		17.0

Source: Field Survey, 2014.

3.2: Sources of agricultural information to the farmers

Data in Table 2 show the major sources of agricultural information available to farmers in the area. Extension Agents, farmer cooperatives, radio, friends and neighbours, agric shows/demonstrators and posters with mean of 2.67, 2.62, 2.44, 2.22, 2.15 and 2.04 respectively were the available sources of agricultural information to the farmers. This agrees with Fishbein (2002) who observed that these are major sources of agricultural information to farmers. Agricultural research institutes, agricultural journal/publications, use of mobile phones had mean below 2 and currently not available to the farmers. This finding is consistent with Hagerdstrand (1998) and Matthews-Njoku (1999) who observed that these are not major sources of agricultural information to farmers.

Table 2. Distribution of Respondents According to major sources of Agricultural Information.

Information Source	Most Available (3)	Partially Available (2)	Not Available (1)	Mean $\overline{x}$	Remarks
Extension Agent	72 (216)	23(46)	5(5)	2.67	Available
Farmer cooperative	68(204)	26(52)	6(6)	2.62	Available
Friends Neighbours	49(147)	22(22)	29(29)	2.22	Available
Agric Journal/publication	20(60)	22(44)	17(17)	1.90	Not available
Radio	61(183)	22(44)	23(23)	2.44	Not available
Television	22(63)	56(102)	23(23)	1.88	Not available
Agric Shows/Demonstration	41(123)	33(66)	26(26)	2.15	Available
Posters	25(75)	54(103)	21(21)	2.04	Available
Use of Mobile Phones	25(75)	56(102)	19(19)	1.96	Not available
Agric Research Institutes	13(39)	29(58)	58(58)	1.55	Not available

Source: Field Survey, 2014

3.3: Perceived roles played by the extension agents in farmers' community organisations

The result in Table 3 shows the perceived roles of extension agents in the various farmers' community organisations. They agreed that use of demonstration methods in training and educating the farmers on new innovations and technologies $\overline{X}$ = 2.16), assisting farmers in forming cooperative societies ($\overline{X}$ = 2.1), providing timely advice on availability of improved agricultural inputs ($\overline{X}$ = 2.05), creating awareness on new agricultural innovations/techniques (X = 2.05) were identified as some of the perceived, or expected roles of the extension agents. This agrees with Unamma *et al*, (2004) who agreed that extension service creates awareness and advisory roles. The farmers disagreed that assisting farmers in resolving conflict ($\overline{X}$ = 1.12), assisting farmers in obtaining, identifying local/professional leaders ($\overline{X}$ = 1.91) were some of the roles expected of an extension agent.

Table 3. Distribution of Respondents According to Perceived Roles Played by Extension Agents in their Farmers' Community Organizations.

Perceived Roles	Strongly Agreed (3)	Agreed (2)	Disagreed (1)	Mean $\overline{X}$	Remarks
Creating awareness On new Agricultural Innovation/technologies	25(75)	55(110)	20(20)	2.05	Agree
Assisting Farmers in Forming cooperatives	19(57)	40(80)	41(41)	1.75	Disagree
Assisting in Identifying Local/professional leaders	21(63)	49(98)	30(30)	1.91	Disagree
Assisting Farmers in Obtaining loans from Financial institutions	30(90)	56(112)	14(14)	2.16	Agree
Assisting in Community Development Projects	4(12)	18(36)	78(78)	1.26	Disagree
Using Demonstration Method in training and Educating farmers	30(90)	56(112)	14(14)	2.16	Agree
Assisting farmers in Resolving conflict	4(12)	4(8)	92(92)	1.12	Disagree
Providing timely advice on Availability of improved farm inputs	30(90)	45(90)	35(25)	2.05	Agree
Helping in coordinating Farmers youth organization	5(15)	15(30)	80(80)	1.25	Disagree

Source: Field Survey, 2014.

3.4:   Farmers' level of satisfaction with the roles played by the extension agents

Table 4 shows the level of satisfaction of farmers with the roles played by extension agents. These included using demonstration methods in training and educating farmers which had a mean of 2.14, creating awareness on new agricultural technologies with a mean of 2.05, and assisting farmers in obtaining loan from financial institutes ($\overline{X}$ =2.14). This is in agreement with the findings of Mgbada (2010. However, the farmers were not satisfied by the rate at which the extension agents assisted them in identifying local leaders with a mean score of 1.19, providing timely advice on availability of improved farming inputs ($\overline{X}$ = 1.80), formation of cooperative societies ($\overline{X}$ = 1.75) and in conflict resolution ($\overline{X}$ = 1.40), also the farmers were not satisfied with the assistance of extension agent in community development projects ($\overline{X}$ = 1.25).

Table 4. Distribution of Respondents According to how satisfied they are with roles of extension agents

Respondents	Very Satisfied (3)	Satisfied (2)	Not Satisfied (1)	Mean $\overline{X}$	Remarks
Creating awareness On new Agricultural Innovation/technologies	25(75)	55(110)	20(20)	2.05	Satisfied
Assisting Farmers in Forming cooperatives	19(57)	40(80)	41(41)	1.75	Not satisfied
Assisting in Identifying Local/professional leaders	21(63)	49(98)	30(30)	1.19	Not satisfied
Assisting Farmers in Obtaining loans from Financial institutions	28(84)	56(112)	14(14)	2.14	Satisfied
Assisting in Community Development Projects	4(12)	18(36)	78(78)	1.25	Not satisfied
Using Demonstration Method in training and Educating farmers	28(84)	56(112)	14(14)	2.14	Satisfied
Assisting farmers in Resolving conflict	13(39)	14(28)	73(73)	1.40	Not satisfied
Providing timely advice on Availability of improved farm inputs	20(60)	40(80)	40(40)	1.8	Not satisfied
Helping in coordinating Farmers youth organization	5(15)	15(30)	80(80)	1.25	Not satisfied

Source: Field Survey, 2014.

3.5: Constraints militating against the effective performance of extension agents' roles in farmers' community organisations

Table 5 shows the farmers mean scores on constraints the farmers considered to be limiting the performance of the extension agents' roles community organizations. Most of the variables considered as limiting their functions were considered to be serious. They included lack of staff motivation ($\overline{X}$ = 2.97), shortage of well trained extension staff ($\overline{X}$ =2.90), inadequate extension visit ($\overline{X}$ = 2.74), top-down approach to extension programmes planning not involving farmers ($\overline{X}$ = 2.74), lack of proper knowledge of evaluation techniques ($\overline{X}$ =2.72), lack of timely advice on available improved farming inputs ($\overline{X}$ = 2.70) and high level bureaucracy ($\overline{X}$ = 2.5). Antwi, *et al* (2010), noted that farmers who had access to extension agents are exposed to adopting new innovations which will help in improving the level of production in a farmer organization. Also Gyasi (2003), found that inadequate access to improved farm inputs like fertilizer was a major problem facing extension personnel. This might be attributed to the problem of bureaucracy associated with public extension system.

Table 5: Distribution of Respondents according to Constraints they consider as those limiting Extension Agents in performing their roles

Perceived Constraints	Very Serious (3)	Serious (2)	Not Serious (1)	Mean $\overline{X}$	Remarks
Shortage of well trained Of staff	92(276)	6(12)	2(2)	2.90	Serious
Lack of motivation to Extension staff	98(294)	1(2)	1(1)	2.97	Serious
High level of Bureaucracy	63(189)	24(48)	13(13)	2.50	Serious
Non timely advice on Availability of improved Farming input	80(240)	10(20)	10(10)	2.70	Serious
Inadequate extension Visits	80(240)	14(28)	6(6)	2.74	Serious
Lack of commitment of Extension staff	52(156)	40(80)	8(8)	2.44	Serious
Top-bottom approach By extension staff in Planning and executing Programmes	82(246)	10(20)	8(8)	2.74	Serious

Source: Field Survey, 2014.

4.0: Conclusion and Recommendations

The study assessed the perceived roles of extension agents by farmers' community organization in Owerri Agricultural Zone of Imo State. The result indicated that 55% of the farmers were male and 71% were unmarried. All of the farmers belonged to one farmers' community organization or the other. The farmers obtained agricultural information from cooperative organizations, extension agents but have not utilized fully the potentials in the use of mobile phones. The respondents agreed that extension agents played the role of creating awareness on new innovations and use of demonstration methods in training farmers. Farmers were not

satisfied in the role of extension agents assisting in community development projects. Perceived constants identified by the farmers included lack of extension visits, insufficient extension staff, and non timely advice on availability of improved farm inputs. The farmers did not see the extension agents performing their roles effectively and the study therefore recommended that enough extension staff should be employed as a it takes care of the low extension staff visits to farmers, timely advice should be given to the farmers on availability of improved farming inputs, top-bottom approach in planning programmes by extension planners should be avoided by incorporating farmers in planning programmes and projects. These will in no small measure boost the morale of farmers' community organizations and increase the credibility of extension agents in contributing adequately to the agricultural development of Imo State in particular and Nigeria in general.

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