

## Impact of Demonstration of Recommended Farm Practices among Farmers in Obio-Akpor Local Government Area of Rivers State, Nigeria

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**Abstract:** The study examined the rate of awareness of demonstration of recommended farm practices, identified the roles of extension personnel in promoting demonstration of recommended farm practices and ascertained the impact of factors affecting demonstration of recommended farm practices among farmers in Obio-Akpor Local Government Area of Rivers State, Nigeria. One hundred and thirty farmers were randomly selected and interviewed using questionnaire instrument. Frequency counts, percentages and mean scores were employed for data analysis. Findings show that rate of awareness of demonstration of recommended farm practices was low for all the media of information used and that 5 out of 7 roles of extension personnel were most important in promoting recommended farm practices which means that though awareness and interest were created their impact was found to be most adverse among farmers. It was recommended that in order to impact significantly on demonstration of recommended farm practices among farmers, adequate logistics and staffing with appropriate enlightenment campaigns should be employed.

**Key words:** Impact, logistics, dissemination, demonstration Obio-Akpor L.G.A, adverse

### INTRODUCTION

Demonstration is an Agricultural Extension teaching method. It is used to make difficult tasks demonstrable and manipulative to the understanding of the audience. According to the Green River Project Handbook of the Nigerian Agip Oil Company Ltd "NAOC" (1991) (an Agricultural Development Project of the Company) demonstration farms were first introduced in 1988 to create awareness among rural communities in the area of operation in line with such demonstration practices, various agricultural agencies like the Agricultural Development Project (ADP), Agricultural and Rural Management Training Institute (ARMTI), National Institute for Horticulture (NIH), International Institute for Tropical Agriculture (IITA), International Rice Research Institute (IRRI), International Centre for Tropical Agriculture (ICTA), International Potato Centre (IPC), International Laboratory Research on Animal Diseases (ILRAD) and the National Root Crop Research Institute (NRCRI) have been established by the Federal Government of Nigeria for the purpose of training and dissemination of technical information to end-users.

However, contrary to expectations, efforts by successive governments of Nigeria toward increasing food production through demonstration of improved agricultural technologies and the diffusion of

recommended farm practices have remained unprogressive as a result of the inability of farmers to know, understand and adopt adequately the new farm practices introduced by extension personnel hence the need for this study.

To support the importance of demonstration and diffusion of recommended farm practices, Helal (1992) in his study on educational impact of maize demonstration in Egypt concluded that demonstration fields have both direct and indirect impacts on production, knowledge and practices of local farmers. Chatterjees (1993) also observed that adoption of technologies may be rapid in situation where inputs like fertilizer, quality seeds, water and pesticides are made available to farmers in a timely way and in a required quantity coupled with appropriate education on demonstration of improved farm practices. Alkire (1992) in his own study found that farmers access to information and its impact on technology adoption in Northwest Frontier Province in Pakistan shows the different sources of information in creating awareness of few improved inputs in their adoption.

Ikechukwu in his own study stressed that although the purchase of inputs from agro-service centres located at strategic points was necessary, it was not a condition of a prerequisite for the creation of the needed awareness among farmers. It is for such a reason that Akpan (2000) argued that the teacher must be highly

qualified and competent because the more informed people are about needed work skills, the more likely they will be able to succeed in their occupations.

Emah (1992) in his study Manpower Development in Rivers State found that fewness of extension staff was responsible for lack of awareness and poor dissemination of technical information among farmers thus, estimated a staff-farmer ratio of 1:2028 in order to improve this situation from the former ratio of 1:5000.

**Purpose of the study:** The study was designed to do the following: examine the rate of awareness of demonstration of recommended farm practices by various media of information, identify the roles of extension personnel in promoting demonstration of recommended farm practices and ascertain the impact of the factors affecting demonstration of recommended farm practices among farmers in Obio-Akpor Local Government Area of Rivers State, Nigeria.

**MATERIALS AND METHODS**

A simple random sampling by balloting method was used to select respondents. Three blocks of Choba, Atali and Oginigba with a population of 216 farmers were used. Forty three respondents were sampled from each block plus the field overseer incharge of the blocks bringing the total number of respondents to 130. Questionnaire instrument was used to elicit information from respondents in line with the purpose of the study. Data were analysed using Frequency Distribution Tables, Percentages and Mean Scores. A modified Likert format with 4 options namely: Less important, Important, More important and Most important was used to measure the degree of roles of extension personnel while the impact of factors affecting demonstration of recommended farm practices was measured with another Likert format of Less adverse, Adverse, More adverse and Most adverse.

**RESULTS AND DISCUSSION**

To examine the rate of awareness of demonstration of recommended farm practices among farmers.

Table 1 shows that 43% of respondents was aware of demonstration of recommended farm practices through Small Plot Adoption Technique (SPAT) sited in strategic locations followed by 18% of those who were aware through posters and publications. Other results also reveal that audio visual media, like radio, television, newspaper and bulletins are not appropriate for creating effective awareness for this group of respondents because of their partial use, traditional background and level of education. While, 14% of awareness indicates that

Table 1: Rate of awareness of demonstration of recommended practices by various media

Medium of awareness	Respondents N = 130	Rate of awareness (%)
Newspaper	12	9.2
Radio and television	13	10.0
Poster and publications	23	17.7
Bulletins	8	6.2
Demonstration plots using SPAT	56	43.1
Extension personnel contact	18	13.8
	130	100.0

Table 2: Extension agents roles in promoting demonstration of recommended farm practices

Identified roles	Mean scores	Remarks
Enlightenment campaigns for farmers	4.1	Most important
Making agro-service demonstration Centres available to farm communities	3.8	Most important
Providing training for groups and Individuals on improved techniques	3.6	Most important
Assisting farmers to obtain necessary Improved inputs for adoption	3.5	Most important
Monitoring demonstration practices	3.3	Most important
Formation of farmers co-operatives	2.5	Less important
Assisting farmers to obtain credit	2.2	Less important

Mean score > 2.9 = most important role, Mean score < 2.9 = less important role

Table 3: Impact of factors affecting demonstration of recommended farm practices

Factors affecting	Mean scores	(%)
Fewness of extension field personnel	4.3	
Working conditions of extension personnel	4.3	
Rate of awareness among farmers	4.2	
Willingness of farmers to participate	4.1	
Availability of access roads and other logistics	4.0	
Regular follow-up practices by personnel	4.0	68.70
Joint planning with farmers	3.6	
Availability of appropriate teaching aids	3.6	
Level of farmers' education and information	3.5	
Location of agro-service centres	3.5	
Timing of demonstration practices	3.5	
Economic viability of such practices to farmers	3.2	
Resourcefulness of extension personnel	3.0	
Types of demonstration methods used	2.5	31.30
Relationship between farmers and extension personnel	2.4	
Farm practices not related to farmers needs	2.3	

Mean Score > 3.5 = Most adversely affected, Mean Score < 3.5 = Less adversely affected

fewness of extension personnel contact cannot create adequate awareness. As a result, the rate of awareness was very low among respondents through these media.

To identify the roles of Extension personnel in Promoting Farm Demonstration Practices among farmers.

Table 2 identifies 5 roles of extension personnel as most important and 2 roles as less important in promoting farm demonstration practices. The 5 important roles are enlightenment campaigns for farmers (4.1), making agro-service demonstration centres available in farm communities (3.8), providing training for groups and individuals on improved techniques (3.6), assisting farmers to obtain necessary improved inputs for adoption (3.5) monitoring demonstration practices (3.3) while

formation of farmers cooperatives (2.5) and assisting farmers to obtain credit (2.2) were the two less important roles. This result shows that most of the roles of extension personnel were found to be very important in promoting demonstration of recommended farm practices in the study area. Yet, their impact on demonstration of recommended farm practices was found to be low and inadequate.

To ascertain the impact of factors affecting demonstration of recommended farm practices.

Table 3 shows that 68.70% of the factors impacted most adversely on demonstration of recommended farm practices, while 21.30% impacted less adversely. Therefore, the demonstration of recommended farm practices in the study area was low and ineffective among farmers mostly because of the general poor attitude of government towards solving the problem of food security in Nigeria.

The study carried out three main functions namely:

- Examined the rate of awareness of demonstration of recommended farm practices among farmers.
- Identified the roles of extension personnel in promoting farm demonstration practices.
- Ascertained the impact of factors affecting demonstration of recommended farm practices among farmers in the area of study.

Results in Table 1 show that rate of awareness of demonstration of recommended farm practices among farmers through the various media of information used was low although most awareness (43.1%) was perceived through demonstration plots otherwise known as Small Plot Adoption Technique (SPAT). This finding falls in line with the study of Alkire (1992) that farmers access to information in creating awareness came through different sources. Table 2 identified majority of roles of extension personnel as most important in promoting effective demonstration practices yet, these important roles were perceived to be ineffective on factors affecting demonstration of recommended practices because of the low awareness rate therefore, personnel roles have no direct relationship with staff commitment, educational level and ability to perform. This also falls in line with the finding of Akpan (2000) that teacher of education must be highly qualified and competent because the more informed people are about needed work skills, the more likely they will be able to succeed in their occupations.

Fewness of extension personnel is another factor that adversely affected demonstration practices in Table 3. This agrees with the finding of Emah (1992) that fewness of extension staff was responsible for lack of awareness and poor dissemination of technical information among farmers. Location of agro-service centres and timing of

various practices adversely affected the demonstration practices and because of their scattered nature and distance from farmers' homes most farmers became unaware of the availability of inputs and time of supply. This result is in line with the finding of Ikechukwu that although the purchase of inputs from strategic agro-service centres was important, it did not create the needed awareness among farmers.

## CONCLUSION AND RECOMMENDATIONS

It was concluded that the scattered nature and distance of agro-service centres from majority of farmers, fewness of extension field-staff, use of inappropriate information media, performance of extension personnel not in line with their important roles, work conditions of extension personnel and level of farmers' education were among the factors that contributed to the low awareness and low impact on demonstration of recommended farm practices among farmers in the study area. Therefore, it was recommended that in order to improve the staff-farmer ratio optimally more extension personnel should be employed and trained to cope with the increasing volume of work at the field level. Also that adequate remuneration and allowances including logistics, farm inputs and means of transportation be provided for effective performance to boost agricultural production among farmers. Government through Agricultural Development Programmes (ADP) which is the main organ of extension services in Rivers State, Nigeria should set up meaningful enlightenment campaigns capable of impacting the desired awareness that can mobilize farmers to participate in recommended farm practices.

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