

Problem Associated With the Transfer of Agricultural Technology in Ahoada East and Obio/Akpor Lga of Rivers State

Amaechi Louisa Ngozi^{1*}, Edward Judith O². and Amugo Nina M.³

¹Directorate of General Studies Federal University of Technology Owerri, Nigeria,

^{2,3}Department of Agricultural Technology, School of Science and Technology, Captain Elechi Amadi Polytechnic Rumuola, Port Harcourt

***Corresponding Author:** Amaechi Louisa Ngozi, 1Directorate of General Studies Federal University of Technology Owerri, Nigeria

ABSTRACT

The overall objective of this study was to examine the problems associated with the transfer of Agricultural technologies to the farmers in Ahoada East and Obio/Akpor local government areas of Rivers State. Specifically, the study was designed to investigate the level of awareness of agricultural technologies by farmers in the study areas, determine the adoption of the identified agricultural technologies of the farmers. Evaluate the various sources of their information transfer and to identify the problems that are militating against effective technology transferred to the study areas. About sixty five (65) farmers each from the two (2) local government areas were used for the study, making a total of one hundred and thirty (130) respondents. The data collected were analyzed using tables and percentage. The findings show that most of the farmers are aware of the technologies transferred to the study areas. It also shows that their level of adoption is poor. The farmer's duration of participation in extension programs is known. Rivers ADP extension agency is the agency that the farmers in the study areas have had contact with. Most of the farmers have been participating in extension programs, the farmers source of agricultural information is Rivers ADP extension agent. Inadequate financial resources to purchase farm inputs recommended illiteracy of farmers and several other constraints were the problems encountered by the farmers. It was recommended that there should be adequate storage facilities for farm products. The extension packages should be relevance to the farmers needs.

Keywords: Transfer, Agricultural Technology, and ADP Extension Agent

INTRODUCTION

Agriculture serves as a foreign exchange earner to the country although indicate that this role has been on the decrease in recent decades. This huge capacity investment and importance attached to petroleum than to awareness of both Federal and State Government of the Arithmetic progression of food supply to sustain the geometrically growing population was impossible. This ten called for the embarkment or introduction of Agricultural research and extension programs. Transfer of new Agricultural innovations to rural communities has always been a problem since the embarkment or introduction of Agricultural research and extension programs, even though, they are important to the importance of new technologies in Agricultural development of all nationals has been stressed. For new technologies to be transferred, it has to do with

information dissemination. Youdeowei et al (1995) and Athilt (1993) stress that information is just as important as production factors live the classic land, Labour and capital. They stated further that it can have a huge multiplier effect on the efficiency and effectiveness with which other resources are utilized.

Foo (1980) remarked that the success of any agricultural extension service depends largely on its ability to transfer agricultural information to farmers. Agricultural extension therefore is a communication system that gives farmers useful information gathered from research institutes and scholarly activities (Rincon 1971). Access to Accurate and timely information is a crucial ingredient for successful development efforts. The benefits of all the new and significant results achieved by scientific research can be made available to mankind only when they are disseminated to potential end-users. Ike (1987)

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is of the view that the un-production traditional farming systems of the rural communities in Nigeria is caused among other reasons, by communication gap between extension and rural farmers. Since the main source of carrying out new technologies from the research institute to the rural areas is communication, one of the problems is that, most rural are ill-educated and poor to be able to purchase the modern agricultural information system like Radio, Television, etc, (Njinga; Spire 1995).

Problem Statement

Many efforts in Agricultural development today are aimed at improving the method used in the transfer of information in Agricultural technologies to farmers. However, only a few of those involved in this development effort have understood the information delivery constraints in Nigeria. This situation also applied in Obio/Akpor and Ahoada East Local Government Areas of Rivers State. The ultimate test of success of agricultural technology transfer is the extent of technology adoption by the end-users.

The transfer of new technology to rural areas requires the services of the extension agents. Extension service can be defined as an out-of-school system of education in which adults and young people study by practical experience. The sole aim of extension service is to teach rural people/farmers how to increase their food production, raise their income and subsequently, their living standard with minimum assistance from the government, and by their own effort using their own resources. Extension services also assist the rural people/farmers in the following ways:

It encourages progressive growth through local leadership, self- help and civic pride (Igbarnbol1985). This broad concept of the function of extension, providing people with scientific knowledge so that they can solve their own problems, is gaining a wide acceptance through the decentralization policy of the state (Igbanibo 1985).

This research primarily assesses the problems and results (if any) obtained as a result of agricultural extension services on farmers in Ahoada East and Obio/Akpor Local Government Areas in relation to their agricultural productivity. The local economy of Ahoada East and Obio/Akpo Local Government Area is dominated by farming and fishing.

Several extension technologies has been transferred to the farming communities in these two local government areas in recent time. Despite these efforts, the farmers are still inclined to their normal traditional farming systems with a resultant low yield in agricultural production.

The question that readily comes to mind is, why are the farmers still inclined to their normal system of farming instead of adopting the new and improved system introduced by research institute? It is on the bases of the above observed problem that this research was designed. This research therefore is carried out to identify and proffer solutions to problems that hindered the effectiveness of agricultural technologies transferred to farmers in the study areas.

The Study Areas

Obio/Akpor and Ahoada East Local Government Areas are two (2) out of the 23 local government areas in Rivers State. They were created on the 31 of May 1989 and 9th March 1997 respectively. Obio/Akpor local government area (OBALGA) is bounded by Port Harcourt city local government area on the south east, Ikwerere and Emohua local government area at the north, Oyiba and Tai/Elemo local government area on the west. On the other hand, Ahoada Local Government Area on the South East, Ahoada West on the South West, Omoku/Ibe-Egbema Local Government Area on the South North, and Abual Odual Local Government Area on the South-North. Obio/Akpor has four (4) major clans namely:

Akpor, Aparo, Eva and Obio with its administrative headquarter located at Rumuodomaya. Each of these districts comprises of several other villages. And Ahoada east has two (2) major clans known as Akoh, Upata (which is made up of O Group and I Group) with its administrative headquarter located at Ahoada town. Each of these districts comprises of several other villages.

Obio/Akpor local government area covers such communities as: Rumueme, Rnmuolumeni, Ogbogoro, Choba, Rukpolwu, Eneka, Rurnuokwurusi, Iriebe, Elelenwo, Worgi, Oginigba (Trans Amadi Area), Rumuigbo, Ozuoba, Rumuodara, Rumuohara, Okporo, Mgbuoba, Rumuogba, Rmnuola, Elimbu, Atali, Rumuobiakani, Rumuibekwe, Rurnorosi,

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Rurnuekmi, Alakoffia, Rumualogu, Rumuopareali, Rumuokwocha, Rumoimoi and Rumigbo. Ahoada east local government comprises of the following villages KlaAhoerd, Ogbo, Ebanikpo, Ihughogo, Uderike, Ugesama, Ugemuge, Ilegbo, Ukparamini, Udernirimi, Ekpewa, Ahoada, Iwaji, Ula-Upata, Ihuke, Edoade, Udata, thugbuoloko, Okpoluludu, Ekata, Ula-Ekata, Obele, thuma, Odiabidi Okporowo, Thuwo, Idorki, Thuba, Okoma 1, Okoma2, Ochigba, Oshigborku, Oburneze, Ozochi. Obio/Akpor local government area covers a total of 1,482 square kilometers and Ahoada East covers a total of 1,263 square kilometers.

According to the census of 1991, population size of OBALGA and Ahoada East are 328,643 thousand and 211,967 respectively. OBALGA and Ahoada East have both urban and semi-urban areas. Apart from the indigenous Ikwerre and Ekpeye origins of the areas, there are settlers from all over the world in the study areas. Their main indigenous languages are Ikwerre and Ekpeye respectively.

A sizeable proportion of the people in both local government areas are also engaged in fishing trading, hunting and food processing. Inhabitants are also involved in livestock production or animal husbandry.

METHOD OF DATA COLLECTION

In a bid together as much relevant information on the subject as possible two (2) sources of data collections were used namely primary and secondary sources. The primary source are information that will be gathered through structured questionnaires and personal interviews with farmers in Ahoada East and Obio/Akpor local government areas, it is pertinent to point out at this point as the idea to

conduct persona' interview apart from the questionnaire is for the following reasons:-

- To allow for the coverage of a lot of grounds.
- To allow for a free discussion of issues this may not be cleared to the respondents by mere administering of questionnaires.

Secondary sources of data were gathered from textbooks, magazines, manuals, journals, internet and other publications relevant to this study.

Sampling and Sampling Procedure

The sample size will consist of different categories of farmers who engaged themselves in cropping, animal husbandry, fishing, etc. The sample frame will involve farmers in Ahoada East local government area and to Obio/Akpor local government area, this respect, by way of random sampling, 65 fanners were selected from Ahoada East local government area, and 65 farmers were selected from Obio/Akpor local government area, making a total of 130 respondents.

METHOD OF DATA ANALYSIS

The data collected for this study were with descriptive statistics such as means, using tables and percentage distributions.

RESULTS AND DISCUSSION

Gender of Respondents

Table 4.1 shows that 30.8% of the respondents are female and 69.2% are male in Ahoada East local government area, while 38.5% of the respondents are female and 61.5% are male in Obio/Akpor local government area. It shows that there are more male than female in the farming system in Ahoada East and Obio/Akpor local government areas.

Table3.1 The distribution of the respondents according to their gender.

Sex	Local Government Area			
	Ahoada East		Obio/Akpor	
	Frequency	Percentage (%)	Frequency	Percentage (%)
	(n=65)		(n=65)	
Female	20	30.8%	25	38.5%
Male	45	69.2%	40	61.5%
Total	65	100%	65	100%

Source: Field Survey, 2020

Age Range of the Respondents

Table 3.2 , Shows that most of the farmers in Ahoada East Local Government Area falls within the age range of 34 43 while Obio/Akpor

Local Government Area, the farmers fall within the age range of 44 — 53. From the analysis, farmers between these ranges 34 —53 and 44 — 53, which represents the active work force

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participate more in the farming system than the younger and older farmers in the study areas.

Table3.2. Distribution of the Respondents According to their Age

Age range	Local Government Area			
	Ahoada East		Obio/Akpor	
Note	Frequency	Percentage (%)	Frequency	Percentage (%)
Below 24	5	7.6%	3	4.6%
24—33	10	15.3%	12	18.5%
34---3	14	21.4%	29	44.6%
44—53	30	46.5%	14	21.5%
54 and above	6	9.2%	7	10.7%
Total				

Source: Field Survey, 2020

Marital Status of the Respondents

Table 4.3 shows that 61.5% of the farmers are married; 9.2% are single, 21.5% are widow and 7.7% are divorced in Ahoada East Local Government Area. While in Obio/Akpor the

table shows that 58.5% are married, 3.0% single, 27.7% are widow and 10.8% are divorced. This implies that most of the farmers are married and their families will add to the labour force available to the farmers.

Table3.3. Distribution of the Respondents according to their Marital Status.

Age range	Local Government Area			
	Ahoada East		Obio/Akpor	
	Frequency n = 65	Percentage (%)	Frequency n = 65	Percentage (%)
Married	40	61.5%	2	3.0%
Single	6	9.2%	38	58.5%
Widow	14	21.5%	18	27.7%
Divorced	5	7.7%	7	10.8%

Source: Field Survey, 2020

Educational Level of the Respondent

Table 3.4 , Shows that 43% of the farmers in Ahoada East Local Government Area have no formal schooling, 26.6% have primary school certificate, 15.4% have WASC/GCE, 12.3% have OND/NE and 3% have HND/FIRST Degree respectively. While in Obio/Akpor 30% of the farmers have no formal schooling, 38.5%

have primary schooling certificate, 18.5% have WASC/G.C.E., 7.7% have ONDINCE and 4.6% have HMD/First Degree.

This simply shows that most of the farmers are not properly educated and this will affect the level of adoption and use of agricultural technological transfer and productivity in such area.

Table3.4. Distribution of the respondents according to their educational

Educational level	Local Government Area			
	Ahoada East		Obio/Akpor	
	Frequency n — 65	Percentage (%)	Frequency n-65	Percentage (%)
No formal schooling	28	43.0%	20	30%
Primary School Certificate	17	26.6%	25	38.5%
WASC/G.C.E.	10	15.4%	12	18.5%
OND/NCE	8	12.3%	5	7.7%
HND/First Degree	2	3.0%	3	4.6%

Source: Field Survey, 2020

Extension Technologies already transferred to the Study Areas

S/NO	EXTENSION TECHNOLOGY
1.	CROP
a.	Introduction of improved cassava varieties TMS 30572, TMS 30555, TMS 50395, TMS 4

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b	(2)1425
c	Cassava/Maize/Telfairia inter crop.
d	Yam/Maize/Cassava/Telfairia inter crop single alternate row.
e	Yam staking (Stake to 4 yam stands)
f	Yam mini sett/Maize followed by cowpea
g	Plantain /cocoyam inter crop
h	Cassava / Cowpea inter crop
i	Introduction of upland rice production Sole cowpea production
2.	LIVESTOCK
a.	Confinement of sheep and goat
b	Establishment of browse plants
c	Rabbits Rearing
	FISHERS
3.	Home stead fish pond construction/fish gear maintenance
a	Fish pond dyke maintenance
b	Fish pond water quality management (Turbidity control)
c	Fish shocking density and feeding.
d	Harvesting of fishponds.
e	WOMEN-IN-AGRICULTURE (AGRO PROCESSING)
	Processing of soya beans into milk and flour.
4	Formulation of family diets (soup and jollof) with soya beans.
a	Odour less fufia processing into flour and mash
b	Cocoyam utilization (cocoyam chips production, Tkpan Nkwukwo-an Efik dish).
c	Plantain chips production
d	Processing/Popularization of rabbit meat.
e	Formation of women groups
f	Processing/utilization of cooking banana (adaba) into chips, portage and maize pudding.
g	Vegetable production and utilization
h	Dry season vegetable and production.
i	AGRO-FORESTRY
j	Alley crop farming.
k	Okazie production
j	Snailery
5	
a	
b	
c	

Source: Field Survey, 2020

Awareness of the Respondents to Identified Extension Technologies

Table 3.6, shows the level of awareness of the farmers in the study areas. The agricultural technologies that have been transferred to the study areas are categorized into crop, livestock, fisheries, Agro-processing and Agro forestry. 100% of the farmers in Ahoada East Local Government Area are aware of crop 69.2% are

aware of livestock, 61.5% are aware of fisheries, 58.5% are aware of Agro processing and 46.6% aware of Agro —forestry. While in Obio/Akpor Local Government Area 100% of the farmers is aware of the technologies, 46.6% are aware of livestock, 64.6% are aware of fisheries, 40% are aware of Agro-processing and 38.5% are aware of Agro-forestry. This table shows that more of the farmers are aware of crop in the study areas.

Table3.6. Distribution of the Respondent According to their Awareness of Identified Technologies

Extension Technologies	Local Government Area			
	Ahoada East		Obio/Akpor	
	Frequency n = 65	Percentage (%)	Frequency n-65	Percentage (%)
Crop	65	100%	65	100%
Livestock	45	69.2%	30	46.6%
Fisheries	40	61.5%	42	64.6%
Agro- Processing	38	58.5%	26	40%
Agro- Forestry	30	46.6%	25	38.5%
Multiple response				

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Source: *Field Survey, 2020*

Adoption of the Respondents

Table 3.7 shows that the level of adoption in the study areas is low. In Ahoada East local Government Area, 30.6% have adopted the crop extension technologies, 12.2% have adopted livestock, 9.2% have adopted fisheries, 15.3% have adopted Agro-processing and 16.9% have adopted Agro-forestry, While in Obio/Akpor local government area 38.6% have adopted crop, 19.9% have adopted livestock, 10.8% have adopted fisheries, 18.4%

have adopted agro-processing and 12.3% have adopt agro-forestry. Generally, the level of adoptions of the farmer is very poor fisheries.

Reasons for Failing to Adopt Agricultural Technologies

Table 3.7, shows the problem encountered by the farmers, during the transfer of agricultural technologies in Ahoada East and Obio/Akpor local government areas. Farmers encounter the following problems:

S/N	Reasons
a	Inadequate financial resources to purchase farm inputs recommended.
b	Late arrival of farm inputs especially when needed most.
c	Poor commitment of extension agents to duties.
d	Inadequate storage facilities for farm products.
e	Irrelevance of extension packages to farmer's needs.
f	Complex technical information, which makes understanding of recommended technologies difficult. Illiteracy of farmers.
g	Poor language barrier between rural people & extension agents
h	Scarcity of inputs to implement packages.
i	Not convince with the harvest/result of the improved technologies.
j	Extension agent meeting time conflict with my personal schedule.
k	Poor market outlet for sale of farm products.
l	Inadequate training workshop and demonstrations by extension agent.
m	Insufficient contacts between extension agents and farmers.
n	Lack of mobility to extension agents to cover the area.
o	Extension agents complain of insufficient motivation by their agency_____ ^ _
p	

Source: *Field Survey, 2020*

SUMMARY

Summary objective of this study was to examine the problems associated with in the transfer of agricultural technologies among fanners in Ahoada East and Obio/Akpor Local Government Areas. Specifically, the study was designed to identify the technologies already transferred to farmers in the study areas, investigate the level of awareness of agricultural technologies by farmers in the study areas; determine the adoption of the identified agricultural technologies in the selected communities and evaluate the problems that militated against effective technologies transferred to these areas. The farmers in Ahoada East and Obio/Akpor Local Government Areas made up the population of the study while the sample size was sixty-five (65) for farmers in Ahoada East and Obio/Akpor Local Government Areas each were studied. Therefore a total number of one hundred and thirty (130) copies of questionnaires were used for the study. To collect the data, structured questionnaire and personal interview were used

for the study. Farmers between 44—54 years of age in Ahoada East Local Government Area participate more in farming, while 34—44 years of age participate more in Obio/Akpor local government area. The analysis suggests that in the study areas more respondents were married. The study shows that the educational level of the respondents in the study areas were low, although some of the farmers are a bit educated. Many agricultural technologies in crop, livestock, fisheries, women in agricultural and Agro-forestry have already been taken to the study areas. And most of the farmers in the study areas have been participating in extension programs. It was observed that most of the farmers are not aware of the agricultural technologies in Ahoada East and Obio/Akpor local government areas. And the farmers that are aware are not able to adopt some of the technologies due to some problems faced by the farmers. E.g. Inadequate financial resources to purchase farm inputs recommended, lack of mobility to extension agents to the areas, etc, Most of the farmers in the study areas

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derived their agricultural information from extension agent in agricultural development program (ADP), Rivers State. The personal characteristics of the farmer shows that majority of the farmers are male. There are more male than female in the study areas.

CONCLUSION

The study reveals the technologies that have already been transferred to Ahoada East and Obio/Akpor local government areas. About thirty (30) extension technologies have already been transferred to the study areas and these extension technologies are categorized into crop, livestock, fisheries, Agro-processing (women-in-agriculture) and Agro-processing. The study also reveals the awareness of the farmers in the study areas. The farmers are aware of almost all the extension technologies taken to the study areas. It shows the level of adoption of the farmers. The farmers have not been able to adopt the extension technologies that have been taken to their areas. Out of about thirty (30) technologies, they have been able to adopt eighteen of the technologies. The study shows the source of information used in transferring agricultural information to the farmers in the study areas. And the sources include Rivers, ADP extension agent, farming cooperative organization, fellow farmers, friends and relatives and television and radio. The study identifies the problems that militated against effective technology that are transferred to Ahoada East local government areas and Obio/Akpor local government area. The major problem that the farmers are facing are inadequate financial resources to purchase farm inputs recommended, lack of mobility to extension agents to cover the areas, illiteracy of farmers, Late arrival of farm inputs especially when needed most.

RECOMMENDATIONS

Based on the findings of the study, the following solution to the problems associated with the transfer of agricultural technologies in Ahoada East and Obio/Akpor local government areas.

- Adequate financial resources should be given extension agents to purchase farm inputs to carry out their extension work in the field.
- The extension agents should create awareness to the farmers that are not aware of the technologies.
- Illiteracy campaign should be carried out, so that the farmers will be educated
- Extension agents should be motivated e.g. allowances should be given to them.
- There should be sufficient contact between farmers and extension agents.

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