Effect of Training on Adoption of Improved Farm Practices by Farmers in Ondo State, Nigeria.

G.M¹ ADEBO AND S.O. EWUOLA²

¹Department of Agricultural Economics and Extension, University of Ado Ekiti

²Department of Agricultural Economics and Extension, Federal University of Technology, Akure

ABSTRACT

An investigation was conducted on whether or not farmers training affects their adoption of improved farm practices in Agriculture. Two hundred farmers were randomly selected from 10 Local Government Areas of Ondo State and made to respond to the interview schedule used in eliciting responses for the study. Findings revealed that farmers were trained by the Agricultural Extension Agents of Ondo State Agricultural Development Project; that majority (87.0%) received training on improved farm practices on maize, cassava and rice respectively while 60.5% received training on yam production and 32.5% received training on improved farm practices of cowpea. The result further showed that, 87.5% received the training through farm/home visit, 75% received through farmers meeting while 60.0% received through radio and 41.0% through television programmes. In addition 71.5% agreed that the extension agents utilized practical demonstration in training, 60.8% learnt through group discussions, 60.2% through radio, and 30% through film shows in farmer's meeting. Also 41% learnt through result demonstration on television programmes. Furthermore, findings showed that farmers preferred training on farm/home and practical demonstration method to other methods of training.

The result of the study equally indicated that timeliness and medium of training had effect on the level of adoption of improved farm practices. It also showed that availability of inputs--seed, cutting, fertilizers and agrochemicals had positive correlation with the adoption of improved farm practices on maize, rice and cassava. The training received and their adoption of improved farm practices increased their output of maize, rice and cassava.

It was therefore recommended that the extension agents of Agricultural Development Project in Ondo State should intensify training given to the farmers to enhance the adoption of improved farm practices. More extension agents should be employed to increase the use of farm home visits and farm meetings which is preferred by the farmers. Improved farm technologies should be supported with adequate input at the right time to enhance adoption.

virvitouhoro bue veni reinet must be a sumi to no incobe no animal to befie ent mo buil (vi)

1.0 INTRODUCTION

Agriculture still retains its position as the bulk walk upon whose solid foundation the economy of Nigeria is based. The Nigeria Agriculture, according to Obadan (1997) is still plaqued with low productivity, meager income and low savings. CBN (1998) also reported a rapid decline in Agriculture's contribution to Gross Domestic Product (GDP).

Majority of the food produced in Nigeria, were grown by farmers whose productions still remains at the subsistence level.

According to Ojo (1991) and Obadan (1997), the demand for food outstripped the supply and that Nigeria still depend on importation of certain food crops

Several efforts have been made in the past by the Government in an attempt to boost Agricultural production. Among these attempts made is the establishment of various institutes of research in Nigeria. The result of the findings of these institutes is to be disseminated to the end user, who is the farmer, by an intermediary – the extension agent.

According to Savile (1978) as quoted by Oladoja (2004) the aim of all extension works is to teach people living in rural areas how to raise their standard of living by their own efforts, using their own resources of manpower and materials with the minimum assistance from Government while Williams (1989) saw extension as an out of school system of education for teaching farmers (Adult, women and young people) how to raise their standard of living by their own effort using their own resources and providing them with scientific knowledge to solve their problems.

In order to utilize/adopt the findings of research institute by farmers requires effective training by the extension agents. Effective training can enhance the adoption of improved farm practices by farmer.

Adoption, according to Onyenwaku and Mbuba (1991) is a mental process, which an individual passes through in deciding to use an innovation. Also Ewuola (1985), noted that adoption is synonymous to transfer of technology. He defines transfer of technology as that which embraces all efforts to make sure that the farmers adopts new technology. He emphasized that for transfer of technology to take place; it must embrace input support, advice and other essentials so that the farmer will have no reason for rejecting the technology.

Before any technology is adopted according to Rogers (1952) it must pass through a process of adoption, which involves awareness, interest trials, evaluation and adoption. The success of the adoption process depends very much on effective instruction by extension agents, which is determined by methods and techniques of instruction used.

Various media can be evolved/utilized in training the farmers. Among which are Farm/Home visit, farmers meetings, use of megaspores, radio, televisions, videotapes. Farm/nome visit according to Adebo (1997) gives room for interpersonal communication. It affords the farmers freedom to ask and answer question and it may involve the use of telephones, letter writings etc for further discussion or clarification. Farmers meeting according to Ononiwu (1985) encourages interaction among the farmers and aids adoption of improved farm practices Bogunjoko (1991) opined that radio, television tapes/audios can be used to reach a large number of audience at a time but does not encourage feed back.

Methods of training the farmers according to Singn (1985), Ononiwa (1985) and Adebo (1997) varies from practical demonstration to result demonstration, the use of life drama, photographs, film shows, tapes, tours, group discussions, conferences etc it may involve the combination of more than two methods for effective training to take place.

The objectives of this paper is to determine the effect of farmers training on adoption of improved farm practices by farmers in Ondo State. Specifically the study aimed at the following; to

- (i) Analyse and describe the socio-economic characteristic of the farmers.
- (ii) Identify the media of training the farmers in Ondo State.
- (iii) Examine the various methods employed in training the farmers
- (iv) Find out the effect of training on adoption of improved farm technology and productivity.

2.0 MATERIALS AND METHODS

The data used in the study were primary data collected by means of structured interview scheduled from a sample of 200 farmers in Ondo State. Ondo State comprises of 18 Local Government areas (LGA) out of which 10 Local Government areas were randomly selected. From each LGA two villages were randomly selected while from each village 10 farmers were randomly selected and interviewed for the study.

Data were obtained from the farmers using pre-tested interview schedule, which had earlier been subjected to face validity and reliability test using split-half technique (r = 0.84).

Descriptive statistics were used to described the demographic characteristics, means of training the farmers and methods/techniques employed in training the farmers while Pearson Product Moment Correlation was used to examine the relationship between training and adoption of improved farm technologies.

3.0 RESULT AND DISCUSSIONS.

Socio economic variable of the respondents.

(a) The result showed that 38.0 percent of the respondents were between the age of 41-50 years and 30.0 percent were between 31-40 years (Table 1). The mean age of the respondents was 41-50 years. This showed that respondents were youthful and active, but matured. Majority (72.5%) of the respondents were married while a few (11.5%) were single and 6.0% were divorced.

to brokerste niedt seigt of vont egen lenn di buivi elevor

- (b) As for their education, 26% received Non-formal education, 25% received primary education, 19% had secondary education while 16 percent indicated having tertiary education. This result revealed that majority of the respondents were educated though with low level of education.
 - Medium of farmers training by agric extension agents. Table 2 showed that majority was trained through the use of farm/home visit, 75.0 percent received through the television 15.0 percent through Agricultural shows while 10.5 percent received training through literature and newspapers.
 - The result revealed that the farmers received training through all media the Agric Extension Agents utilized. However farm/home visit, farmer's meeting and use of radio were prominent. They also indicated the preference for farm/home visit to all other sources of training
- (c) Method of farmer's training by agricultural extension agents: Methods of training farmers employed of AEAS included practical demonstration, result demonstration, group discussion Audio, film shows, video tapes. Tour and the use of posters and pictures (Table 4).
 - The result indicated that practical demonstration method was mostly used to train the farmers followed by group discussion (60.5% followed by radio Audic/listening and result demonstration 41.0 percent. All other methods were not popularly employed to train the farmers.
- (d) Type of crops in which farmers received training on improved farm practices: Table 2 showed that majority (87.0%) of the respondents received training on improved farm practices on rice, maize and cassava respectively 60.5% received training on yam production, 32.5% received on cowpea production however very few received training on groundnut, soybean and cowpea.
- (e) Types of relationship between variables: Table 5 showed that availability of farm inputs correlated positively and significantly with number or methods of training on improved farm practices (r = 0.22), adoption for maize (r = 0.91) (r = 0.44), yam (r = 0.43), cowpea (r = 0.27) and adoption for all crops (r = 0.48) all at the 1% level. It also correlated with total for timeliness of training (r = -0.14) and total number of media for training (r = -0.17) both at the 5% level.

These significant correlation shows that availability of farm input to farmers is accompanied by increase in adoption of technology for maize, rice, yam, cowpea and a decrease in the number of media for training. Increase in the availability of farm inputs to farmers which correlated positively with adoption rate for improved technologies for all food crops produced may be attributed to the fact that the availability of input will help to stimulating their interest which stimulate trial and successful trial leads to adoption. This increases the yield and income. Positive correlation between availability of inputs and timeliness of training on improved farm practices indicated that as farm inputs are available for farmers it enhances the time of training and adoption of improved farm practices. This is in line with the claims of Adeleke (1985) that if inputs are supplied at the right time, the adoption farm innovation will increase.

4.0 CONCLUSION AND RECOMMENDATIONS

The result of the study established that the Agricultural Extension Agents of Agricultural Development Projects trained farmers in Ondo State and that they received training through the use of all the means employed by the Agricultural Extension Agent. Various methods of training were employed to teach the farmers. The farmers prefer the use of farm and home visit as well as practical demonstration method to other methods of training. The various methods of training employed correlate significantly with the adoption of all the food crops produced.

The significantly correlation between method of training employed and adoption rate of all the food crops produced shows that as farmers received more training on each crop the adoption rate increase. The study revealed that availability of farm input affects training and adoption of improved farm technology.

Based on the findings it is therefore recommended that the extension agents of Agricultural development project in the country should intensify training given to the farmers in other to enhance the adoption of improved farm practices. More extension agents should be employed to increase the use of practical demonstration and farm/home visit, which is preferred by the farmers.

Improved farm technologies should be supported with adequate input at the right time to enhance adoption

TABLE 1: Socio economic characteristic of respondents

Socio Economic Variables	Frequencies	Percentages	
(A) Age			
< 30 years	14		
40 years	50	30	
41-50 years	and bei 76 med and materials	38	
Above 50 years	50	25	
	200	100	
Male	145	72.5	
Female	55	27.5	
m 1) zapitosm mmi bevergen no	200	100	
(C) Marital Status			
Single	23	11.5	
Married Deinson	165	82.5	
Divorced	ni 02697012 bns 6.45	on of reducingly for mairie, 18-, yann	
tumini ko viilidelieve sultasit tost ed	200	100	
(D) Highest Educational Qualification	n	olina recommende de la compania de compania	
No formal education	28	14	
	5211 21 2501	or 126 by or mile to not good on one	
Primary	50	25 and Ingin oil in beilgaus one	
Secondary	38	19	
		16	
	200	the 100	

Source.

Field Survey 2003

TABLE 2: Type of crops in which farmers received training on improved farm practices

Crop Type	Frequency	Percentage
Cassava	174	87.0
Yam	121	60.5

He to noticobe orbitistive vimes the comment of training comments assisting a speciment of I continue to aborton

Maize	174	87.0
Rice	174	87.0
Cowpea	65	32.5
G/Nut	20	10.0
Soyabean	37	18.5
Cocoyam	0	
Vegetables	3	1.5

^{*} Multiple Responses

Source: Field Survey, 2003

TABLE 3: Media of farmers training on improved farm practices

Medium	Frequency	Percentage
Farm/Home Visit	175	87.5
Farmers meeting	150	75
Radio	120	60.0
Television	82	41.0
Newspapers	21	10.5
Agric shows	30	15.0
* Multiple Decrease		

^{*} Multiple Responses

Source: Field Survey, 2003

TABLE 4: Method of farmers training

Method of training	Freque	ncy	Percentage	
Practical demonstration	143		71.5	
Result demonstration	82		41.0	
Group demonstration	121		60.5	
Audio	120		60.0	
Film shows	106		53.0	
Video shows	7		3.5	
Tours	8		4.0	
Posters/Pictures	20		10.0	

^{*} Multiple Responses

Source: Field Survey, 2003

TABLE 5: Correlation of some selected variables and adoption of improved technologies

	Total farm inputs availabilities of farm input	timeliness		No of method of training on IFP			Adoption for cassava		Adoption for cowpea	Adoption for all crops
Total farm inputs availabilities of farm input										
Total for timeliness of training	-0.14									
No of media of training on IFP	0.17	0.05								
No of method of training on IFP	0.22++	0.10	0.05							
Adoption for maize	0.91++	0.05	0.08	0.25						
Adoption for rice	0.22++	0.05	0.06	0.25 ⁺⁺	0.04					
Adoption for cassava	0.10 ⁺⁺	0.04	0.8	0.32++	0.32**	0.14				
Adoption for yam	0.43**	- 0.12	0.10	0.15+	()27++	0.24 ⁺⁺	0.51			
Adoption for cowpea	0.27 ⁺⁺	- 0.15+	0.25++	0.10	0.33++	0.26++	0.32**	0.21**		
Adoption for all crops	0.48++	0.18+		0.25++	0.49++	0.61++	0.67 ⁺⁺	0.65++	0.70+	

Source: Field Survey, 2003

REFERENCES

- Adebo G. M. (1997): The Effect of Agricultural Communication on Adoption of improved Farm Technologies by Contact Farmers in Ondo State.M. Tech thesis. (unpublished)
- Adeleke A.R. (1985). Farm Management for Improving Food Production in Nigeria pg 100
- Bogunjoko J. O. (1991): Source of Information on Improved Farm Practices. A Case Study of Farmer in Gawa District of Kaduna State. Nigeria Journal of Agricultural Extension Vol. 1 No. 2 pp 64 67.
- C. B. N. (1998): Economic and Financial Review June No 2 Vol 31 Agric. Exports as a percentage of Nigeria Total Export.
- Ewuola S. O (1995): An Analysis of the Effectiveness of Small Holder Farmer Credit Programme in Ondo State.
- Obadan M. I (1997): Analystical Framework for Poverty Reduction Issue of Economic Growth Versus other Strategies. In Poverty Alleviation in Nigeria. Selected Papers for the Annual Conference Nigeria Economic Society.
- Ojo M. O. (1991): Food Policy and Economic Development in Nigeria C. B. N. Paper Page Publisher Service Ltd.
- Oladoja M. A. (2004): Changing Trends and Challenges Facing Agricultural Extension Delivery in Nigeria. Lead Paper Presented at the first South West AESON Conference, Ayetoro Dec. 2004.
- Ononiwu G. D (1985): Communication Support for Agricultural Development Managing Agricultural Extension in Nigeria Proceedings of the National Workshop on Agric Extension. 1985 FACU pp 63 69.
- Onyenwaku C. E. and A. C. Mbuba (1991): The Adoption of the Seed Yam Miniset Multiplication Technology by Farmers in Anambra State Nigeria. The Nigerian Journal of Agricultural Extension Vol. 6, and 2 pp 26 27.
- Rogers E. M. (1962): Diffusion of Innovation. The Free Press, New York.
- Singh Daulat (1985): Effective use of Demonstration Mass Media and Other Extension Methods.

 Management of Agricultural Extension in Nigeria FACU.
- Williams S.K.T. (1989). Extension Service within the Strategy of Agricultural Development in Nigeria in the 1990s 6th ARMTI Annual Lecture.