

CORELATION BETWEEN YAM MINISETT USAGE LEVEL AND DEMOGRAPHIC CHARACTERISTICS OF FARMERS IN RIVERS STATE

A. C. Agumagu

ABSTRACT

This paper investigated the relationship between yam minisett usage level and demographic characteristics of farmers in Rivers State. Cluster sampling technique was used to select 63 respondents in the study area who were administered structured questionnaire. Data were analysed by using frequencies, percentages and Pearson correlation. The findings revealed that usage level of yam minisett was moderate and majority of the respondents were middle-aged, had formal education, were males and had between 1 and 5 years farming experience, most got information on yam minisett from Agricultural Extension agents. Of all the variables identified, only experience showed significant relationship with usage level of yam minisett. Age, education, family size, gender and source of information did not show significant relationship.

INTRODUCTION

Yam is a very important staple crop in Nigeria and many other countries. They have been noted as the most important crops in West Africa, except for cereals (Coursey, 1967; Onwueme, 1978). Over the years much research has been done on improvement of yam as

staples. Improvements have been made on the planting methods and the general botany of the plant (Okonkwo, 1985). The method of planting yam with the use of setts is a long standing tradition. Most farmers cut off the "head" after eating the edible part. This convention has not helped to increase yam production. It only produced yam at the subsistence level. However, in recent times the introduction of yam minisett has brought hopes to farmers as a strategy to increase income and reduce poverty. It was aimed at increasing yam production to a reasonable commercial level.

The International Institute for Tropical Agriculture (IITA), Ibadan and The National Root Crops Research Institute (NRCRI), Umudike have played significant roles in the introduction of yam minisett in Nigeria. The minisett method involves the use of smaller portions of the whole yam tuber as planting materials, which is a major advantage over the traditional and conventional methods of yam production. Otto, Osiru, Ng and Hahn (1987) stated that the setts used in the traditional method of yam production as planting materials when planted often sprout unevenly since they are planted directly on the field; the time required for sprouting also prolongs the cropping period, which eventually increases the need for weeding. The use of minisett has been very useful in the agricultural environment because through its cultivation seed yam and eventually ware yams are produced. This has relatively raised the income level of such farmers and thus encouraged others to produce more. This study

determines the relationship between yam minisett usage level and demographic characteristics of farmers in Rivers State.

METHODOLOGY

The study was covered five yam producing areas in Rivers State, which include Omoku, Idu, Okposi, Obrikom and Ahoada. A cluster sampling technique was used to select 63 farmers from the study area.

Data analysis was by the use of simple descriptive statistics and correlation analysis.

Table 1: Demographic characteristics of respondents

	f	%
Age:		
<30years	23	36.5
30-40years	29	46.0
>40years	11	17.5
Education:		
No education	4	6.3
Formal	50	79.4
Non-formal	9	14.3
Experience:		
<1 year	17	27.0
1-5years	30	47.6
6-10years	11	17.5
>10years	5	7.9
Family size:		
<3	10	15.9
3-5	28	44.4
>5	25	39.7
Gender:		
Male	44	69.8
Female	19	30.2
Source of information		
Friends/relations	14	22.2
Extension agents	48	76.2
Mass media	1	1.6

From table 1, it is observed that respondents involved in the study are middle aged ranging from 30 to 40 years (46%). It was found that majority of the respondents received formal education (79.4%). The study showed

that 47.6% of the respondents have between 1 and 5 years farming experience, most of them (44.4%) have family size of between 3 and 5. The study also showed that most respondents are male (69.8%) and majority (76.2%) got information on yam minisett from Agricultural Extension agents.

Table 2: Correlation analysis

Variables	r	p	Relationship
Age	0.193	$p > 0.05$	NS
Education	-0.036	$p > 0.05$	NS
Experience	0.255*	$p < 0.05$	S
Family size	0.082	$p > 0.05$	NS
Gender	0.089	$p > 0.05$	NS
Source	0.133	$p > 0.05$	NS

* Relationship is significant at 0.05 level

The correlation analysis shown in table 2 reveals that age, education, family size, gender and source of information are not significantly related to usage level of yam minisett among respondents, while experience shows a significant relationship.

Experience showing significant relationship implies that the longer the respondents experience in farming, the higher the use of yam minisett. Experience has the highest r-value compared to the other variables, implying a high strength of relationship. This finding confirms a previous one by Okoro (1999). Age showed a positive

relationship though not significant. It may suggest that the older the respondent the higher the usage level of yam minisett. This is in line with a previous study by Clark and Akinbode (1968). Education showed a negative relationship which is not significant. This does not agree with the expectation that education influences adoption. This finding therefore contradicts those of Asiabaka and Emereonyenkwe (1997) and Okoye (1989). However, Okoro (1999) found negative relationship between education and technological knowledge gap in his study. Source of information showed a positive relationship with usage level. This is expected considering the fact that respondents obtain information from Agricultural Extension agents of the Agricultural Development Programmes (ADPs) and the Green River Project of Nigerian Agip Oil Company. Family size and gender also have positive relationship with usage level.

CONCLUSION AND POLICY IMPLICATION

Usage level of yam minisett among respondents was found to be moderate, and most respondents get information on yam minisett from Extension Agents. Experience was the major contributing factor that influenced yam minisett usage level among respondents. The implications of the findings of this study include:

1. That Agricultural Extension agents need to intensify efforts in disseminating yam minisett technology to farmers in the study area.

2. That adequate demonstration is required for proper utilization of yam miniset.
3. That more enlightenment campaign is necessary for farmers.

REFERENCES

Asiabaka, C. C and Emerenyenkwe, N.G (1997) Training and Visit extension system as a strategy for increasing agricultural productivity of rural farmers. *Journal of Technology and Education in Nigeria*, 2 (1&2), 63-68.

Coursey, D. G. (1967) *Yams*. Longmans: London

Clark, R. C. and Akinbode, A. I. (1968) Factors associated with the adoption of three farm practices in Western Nigeria. University of Ife, Faculty of Agriculture Research Bulletin, No. 1.

Okonkwo, S. N. C. (1985) The botany of the yam plant and its exploitation in enhanced productivity of the crop. In: Osuji, G. (ed) *Advances in yam research. The biochemistry and technology of the yam tuber*. Enugu: Biochemical Society of Nigeria/Anambra State University of Technology.

Okoro, F. U. (1999) Technological gaps in yam miniset technology among yam growers in Owerri Agricultural zone of Imo State, Nigeria. *Journal of Agricultural Extension*. 3, 122-128.

Okoye, A. A. (1989) Factors affecting adoption process by farmers in selected local government areas of

Anambra State, Nigeria. *Niger Agricultural Journal*. 24 (1), 9-20.

Onwueme, I. C. (1978) *The tropical tuber crops: yams, cassava, sweet potato, and cocoyams*. Chichester: John Wiley and sons.

Otto, J. A., Osiru, D.S.O., Ng, S. Y., and Hahn, S. K. (1987) *Improved technology for seed yam production*. Ibadan: International Institute for Tropical Agriculture