

Assessment of Youths Participation in Yam Minisett Technology in Ivo Local Government Area of Ebonyi State, Nigeria

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ABSTRACT

This paper assessed youths participation in yam minisett technology in Ivo LGA of Ebonyi State. Multistage random sampling technique was used to select the communities, villages and youths involved in yam minisett technology. The sample size was one hundred and twenty (120) yam minisett farmers. Result showed that majority (73.34%) of the farmers had age range between 15 – 30 years, 26.6% had farming experience of between 11 – 15 years while 55.0% culminated on farm sizes ranging between 1.1 – 3.0ha. The study also revealed that 80.0% of the youths participated fully in yam minisett technology organized by the College. A correlation analysis showed that age, farming experience and farm size were strong determinants of youths participation in yam minisett technology at 0.01% level, while household size is significant at 0.05% level. It was recommended that married youths should be encouraged to participate in the project. The College should also intensify training to make farming attractive. Finally, government is advised to provide soft loans for the youths for expansion and growth in agricultural production.

Key words: Youths, Participation, Yam, Minisett and Technology

INTRODUCTION

Yam (*Discorea Spp*) is an important tuber crop in Nigeria where it is produced as food and cash crop (Asumugha, *et.al*, 2009, Okwo, 1996). Nigeria is the largest world producer of yams with annual production estimated at 26.587 million metric tones (FAO, 2006). Yam is regarded as a socio-cultural crop and is becoming expensive in urban areas as production has not kept pace with population growth leading to demand exceeding supply (Kushwala and Polycarp, 2001). A recent study on yam has shown that absolute level of production in West Africa and the World have remained static for three decades (Scott *et. al*, 2000). The static or declining trend may not be unconnected with production resources which are not being efficiently utilized leading to low productivity (Fassasi, 2006).

Seed yams are the most important input required for yam production in Nigeria. Unfortunately they are scarce and costly during planting season (NRCRI, 2004). Studies reveal that seed yams contributed to over 40% unit cost of yam production in Nigeria (Ironkwe *et. al*, 2006; Ugwu, 1990; Nweke *et. al*, 1991; Odurukwe *et. al*, 1991). There is need for increased yam production not only to satisfy domestic need but also for export demands. To address the constraints of scarcity and cost of seed yams, the yam minisett technology was developed by National Root Crops Research Institute, Umudike in 1981 (Asumugha and Eluagu, 1991; Ikeorgu, 2004). The minisett technique involves the use of 25 grams cut setts to produce whole tubers, which serves as “seed” of yam (Akoroda and Hahn, 1995).

Many species of yams used for minisett production occur abundantly in tropical and sub-tropical regions of the World (Stephens, 2009). According to Akoroda and Hahn (1995), the production of yam through this technology is grossly inadequate and cannot meet the ever increasing demand for it under present level of input use.

It is against the background that the study was aimed at assessing youths participation in yam minisett technology in Ivo LGA Ebonyi State.

Specifically this study is tailored to achieve the following objectives:

- i. describe the socio-economic characteristics of yam minisett farmers
- ii. determine the level of participation/attendance in yam minisett technologies
- iii. determine the relationship between the socio-economic variables of yam minisett farmers and their levels of participation.

Hypothesis of the Study

There is no significant difference between the socio-economic variables of yam minisett farmers and their levels of participation.

METHODOLOGY

The study was conducted in Ivo Local Government Area of Ebonyi State, Nigeria (Southern Ebonyi). The Local Government Area of Ebonyi State has two (2) Autonomous Communities namely: Ishiagu and Akaeze. Multistage random sampling technique was used in selecting the villages and yam minisett farmers. First, five villages were randomly selected from the 2 autonomous communities giving a total of ten (10) communities namely: Amata, Ngwogwo, Amagu, Amaeze, Ihie, Akaeze-Ukwu, Umuobo, Ihenta, Iyioji and Ngede. From the selected communities twelve (12) yam minisett farmers were randomly selected and this gave a total of one hundred and twenty (120) yam minisett farmers being the sample size of the study.

Youths participation in yam minisett technology was measured as frequency of attendance of farmers to meetings and demonstration techniques such as cutting of ware yams into setts of 25 – 30 gms, applying minisett dust, planting spacing, planting of setts, making of ridges or mounds, fertilizer application, weeding, pyramidal staking and harvesting of tubers. All these activities were organized by Extension Outfit of Federal College of Agriculture, Ishiagu, Ebonyi State.

Descriptive statistics consisting of frequency counts mean and percentage were used to analyze objectives 1 and 2 while objective 3 achieved using Pearson's Product Moment Correlation technique.

RESULTS AND DISCUSSION

Table: Socio-economic Characteristics of Youths (Yam Minisett Farmers) N = 120

Variables	Frequency	Percentage
Age		
15 – 20	11	9.17
21 – 25	24	20.00
26 – 30	53	44.17
31 – 40	32	26.67

Household size

1 – 4	20	16.67
5 – 7	62	51.67
8 – 10	38	31.66
Years of farming Experience		
1 – 10	10	8.33
11 – 15	43	35.83
16 – 20	32	26.67
21 – 30	24	20.00
31 – 40	11	9.17
Farm size (ha)		
0 – 1.0	53	44.17
1.1 – 3.0	66	55.00
3.1 – 5.0	1	0.83

Source: Field Survey, 2009

The socio-economic characteristics of respondents are shown in Table 1. The table revealed that majority (73.34%) of the respondents was in the age-range between 15-30 years while 26.67% were above 30 years. The implication is that the age groups of farmers are capable of withstanding stress and strain in any farming activity (Nwaobiala, *et. al*, 2009). Household size of respondents indicates that majority (62.0%) of respondents had household size range from 5 – 7, while 16.67% and 31.66% of them are in the range of 1 – 4 and above 7 respectively. Larger family size provides cheap and readily available labour for use in farming.

Table 1 also shows that 35.83% of the youths had farming experience ranging from 11 – 15 years while 26.67% had 16 – 20 years. However, 8.33% of them had the least years of farming experience (1 – 10) years and 9.17% had above 30 years of farming experience. Farming experience enhances efficient utilization of scarce farm resources (Nwaobiala and Ezeh, 2008).

A reasonable proportion (55.0%) of the farmers had farm size ranging from 1.1 – 1.3ha while 44.17% of them had 1.0ha farm holding. The size of a farm is a strong determinant of the expected output/yield (Nwaobiala *et. al*, 2008).

**Table 2: Farmers (Youths) Participation in Yam Minisett Technology in Ivo LGA of Ebonyi State
N =120**

Attendance to Activities	Frequency	Percentage	Classification
Weekly	52	43.33	High
Fortnightly	44	36.67	high
Monthly	16	13.33	Low
Bi – monthly	8	6.67	Low

Source: Field Survey, 2009

Table 2 reveals youths level of participation in yam minisett technology. Those who attended the college programmes either once a week or twice a month were described as high participants while low participants were those who attended either once a month or once in two months.

The table also indicates that majority (80.0%) of the yam minisett farmers actively participated in the technology while few (20.0%) of them did not actively participate in the project. Participation helps farmers in decision making process and in evaluating programmes (Akinbile *et. al*, 2008).

Table 3: Correlation Analysis of Relationship between Socio-Economic Characteristics and Levels of Participation of Yam Minisett Farmers in Ivo LGA Ebonyi State

Variables	R –Value	P – Value	Remarks
Age	0.335***	0.001	S
Marital Status	0.176	0.036	NS
Household Size	0.286**	0.006	S
Education	0.021	0.726	NS
Farm Size	0.328***	0.042	S
Farming Experience	0.328***	0.00	S
Farm Income	0.072	0.214	NS
Occupation	0.066	0.312	NS

Source: Field Survey, 2009

*** Significant at 1%, **Significant at 5%
NS = Not Significant, S = Significant

Table 3 showed that Age (0.335***) correlated positively with level of participation. The relation is significant at 0.01 level. The implication of the finding is that younger farmers participated in the project more than the older ones. Farming experience (0.328***) also correlated positively and significantly at 0.01 level of participation. This suggests that respondents with longer years of experience in the technology

must have participated more than those with fewer years. This may be attributed to the benefits they enjoy from the Extension Out-fit of the College.

Household size ($P = 0.5$), correlated positively with technology adoption. This implies that farmers who had larger household size participated in the technology because of availability of cheap labour. Farm size ($P = 0.01$) correlated positively with level of participation and the relationship is significant at 0.01 level. This suggests that those who cultivated larger farm sizes were able to produce more seed yams thereby leading to expansion and growth of their enterprise.

CONCLUSION AND RECOMMENDATION

Results from the study have shown that youths in Ivo LGA of Ebonyi State are actively involved in yam minisett technology. The combined effects of the socio-economic variables namely: age, farming experience, household size and farm income has made positive and significant contribution to their levels of participation in the technology. Policies aimed at improving the infrastructural status of the rural areas will encourage the younger population to take farming/yam minisett production as a primary occupation.

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