



## Effect of Farmers' Participation in “Agric and You” Inspiration Radio Broadcast on Cassava Production in Akwa Ibom State, Nigeria

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### Abstract

This study examined the effect of farmers' participation in “Agric and You” agricultural radio broadcast of Inspiration FM 105.9 radio station on cassava production. Data on participation and yield per hectare before and after participation were obtained from 180 randomly selected farmers using a questionnaire on a 5-point rating scale. Data were analyzed using descriptive and inferential statistics. The technologies disseminated and level of adoption were; herbicide application (3.13), input acquisition (3.46), marketing opportunities (4.33), Improved storage facilities (3.34), fertilizer application (3.97), and harvesting (3.22), indicating a high level of farmers participation in the agricultural radio programme. The result of the simple linear regression showed that 'Agric and You' agricultural programme was effective on the farmers cassava yield, and significant at 1% level of probability. The study concluded that farmers had high level of participation in the programme led to increase in yield. It is recommended that the programme should be sustained and stakeholders and Research Institutes should make more use of radio as a means of reaching out to the farmers.

**Keywords:** *Farmers' participation, agricultural radio broadcast, cassava production*

### Introduction

Agriculture is a major sector of the Nigeria economy and a primary source of livelihood for the rural dwellers who contribute a large percentage in the production of Nigeria's food crops and livestock. Onyeagocha (2012) acknowledged that the rural dwellers contribute over 80% of Nigeria's food crops and livestock under unfavorable conditions. The significance of agriculture in the economy of Nigeria is so glaring, and even with the growth of other sectors, the agricultural sector continues to be the key economic activity of Nigerians. Agriculture is predominantly important because of its employment generation and contribution to Gross Domestic Product (GDP) and export revenue earnings of the country. Among the crops grown by the rural dwellers, cassava is among the most widely produced in Nigeria. In cassava production, Nigeria is rated the highest producer in terms of its volume of production (FAO, 2002). Cassava is a staple food crop with worldwide distribution and serves as a fundamental energy source and food security for about 80million people Worldwide (FAO, 2014). Cassava is an important crop with various uses; the leaves are consumed as vegetable, it can be dried and fed to livestock as protein feed supplement, the tubers are processed for human and animal consumption and it

also creates employment opportunities as well as contributing to the food security status of many rural families in Nigeria.

Looking at the importance of cassava as a staple food crop in Nigeria, its productivity can be increased and sustained through efficient utilization of improved research findings such as new varieties and improved agronomic practices. According to Ojuekaiye (2001), because of the significant contribution of cassava to food security and economic development of the country, the Federal Government of Nigeria embarked upon a number of programmes to boost its production. These include; Cassava Multiplication programmes, Root and Tuber Expansion Programme and Pro-vitamin A cassava production technologies, amongst others. Currently, agricultural extension delivery has progressed from the personal contact of farmers by extension agents to the use of mass media in extending improved agricultural information and this is a hopeful resolution to the limited number of extension agents to reach rural farmers. For farmers to be productive, there is need for them to be enriched with the relevant agricultural information at the right time. Notwithstanding the inadequate number of extension agents, farmers have to be reached with agricultural

information irrespective of their locality. This is so because the rural farmers depend solely on agriculture for their source of livelihood and one cannot afford to deny them essential information to help increase their productivity. The urban dwellers are able to feed today because, the rural farmer in spite of all challenges still produce.

Efforts are being made by agricultural extension and other agencies to ensure that farmers are provided with relevant information. Radio, which is mass media communication method, has been known to be very effective in reaching a large number of farmers quickly as compared to the interpersonal method used by extension agents. Badiru and Yekinni (2015) acknowledged that mass media have become an important means of agricultural and rural development information dissemination in Nigeria. Among the mass media methods, radio has been identified to be one of the most effective. Radio is one broadcast medium that is effective for rural emancipation programme. It beats distances, and thus has immediate effect (Okwu *et al.*, 2007). It has been identified as the only medium of mass communication that the rural population is very familiar with (Kuponyi, 2000). Nazimi and Hasbullah (2010) also noted that, among the different modes of communication, radio has been acknowledged as a powerful communication tool. This could be due to the low and affordable cost of radio and portability compared to other sources of mass communication.

*Agric and You* agricultural broadcast is a weekly radio programme used to enrich and educate farmers on improved agricultural innovations in Akwa Ibom State. The programme has been aired since 2016, and it covers areas such as crop production, livestock production, fish farming, input acquisition, co-operative societies, credit institutions, and market information. Till date, no study has been conducted to establish the effect of farmers' participation in the program, hence the nwwd of this study. The specific objectives of the study were to examine the extent of farmer's participation in *Agric and You* agricultural programme and determine the perceived effect of *Agric and You* agricultural programme on cassava yield of farmers.

### Methodology

The study was carried out in Akwa Ibom State, which is located in the coastal southern part of Nigeria. The State lies between latitudes 4° 32' and 5° 53' North and longitudes 7° 25' and 8° 25' East and has an area of 8,412 km. A multi-stage sampling procedure was used to select respondents for the study. The first stage involved the random selection of three zones from the six agricultural zones (Uyo, Etinan, Oron, Abak, Ikot Ekpene, and Eket) of the State which include Uyo, Ikot Ekpene and Eket. In the second stage, simple random sampling was used to select 2 blocks from each of the selected zones making it 6 blocks. The third stage involved selecting 2 cells each from the 6 selected blocks using simple random sampling to give a total of 12 cells. Finally, 15 farmers were selected

from the twelve cells using simple random sampling technique which gave a total of 180 respondents. Data collection was done through the administration of questionnaires and interview schedule. Descriptive statistics such as frequency, distribution, mean and percentages were used to analyse data, while the inferential statistic such as simple linear regression model was used to determine the relationship between farmers' participation in the programme and cassava yield. A null hypothesis that, there was no significant relationship between farmers' participation in *Agric and You* programme and cassava yield was tested at 5% level.

### Results and Discussion

Extent of farmers' participation in AGRIC AND YOU agricultural programme

The result in Table 1 shows the extent of farmers' participation in *Agric and You* agricultural programme. The mean rating on a 5-point scale shows that improved cassava varieties (x = 2.88), proper pest and disease control (x = 3.08), herbicide application (x = 3.13), input acquisition (x = 3.46), co-operative societies (x = 3.05), credit, grant and loan acquisition (x = 3.08), marketing opportunities (x = 4.33), improved storage facilities (x = 3.34), cassava processing (x = 2.68), fertilizer application (x = 3.97), timely weeding (x = 3.12), and harvesting (x = 3.22). The result shows that, the extent of farmers' participation in the agricultural programme was high. Ten out of twelve technologies were higher than the bench mean of 3.0. This shows the farmers need and value for agricultural information and this is in line with the findings of Okwu *et al.* (2007), who reported a high level of farmers' participation in agricultural radio programmes.

### Relationship between *Agric and You* agricultural programme on cassava yield of farmers

The result on Table 2 shows the regression estimate of the effect of *Agric and You* agricultural programme on cassava yield of farmers. Table shows that the R-square value was 0.732, indicating that 73.2% of the variation in the dependent (cassava yield) was accounted for by the independent variable, while others was due to other factors. The F-test was statistically significant at 1% indicating that the model used was fit for the analysis. The result implied that an increase in *Agric and You* agricultural programme will lead to an increase in the cassava yield of farmers in the study area.

### Conclusion

The study revealed that farmers had high level participation in *Agric and You* Inspirational Radio Broadcast which resulted in high cassava yield among the participants. The paper therefore concluded that participation in the programme led to increase in cassava yield in the study area. Based on the findings of the study, the paper recommended that the *Agric and You* Programme should be made to have a wider coverage to reach more farmers. The government, general public and Non-Governmental Organizations (NGO's) should make effort to support and sponsor agricultural the *Agric and You* programme.

**Table 1: Extent of farmers' participation in Agric and You agricultural programme**

	Always	Often	Seldom	Rarely	Never	$\sum fx$	SD	$\bar{x}$
A Improved cassava varieties	65(325)	35(140)	2(6)	0(0)	78(78)	504	0.8119	2.88
B Proper pest and disease control	35(175)	94(376)	1(3)	0(0)	50(50)	554	0.9980	3.08
C Herbicide application	47(235)	80(320)	2(6)	1(2)	50(50)	563	0.72246	3.13
D Input acquisition	38(190)	60(240)	36(108)	40(80)	6(6)	622	0.9777	3.46
E Co-operative societies	25(125)	73(292)	21(63)	11(22)	48(48)	550	0.6640	3.05
F Credit, grant and loan acquisition	27(135)	46(184)	31(93)	68(136)	8(8)	555	0.5667	3.08
G Marketing opportunities	65(325)	111(444)	3(9)	1(2)	0(0)	780	1.0862	4.33
H Improved storage facilities	96(480)	10(40)	12(36)	23(46)	0(0)	602	0.9220	3.34
I Cassava processing	4(20)	25(100)	86(258)	43(86)	19(19)	483	0.8002	2.68
J Fertilizer application	106(530)	20(80)	12(36)	26(52)	16(16)	714	0.5211	3.97
K Timely weeding	4(20)	28(112)	89(267)	80(160)	3(3)	562	0.7442	3.12
L Harvesting	6(30)	34(136)	87(261)	44(88)	65(65)	580	0.8510	3.22
<b>Grand mean</b>								<b>3.28</b>
<b>Benchmark mean</b>								<b>3.00</b>

Source: Computed from field survey data, 2019

**Table 2: Simple linear regression effect of Agric and You agricultural programme on cassava yield of farmers in the study area**

Parameters	Coefficient	Standard error	t-value
Constant	9.4303	0.576	2.953***
Agric and You agricultural programme	0.828	0.348	2.752**
R-square	0.732		
R-adjusted	0.698		
F-ratio	18.634***		

Source: Computed from Field Survey Data 2019 (\*\* = significant at 5% and \*\*\* = significant at 1%)

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