

# The Radio Programme Agric Panorama and Its Implications for Agricultural Practices in Samaru, Zaria, Nigeria

<sup>1</sup>Faruk N.B., <sup>2</sup>Okaiyeto S.A. and <sup>1</sup>Musa A.

<sup>1</sup>Department of Mass Communication, Ahmadu Bello University, Zaria

<sup>2</sup>Department of Mass Communication, University of Ilorin, Ilorin

*Nigerian Journal of Agricultural Extension, Vol. 19, Number 1, March 2018*

## Abstract

The main objective of this study was to assess the role of the radio programme Agric Panorama and its implications for farmers' practices in Samaru, Zaria, Nigeria. Survey research design and simple random sampling were adopted. One hundred and thirty-one (131) questionnaires were administered to Samaru farmers' as respondents and 126 were retrieved and analysed. Findings revealed that the target farmers access the programme through ABU FM 101.1 Radio and agreed that it has aided their farming practices. A majority of the farmers (86.9%) believed that the programme has contributed towards improving their farming practices ( $M=4.3$ ,  $SD=.86$ ); through delivery of useful information on agricultural management, improved fertilization, disease control, seeds and up to date information on best practices. Regression analysis ( $R^2=0.38$ ,  $P=0.032$ ) shows that exposure to Agric Panorama programme is significantly and positively correlated with improvement of agricultural practices. Poor power supply, insufficient time, and language barrier were found to be the major challenges faced by listeners in accessing the programme. It is recommended that a Hausa version of the programme should be introduced as majority of the Samaru farmers are Hausas.

**Keywords:** Development, radio programme, Farmers and Agricultural Improvement

## Introduction

Development oriented communicated messages, which is the planned and systematic use of communication through interpersonal channels, ICT's, audio, visuals and the mass media to collect and exchange information among those concerned in planning a development initiative and to mobilize people towards a common societal good. Acknowledging the importance of communication in improving the lot developing communities, the United Nations Agency posits that through communication strategies such as the use of advocacy, social mobilization and programmed communication social transformation are been ensued.

There are various channels development communicators can use to advance their communication strategies in order to achieve development goal. These channels are radio, television, print

media and most recently the information and communication technology. In this respect, development communicators have observed that an important and effective channel for communicating agricultural messages is the use of mass media (Ekoja, 2003; Rasak and Amusat, 2012). Farmers have arrays of information sources to leverage upon. Radio, television, propagational publications, daily farm newspapers, agriculture exhibitions, practical education, and consultation services, are means of reaching farmers with extension services.

Radio has been adjudged to have a strong appeal among Nigerian farmers (Arokoyo, 2003; Ifenkwe, 2008; Rasak and Amusat, 2012). As such, extension workers have seen the important of radio as a source of reaching farmers in developing society such as Nigeria with

information (Nyareza and Dick, 2012). Therefore, Haider (2013) pointed, that radio programmes have been used for dissemination of agricultural information for improvement of farming activities in both developed and under developed countries.

Agriculture, which is seen as important factor in the emancipation of majority of rural dwellers in developing countries, is the source of livelihood of 70 to 80 percent of Nigerians as National Bureau of Statistic 2017 report indicated. It is no longer news that radio programmes help to achieve development in the agricultural sector of a society, as such programmes on how to improve farming activities are aired by extension workers (Okorie, Nelson and Tunji, 2011). Examining the effectiveness of radio programme in improving agricultural practices necessitated this study.

Among several studies done in the area of media and agricultural development is the work of Mohy-ud-Din, (2011), who states that agricultural extension workers play a prominent role through providing useful information to farmers. However, Asemah, Anum and Edehog (2013), Haider (2013) and Okorie, Nelson and Tunji (2011), acknowledged that there is a serious shortage of extension agents due to death, retirement, movement to greener pasture and so serious effort in recruiting of new agents for farmers existed in Nigeria.

Shortage of extension workers can have a negative effect on farmers and agricultural development. As such, utilizing radio programmes for extension services can bridge the gap created by shortage of extension workers. Farmers that are faced with shortage of information that will aid them in improving their farming activities can be reached via radio. Radio has a lot of advantages such as low cost, illiteracy appeal and wide coverage. For instance, if there is no enough extension workers to be sent to rural areas, radio can be used to ameliorate the deficiency. Attempt to bridge the gap of shortage of extension

workers obviously is the reason for initiating the programme "Agric Panorama" aired on ABU Samaru 101.1 FM, hence, provide farmers with information on how to improve their agricultural practices. The radio programme, *Agric Panorama* is produced by National Agricultural Extension Research and Liaison Services (NAERLS), Ahmadu Bello University, Zaria and it can be received as far as Kawo in Kaduna metropolis, which is about 100 Kilometer from the station location. It is a 30 minutes programme, broadcasted every Saturday at 9:30am with a feedback interactive format in place.

Against this backdrop, this study assesses the impact of radio programmes in improving farmers' agricultural practices in Nigeria. Specific objectives are to: examine farmers level of exposure to the programme *Agric Panorama* on ABU Samaru 101.1 FM; investigate farmers perception of the importance of the programme *Agric Panorama*; know whether the programme *Agric Panorama* is improving farmer's agricultural enterprise; and identify the challenge(s) farmers faces in accessing the programme.

This study is expected to contribute to the existing literature on the role of radio in improving agricultural practice among farmers. The findings will create more awareness concerning the importance of radio agricultural programmes to extension workers, economic planners especially public policy makers, as it will add to their insight and understanding about agricultural improvement practice and the actual realities on ground in order for their future policy to be firmly shaped.

### **Methodology**

This study employed the survey research method using questionnaires to address the research questions raised for the study. Survey is chosen because the study focuses on analysing views of Samaru residents in line Creswell (2014) who observe that Surveys are commonly used by behavioural scientists to describe

people's opinions and attitudes. Questionnaires are used for gathering data to examine the role of radio programme in agricultural development among farmers in Samaru community in Zaria, Nigeria.

Samaru has a climate favourable to farmers with it rainy and dry seasons (Sawa and Abdulhamid, 2009) distribution. According to the 2006 population census, Samaru had 12,978 people, with 7,417 male and 5,561 female. The simple random sampling technique was used to select farmers who listened to the programme. The respondents were randomly picked from residences to residences. That is: one person represented a household. The researcher visited the respondents in their houses or farms in Samaru community. Based on the population of farming families in Samaru, Zaria as provided by NAERLS (2017), which stands at 200, using Krejcie and Morgan (2001) sampling table, 131 farmers were sampled.

To achieve validity for this study, the researcher consulted plethora of literature to develop the instrument of data collection, also comments and suggestions from experts and colleagues. However, to ensure reliability of the instrument of measurement, the researcher conducted a pilot study. Responses from the pilot study were subjected to a reliability test using Cronbach's alpha coefficient (Creswell, 2014). As such, the scale of programme improving agricultural practices and challenges Coefficient Alpha ranged from 0.78 to 0.98 at both pilot and final stages.

The study used the questionnaire as the instrument of data collection. The questionnaire was structured in such a way that various demographic characteristics of the subject are acquired to explain categorically the role of radio programme in agricultural improvement and presented in close-end format using 5-point Likert-type rating scale. The data gathered through questionnaire were analysed using descriptive and inferential

statistics method with reference to SPSS 21.0 statistical package using frequency tables and simple percentages, mean, standard deviation and regression analysis. Exposure to Agric Panorama was regressed with the perceived influence of the programme in improving agricultural practices.

### Results and Discussions

Table 1 showed that in every 10 respondents 6 will be a male as they represent 61% while female farmers account for 39%. The table also shows that over one-third (40.8%) and (38.4%) of the respondents are between the age bracket of 41-50 and 31-40 years respectively. Furthermore, the table also revealed that majority of the farmers (57%) in this study is married and 37.2% are single farmers. Lastly, the table shows that about half (47.8%) of the respondents engaged on crop production. About over one-quarter (26.3%) who practice livestock rearing and 14.3% engaged on integrated farming system. The least represented (11.9%) respondents are farmers of fishery. This result may be informed by the fact that there is enough arable land in Northern Nigeria for crop production.

### Exposure level to Agric Panorama

Table 2 revealed the result of the exposure level of the respondents to Samaru FM and it shows that over one-third (43.2%) of the respondents are much exposed to the radio station. About one-third also are moderately exposed to the station and 19.2% have little exposure. It therefore means that radio exposure among farmers in Samaru community is high. This confirmed the study of Ifenkwe (2008) that large number of Nigeria are exposed to radio station and Rasak (2012) who posits that radio in Nigeria reach both the farmers in urban and rural areas with information.

Table 2 also revealed that farmers' exposure to Agric Panorama was high, as 43.9% of the respondents attested to this. Also, about one-quarter (26%) have moderate exposure to the programme and

13.9% are very much exposed to *panorama* programme. This means that Samaru farmers are very much aware of the *Agric Panorama* programme currently running on Samaru FM. Arokoyo (2003), Ekoja (2003) and Rasak (2012) have all attested that Nigerian farmers are being availed with information on how to improve farming activities in the country. As such *Agric Panorama* programme is equally contributing to that effect.

#### **Importance of Agric Panorama to farming activities**

Table 3 found that agricultural information on radio is important to farmers as over one-third of the respondents attest that radio providing agriculture information is much importance to them. Specifically, 40.8% of the respondents agreed that *Agric Panorama* programme is much importance to them. It therefore means that farmers are delighted with radio contribution to agricultural development in the country.

#### **Agric Panorama and improvement in agricultural enterprises**

Overall, table 4 shows that 86.9% of the respondents believe that *Agric Panorama* programme has improved their agricultural practice (M=4.3, SD=.86). Specifically, 92% agreed that the programme provides useful information for farmers' agricultural practice (M=4.6, SD=.83). Furthermore, 86% agreed that they put to use the instruction received from the programme (M=4.3, SD=.84) and 86% agreed that it helped farmers with updated information on best farming practice (M=4.4, SD=.87). In the same vein, 88% respondents agreed the programme has thought farmers on how to manage agricultural produce (M=4.4, SD=.87), 84% agreed to provide farmers with information on how to sell their farm produce (M=4.2, SD=.86), just as 86% believe that it provides farmers with information on best fertilization procedure (M=4.3, SD=.85). Lastly, 86% of farmers in the study are provided with information on disease

control. This finding no doubt is supported by a myriad of studies done elsewhere earlier (Arokoyo, 2003; Haider, 2013; Mahmood and Sheikh, 2005; Mohy-ud-Din, 2011).

Exposure to *Agric Panorama* programme significantly and positively correlated with development of agricultural practice among farmers. The model which was statistically significant predicted 38% variance in independent variable ( $R^2=0.38$ ,  $P=0.032$ ). Therefore, *Agric Panorama* programme aids farmers in Samaru community to improve their farming practice. Mohy-ud-Din, (2011) agreed that radio stimulates farmers about new information and then farmers go to their peers, extension workers and friends to get more detailed information.

#### **Challenges to accessing Agric Panorama**

Table 6 presents the challenges farmers encounter while following *Agric Panorama* programme. Generally, there is slight agreement (51.6%) of some challenges (M=2.58, SD=1.36). Specifically, 58% of the respondents agreed that the 30 minutes allotted for the programme is not enough (M=2.9, SD=1.2), 58% also agreed that they have a problem with the programme's broadcasting language (M=2.9, SD=1.4) and 58% agreed that they sometimes find it difficult to understand some terms used in the programme (M=2.9, SD=2.1). Though, the programme is serving its purpose of creation, it has some inherent challenges which can easily be tackled by the producers of the programme.

#### **Conclusion and Recommendation**

From the findings of this study, the researcher concludes that the programme "Agric Panorama" aired on ABU FM Radio provides Samaru farmers with information on how to improve agricultural productivity. The programme contributes to enlightening farmers on the choice of seeds, fertilizer and how to apply them to increase productivity. Others include how to treat diseases that may attack crops, how to harvest and

finally best storage techniques. It is however, recommended that a Hausa version of the programme be introduced to enable farmers benefit more from the programme and to encourage more participation. Also, there is the need to improve presentation especially language expression and terms use for easy assimilation.

## References

- Arokoyo, T. (2003). ICT for agriculture extension transformation. Proceeding of ICT: Transforming agricultural extension. CTA observatory on ICTs. Sixth Consultative Expert Meeting. Wageningen, 23 – 25 September.
- Asemah, E., Anum V. and Edehog, L.O. (2013). Radio as a tool for rural development in Nigeria: Prospects and challenges. *International Journal of Arts and Humanities*, 2 (1/5): 17-35.
- Creswell, W.J. (2014). *Research Design: Qualitative, Quantitative and Mixed Method Approaches* (4<sup>th</sup> ed). Sage: London.
- Egbuna, B. (2009). Digitization and radio broadcasting in Nigeria. Presented at the School of Media and Communication, Conference on Journalism: New Practices and the Renewal of Media Training in Africa. Lagos: Pan-African University, 23-27 August.
- Ekoja, I. (2003). Farmer's access to agricultural information in Nigeria. *Bulletin of the American Society for Information Science and Technology*, 29(6): 21- 23.
- Haider I. (2014). More farmers listen, more they adopt: Role of local radio agricultural programs in small scale farm extension. *International Journal of Multidisciplinary Academic Research*, 2(3).
- Ifenkwe, E. (2008). Assessment of newspaper advocacy for rural development and environmental education in Nigeria. *Journal of Agricultural Extension*, 12(2): 41-51.
- Krejcie, R.V. and Morgan, D.W. (2001). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3): 607-610.
- Mahmood, M.A. and Sheikh, A.D. (2005). Crop yields from new technologies. *Daily Dawn*, March 28- April 3.
- Mohy-ud-Din and Badar, H. (2011). Marketing of agricultural products in Pakistan. *Theory and Practice*. 83-85.
- Muhammad, S., Irfan. M., Khan A.G and Asif M. (2006). Role of mass media in the dissemination of agricultural technologies among farmers. *International Journal of Agriculture and Biology*, 417-419.
- Muhammad, S. (2005). *Agricultural Extension: Strategies and Skills*. Unitech Communications, Faisalabad-Pakistan.
- National Bureau of Statistic (2017). Annual abstract of statistic. Retrieved 12 January 2018 from [www.nigerianstat.gov.ng](http://www.nigerianstat.gov.ng).
- Nyareza S. and Dick A.J (2013). Use of community radio to communicate agricultural information to Zimbabwe's peasant farmers. Department of Information Science, University of Pretoria, Pretoria, South Africa.
- Okorie I. and Oyedepo P. (2011). Newspaper reportage and its effect towards promoting agricultural development in Nigeria. *Journal of Media and Communication Studies*, 3(2):27-32.
- Ozowa, V.N. (1995). Information needs of small scale farmers in Africa: The Nigerian example. *Quarterly Bulletin of the International Association of Agricultural Information Specialists*. IAALD/CABI.40 1
- Rasak O.B. and Amusat A.S. (2012). Perceived efficacy of radio agricultural commodities trend programme among farmers in Oyo State, Nigeria. *Journal of Media and Communication Studies*, 4(3):46-51.
- World Bank (2002). *The Right to Tell: The Role of Mass Media in Economic Development*. Washington DC: World Bank Institute.

**Table 1: Demographic Profile of Respondents**

<i>Demography</i>	<i>Frequency</i>	<i>Percentage(%)</i>
<b>Gender</b>		
Male	75	61
Female	48	39
Total	123	100
<b>Age</b>		
18-30	14	11.2
31-40	48	38.4
41-50	51	40.8
51 and Above	12	9.6
Total	125	100
<b>Marital Status</b>		
Single	45	37.2
Married	69	57.0
Others	7	5.8
Total	121	100
<b>Types of Farming Practice</b>		
Crop Production	60	47.8
Fishery	15	11.9
Livestock Rearing	33	26.3
Integrated Farming	18	14.3
Total	126	100

**Table 2: Exposure to Agric Panorama programme on Radio**

<i>Exposure to Samaru FM</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Little Exposure	24	19.2
Moderate Exposure	41	32.8
Much Exposure	54	43.2
Very Much Exposure	6	4.8
Total	125	100
<i>Exposure to Agric Panorama on Samaru FM</i>		
Little Exposure	21	17.1
Moderate Exposure	32	26.0
Much Exposure	54	43.9
Very Much Exposure	16	13.9
Total	123	100

**Table 3: Farmers' perception of the importance of programme Agric Panorama?**

<i>Importance of Agricultural Information on Radio</i>	<i>Frequency</i>	<i>Percentage(%)</i>
Little Importance	22	17.6
Moderate Importance	34	27.2
Much Importance	54	43.2
Very Much Importance	15	12.0
Total	125	100
<b>Important of Agric Panorama to Famers</b>		
Little Importance	20	16.0
Moderate Importance	38	30.4
Much Importance	51	40.8
Very Much Importance	16	12.8
Total	125	100

**Table 4: Agric Panorama improving Farming Practice**

<i>Panorama Improvement of Agriculture</i>	<i>Level of Agreement (%)</i>						<i>SD</i>	<i>Overall (%)</i>
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>M</i>		
The programme provides useful information for famers agricultural practice	0.8	4.8	5.6	44.8	44.0	4.6	.83	92
Farmers put to use the instruction received from the programme	.8	4.8	5.6	44.0	44.8	4.3	.84	86
The programme have thought farmers on how to manage agricultural produce	.8	5.6	5.6	39.2	48.8	4.4	.87	88
It helped farmers with updated information on best farming practice	1.6	4.8	5.6	40.0	48.0	4.3	.89	86
It provide farmers with information on how to sale their farm produce	.8	4.8	8.0	42.4	44.0	4.2	.86	84
It provide farmers with information on best fertilization procedure	.8	4.8	7.2	42.4	44.8	4.3	.85	86
Farmers are provide with information on disease control	.8	4.8	6.4	41.6	46.4	4.3	.85	86
Total						4.3	.86	86.9

Source: Researcher Field Work, 2017

**Table 5: Regression Analysis on the Influence of Agric Panorama on Agricultural Improvement**

<b>B</b>	<b>SE</b>	<b>B</b>	<b>t</b>	<b>P</b>
Constant	1.593	3.608	0.000	
Influence	.525	.194		2.167 0.032

F<sub>(104,369)</sub> = 100.437, p=.032, R<sup>2</sup>=0.38

**Table 6: Challenges Farmers Faced on Agric Panorama Programme**

<i>Challenges Farmers Faced on Agric Panorama</i>	<i>Level of Agreement (%)</i>						<i>SD</i>	<i>O/all%</i>
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>M</i>		
Incessant break in transmission	36.8	26.4	19.2	14.4	3.2	2.2	1.2	44
The issue of power supply	31.2	40.8	22.4	4.8	.8	2.0	.90	40
Insufficient allotted time	12.0	34.4	18.4	26.4	8.8	2.9	1.2	58
Don't understand the broadcast language	25.4	20.6	7.6	32.5	13.5	2.9	1.4	58
Farmers finds it difficult to understand the terms used in the Programme	20.3	21.9	29.7	18.8	8.6	2.9	2.1	58
Total						2.58	1.36	51.6

Source: Research Field Work 2017