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# Role of Radio Agricultural Programmes on farmers' education: A case study of Radio Benue, Makurdi, Benue State.

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## Abstract

*The study analysed the use of radio programmes on farmers' education in Benue State. The rationale of the study was to analyse the role of radio in educating farmers using Radio Benue, Makurdi as a case study. The study employed survey as research design, using questionnaire as instrument for data collection. Data were collected from a sample of three hundred and eighty-four respondents through purposive, stratified and simple random sampling technique. Using simple percentages, findings revealed that respondents gained knowledge through listening to the programmes. Farmers (28.4%) gained knowledge of appropriate fertilizer application through the agricultural programmes farming world and Tom Sule (in Tiv) aired by radio, 26.8% of the respondents gained knowledge of agricultural practices, and 25.8% of the farmers gained knowledge on the prevention of post- harvest losses. The study concluded that the radio plays a vital role in creating awareness on agricultural information among farmers. The study recommended amongst others that the government and Non-Governmental Organizations (NGO's) should endeavour to introduce grants and farm loans to the farmers through agricultural programmes so as to encourage agricultural activities.*

**Keywords: Agricultural programmes, radio, education**

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## INTRODUCTION

Mass media are vital tools of communication and they have been instrumental in informing people about developments. Mass media have aided changes at the home front as well as revolutionizing, (Nabusoba, 2014). According to Buren (2000), the widespread use of the mass media has resulted in heightening the level of public knowledge in different fields. Its place in educating the populace and bringing about developments in multiple fronts is evident in the Nigerian society (Azelama and Anegbode, 2003).

The dissemination of agricultural information in order to educate farmers through media so as to increase their productivity and income cannot be overemphasised. In every

economy, food production is central to the overall well-being of the populace because of its importance in the provision of foods, income for farmers, raw materials for industries, employment and foreign exchange for the nation (Momoh, 2015). In corroboration with the above, Nakabugu (2001) opined that mass media provides information to farmers through agricultural programs especially on radio and television, providing education, thus enhancing agricultural development. Swanson and Rajalathi (2010) opined that Mass media in agricultural information dissemination generally, are useful in reaching a wide audience at a very fast rate.

According to Khan, Rahman and Uddin (2017), mass media can increase the level of awareness about agricultural activities through providing more information to stakeholder for increasing production. Chapman and Slaymaker (2002) as cited in Khan, Rahman and Uddin (2017) buttressed the above when they said that mass media have the potential to provide timely and reliable information on weather, input prices, and marketing of the products to the stakeholders especially the farmers.

According to Okwu, Kuku and Aba (2007), radio is one of the most appropriate media for agricultural communication as it beats distances, and thus has immediate effect. It has been identified as the only medium of mass communication the rural population are very familiar with. Radio has been playing significant roles in providing fast information and knowledge about agriculture in global arena. Radio is a useful source of agricultural information to farmers and as well constitutes methods of notifying farmers of new developments and emergencies (Khan, Rahman and Uddin, 2017).

Over the years, radio has been a dominant source of information for farmers in sub-Saharan Africa. Although the reach of radio varies from country to country, Oguche (2016) estimated that between 80 and 90 percent of households in Africa have access to a functional radio. Radio preference as a mass medium has attributed to its unique characteristics that allow the owners to expand the spectrum beyond urban areas, avoid economic barriers to consumers paused by high priced newspaper or TV subscriptions. It is these traits about radio that have arguably placed the medium in the lead and consequently convinced governments and development partners that it can assist to reach their targets to advance their economic and social development agendas (Nabusoba, 2014). Oyeyinka, Bello and Ayinde (2014) also see radio as one of the several vehicles in which information is being transferred in Nigeria and the world at large.

This study was therefore designed to assess radio as a medium for farmers' education and benefits of agricultural knowledge acquired from radio programmes using *farming world* and *Tom Sule* (in Tiv) agricultural radio programmes in *Radio Benue* as the case study. The programme Farming world is aired twice weekly (Tuesday and Friday) for 15 minutes while *Tom Sule (*in Tiv) is aired for 30 minutes on Monday and Tuesday to create awareness on improved agricultural practices, to enlighten farmers on application of herbicides, fertilizers and pesticides. The programmes are broadcasted in English and Tiv and are sponsored by Benue Agricultural and Rural Development Authority (BNARDA) aired on Radio Benue.

Improving farmers' knowledge in agriculture as a way of boosting food security is of utmost priority to governments across the globe. This is because vital information goes a long way in improving agricultural practices. Radio, as a medium of mass communication, is

considered useful in improving food production through the sharing of agricultural information to farmers (Asiabaka, 1991).

Over the years, many researches have been conducted on the importance of radio agricultural programmes in improving agricultural productivity, but there is a lacuna in 'radio programmes on agriculture and farmer education in the study area of Benue State.

The objectives of the study are to:

1. Find out whether the radio agricultural programmes *farming world* and *Tom Sule* (in Tiv) on Radio Benue, Makurdi provide education to farmers in Benue State.
2. Investigate the competence of the resource persons used in the radio agricultural programmes; *farming world* and *Tom Sule* (in Tiv) on Radio Benue, Makurdi.
3. Assess the benefits of the agricultural knowledge acquired from the radio programmes; *farming world* and *Tom Sule* (in Tiv) on Radio Benue, Makurdi.

## METHODOLOGY

This study was carried out in Benue State, North Central, Nigeria with a total population of five million seven hundred and forty-one thousand eight hundred and fifteen (5,741,815) according to the 2018 population projection of the National Bureau of Statistics (NBS). This population cuts across the 23 Local Government Areas (LGA) of the state.

The study employed survey as a research design using questionnaire as instrument for data collection. This approach is often used in social and behavioural sciences to provide a comprehensive and generalised proposition about human disposition, (Wimmer and Dominick cited in Ya'u, 2017).

A multi-stage sampling procedure was used to select respondents for this study. To ensure equal representation of the LGAs, stratified sampling procedure was adopted to stratify Benue State into three geopolitical zones namely; Benue North East, Benue North West and Benue South. The study further employed purposive sampling technique in the selection of one LGA from each zone; Katsina-ala, Gboko and Agatu. Selection of these LGAs was done because of the volume of agric production in these areas. Furthermore, two (2) council wards were selected randomly from each of the selected LGAs. Accordingly, in Katsina-ala; Ikyurav-tiev 1 and Tiir wards were selected, in Gboko the wards selected include Gboko South and Gboko East and lastly in Agatu LGA; Oweto and Adanna were chosen. The sampled LGAs are tabulated according to strata in Table 1:

**Table1**: **Distribution of Respondents according to Zones**

| **Strata** | **LGAs** |
|---|---|
| Northeast | Katsina-Ala |
| Northwest | Gboko |
| Benue South | Agatu |

***Source: Field Survey 2021***

At the third stage, numbers of households were selected in each council wards through systematic sampling technique. The first house was selected and a house is left in between before selecting another. This was done repeatedly to select the houses from the council wards. In addition, lesser houses will be selected in Katsina- Ala due to the fact that they have lesser

council wards. In summary, 124 houses were selected in Katsina-Ala, 130 in Gboko, 130 in Agatu, making a total of 384 houses.

The fourth stage which was the last stage entailed selecting respondents from each household. The researcher purposely selected one person per household. This was due to the fact that; the researcher was unable to cover all the households because of the larger number. The persons selected were heads of household, males or females of ages 18-30, 31-40, 41-50 and 51 and above. After the whole process the sampled respondents for the study were 383 respondents.

## RESULTS AND DISCUSSION

### Education to Farmers by Radio Agricultural Programmes *farming world* and *Tom Sule* (in Tiv) on Radio Benue

Findings from Table 2 revealed that majority of the respondents have access to radio programmes, where 350 (91.1%) respondents agreed to having access to radio programmes while 34 (8.9%) of the respondents said no access to radio programmes. This implies that farmers have access to radio programmes, this also means that radio, given its unique features, can be used to create awareness on improved agricultural practices among farmers. This goes in line with the opinion of Myers (2008) who said radio is the dominant mass medium in Africa with the widest geographical reach and the highest audiences compared with television, newspapers and other information and communication technologies (ICTS).

**Table 2: Respondents' Access to Radio Programmes**

| Response | Frequency | Percentage (%) |
|---|---|---|
| Have access | 350 | 91.1 |
| Have no access | 34 | 8.9 |
| **Total** | **384** | **100** |

**Source: field survey, 2021**

### Competence of the resource persons used in the radio agricultural programmes; *farming world* and *Tom Sule* (in Tiv) on Radio Benue

Findings from the study revealed that the respondents are of the opinion resource persons used in radio agricultural programmes are competent. Table 3 showed that 81% of the farmers said they are competent, 18% revealed they are not while 1.0% chose difficult to say. This means that experts in the field are invited as guest and sources of agricultural information to the farmers. Perrazon in Mboho (2009) reported that radio is used to reach farmers through extension agents, training centres and through the mass media.

**Table 3: Competence of Resource Persons Used in Radio Agricultural Programmes**

| Response | Frequency | Percentage (%) |
|---|---|---|
| Competent | 311 | 81 |
| Not competent | 69 | 18 |
| Difficult to Say | 0.4 | 1.0 |
| **Total** | **384** | **100** |

**Source: field survey, 2021**

**Benefits of the agricultural knowledge acquired from the radio programmes; *farming world* and *Tom Sule* (in Tiv) on Radio Benue**

The findings in Table 4 showed that 28.4% of the farmers gained knowledge of appropriate fertilizer application through agricultural programmes aired by radio Benue, 26.8% of the farmers gained knowledge on of agricultural practices, 25.8% of them gained knowledge on the prevention of post- harvest losses. The Table also revealed that 15.1% of the farmers gained knowledge on the accessibility to agricultural grants and other loan while 03.9% of the farmers gained knowledge of timely crop planting on agricultural activities as a result of the agricultural programmes aired by radio Benue. This implies that the farmers in the study area gained knowledge from the agricultural programmes aired, the knowledge also made impact on the farmer's agricultural practices.

**Table 4: Knowledge Gained Through Radio Agricultural Programmes**

| Response | Frequency | Percentage |
|---|---|---|
| Appropriate type of fertilizer to apply | 109 | 28.4 |
| Agricultural practices | 103 | 26.8 |
| Prevention of post- harvest losses | 99 | 25.8 |
| Access to agricultural grants and loans | 58 | 15.1 |
| Timely crop planting | 15 | 03.9 |
| **Total** | **384** | **100** |

**Source: Field survey, 2021**

Table 4 also revealed that majority (77.9%) of the farmers were of the view that the radio agricultural programmes were very important to them in their agricultural practices while only (22.1%) of the respondents testified that the agricultural programs were not important to their agricultural practices. This implies that majority of the farmers in the study area benefit from the agricultural programmes aired by radio Benue and it helps them in improving their level of productivity and income due to the knowledge gained as seen in Table 4.

**Table 5: Relevance of Radio Agricultural Programmes**

| Response | Frequency | Percentage (%) |
|---|---|---|
| Relevant | 299 | 77.9 |
| Not relevant | 85 | 22.1 |
| **Total** | **384** | **100** |

**Source: Field Study, 2021**.

**Conclusion and Recommendations**

Based on the findings, the study concluded that radio is a tool of diffusion of agricultural information among peasant farmers in Benue State. The greatest implication this may hold for farming in Benue is that there will be a boost in agricultural activities. This is because the major stakeholders (farmers) are empowered with vital information to advance the occupation. This is evident as the findings revealed the role of radio in awareness creation about improved agricultural information among farmers. The study also revealed that the farmers obtained knowledge which include, correct/ appropriate application of fertilizer, agricultural practices, prevention of post- harvest losses certain agricultural practices such as and, agricultural practices, prevention of post-harvest losses and access to agricultural credits and loans were obtained. The study reveals that knowledge obtained through radio agricultural programmes were highly pertinent, highly relevant and effective in solving farmer's agricultural problems.

Based on the findings of the study, the following recommendations were made;

1. Programmes on agriculture should be given more prominence so as to appeal to the rural farmers
2. More agricultural information programmes should be created to farmers through radio especially those that have strong bearing with the needs and interest of the farmers.
3. Agricultural programmes should be broadcasted in other local dialects in the state so as to appeal to every farmer in the state.

**References**

Ani, A., Undiandeye, U. C., & Anogie, D. A. (1997). The role of mass media in agricultural information in Nigeria. *Educational Forum, 3*(1): 80-85.

Asemah, E. S. (2011). *Mass media in the contemporary society*. Jos: University press.

Asiabaka, C. C. (1991). The role of Imo State agricultural development project in boosting food production, *The Nigerian Journal of Agricultural Extension*, *6*(1& 2): 47-51.

Azelama, J. U., & Anegbode, J. E. (2003). Mass media and nation building in Nigeria. *International journal of government and development 1*(1)

Ayodele, O. S., Obafemi, F. N., & Ebong, F. S. (2013). Challenges facing the achievement of the Nigeria vision. *Global advanced research journal of social sciences; 4*(8): 36-47

Buren, E. D. (2000). *Cultural aspects of communication for development*. Trans: Falsafi, S. Tehran. Iran: IRIB Press.

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.

Grise, P. J., Kenneth, I. E., & Lukin, T.G. (1974). *Educational radio: A review of literature.* Center for educational technology. State University of Tallahassee, Florida.

Khan, S., Rahman, M. H. & Uddin, M. N. (2017). Effectiveness of selected mass media in agricultural technology transfer to the farmers of Bangladesh. *Research in Agriculture, Livestock and Fisheries: An Open Access Peer Review Journal, 4*(1): 7 – 13.

Kuponiyi, F. A. (2000). Mass Media in Agricultural Development: The use of Radio by Farmers of Akinleye Local Government Area of Oyo State, Nigeria. *Nigeria Agricultural Development Studies, 1*(1): 26-32

McAnany, E. (1980). *The role of information in communication with the rural people: Some reflections in Communication for social change*. Denise Gray –Felder, USA.

Momoh, Y. O. (2015). Impact of Agricultural Services and Training Centre (ASTC): Project on tomato farmers' livelihood in Plateau State, Nigeria. Ph.D. Thesis, Department of Agricultural Extension and Rural Sociology, Ahmadu Bello University, Zaria.

Nabusoba, T. (2014). The impact of radio agricultural programmes on small scale farmers: The case of *"Mali Shambani"* programme on KBC Radio, Taifa. M. A. Dissertation, Department of Communication Studies, School of Journalism, University of Nairobi.

Nakabugu, S, B. (2001). The Role of Rural Radio in Agricultural and Rural Development Translating Agricultural Research Information into Messages for Farm Audiences. Programme of the Workshop in Uganda, 19 February 2001.

Nazari, M. R. & Hasbullah, A. H. (2010). Radio as an educational media: Impact on agricultural development. *The Journal of South East Asia Research Centre for Communication and Humanities*, 2: 13 – 20.

Nwagbara G. U. (2009). How Communication can reawaken Agricultural Consciousness among Nigerians: *Nigerian Journal of Communication Research;* 1

Newman, A. (2013). *Business Communication: In person, In Print, Online.* Cengage Learning. Australia.

Oguche, I. (2016). Use of radio as a tool for promoting integrated pest management among farmers in Shika, Kaduna State, Nigeria. *International Journal of Journalism and Mass Communication; 2*(1)

Olowu, T. A., & Oyedokun, O. A. (2000). Farmers' Acessibility of Agricultural Marketing Information: The case of Oyinladun Radio programme. *Journal of Economy Rural Development; 14*(1): 109-125

Okwu, O. J., Kuku A. A., & Aba, J. I. (2007). An assessment of use of radio in agricultural information dissemination: a case study of radio Benue in Nigeria. *African Journal of Agricultural Research; 2* (1): 014-018

Omoghene, F. N., Okome, A. J., & Ohumagba, S. K. (2017). A Study of the Impact of Radio Agricultural programmes on targeted audience in Nigeria. *African journal of agricultural Economics and rural development. 7*(7): *001-005*

Oyeyinka, R. A., Bello, R. O., & Ayinde, A. F. O. (2014). Farmers Utilization of Farm-Radio Programmes for Marketing of Agricultural Commodities in Oyo State, Nigeria. *European Journal of Business and Management*; *6*, No.35

Sarwatay, D., & Divatia, A. (2016). A study on interpersonal communication between married couples on planned parenthood. *International Journal of social sciences and humanities*. *6* (1): 1-8

Sharma, R. (2008). The Digital Paradigm in Radio Nepal. International Radio Festival of Iran,17-23 May, Isfahan. Iran.

Swanson, B. & Rajalahti, R. (2010). Strengthening agricultural extension and advisory systems: Procedures for assessing, transforming, and evaluating extension systems. Agriculture and rural development discussion Paper 44. ARD, Washington, DC, USA: World Bank.

Tancard, J. &Verner, S. (2005). *Communication theories*. Transl: dehghan. A. Iran: Teran university press.

Van den Ban, A. W. & Hawkins, F. A. (1992). *Agricultural extension*. England: Longman Science Technical.

World Summit on the Information Society (WSIS) (2005). Second phase of the WSIS, 16-18 November, Tunis.

Ya'u, A. H. (2017). *Perception of journalists on national security in Kano*: Canada University, Concord Ontario Canada