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Assessment of the use of Rural Radio as an Agricultural Information Dissemination Tool among Rural Farmers in Dekina Local Government of Kogi State, Nigeria

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Abstract

The study assessed the use of rural radio as agricultural information dissemination tool among farmers in Dekina Local Government Area of Kogi State, Nigeria. The specific objectives were to: describe the socio-economic characteristics of the respondents, identify rural and agricultural programmes normally aired on radio, find out the level of patronage of the programmes, identify the convenience of the time of presentation to the target audience, identify the necessity for rural radio among the rural farmers and identify the problems militating against the listening audience of the rural radio. A three-stage sampling technique was used to randomly select 150 respondents for this study, using a well structured questionnaire. The data collected were analyzed using descriptive statistics. Results of the finding shows that majority of the respondents listened more to their traditional programmes on daily basis. The major constraints to the respondent's listenership of the radio programmes were language barrier and lack of feedback amongst others. It was recommended that agricultural and rural development information be coded in the form of traditional/local music or incorporated into the traditional music to arouse the interests of the target audience and move to take actions and that research messages should be translated into the simplest language possible and translated to the prevalent languages.

Keywords: Rural Radio, Extension, Farmers

1. Introduction

Agriculture has always been a highly knowledge-intensive sector requiring continuous information flow. Farmers' quest for authentic, credible and usable information both from established systems and traditional practices is ever increasing in this fluctuating global environment, to operate efficiently and compete economically. The rapid changes happening around with globalization, uncertainty in climate change, discerning consumer segment and continued farm crisis emphasize the importance of timely, appropriate and need based information and knowledge to meet the myriad challenges of agriculture. (Arpita, 2011).

According to Ozowa (1997) and Conroy (2003) the quantum of agricultural technology information available in the Nigerian systems developed by research institutes, and faculties of agriculture in universities is quite enormous. The problem therefore, lies with effective dissemination of information about these innovations by the dissemination agencies. Research institutes must disseminate their findings to the target group – the farmers, while receiving feed back to indicate that communication was successful. The feedback is expected to expose areas requiring modification or further enquiry. Information source is an institution or individual that creates or brings about a message. The characteristics of a good information source are relevance, timelessness, accuracy, cost effectiveness, reliability, usability, exhaustiveness and aggregation level (Statrasts, 2004). According to Oladele (1999),

the efficiency of technologies generated and disseminated depends on effective communication which is the key process of information dissemination.

Individual, group and mass-media approaches to agricultural extension and advisory services have been used concurrently. The continuing increase in the number of farming families has led to a growing emphasis on approaches that reach more people at a time (Chapota, Fatch and Mthinda, 2014). Realizing the importance of mass media in extension, the use of radio has evolved. Radio is ranked as the most popular means of disseminating information, regardless of the content. If used in conjunction with other agricultural extension methods of dissemination, radio can play an effective role in bringing about desirable change in behaviour and attitude of the farmers. It is very appealing because of some distinguishing features of interactivity, its capacity to provoke dialogue and to solicit the participation of local population with lower production costs and extreme versatility. Omenesa (1997) observed that radio programmes are usually timely and capable of extending messages to the audience no matter where they may be as long as they have a receiver with adequate supply of power. The absence of such facilities as road, light and water are no hindrance to radio. Similarly, such obstacles as difficult topography, distance, time and socio-political exigencies do not hinder the performance of radio. He further observed, that illiteracy is no barrier to radio messages since such messages can be passed in the audience own language.

The term rural radio and community radio have come to be used interchangeably to describe FM stations established to broadcast to a local and predominantly rural audience. Community radio is a type of radio service that caters to the interests of a certain area, broadcasting content that is popular to a local audience but which may often be overlooked by commercial or mass-media broadcasters (UNESCO 2002). Community radio is confined to a small geographical area. It depends on low power transmission covering not more than 20-30 km. radius. It serves a community which uses common resources for livelihood, has common development issues and concerns, which are relatively localized, nevertheless connected to national and regional development goals. (Arpita, 2011). Rural Radio signifies a two-way process, which entails the exchange of views from various sources and the adaptation of media for use by the communities. It allows members of a community to gain access to information, education and entertainment and offers an opportunity for the community to participate actively in the media as planners, producers and performers. It is the means of expression of the community rather than for the community. It is different from urban radio in that it is directed specifically to rural people and to their information needs. Community Radio plays a central role in community development. To play this role they need to provide quality programmes to ensure continued audience, and support from the community. It has been a great success in developed nations but has lacked in developing countries because of illiteracy and lack of awareness among people. Community radio faces the challenges in effective and quality programme production in terms of content, production quality and community involvement: Community Radio derives its strength and popularity from community participation. In practice participation is harder than it seems, because it is labour intensive, requires the right attitude, skills and mobile equipment; Community Radio is by definition relatively small and often situated in locations where basic services, like a constant supply of electricity, are lacking. Due to these conditions equipment suffers and needs to be vigorously maintained and/or regularly replaced. (Arpita, 2011).

Communicating agricultural and rural development programmes is very ineffective without ample opportunity not only to disseminate information to various parts of the society, but also to encourage the participation of the rural people. In Nigeria and Kogi State in particular, development activities, for instance health, agricultural development information on the radio among urban and rural dwellers have not been given the priority attention it deserves. In relation to the mass media landscape of Kogi State, there is a very high expectation for radio to play the central role in the dissemination of information. But there is the problem of the capability of trained agricultural extension personnel's who used radio programmes for broadcasting, time of broadcasting, the scientific jargon is sometimes very difficult to interpret and the problem of translating information or messages into various or different languages of the non – igala's dwelling in the study area who do not understand the language. It is imperative therefore to assess the use of rural radio as an agricultural information dissemination tool among farmers in Dekina Local Government Area: describe the socio-economic characteristics of the respondents; identify rural and agricultural programmes normally aired on radio; find out the level of patronage of the programmes; identify the convenience of the time of presentation to the target audience; identify the necessity for rural radio among the rural farmers; identify the problems militating against the listening audience of rural radio.

2. Materials and Methods

This study was carried out in Dekina Local Government Area of Kogi State, Nigeria. This Local Government was created on the 28th of August, 1976. The Local Government share boundaries with Ofu in the south, Ankpa in the east, Omala in the North and Bassa in the West, with it headquarter in Dekina. Dekina Local Government lies between latitude $7^{o}27'N - 7^{o}31'N$, longitude $7^{o}09'E - 7^{o}12'E$ and it has a land area of about $2461km^2$ (About 950 miles) and a population of about 260, 312 people (NPC, 2006).

Dekina Local Government Area has a tropical climatic condition; the rainy season starts from the month of April to October, while dry season sets in by November and end in March. It is estimated that about 80% of the total population in the area are farmers who engage in the production of maize for the teaming population of the areas. The major sources of income of the people in the study area is farming, with the presence of radio stations in and around the local government, were the facts that justified the choice of the local government as the study area. Dekina Local Government Area consist of three districts namely; Dekina, Biraidu and Okura Districts. Dekina district is located in the North-east of Dekina Local Government, while Biraidu and Okura districts are located in the West and South-east respectively.

The data for the study were obtained from primary source with the aid of a well structured questionnaire and personal observations. The target population for this study was all the farmers in Dekina local government area. A 3 – stage sampling technique was used to select the respondents for the study. The first stage was purposive selection of all the three (3) districts. The second stage involved a random selection of five (5) villages from each of the districts while the third stage involved a random selection of ten (10) respondents from each of the villages selected. A total of 150 farmers were sampled through the administration of the questionnaire.

Simple descriptive statistics such as frequency distribution and percentages were used to achieve the objectives of the study.

3. Results and Discussion

3.1 Socio-economic Characteristics of the Respondents

Table (1) presents the socio – economic characteristics of the respondents. It shows that the age of the farmers varies with majority (84%) of the respondents within the age bracket of 30 – 49 years. The mean age of the respondents was 39 years approximately and most (50%) of them were married. This implies that most of the respondents were within the active farming age. Age is a significant factor in agricultural information accessibility and utilization because young farmers are more responsive to new ideas and practices than the older farmers who are more conservative, depends more on past experience and less responsive to adoption of new ideas and practices. About 69% of the respondents had a household size of 5 – 8 people, 40% of the respondents had a household size of 1 - 4 people, 28% had a household size of 9 - 12 people, and 13% had household size of 13 people and above. The household members can get information from different media or radio stations. This implies that large household will have more agricultural information. This is supported by Dauda et al., (2009) who reported that large household size will ensure more net working for information and enhance more availability of information to farmers. This therefore implies that household size has a direct positive impact on the listenership and gathering of information which leads to increase farm production.

The information on the respondent's educational level shows that 32.67% of the respondents had primary education, 26% had secondary education, 14% had tertiary education and 27% had no form of formal education indicating a relatively low literacy level of the respondents. This has an implication for their participation in radio programmes, since participation requires the right attitude and skills. This implies that radio is a suitable medium for dissemination of innovations and educating the farmers. This is corroborated by Pavarala, (2003) who observed that radio is an inexpensive medium, with comparatively simple technology, and more suitable for illiterate and peasant communities and societies characterized by oral and folk traditions. Though, the programmes are for the educated and uneducated farmers. The respondents' educational level determines to a great extent their ability or inability to access relevant information as well as in the adoption of new technologies.

Table 1 also shows that 27% of respondents earned below N60, 000 per annum, 48% earned between N60,000 - N300,000, 16% earned between N312,000 – N900,000/annum,7% earned between N912,000 - N1,200,000/annum and only 2% earned N1,200,000 and above. The respondents generally were of low income; this can affect adoption of capital intensive modern farm technologies and their ability to purchase and own a radio set. This has an implication on their access to information through the radio. This is in accordance with the general characteristics of the traditional farming system practiced in the rural area where returns from farming

are low due to low investment by subsistent farmers (Conroy, 2003b).

Table 1. Distribution of Respondents according to their Socio-economic Characteristics (N=150)

Variables	Frequency	Percentage
Age		
20-29	24	16.00
30-39	46	30.67
40-49	38	25.33
50-59	23	15.33
60 & above	19	12.67
Total	150	100
Marital Status		
Married	75	50.00
Single	36	24.00
Divorced	21	14.00
widowed	18	12
Total	150	100
Household Size (persons)		
1-4	40	26.67
5-8	69	46.00
9-12	28	18.67
13 and above	13	8.67
Total	150	100
Educational Level		
No formal education	41	27.33
Primary education	49	32.67
Secondary education	39	26.00
Tertiary education	21	14.00
Total	150	100
Income		
level/Annum(Naira)		
Below 60,000	40	26.67
60,000-300,000	89	59.33
312,000-900,000	11	7.33
912,000-1,200,000	8	5.33
1,200,000& Above	2	1.33
Total	150	100

3.2 Agricultural and Rural Programmes aired on the Radio

Table (2) presents the different programmes aired on the radio in the study area. The table shows that programme on drama & folk media ranked first with the highest numbers of listeners (99.33%) and the least number of non – listeners (0.67%). This is followed by announcement (obituary, wedding, festival etc) with (90.67%) listeners and (9.33%) non – listeners, and traditional music with (80%) listeners and (20%) non – listeners which ranked 2nd and 3rd respectively. The respondents listened to their traditional and rural programmes more than other programmes. This implies that they attached more value to their traditions. A major reason why innovations has to be compatible with the existing culture; its compatibility and consistency with existing values, past experiences and needs of the people.

The table also shows that programmes on fertilizer availability had (78%) listeners and 22% non – listeners, use of insecticides and pesticides had 74% listeners and 26% non – listeners, improved seeds had 70.67% listeners and 29.33% non – listeners, and programme on accessibility of credit and loan recorded 64% listeners and 36% non – listeners. They ranked 5th, 6th, 7th, and 8th respectively. While women empowerment programme had equal number of listeners (50%) and non – listeners (50%), youth empowerment ranked least with 42% listeners and had the highest number of non – listeners (58%).

This shows that majority of the respondents (farmers) had access to radio. This implies that a good proportion of the farmers had access to rural and agricultural information disseminated through the radio.

Table 2. Distribution of Respondents according to their Listenership of Agricultural and Rural Programmes aired on the Radio (N =150)

Programmes	Listeners %	Non – Listeners %	Rank
Fertilizer Availability	78.00	22.00	4th
Improved seeds	70.67	29.33	6th
Use of pesticides and insecticides	74.00	26.00	5th
Herbicides application	61.33	38.67	8th
Accessibility to credit and loan	64.00	36.00	7th
Animal health information	60.00	40.00	9th
Drama/Folk media programme	99.33	0.67	1st
Traditional music	80.00	20.00	3rd
Health and nutritional programme	53.33	44.67	10th
Youth empowerment programme	42.00	58.00	13th
Women empowerment programme	50.00	50.00	12th
Sports programme	52.67	47.33	11th
Announcement	90.67	9.33	2nd

3.3 Frequency of Listening to Rural/Community Radio

Table (3) presents how often the respondents listen to rural radio, especially rural and agricultural programmes aired on the radio. The result shows that greater percentage (67.33%) of the respondents listen to the radio every day. This implies that majority of the farmers were informed and gets timely information relating to rural development, agricultural development and other spheres of life. Also, the table shows that 14.67% and 6.67% respectively listened to agricultural programmes weekly and rarely while 11.33% of the respondents never listened to rural and agricultural programmes on radio.

Table 3. Distributing of Respondent According their Frequency of Listening (N =150)

Frequency of Listening	Frequency	Percentage
Everyday	101	67.33
Weekly	22	14.67
Seldom	10	6.67
I do not listen	17	11.33
Total	150	100

3.4 Suitability of Time of Presentation of Rural and Agricultural Programmes aired on the radio

Table (4) presents the suitability of the time rural and agricultural programmes were aired. The results show that 58% of the respondents indicated that the time of the programmes were suitable; 34% claimed that the time for the programmes were relatively suitable depending on the schedule mood of the listeners while 8% of the respondents did not find the time of the programmes to be suitable.

Table 4. Distribution of Respondents According to the Suitability of time of programme (N =150)

Variable	Frequency	Percentage
Suitable	87	58.00
Relatively suitable	51	34.00
Not suitable	12	8.00
Total	150	100

Source: Field Survey, 2015

3.5 Reasons for Listening to the Rural Radio by the Respondents

Table 5 shows that the respondents listened to rural radio for diverse reasons; it is indicated in the table that 19.33% of the respondents listened to rural radio for the purpose of entainment, 5.33% listened for agricultural purposes, 10% for News purposes while 65.33% listened to gain generally educated, be it news, agriculture or entertainment.

Table5. Distribution of the Respondents According to their Reasons for Listening to Radio Programmes (N =150)

Reasons for Listening	Frequency	Percentage
Entertainment Purpose	29	19.33
Agricultural Purpose	8	5.33
News Purpose	15	10.00
All of the above	98	65.33
Total	150	100

3.6 Constraints to the Listening Audience of Rural Radio

Table 6 presents the respondents problems militating against the listening audience of rural radio. The results of the findings show that language barrier (65.33%) was the major constraints faced by the respondents followed by lack of feedback (46%), lack of constant power supply (30.67%), affordability of radio set and its accessories (26.67%) and irrelevant programmes (12.67%). Rural radio gives farmers an opportunity to interact with each other and other relevant authorities e.g. extension workers, crop and animal experts through formats like live talk shows, phone-in programmes and on location broadcasts but the rate of feedback is very low since the programme is bound with time.

Table 6. Distribution of the Respondents according to their constraints against to listening to Radio

Constraints	Frequency	Percentage
Language Barrier	98	65.33
Affordability of radio set and accessories	40	26.67
Irrelevant Programmes (urban – centered)	19	12.67
Lack of constant power supply	46	30.67
Lack of Feed back	69	46
Total	272	181.34

4. Conclusion and Recommendations

The study revealed that the respondents listened to the radio for various reasons. Based on the findings it can be concluded that that majority of the respondents were married, averagely educated and in their prime age. The respondents listened to their traditional programmes more than other programmes.

It can also be concluded that most of the respondents (farmers) had access to the radio, listened to radio on daily basis, were informed and gets timely information relating to rural and agricultural development through the radio. The broadcasting times of the programmes were suitable for their listenership, and language barrier and lack of feedback were the major constraints to their

listenership of the radio programmes. Based on these findings, it can be recommended that; rural radio goes beyond agricultural issues to address a wide range of related social, educational, health and cultural issues. It is excellent for motivating farmers and for drawing their attention to new agricultural production ideas and techniques. Agricultural and rural development information can be coded in the form of traditional/local music or incorporated into the traditional music to arouse the interests of the target audience and move to take actions. Radio schools like Interactive Radio Instructions (IRI) may be launched for effective teaching and learning process in the study area. The literacy level of the respondents can be enhanced through distance and non – formal education on the radio.

Research messages should be translated into the simplest language possible and translated to the prevalent languages. The radio programmes should be backed up by other forms of communication/media.

The field extension workers also need to be trained in basic broadcasting and communication skills so that they can organize radio recordings at their level and document important messages for farmers.

Research messages should be translated into the simplest language possible and translated

References

1. Arpita, S. (2011). Community Radio as an Effective Tool for Agricultural Development (Research). Posted at Youth Kiawaaz: mouth piece for the youth on the 12th of July, 2011. Largest Indian online platform for the youth to address critical issues.

2. Dauda, S., Chado, S. S, and Igbashal, A. A. (2009). Agricultural Information Sources Utilized By Farmers In Benue State, Nigeria. Publication of Faculty of Agriculture, Nasarawa State University, Keffi PAT 2009; 5 (1): 39-48.

3. Pavarala, V. (2003). Building Solidarities-A case of Community Radio in Zharkhand. Economic and Political Weekly, 22: 2188-2197.

4. Conroy. C. (2003). New Direction for Nigeria's Basic Agricultural Services: A DiscussionPaper.: National Stakeholders Workshop on Basic Agricultural Services for Poor Farmers in Nigeria, Abuja. (1&2): 1 – 63.

5. Oladele, O. J. (1999). Analysis of the Institutional Research – Extension Farmers Linkage System in South Western Nigerian. An Unpublished Ph.D Thesis in the Development of Agricultural Extension and Rural Development, University of Ibadan, Nigeria (Internet).

6. Ozowa, V. N. (1997). 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):15 – 20.

7. Starasts, A. M. (2004). Battling the Knowledge factor: A Study of Farmers' Information Seeking Learning and Knowledge Process with an online environment in Queensland. Unpublished Ph.D Thesis. PP 35-46

8. National Population Commission. (2006). Working document of National Population Commission of Nigeria. www.**population**.gov.ng/

9. Chapota, R., Fatch, P and Mthinda, C. (2014). The Role of Radio in Agricultural Extension and Advisory Services – Experiences and Lessons from Farm Radio Programming in Malawi www.meas-extension.org/meas-offers/case-studies

10. United Nation Education Scientific and Cultural Organisation. (2002). Working document. www.unesco.org/new/en/communication-and-information/.../2002/