

Full Length Research Paper

An assessment of use of radio in agricultural information dissemination: a case study of radio Benue in Nigeria

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Accepted 5 January, 2007

This study investigated the use of radio as a medium of agricultural information delivery to farmers in Benue State, Nigeria. The objective was to determine the impact of radio agricultural programmes on the target audience (farmers). The data were collected from a sample of one hundred respondents selected through a simple random sampling technique. The data were analyzed with descriptive statistics viz frequency distribution and percentage. The findings of the study showed that 66% of the respondents listened to agricultural programmes aired on Radio Benue and 42% of the listeners indicated that the programmes were relevant to their agricultural information needs. Majority of the respondents admitted that they gained some new knowledge through listening to the programmes. Non-possession of radio set and unsuitable time of programme presentation were indicated constraints to listener- ship of the programmes. The programmes, to a large extent, had the desired impact on the listeners. It should therefore be sustained but with some modifications in terms of time of presentation and encouragement of group listener- ship.

Key words: Agricultural Information, radio, assessment, listener-ship and impact.

INTRODUCTION

Absence of a functional agricultural information delivery system is a major constraint to agricultural development in Nigeria. Aina, (1989) identified non-provision of necessary agricultural information as a key factor limiting agricultural development in Nigeria. According to Youdeowei (1995), lack of access to relevant agricultural information by farmers in developing countries cuts across all subsectors of agriculture and different stages of agricultural production process.

Farmers need to be informed and educated about improved agricultural practices to enable them increase their productivity and income. Several channels such as extension agents, individuals, farmer-to-farmer contact, print media (newspapers, magazines, newsletters, leaflets, pamphlets, and posters) and electronic media (radio, television, film, slides and film strips) have been widely used to disseminate information to farmers (van den Ban and Hawkins, 1992; Olowu and Oyedokun, 2000). The required amount of information and learning is, however,

so vast that only effective use of the information multipliers, the mass media, can provide information at the rates driven by pressure of time, population, geographical constraints, and shortage of trained extension personnel in developing countries.

Radio is one broadcast medium which almost all experts identify to be the most appropriate for rural emancipation programme. It beats distances, and thus has immediate effect. It has been identified as the only medium of mass communication the rural population is very familiar with (Kuponiyi, 2000). This is because a radio set is cheap to obtain and is widely owned in the rural areas. This is made possible by the advent of the battery-operated transistorized sets. Furthermore, radio is favoured as a medium of communication in rural communities because of the advantages ascribed to it in form of (i) transcending the barriers of illiteracy, and (ii) demanding less intellectual exertion than the print media messages (Folarin, 1990).

Radio Benue was established in 1978 by the government of Benue State in Nigeria and empowered to disseminate information aimed at informing, educating and entertaining the people of the state. It was in an attempt

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Table 1. Agricultural Programmes on Radio Benue

Programmes	Languages	Day/Air Time	Duration
Profitable Agriculture	English	Mon./11.00am	30 min
		Wed./8.00am	30 min
Tom Sule	Tiv	Mon./2.30pm	30 min
		Tue./7.00am	30 min
Ekoli Heho'	Idoma	Thur./10.15am	30 min
		Sat./3.45pm	30 min
Farming World	English	Tue./6.00pm	15 min
		Fri./3.03pm	15 min

Source: Radio Benue Manager Programme, 2005

to achieve abortive objectives in area of agriculture that some agricultural programmes viz "Profitable Agriculture" sponsored by Cooperative Extension Centre (CEC) of University of Agriculture, Makurdi, Nigeria and "Farming World" sponsored by Benue Agricultural and Rural Development Authority (BNARDA) were designed. They were presented in English and in two indigenous languages viz Tiv and Idoma. Since the inception of the programmes, no empirical assessment of them was known to have been carried out. This study was therefore designed to find out if the objectives of the programmes were being achieved.

Objectives of the study

The major objective of the study was to determine the impact of radio agricultural programmes on knowledge gained by listeners. The sub-objectives of the study were, to:

- Identify agricultural programmes aired on Radio Benue.
- Find out the level of patronage of the programmes.
- Ascertain the convenience of the time of presentation to the target audience.
- Determine relevance of the programmes to information needs of the target audience.
- Ascertain agricultural knowledge gained by the listeners.

The findings of the study shall add to the body of knowledge in area of radio usage in agricultural information dissemination. The findings shall also assist agricultural extension agents and radio stations to design relevant agricultural programmes and air same at appropriate time to meet information needs of farmers.

METHODOLOGY

The area of study is Makurdi Local Government Area of Benue State, Nigeria. Geographically, Benue State is bounded by Nasarawa State in the North, Taraba State to the East, Enugu State to the South and Kogi State to the West. Benue State lies within the

middle belt of Nigeria where farming is the main occupation. About 75% of the people primarily engage in agriculture.

Field survey was carried out with the aid of questionnaire, complemented by personal observation and interview during data collection. The questionnaire was made up of two parts (A and B). Part A sought information on demographic/socio-economic characteristics of the respondents. Part B consisted of questions on radio ownership, listenership pattern, agricultural programmes and its effectiveness. Random sampling technique was used in selecting four wards from the study area (Makurdi LGA) namely, North Bank, Apir, Fiidi and Agan. A total of one hundred (100) respondents with 25 from each ward were then selected through simple random sampling technique and administered with the questionnaire with the help of well-trained enumerators. Frequency distribution and percentages were used for analysis of data.

RESULT AND DISCUSSION

Agricultural programmes on radio Benue

Table 1 below shows the agricultural programmes aired on Radio Benue. They were broadcast in the main languages spoken in the study area viz, Tiv, Idoma and English. The programmes covered various aspects of agriculture including crop production, livestock, and fisheries as well as harvesting, storage, processing, marketing strategies and information about credit or loan.

Socio-economic characteristics of the respondents

Age of respondents

The age distribution of respondents is contained in Table 2 and 8% of the were in the age bracket of 20 to 29 years; 35% were between 30 to 39 years; 30% were 40 to 49 years and 17% fell between 50 to 59 years. Majority of the respondents (65%) were found in the age brackets of 30 to 39 and 40 to 49 years, that is between 30 and 49 years.

The result implies that most of the respondents fell within the economically active age. Age factor is significant in agricultural information accessibility and utilization. Young people (farmers) are more responsive to new ideas and practices while older ones are conservative and less responsive to adoption of new ideas and practices.

Educational level

The study shows that 37% of the respondents had no formal education; 29% had primary education and 20% had secondary education. Only 14% of the respondents had higher education. An individual's level of education can affect his/her access, comprehension and adoption of modern agricultural practices.

Respondents' income level

The result (as contained in Table 2) shows that 27% of

Table 2. Socio-Economic Characteristics of Respondents N=100

Socio-economic characteristics	Percentage
Age (Years)	
20 – 29	8
30 – 39	35
40 – 49	30
50 – 59	17
60 and above	10
Educational level	
No formal education	37
Primary education	29
Secondary education	20
Tertiary education	14
Income level (₦)	
Below 5,000	27
5,000 – 25,000	48
26,500 – 75,000	16
76,000 – 100,000	7
Above 100,000	2
Marital status	
Single	23
Married	49
Divorced	10
Widowed	18

Source: Field survey, 2005.

Table 3. Radio set ownership by Respondents N = 100.

Radio Set Ownership	Percentage
Own	69
Don't own	31
Total	100

Source: Field Survey, 2005

Table 4. Listener-ship of Agricultural Programmes on Radio Benue N = 100.

Listener-ship status	Percentage
Listen	66
Don't Listen	34
Total	100

Source: Field Survey, 2005

respondents earned below ₦5, 000 per annum and only 2% earned above ₦100,000 per annum. Those in income bracket of ₦5, 000 to ₦25, 000 constituted the highest frequency with 48%. The respondents generally were of low income. This can affect adoption of capital intensive modern farm technologies.

Marital status

About half of the respondents (49%) were married at the time of the study while 23% were single. The other respondents were either widowed (18%) or divorced.

Radio ownership by respondents

Ownership of radio sets by respondents is an important factor that indicates the physical availability of the medium and exposure of audience/farmers to radio agricultural programmes. Table 3 shows the findings. The result revealed that 69% of respondents had radio sets in their houses, while 31% did not. Hence, majority of the respondents had access to radio programmes in the study area.

Listener-ship of agricultural programmes on radio Benue by respondents

To ascertain their listener-ship of agricultural programmes, the farmers were asked to indicate whether they listened to radio agricultural programmes or did not. Table 4 below shows their responses.

Majority of the respondents (66%) listened to Radio Benue agricultural programmes. This implies that a good proportion of the farmers had access to agricultural information disseminated by Radio Benue. The remaining 34% did not listen to these programmes.

Reasons for non-patronage of programmes by respondents

The reasons given for non-patronage of agricultural programmes by those who did not listen to them were: non-awareness of the programme presentation (35%), non-access to radio set (40%) and unsuitable time of presentation (25%). Table 5 shows the results.

The listener-ship frequency of respondents to radio agricultural programmes

This indicates the number of times the respondents listen to radio agricultural programmes in a week. Table 6 shows the findings.

The results show that 23, 22 and 21% respectively listened to agricultural programmes once, twice and more than twice while 34% of the respondents never listened to agricultural programmes on Radio Benue.

The suitability of time of presentation of agricultural programmes

Table 7 shows the suitability or otherwise to the farmers of the time that agricultural programmes were aired. The findings shows that airtime of agricultural radio

Table 5. Reasons for non-patronage of radio Benue agricultural programmes N=34.

Reasons for non-patronage	No. of respondents
Not aware of the programme	35
No access to radio set	40
Unsuitable time of presentation	25
Total	100

Source: Field Survey, 2005

Table 6. The listener-ship frequency of respondents to radio agricultural programmes. N = 100.

Listener-ship frequency	Percentage
Never	34
Once	23
Twice	22
More than two times	21
Total	100

Source: Field Survey, 2005.

Table 7. The suitability of time of presentation of the radio agricultural programmes N =66.

Suitability of time of programme presentation	Frequency	Percentage
Suitable	31	47.0
Not suitable	35	53.0
Total	66	100.00

Source: Field Survey, 2005.

Table 8. The relevance of the radio agricultural programme to respondents N = 66.

Relevance of programmes	Frequency	Percentage
Very relevant	28	42.4
Partially relevant	37	56.1
Not relevant	1	1.5
Total	66	100.00

Source: Field Survey, 2005

programmes was unsuitable to majority of the farmers. This could be attributed to the fact that most farm families spent greater part of their day time on the farm. They leave home as early as 6.30 am for their farms and get back at 6.00 pm in the evening. Thus, most programmes that were presented in the mornings and afternoon were not listened to.

The relevance of radio agricultural programmes

The responses of the listeners on the relevance of radio

of radio agricultural programmes to their information needs are contained in table 8.

The results show that 42.4% of the respondents indicated that the programmes were very relevant to their information needs; 56.1% indicated that the programmes were partially relevant, while 1.5% did not find the programmes relevant at all. Generally, 98.5% of the respondents found the programmes relevant to some extent.

The knowledge-gain of the listeners through radio agricultural programmes

Table 9 shows the number of respondents that gained some knowledge about the various improved agricultural practices aired by Radio Benue.

The programmes made impact on the knowledge-gain level of the target audience. The listeners indicated the various improved practices they gained knowledge of and found very useful as a result of the radio agricultural programmes. Most of the respondents (81.8%) gained some new knowledge on timely crop planting. Majority of the listeners also gained some knowledge on correct application of fertilizer (68.2%), appropriate type of fertilizers to apply (78.8%), proper management of growing crops (66.7%) and disease, insect and pest control (56.1%). Relatively few listeners gained knowledge through the programmes about improved crop/livestock varieties (42.4%) and proper methods of processing farm produce (39.4%). Only very few respondents (18.2%) indicated some knowledge-gain about access to agricultural credit.

Conclusion and recommendations

The study revealed that majority of the respondents (66%) listened to agricultural programmes on Radio Benue. The remaining respondents (34%) did not listen to the programmes due to either inaccessibility to radio sets, non-awareness of the programmes or unsuitable time of presentation. Generally, the listeners found the messages relevant to their information needs.

The major determining factor for listening frequency among the respondents was time of presentation of the programmes. The respondents complained that the programmes were aired mostly in the mornings and afternoons when they were on their farms and too busy to listen to radio. They also complained that the programmes were aired more often in English language than in local languages they understood better. Similarly, there are some ethnic groups in the state that do not understand any of the 3 languages of the programme presentation. They include Igede, Etulo and Hausa. Their interests need to be considered. The study shows that Radio Benue agricultural programmes made good impact on the listeners in terms of knowledge-gain in several areas of

Table 9. The Knowledge-gain of the listeners of radio agricultural programmes N = 66.

Information given	No. of those who gained knowledge (%)
Improved varieties of crops/livestock	42.4
Timely crop planting	81.8
Yam miniset technology	31.8
Appropriate type of fertilizer to apply	78.8
Correct fertilizer application methods	68.2
Farm produce processing methods	39.4
Proper management of growing crops	66.7
Easy access to information about credit	18.2
Disease, insect and pest control	56.1

Source: Field Survey, 2005.

of improved agricultural practices. The programmes should therefore be sustained. The following modifications or measures are, however, recommended to enhance the result of the programmes: (i) the programmes should be broadcast in the evenings as from 6.00 pm when farmers would have returned from the field, (ii) the programmes should be presented in other local languages such as Igbo, Etulo and Hausa to enable them benefit as well, (iii) Group listener-ship should be encouraged through establishment of community listening centres in the rural areas. This shall help those who don't own personal radio sets. It shall also enhance interaction and discussion of the messages among the listeners, thereby encouraging active participation and better comprehension.

REFERENCES

- Aina LO (1989). Education and Training of Librarians for Agricultural Information work in Africa. *Qtr Bull. IAALD*, 34(1):23-26.
- Folarin B (1990). Broadcasting for Rural Development. In: L. Oso and L. Adebayo (eds) *Communication and Rural Development in Nigeria*. Abeokuta: Millennium Investments Ltd. ISBN 978-39006-0-7. pp. 74 – 90.

- Kuponiyi FA (2000). Mass Media in Agricultural Development: The use of Radio by Farmers of Akinyele Local Government Area of Oyo State, Nigeria. *Nig. Agric. Devpt Studies*. Vol 1 No. 1, pp.26 – 32.
- Olowu TA, Oyedokun OA (2000). Farmers' Accessibility of Agricultural Marketing Information: The Case of Oyinladun Radio Programme. *J. Econ. Rural Devpt*. Vol. 14, No. 1, pp.109 – 125.
- Radio Benue, Makurdi (2005). Programme Schedules, Synopsis and Commercial Rates. Makurdi: Onaivi Publishers. pp. 41 – 51.
- Van den Ban AW, Hawkins FA (1992). *Agricultural Extension*. Engl. Longman Sci Technical p. 128.
- Youdeowei A (1995). The Role of Information for Rural Development in ACP Countries. *Proceedings of an International Seminar, Montpellier, France*, pp.12-16