

Utilization of Radio Messages as a Source of Agricultural Information among Dry Season Farmers at Lake Gerio, Yola, Adamawa State, Nigeria

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ABSTRACT

The study analyzed the utilization of radio messages as source of agricultural Information among dry season farmers at Lake Gerio Yola, Adamawa State. The study described the socio-economic characteristics of dry season farmers, determined the radio stations that are utilized by dry season farmers, determined the agricultural information needs of the dry season farmers and, identified the respondents' constraints in utilization of information from radio in the study area. Random sampling technique was used to select 82 respondents for the study. The data was collected using structured questionnaires administered to sampled respondents. Descriptive statistics such as frequency and percentages were used to analyze the data. The study revealed that, dry season farmers in the study area had access to five radio stations, they are; Radio Gotel Yola, ABC Yola, Fombina FM Yola, BBC London and VOA Washinton DC. Respondents information were satisfied by the radio messages and the constraints associated with utilization of information were; programme aired at an inappropriate time, low literacy among most farmers, message relevance to information needs, and shortage of time allotted to agricultural-related programmes . It was recommended that, more air time should be allotted to agricultural-related news by the programmers as well as improving the quality of channels for better reception and utilization by dry season farmers in the study area and the country at large.

Keywords: *Farmers, information, messages, radio, utilization.*

1. INTRODUCTION

The trend of development in agricultural extension delivery from material technologies to information and knowledge packaging through the electronic media is a possible solution to shortage of extension manpower in Nigeria to reach rural farmers. Information as a factor of production in the paradigm of development communication is a critical input in agricultural extension delivery services to increase production, improved standard of living and sustainability.

Radio as a medium of electronic mass communication has the potential to meet the information needs of the various segments of the rural dwellers. Food and Agricultural Organization (FAO) [3] acknowledged this fact among other functions of radio in development communication thus; radio is an important mechanism for rapid diffusion of development information in diversity of language and to a widespread often remote geographical mass. FAO [3], report on World Development indicators (WDI) ranked radio as the most widely used information technology in Nigeria. Yahaya [9] established high radio ownership (92.8%) and listenership (78%) among dry season farmers in Northern Nigeria.

This explains the importance of radio to dry season farmers which can be attributed to its merits such as affordability, low cost of maintenance, easy to operate, wider reach, availability and possible localization of programmes. According to Salomon and Engel [8], promotion of information is the activity of making potential users aware and increasing its accessibility. In

most cases, farmers differ in their access to and utilization of agricultural information from extension service and other sources. Such diversity among farmers could be related to various personal, social, economical, or institutional factors. Understanding reasons behind such diversity and farmers current level of access and utilization of agricultural information is of paramount importance. To enhance farmers' productivity they need to have access to well organize and relevant information while sufficient utilization of agricultural information will as well raise farmers' productivity.

Dry season farming is on-going at Lake Gerio Yola, Adamawa State. Most of the farmers are not full time farmers as there are civil servant, business men and women among other livelihoods. These people are interested in having complete knowledge of farming and agricultural information because they require knowledge of crop cultivation. As a result of limited number of extension activities to dry season farmers as part of their main responsibility, It becomes imperative for dry season farmers to access and utilize information from other sources and in this light, use of radio becomes necessary because of the wide radio relationship that in Nigeria there is a problem of accessibility and utilization of radio as source of agricultural information among dry season farmer.

Accessibility and utilization have been described as opportunities or means of reaching, using or approaching something [7]. Dry season farmers' access to information on improved agricultural production is very crucial in order to increase productivity. In the opinion of

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Olawoye [6], useful information could greatly enhance dry season farmers' productivity. This is because agricultural information is very crucial to the productivity of the dry season farmers. For dry season farmers to continue with food production effectively and feed the nation, they must be adequately informed, as well as have access to information that is essential to increasing agricultural production. This brings to bare the need to address dry season farmers' utilization of agricultural information. Access to useful information is necessary to deal with a given situation [4]. Therefore dry season farmers in the study area most of whom are responsible for the food and other demands of the farm family, have limited contacts and critically desire access to information and other production resources. Also the knowledge of dry season farmers' utilization of agricultural information to enhance their productivity and well being is equally critical.

The broad objective of the study was to analyze the utilization of radio messages as sources of agricultural information among dry season farmers at the Lake Gerio, and specifically, the study;

- i. Described the socio-economic characteristics of dry season farmers at the Lake Gerio.
- ii. Identified the radio stations which are utilized by respondents to source agricultural information.
- iii. Determined the agricultural information needs of the dry season farmers at Lake Gerio.
- iv. Identified the respondents' constraints in accessing of information from radio.

2. METHODOLOGY

2.1 The Study Area

The study was conducted at Lake Gerio in Yola North local Government Area (LGA) of Adamawa State. Yola is the capital city Adamawa State. It has a population of 198,247 people [5] and covers a land area of approximately 191km². Yola North Local Government Area is boarded by Gerei Local Government Area to the North, Yola South Local Government Area to the east, Mayo-Belwa Local Government Area to the South and Demsa Local Government to the west. Yola North Local Government Area is located on longitude 12.38°E and latitude 9.14°N, with total land mass of about 8,068 km² [1]. It has an average annual rainfall of about 759mm with maximum temperature 39.7°C. The rainy season runs from May through October while the dry season commences November and ends in April.

The occupations of the people are trading, fishing, farming and civil servants among other occupations. Indigenous farmers in the study area cultivate crops such as: groundnut, maize, millet, rice among others crops. They are also involved in rearing animals such as cattle, sheep and goat. Lake Gerio is located in Jambutu ward of Yola North local Government. It has an Irrigation scheme situated along the bank of river

Benue on the western end of Jambutu and has a potential of 250 hectares with 120 hectares already developed.

The data for the study was collected using primary source with structured questionnaires which was administered to dry season farmers at Lake Gerio. A total number of 90 questionnaires were administered to the dry season farmers through their association but 82 were recovered. Farmers were selected for the study using simple random sampling. Descriptive statistics such as frequency and percentage was used in the study.

3. RESULTS AND DISCUSSION

Table 1 indicates the socio-economic characteristics of the respondents. Ages of the respondent indicates that, 26.5%, 25.6%, 22.0%, 20.7% and 4.9% of the respondents are within 21-30, 31-40, 41-50, above 50 years and 20 years of age respectively. This corroborates the findings of Akinbile and Ndaghu [2] that most of the farmers are between the ages of 20-50 years. This showed that most of the farmers are within their prime age. This implies that the youthful farmers are capable of undergoing the rigors and stress involved in dry season cultivation. This youthful category of farmers can also be involved in seeking information from the radio and other ICTs. The farmers by their age can easily adopt production technology that is passed to them. This agrees with the findings of Yahaya [9] that there is a correlation between farmers' age and adoption of technology. The sex of the farmers indicates that, 59.8% were male. This may be as a result of social realities and challenges where men were given preferential treatments and held in high regards over women despite their willingness to participate in farming.

Educational attainment of the respondents revealed that 25.6% of them acquired diploma/ NCE, 24.4% had Degree. Those with no formal Education were 17.1%, respondents with primary school education were 12.2%, and those with Junior Secondary School certificate were 3.7%, Senior Secondary School 15.9% and only 1.2% master degree. An educated farmer is expected to be more efficient in combining resources through the knowledge gained from literatures or other media than non-educated farmer. This is because educated farmer are more likely to find it easier to obtain information than the non educated counterpart.

The data for primary occupation of the respondent revealed that, 53.7% indicated farming as their primary occupation and 34.1% were civil servants and 9.8% were students while only a few (2.4%) were artisans. This shows that majority of the population were farmers. Also, their farming experience showed that 35.4% had 6-10 years of farming experience, 13.4% had 11-15 years of farming experience, 3.7% had 16-20 years and 17.1% had 20years and beyond.

Table 2 showed the radio stations utilized by the respondents, it indicates that, 72%, 67.1%, 73.2%, 63.4% and 63.4% have access to Radio Gotel Yola, Adamawa broadcasting cooperation (ABC) Yola, Fombia FM Yola,

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British broadcasting cooperation (BBC) London and Voice of America (VOA) respectively. This implies that, farmers in the study area were access to different radio channels to enable them get one form of agricultural information or the other.

Information needs of the respondent were determined as revealed in table 3. All the respondents indicated that they need information on weed control and fertilizer sources. About 76.8%, 73.3%, 69.5%, 63.4% and 59.8% of the respondents indicated that they need information on sources of farm inputs, storage method, herbicides application, disease control and credits/loan respectively.

Table 4 determined the constraints involved in utilizing agricultural information from radio, it was revealed that, low literacy among most farmers tops the list as a constraint with 65.9%. Others are programs aired at inappropriate time and radio message not trusted by farmers both having 63.4% of the respondents. 73.6% of the respondents had no constraint with the loss of signal from the radio channels among others.

Table 5 shows that 68.3%, 59.8% and 50.8%, of the respondents use radio, extension agents and television as a source of information. Were 31.7% and 19.5% of the respondents use newspaper and internet as source of information respectively. This implies that use of radio is very popular among the respondents. While the use of

internet and newspaper is not very popular. This may be due to the high cost of acquiring them.

4. CONCLUSION

Radio was found to be the most popular source of information among the respondents in the study area. Majority of the farmers indicated that their information need was satisfied through the radio channels. This may be attributed to such as the high level of literacy among the farmers, availability and accessibility of the radio channels and ease language comprehension. The use of radio in spreading agricultural information among farmers is increasing at a faster rate than personal contacts by extension workers. It can be a powerful tool for information dissemination within the rural communities.

5. RECOMMEDATION

Based on the findings of the study, it is recommended that, more air time should be allotted to agricultural-related programmes by the managers as well as improving the quality of programme reception among dry season farmers in the study area and the country at large. Agricultural programmes should be aired during farmers' leisure time, for easy accessibility. It is also recommended that, government should provide adequate extension services, internet services and newspapers to farmers at Lake Gerio as alternative sources of information among others.

Table 1: Socio- economic characteristics of the respondents

Variables	Frequency	Percentage (%)
Age		
Below 20	4	4.9
21-30	22	26.8
31-40	21	25.6
41-50	18	22.0
50 above	17	20.7
Total	82	100.0
Sex		
Male	33	40.2
Female	49	59.8
Total	82	100
Educational Attainment		
No formal education	14	17.1
Primary education	10	12.2
Junior secondary school	3	3.7
Senior secondary school	13	15.9
Diploma/NCE	21	25.6
Degree	20	24.4
Masters degree	1	1.2
Total	82	100
Primary Occupation		
Artisan	2	2.4
civil servant	28	34.1
farming	44	53.7

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students	8	9.8
Total	82	100
Farming Experience		
Below 6	25	30.5
6-10	29	35.4
11-15	11	13.4
16-20	3	3.7
20 beyond	14	17.1
Total	82	100

Source: Field Survey, 2011

Table 2: Radio Stations Utilized by the Respondents

Radio Stations	Frequency	Percentage (%)
Radio Gotel Yola	59	72
ABC Yola	55	67.1
Fombina FM Yola	60	73.2
BBC London	52	63.4
VOA Washington DC	52	63.4
Total	278*	

Source: Field Survey 2011

*Multiple responses

Table 3: Information Needs of Respondents

Information	Needed (F)	Not Needed (F)
Disease control	52 (63.4)	30(36.6)
Herbicides Application	57(69.5)	25(30.5)
Source of farm input	63(76.8)	19(23.2)
Credit and loan service	49(59.8)	33(40.2)
Storage method	60(73.2)	22(26.8)
Weed control	44(53)	38(47)
Fertilizer sources	40(49)	42(51)
	66(81)	16(19)

Source: Field Survey 2011. Numbers in parenthesis are percentages

Table 4: Constraint in accessing and utilizing Agricultural Information from Radio

Constraints	Constraint (F)	No constraint (F)
Programs carried out at inappropriate time	52(63.4)	30(36.6)
Shortage of time allotted to programs	48(58.5)	34(41.5)
Low literacy among most farmers	54(65.9)	28(34.1)
Comprehension of language of presentation	41(50.0)	41(50.0)
Message relevance to information need	44(53.7)	38(46.3)
Farmers have no access to Radio	50(61.0)	32(39.0)
Radio message not trusted by farmers	52(63.4)	30(36.6)
Cost of accessing Radio	44(53.7)	38(46.3)
Loss of signal	22(26.4)	60(73.6)

Source: Field survey 2011

Numbers in parenthesis are percentages

<http://www.ejournalofscience.org>**Table 5:** Source of Agriculture information Among Farmers

	Frequency	Percentage
Radio	56	68.3
Extension agents	49	59.8
Television	41	50.0
Newspaper	26	31.7
Internet	16	19.5
Total	188*	

Source: Field survey, 2011 *multiple responses

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