

Contributions of Mass Media to the Development of Agricultural Extension in Ika North East L.G.A of Delta State, Nigeria

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Abstract: The purpose of this study was to investigate the socioeconomic efforts of mass media on farmers in Ika North East Local Government Area of Delta State, Nigeria. It was designed to know the kind of services provided by extension workers to increasing farm output. A total of ninety six (96) farmers were randomly selected and interviewed. From the tables, simple descriptive statistical tools were used such as: frequency table and percentage. The findings show that visit of extension workers to farmers were aimed at teaching them modern technologies, majority of the benefits from extension services were due to usefulness of the innovations. More efforts are expected from the extension agent to convince the non-adopting farmers to adhere to their teaching. The major constraints militating against the used mass media were inadequate capital, language, frequency modulation, power shortage, time of programmes, price of battery and mode of presentation.

Key words: Mass media • Development • Agricultural Extension • Socio-economic characteristics

INTRODUCTION

Throughout the world, agriculture is one of the oldest occupations. Although, man has been involved in the production of food right from Neolithic revolution which was associated with the adoption of early farming techniques, crop cultivation and the domestication of plant and animals. However, it should be noted that types of farming practices then was on subsistence level, which was characterized by the use of crude implement and poor inputs.

Early knowledge of agricultural practice was then a collection of experience verbally transmitted from farmer to farmer [1]. It is apparent that adequate and timely information is relevant for better understanding of the new programmes. Therefore, one of the primary aims for stimulating agricultural development is through disseminating relevant information to farmers.

Mass media constitute the main vehicle for wide and rapid transmission of information to farmers. However, for effectiveness of mass media in agricultural information

transfer, the following factors could be taken into consideration in programming and dissemination of such information:

- The farmers
- Their needs and interest
- Format in which information is desired
- Their beliefs and culture
- Which method of presentation will serve them better
- Justification of the cost of information

Considering the above, it is the focus of this research to find out how the potentials of mass media will be exploited for a meaningful agriculture, it is essential for two reasons:

- To allow the necessary increase in food production.
- To protect and develop the productive potential of the natural resources to continue to feed the rapidly growing population.

It is believed that a well-informed society is an organized society because government will be more responsive to their needs and they will be eager to participate in the nations' development programme. Radio is the most responsible and efficient mass medium for disseminating information required for mobilizing farmers to participate actively in agricultural extension services. Though, various communication media have been used to transmit agricultural information to farmers in Nigeria in line with the national policy on agriculture, notable among the media are farm magazine, leaflets, newsletters, newspapers, pamphlets, radio and television among others [2]. Radio has been considered as the most important and most preferred tool of mass communication in Nigeria [3]. Statistics have shown that radio receivers are at least ten times more common than TV set in developing countries and is the only means of information for two third of people living in rural Nigeria. In addition, radio is listened to by 80% of people living in developing countries every week, reaching people isolated by language geography, conflict, illiteracy and poverty [4]. Since majority of the farmers live in the rural areas, it is necessary therefore, to understand the situation and conditions surrounding their farming environment.

The success of agricultural development programmes in developing countries largely depends on the nature and extent of use of mass media in mobilization of people for development. The planners in developing countries realize that the development of agricultural extension could be hastened with the effective use of mass media.

Radio and Television have been acclaimed to be the most effective media for diffusing scientific knowledge to the masses. In the study area where literacy level is low, the choice of communication media is of vital importance. In this regard, the television and radio are significant, as they transfer modern agricultural technology to literate and illiterate farmers alike even in interior areas, within short time to enlighten farmers on the use of various technologies to boost agricultural development. The farmers can easily understand the operations, technology and instruction through the radio.

The mass media have a vital role to play in the communication of agricultural information among the literate farmers. Increasing rate of literacy in the country offers new promises and prospects for utilizing print medium as a means of mass communication. The print media widened the scope of communication. It is cheap and people can afford it and read them at their convenience. It is a permanent medium in that the

message are imprinted permanently with high storage value which makes them suitable for reference and research.

[5], identified that rural farmers are ready for information but the prevalent problem is non-availability of or access to some of the information sources.

It is also obvious that most rural areas in Nigeria especially the study area have no electricity, thus such media services as Television services do not get to them even when they can afford to buy one.

The need to incorporate the rural farmers in decision-making is a welcome idea in order to reduce their indifference towards issues that affect them. This is because; they are likely to oppose decisions which they feel are imposed on them and hence mass media should be given the opportunity to play their vital role of explaining the principles and activities of government development programmes as well as agricultural projects in practical terms.

Objectives of Study: The general objective of this study was to examine the contribution of mass media to the development of agricultural extension in Ika North East Local Government Area of Delta State. The specific Objectives were to:

- describe the socio-economical characteristics of the farmers reached with agricultural information through the radio and television;
- determine the relationship between farmers level of education and their use of mass media;
- identify the mass media mostly used by farmers;
- find out the most effective mass media for the farmers;
- identify the problems encountered by farmers in using the mass media, advice on the best process to disseminate information to the farmers in the study area based on the research findings;
- give recommendations based on the research findings.

Methodology

Area of Study: The study area was Ika North East Local Government Area of Delta State, Nigeria. The local government is currently one of the twenty five (25) local government areas of the state. The Ika speaking people are found in the North West of Delta State. They share border in the West with Edo people, in the North with the Ishan people and East with the Aniocha people and in the South with the Ukwani people.

Ika people are mainly found in two local government areas; Ika North and Ika South Local Government Areas, both are created in 1991 from the parent Ika Local Government Area of Delta State. Ika South and Ika North East Local Government Area occupy a land area of 117.45 square kilometer [6]. With a total population of about 24,000 people, Ika North East Local Government Area is made up of seven communities: Owa Oyibu, Owa Alizomor, Owa Alidnma, Owa Ufie, Owa Aliro, Owa Nta and Owa Eke. The local government area has its headquarters at Owa-Oyibu town. The mainstay of the people of Ika North East local government area is farming and palm wine tapping.

Farm holding in the area are relatively small and fragmented because of the traditional system of land ownership coupled with the limited availability of farmland relative to the population of the area. Yam cultivation involving mix cropping with cassava, maize, cocoyam with palm wine tapping are practised in the area. The agricultural activity of the people is particularly assisted by some agricultural development projects established in the area.

The local government has a population estimate of 183,657 persons [7].

Sampling Techniques: Since there were few registered farmers under the local government. The technique that was used in this study was a multi-staged random sampling techniques and it was used to select the respondents for the study. The first stage involved four communities, which was randomly selected from the seven communities that made up the local government.

The second involved the farmers, thirty farmers were randomly selected from each of the four communities in the study area to make a total of one hundred and twenty (120) farmers.

Data Collection: The instrument that was used for the study was a validated structured interview schedule. The literate farmers responded to questionnaires, while an interview schedule was organized for those farmers whom can neither read nor write.

The instrument was administered in different locations in the study area to reflect the different communities. Less enlightened farmers were assisted in the collection of data.

The schedule contained relevant sections to provide information on their socio-economic characteristics, the improved farm practices disseminated and adopted by the farmers, type of farm activities engaged by the farmers,

the major food crops cultivated by the farmers, their perceptions on the sources of information for the adoption of improved technologies and the effectiveness of the source and the problems they encounter. The respondents were asked to indicate the perception of the source of information and also the contributions of mass media agencies and also their perception on the effectiveness of these information dissemination for agricultural development in Ika North East Local Government Area of Delta State using a four (4) point scale with options as follows: very Effective, Effective, Ineffective and Very Ineffective.

Data Analysis: Data was being analyzed using simple statistical tool such as frequency counts and percentages tables.

RESULTS AND DISCUSSIONS

The study investigated the contributions of mass media to the development of agricultural extension in Ika North East Local Government Area of Delta State, using simple descriptive statistical tool such as: frequency and percentage tables. Out of the one hundred and twenty (120) respondents chosen, ninety six (96) of them responded to the questionnaire and interview carried out.

Socio-economic characteristics of the respondents discussed are: sex, educational level, age, farm size and marital status.

Table 1 above shows that 80% of the respondents are males while 20% were females. This result does not mean that males were involved in farming more than females, but it was a reflection of the custom and tradition of the area where males serve as heads of households and landowners who go into farming except in few cases where a man dies and his widowed wife serve as the head of the household.

Table 2 shows that 27% of the respondents had no formal education, 37% attended primary school, 22% had secondary education while 12% had post secondary education. This result shows that 73% of the respondents had one level of formal education or the other and can therefore be said to be relatively literate.

Table 3 shows that 7% of the respondents are under 20 years of age. This percentage may have represented the number of respondents who took up their father's farmland in their young age upon the death of their fathers, 15% belong to the age range of 20-30 and 59% belong to the age range of 31-50 while 19% are above 50 years of age. This result revealed that 74% of

Table 1: Distribution of Respondents based on their Sex

| Sex | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male | 77 | 80.0 |
| Female | 19 | 20.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 2: Distribution of Farmers According to their Educational Level

| Sex | Frequency | Percentage (%) |
|--------------------------|-----------|----------------|
| No formal education | 26 | 27.0 |
| Primary education | 37 | 39.0 |
| Secondary education | 21 | 22.0 |
| Post secondary education | 12 | 12.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 3: Distribution of Respondents according to their Age

| Age (years) | Frequency | Percentage (%) |
|-------------|-----------|----------------|
| Under 20 | 7 | 7.0 |
| 20-30 | 14 | 15.0 |
| 31-50 | 57 | 59.0 |
| Above 50 | 18 | 19.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 4: Distribution of Respondents according to their Farm Size

| Size of Farm (ha) | Frequency | Percentage (%) |
|-----------------------|-----------|----------------|
| Less than one hectare | 6 | 6.0 |
| 1-2 hectares | 39 | 41.0 |
| 3-4 hectares | 28 | 29.0 |
| Above 4 hectares | 23 | 24.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

the respondents who responded to the questionnaire belong to the age range of 20-50 years, so this means that the respondents involved in the study are within the middle group and hence should be very active and desirous of information capable of improving their standard of living and farm work.

Studies on the size of farmland maintained by farmers as presented on table 4 above revealed that 29% had 3 to 4 hectares, while 6% of the respondents involved in the study had farm holdings less than one hectare. This result shows that the respondents involved in the study are mostly small-scale farmers this is also a reflection of the complex land tenure system in the area, land is either owned in fragment by families or households as assets inherited from their late father's with large family sizes, individual farm sizes are therefore drastically reduced.

Table 5: Distribution of Respondents according to their Marital Status

| Marital Status | Frequency | Percentage (%) |
|----------------|-----------|----------------|
| Single | 6 | 6.0 |
| Married | 90 | 94.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 6: Distribution of Respondents according to their Religion

| Religion | Frequency | Percentage (%) |
|-------------|-----------|----------------|
| Muslim | 5 | 5.0 |
| Traditional | 8 | 8.0 |
| Hinduism | 0 | 0.0 |
| Christian | 83 | 87.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 7: Types of Programme Listened to or Viewed or Read by Farmers

| Types of Programme | Frequency | Percentage (%) |
|-------------------------------|-----------|----------------|
| Input supply and distribution | 72 | 75.0 |
| Variety of trials | 0 | 0 |
| Chemical application | 0 | 0 |
| Policy announcement | 24 | 25.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Studies on the marital status of the respondents revealed that 94% were married. Hence, majority of the respondents were settled family farmers who would most likely be serious with their farm work while 6% were single. Studies were also carried out on the various occupations of the people. All of the farmers who served as respondents in the study area had farming as their main occupation, while some had other occupations such as trading, teaching, civil service as secondary occupation. Greater majority were entirely dependent on farming. Hence, they are most likely to be serious with their farm work and should take matters affecting their farming seriously.

Table 6 shows that 87% of the respondents belong to Christian religion while 0% of the respondents belong to Hindus religion.

The Farmers' Use of Mass Media for Agricultural Information: In response to question on the various purpose for which respondents listened to or viewed or read agricultural programmes on the mass media, result on table 7 above was obtained. Great percentages of the respondents were on input supply and distribution (75%) announcement on policy announcements (25%).

Table 8: Distribution of Farmers Based on Sources of Information on New Farm Practice

| Awareness of New Farm Practices | Frequency | Percentage (%) |
|---------------------------------|-----------|----------------|
| Through extension agent | 35 | 37.0 |
| Through friends | 10 | 10.0 |
| Through radio/television | 15 | 16.0 |
| Through fellow farmers | 25 | 26.0 |
| Through neighbors | 6 | 6.0 |
| Through discussion in group | 5 | 5.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 9: Distribution of Farmers to their view on how Mass Media affect their Farming Practices

| Types of Program | Frequency | Percentage (%) |
|--------------------|-----------|----------------|
| Crop production | 75 | 78.0 |
| Animal production | 7 | 7.0 |
| Crop processing | 1 | 1.0 |
| Producer marketing | 13 | 14.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 10: Distribution of Farmers according to their use of the mass media

| Mass Media | Frequency | Percentage (%) |
|------------|-----------|----------------|
| Radio | 78 | 81.0 |
| Television | 13 | 14.0 |
| Prints | 5 | 5.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 11: Distribution of Available Media to the farmers

| Available Media | Frequency | Percentage (%) |
|-----------------|-----------|----------------|
| Radio | 83 | 87 |
| Television | 8 | 8 |
| Print | 5 | 5 |
| Total | 96 | 100 |

Source: Field Survey, 2010

This result supports the problem identified by [5] that rural farmers are ready for information but lack access to some of the information sources.

Analysis in table 8 shows that 35% of respondents became aware of new farm practices through extension agents, 10% became aware through friends, 15% became aware through radio and television, 25% through neighbours, while 5% became aware through discussion in social group. It therefore shows that sources of information to the farmers were mostly through extension agents in the teaching of recommendation technologies.

Table 12: Distribution of Farmers according to their Purpose of Mass Media

| Types of Program | Frequency | Percentage (%) |
|--------------------------|-----------|----------------|
| Agricultural information | 81 | 85.0 |
| Entertainment | 8 | 8.0 |
| News | 4 | 4.0 |
| Other news | 3 | 3.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 12: Distribution of Respondents Based on acquired Innovation through the mass media

| Acquired Innovation | Frequency | Percentage (%) |
|------------------------|-----------|----------------|
| Planting techniques | 68 | 71 |
| Fertilizer application | 26 | 29 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 13: Distribution of Respondents based on their Access to the Media

| Mass Media | Frequency | Percentage (%) |
|------------|-----------|----------------|
| Radio | 86 | 90.0 |
| Television | 9 | 9.0 |
| Prints | 1 | 1.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

From the studies carried out to find the farmers' views on how the mass media system affect their farming practices, 78% agreed that the mass media affected their crop production, while 1% accepted that the media affected their crop processing.

Table 10 shows that 81% of the respondents use radio to acquire agricultural information and 5% uses it to acquire agricultural information.

The Mass Media Mostly Used by Farmers as Source of Agricultural Information: Analysis in table 11 shows that Radio was available to 87% of the respondents, television was available to 8 percent of the respondents, while the prints was available to 5% of the respondents.

Table 12 shows that 85% use the mass media for agricultural information only while 3 percent use it for other news.

Analysis in table 12 shows that 71% acquire planting techniques innovation through the media while 29% acquired fertilizer application innovation through the media.

The Most Effective Mass Media for the Farmers: Table 13 shows that out of the 96 respondents that has access to the radio, 90% are using it as source of agricultural

Table 14: Distribution of Respondents based on their Most Effective Media

| Mass Media | Frequency | Percentage (%) |
|------------|-----------|----------------|
| Radio | 81 | 94.0 |
| Television | 11 | 12.0 |
| Prints | 4 | 4.0 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 15: Timing of Agricultural Programmes

| Time | Frequency | Percentage (%) |
|------------------------|-----------|----------------|
| Morning 7.00-11.00 | 8 | 8.00 |
| Afternoon 12.00-3.00pm | 0 | 0 |
| Evening 6.00-7.00pm | 88 | 92 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 16: Distribution of Respondents according to Constraints Militating the use of Mass Media

| Constraint | Frequency | Percentage (%) |
|---------------------------|-----------|----------------|
| Price of battery | 25 | 26 |
| Frequency modulation | 40 | 42 |
| Power (shortage of power) | 15 | 16 |
| Time of programme | 10 | 10 |
| Language | 6 | 6 |
| Total | 96 | 100 |

Source: Field Survey, 2010

Table 17: Distribution of Respondents based on the ways of Reducing these Problems

| Ways of Reducing the Problems | Frequency | Percentage (%) |
|---------------------------------|-----------|----------------|
| Provision of electricity | 78 | 82 |
| Favourable time of presentation | 9 | 9 |
| Improved method of presentation | 9 | 9 |
| Total | 96 | 100 |

Source: Field Survey, 2010

information. On the other hand only 9% of the 96 respondents that had access to television while in the area of print 1% used it for agricultural information. Radio was thus the most commonly used media system for agricultural information.

Table 14 shows that 84% of the respondents agreed that the radio was very effective, while 4 of the respondents agreed that the print was the most effective.

Analysis in table 15 shows that 92% preferred evening (6.00-7.00pm) while 8% of the respondents preferred morning time (7.00-11.00am). This result agrees with the view that agricultural programme should be presented in the evening when farmers might have come back from their farm work and would be more relaxed and patient enough to listen to the message attentively.

The Problems Encountered by Farmers: The result of table 16 shows that frequency modulation affects 42% of the respondent's use of the media, while language affects 6% of the respondents use of the media.

The result in table 17 shows that 82% of the respondents agreed that provision of electricity will enhance their access and use of mass media, while a percent agreed that improved method of presentation will enhance their productivity.

CONCLUSION AND RECOMMENDATIONS

Summary: The result of this study showed that majority 80% of the farmers in Ika North East Local Government Area of Delta State were males while 20% were females. The results also revealed that majority of the farmers had one form of formal education or the other. Although, majority 39 was primary school attempted who cannot read or write well. On the age distribution, result showed that greater percentages (74%) were able-bodied, middle-aged men who should be active in agricultural practices and who should be desirous of information on agriculture.

The survey also revealed that Radio was the most widely used mass media system by the farmers with 84.0% of the farmers who had access to it claiming that they listened to it for agricultural information. Only 12.00% and 4.00% claimed they use the television and prints respectively. Again, the use of various media systems was found to be independent of the socio-economic characteristics of the farmers, this reveals that farmers age, sex, marital status, farm size and educational levels do not affect their use of mass media as source of agricultural information by the rural farmers.

Conclusion: In order to gainfully exploit the potentials of the mass media system, the extension service agency should have to reach the farmers regularly through the mass media to complement direct contact by extension agents. The government on the other hand will have to direct her attention to the use of Television and Radio as the most effective means of reaching the rural dwellers in her various developmental programmes. To the media stations, they will have to improve on their broadcasting services to achieve effectively. With effective programming and information dissemination, the impact of radio and television will be felt by the rural farmers. In this way, they realize that this media are essential tools for getting the information they require for increasing their farm production and productivity.

Recommendations: To promote and ensure the adoption of innovations and relevant agricultural information by farmers in Ika North East Local Government Area, government needs to ensure adequate availability of rural infrastructures and facilities so as to enable more of the rural farmers to cultivate the habit of utilizing mass media as source of agricultural information.

There is also the need for extension agents to increase the use of mass media in disseminating information on agricultural to farmers. This is necessitated by mass media will help in stimulating agricultural development. Rural farmers' education by the extension agency will also help the farmers appreciate the usefulness of the mass media system as sources of agricultural information.

Finally, mass media agencies and the agricultural extension agency should always consider the following factors to ensure effective information dissemination to farmers.

The understanding of the target audience, this needs and interest, what order to time should the agricultural programmes be presented to ensure greatest impact, which methods of presented will service them best, justification of cost, etc.

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