



## ABSTRACT

The study examined the contribution of mass media to the productivity and training of crop farmers in Oshimili North Local Government Area of Delta State and specifically, to determine how effective mass media is in the dissemination of agricultural information to farmers and

# CONTRIBUTIONS OF MASS MEDIA TO AGRICULTURAL PRODUCTIVITY AND TRAINING OF CROP FARMERS IN OSHIMILI NORTH LOCAL GOVERNMENT AREA OF DELTA STATE

<sup>1</sup>CHUKWUKELU, IFEANYI. SAMUEL,  
<sup>2</sup>EDET, EYO, <sup>2</sup>ROLAND OSAGIE  
OMOREGBEE AND <sup>2</sup>CHUKWUKELU,  
UCHENNA KINGSLEY

<sup>1</sup>Department of Agricultural Education Federal College of Education (Technical) Asaba, Delta State. <sup>2</sup>National Productivity Centre Calabar, Cross River State

## INTRODUCTION

Agricultural productivity is one of the ways of measuring total agricultural output to the total input used in farm production. Agricultural productivity is the measurement of the quantity of agricultural yield produced for a given quantity of input or a set of inputs, there are different ways of defining and measuring productivity (Dethier and Effenberger, 2011). Increased agricultural production is essential



*the factors hindering the effective use of mass media in the dissemination of agricultural information to farmers. 25 farmers each from four (4) farming communities were selected using a simple random sampling technique given a total number of respondents of 100. Data was collected for this study via the use of a structured questionnaire administered to the crop farmers in the study area. Frequency count and mean were used to analyzing data collected from the field survey. A mean of 2.5 and above indicated the most effective of opinion while a mean less than 2.5 indicated rejection of opinion. It was concluded that radio, television, telephone, print media, and the internet are available to mass media in the study area, but the radio was most effective. Based on the findings of the study, it was recommendations The government should encourage the use of radio and television in educating and training the farmers in the study area using the local language with an adequate announcement before the broadcast and the unstable electricity supply should be improved significantly if mass media is to perform its roles effectively.*

around the world to feed the global hungry people. According to ECG (2011), agricultural production is low in Sub-Saharan Africa compared to other developing regions like South Asia and Latin America. For example, an average farmer in Sub-Saharan Africa gets a maximum of 2 metric tons of grain per hectare whereas an Indian farmer receives double, a Chinese farmer gets four times more, and an American farmer gets five times more of what an average farmer of Sub-Saharan Africa gets (AfDB-IFAD, 2010). Hence, productivity should be increased in Sub-Saharan Africa. To increase agricultural productivity in Sub-Saharan Africa, it is necessary to identify the obstacles of agricultural production as well as growth in agriculture in that region. Limited land



rights, inadequate access to water, insufficient access to credit, underdeveloped rural roads and transport infrastructures, narrow market support, underprivileged agribusiness activities, underinvestment in research and extension, etc. are some of the major problems in agricultural production in that region (IEG 2010). In addition, institutions like coordination within organizations and among the donor agencies are also the most difficult task and are related to market failures and property rights. Six action areas namely i) access to land and formation of land rights, ii) access to water, iii) access to credit, iv) improve transport and marketing facilities, v) market opportunities, agribusiness activities and policy reforms, and vi) investment in research and extension have to be prioritized to improve agricultural production in Sub-Saharan Africa (ECG, 2011). Moreover, weakness in institutions and any of these action areas can slow down the agricultural productivity in these regions. Hence, an appropriate institutional framework is also necessary for that region. Interventions in these areas can create different scenarios in agricultural production

Agricultural growth in Nigeria generally largely depends upon small-scale farmers who form the bulk of the farming community, for agriculture to develop these small-scale farmers must learn how to be productive in farming. The extent to which these farmers become highly productive, however, depends largely upon their ability to access accurate and reliable information as well as the type of information capable of solving their farming problems. Reports have also shown that successes of agricultural yield in most developing countries depend on the nature and extent of the use of mass media in the mobilization of farmers for agricultural production. According to Purushothaman et. al., (2010), the growth of agriculture could be hastened rapidly with the effective use of mass media.



Mass media (electronic and print) plays a very important role in educating farmers on new agricultural technologies. Television (TV), radio, and newspapers play an important role in educating farmers about new agricultural technologies among farming communities across the world (Yawson et al., 2010).

Agricultural training is therefore important in poverty alleviation, food security, and consequently economic growth, however in Cameroon emphasis on increasing agricultural productivity by 2035 is more on improved seeds, increasing the number of seeds planted, increasing in arable land, and increase in farm use equipment as well as the creation of available markets for the sales of agricultural products. The government has not yet considered agricultural training to be a priority and there was a practically countable number of institutions and faculty conducting training in agriculture.

The reasons for low agricultural training can be explained below:

- a) Culturally, most rural dwellers believe that one doesn't need to be trained to do agriculture. This idea in mind becomes difficult to acquire training for a farmer.
- b) Inadequate knowledge and ignorance have caused many agricultural workers to be indifferent so far as agricultural training is a concern.
- c) The government has not yet taken it as a priority to make the training of agricultural workers important. It's a profession that requires just manpower; it's difficult to find people sacrificing to learn except the government impose on them.
- d) Aid from support institutions like international bodies (FAO, WFP, World Bank) to agriculture is oriented towards cash and kind (agricultural tools, i.e. hoes, machetes, etc).
- e) Elites from local communities have also failed to explain the necessity of this exercise to their rural dwellers.



- f) Many farmers are still resistant to new agricultural innovations or practices in their methods. This resistance has hindered agricultural training and education.

In their view, for the effective transfer of technologies that are meant to boost agricultural production, mass media is seen as an essential ingredient (Okwu and Daudu, 2011).

Extension service organizations use mass media in sharing agricultural information because of the high speed and low cost covering a wide area at a very fast rate. Mass media as stated by Nazari and Hassan (2011), offers powerful channels for communicating agricultural techniques and related methods which can boost the capacity building of farmers and increase their yield.

Mass media communication includes all those means of transmitting messages such as radio, televisions, video, magazines, film, and others, which enable a source of one or few individuals to reach a large audience. The main aim or function of mass media is to inform, educate and encourage the farmers to accept new ideas and technologies to increase their agricultural production and change their status as a farmer. Mass media as a modern means of educating/training and spreading new skill/methods to a large number of farmers disseminate such agricultural production information as techniques of applying fertilizers, insecticides and fungicides, improved methods of crop cultivation, and soil conservation techniques, harvesting technology and storage of crops (Egbule and Njoku, 2010), hybrid and other recommended seeds of crops, irrigation system and approaches, crop protection and of various new technologies in agriculture ought to reach farmers and or their farms through effective extension and mass media stations (Egbule and Njoku, 2010).



Mass media are important in providing education/training to enable the rural farmers to make informed decisions regarding their farming activities, especially in the rural areas of developing countries (Lwoga, 2010). This is the reason why Anifowose (2013) says communication involves the process by which information and understanding are transferred to different farmers at a different locations. Radio as a mass media remains a medium in development communication usually employed by the development officers or experts for the dissemination of relevant development messages, especially for the rural audience. He further argued that radio can be multi-faceted as among other things. It can serve to pass messages, improve the capability of calling upon and organizing groups and organizations, enlarge the forum for social dialogue, provide effective capacity building of the community to raise awareness and knowledge of community issues, bring the people's voice to the higher level of their political structure and mobilize the community to tackle issues.

Despite the impact of agriculture on the economy and food security, the country has not been able to realize its real agricultural production potential as it is much lower than many other countries of the world (Noor et al. 2018, Baig and Straquadine, 2011). Mass media play a very crucial role in educating/training the farmers of the agriculture sector in rural areas. But there is inadequate knowledge about farming and rearing livestock techniques in urban and rural areas in developing countries. So far different research articles have been published on the role of mass media in farming and rural studies but still, there is a big gap. This review aims to reduce the gap between farmers and mass media. Farmers could get the best training and knowledge through the role of mass media in managing their crops and livestock.

### **Statement of the Problem**

The agricultural section has experienced a gradual but slow growth in recent times (Oladipo, 2013). The growth is necessitated by population growth, lack of information, and technology needs (Henri-Ukoha et al.,



2012). Agricultural information is a key to improved agricultural production anywhere in the world. One of the main ways this great benefit can be achieved is when the farmers, especially those in the villages, adopt the innovations and continue to practice them until there is another improvement that is better than the present. This improvement is possible when the farmers get awareness on such technologies and, better still, access and afford them. In this regard, information dissemination is another key factor. For the information to be adequately and timely spread, mas to farmers in different places, media are key players. This is because, in the past, much of the activities of extension workers were done through face-to-face extension contacts, a tedious and time-consuming approach. Therefore, it is necessary to shift from this old method of reaching farmers to a more effective, faster, and wider means to cover a wide spectrum of the clientele. This makes it important that the mass media scale up their efforts towards ensuring that programmers through which farmers can be reached and educated are broadcast properly and timely. After all, they are established with the duty of informing, educating, and entertaining their listeners, depending on which aspect is the need of the individuals concerned.

Taking the important role mass media play or are expected to play in the education and training of farmers that can improve rural farmers' production and productivity, it is important to understand some important facts about their performance. At the moment, the various measures of performance by each of the selected mass media stations for this study and their ability to create positive effects in the farmers' production are not known. This is basically because there is no study conducted on this important topic in the study area, to the best of the knowledge of the researchers. There is, therefore, a need to investigate this issue, especially considering the proximity of the



farmers to the state capital where the radio stations are located. Thus, the study was designed to examine the contribution of mass media to the productivity and training of crop farmers in Oshimili North Local Government Area of Delta State.

### **Objectives of Study**

The general objective of this study was to examine the contribution of mass media to the productivity and training of crop farmers in Oshimili North Local Government Area of Delta State.

Specifically, the objective of this study

1. To determine how effective mass media is in the dissemination of agricultural information to farmers
2. To determine the factors hindering the effective use of mass media in the dissemination of agricultural information to farmers.

### **Methodology**

Oshimili North Local Government Area in Delta State, Nigeria was the study Area. It is one of the twenty-five local Governments that make up Delta State, South-South Geo-political zone of Nigeria, and is located along longitude 60 and 620 east also 60 and 640 east of the Greenwich meridian and latitude 60 and 400 north and 60 and 320 North of the Equator. The study area is a boundary Town having boundaries with several Local Government Areas. It has a boundary in River Niger, in the South with Oshimili South Local Government Area and in the western part by Aniocha North local Government and Aniocha South Local Government Areas of Delta State, Nigeria. The study area is highly populated with a population of 143,361 people (NPC, 2006). Farming was the main occupation of the people.



The respondents used for this study were crop farmers from Oshimili North Local Government Area of Delta State. 25 farmers each from four (4) farming communities were selected using a simple random sampling technique given a total number of respondents of 100. Data was collected for this study via the use of a structured questionnaire administered to the crop farmers in the study area. Frequency count and mean were used to analyzing data collected from the field survey. A mean of 2.5 and above indicated the most effective of opinion while a mean less than 2.5 indicated rejection of opinion.

## Result

**Table 1: Shows how effective mass media is in dissemination of agricultural information to farmers in Oshimili North Local Government Area of Delta State**

S/N	Effectiveness of Mass Media	Most Effective	Effective	Less Effective	Not Effective	Mean	Remarks
1	Radio	35	33	15	17	2.86	Most Effective
2	Television	13	19	43	25	2.20	Not Effective
3	Newspapers	9	28	31	32	2.14	Not Effective
4	magazines	8	28	35	29	2.15	Not Effective
5	Video	8	17	43	32	2.01	Not Effective

Analysis in Table 2 revealed the respondent's rating on the effectiveness of mass media in the dissemination of agricultural information for productivity in Oshimili North Local Government Area



of Delta State. It was revealed that radio had a mean score of 2.86 which is above 2.50, indicating the radio is the most effective of mass media in the dissemination of agricultural information to farmers while Television, Newspaper, Magazines, and video had mean scores of 2.20, 2.14, 2.15 and 2.01 which is less than 2.50, also indicating that Television, Newspaper, Magazines, and video are not effective of mass media in spreading agricultural information for productivity in Oshimili North Local Government Area of Delta State.

**Table 2: Mean Rating showing factors militating against the effective utilization of mass media in the dissemination of agricultural information for productivity in Oshimili North Local Government Area of Delta State**

S/N	ITEMS	SA	A	D	SD	X	Remarks
1.	Government Interference	45	34	12	9	3.15	Agree
2.	Lack of Sponsors/funding of Agricultural Programmes	88	11	1	0	3.87	Agree
3.	High level of illiteracy of farmers	99	1	0	0	3.99	Agree
4.	Limited Coverage or Transmission/Range	19	47	13	21	2.64	Agree
5	Unstable Power Supply	75	12	9	4	3.58	Agree
6	High cost of alternative power through the use of generators	45	34	12	9	3.15	Agree
7	Rural poverty is high	88	11	1	0	3.87	Agree

Analysis in Table 2 revealed that the respondents agreed to all the statements 1, 2, 3, 4, 5,6, and 7 with mean scores 3.15, 3.87, 3.99, 2.64, 3.58, 3.15, and 3.87 which is above 2.50. This indicates that the



respondents agreed that the items above are all factors hindering the effective use of mass media in spreading agricultural information for productivity in Oshimili North Local Government Area of Delta State.

### **Discussion**

The findings of the study revealed that radio is the most effective mass media in the dissemination of agricultural information to farmers. This finding is similar to the findings of Aromolaran et al., (2016) who found that radio is a major communication device, especially for uneducated growers, which can collect a variety of better information about agriculture and other aspects of society. Radio is a major tool or communication technology and plays a vital role in agricultural development. The result is similar to the finding of Zhang et al., (2016) that radio broadcasting has played a crucial role in the agricultural sector, climate and pesticide use, and other relevant knowledge among growers.

The study also discovered mass media as a necessary tool for disseminating agricultural information which is also in line with the findings of Ariyo et al. (2013) who found out that mass media is an effective instrument of communication and spreading agricultural-related news amongst farmers. However, they were some certain causes to decrease the effective practice of using mass media for agriculture. These causes were low level, education level and lack of other basic facilities in the respective area. The study also found that factors are hindering the effective utilization of mass media in spreading agricultural information to farmers among them are high poverty in the rural areas, lack of funding of agricultural programs, government interferences, high level of illiteracy, and limited coverage or transmission range and many others. This finding is in line with the findings of Ariyo, Ariyo, Okelola, Aasa, Awotide, Aaron, and Oni, (2013)



who found that illiteracy, low-income level, lack of credit facilities, and inadequate/ erratic power supply are factors militating against the use of mass media. According to their findings, unstable electricity supply formed the main constraint in the study area.

### **Conclusions**

From the results of the study, it can be concluded that radio, television, telephone, print media, and internet are available to mass media in the study area, but the radio was most effective, hence serving as the main source of agricultural innovations to the respondents. Generally, the use of mass media in educating farmers on agricultural technologies was found to be effective in the study area.

### **Recommendations**

From the findings of the study, the following recommendations were made:

The government should encourage the use of radio and television in educating and training the farmers in the study area.

1. The broadcasters should always broadcast in suitable local languages as much as possible and efforts must be taken to guarantee that the airing times are.
2. Adequate announcement of the agricultural program on the media before the kick-off of the program will keep the farmers aware and plan their time to pay attention and watch such programs.
3. The unstable electricity supply should be improved significantly if mass media is to perform its roles effectively.

### **References**

- AfDB-IFAD, (2010). "Towards Purposeful Partnerships in African Agriculture". AfDB-IFAD Joint Evaluation on Agriculture and Rural Development in Africa. Tunis: AfDB-IFAD. Anifowose, B.O (2013) Exploring Radio as a Means for



- Disseminating Development Messages Department of Communication and Language Arts, University of Ibadan, Ibadan, Oyo-State.1-9pp.
- Ariyo, O., Ariyo, M., Okelola, O., Aasa, O., Awotide, O., Aaron, A., & Oni, O. (2013). Assessment of the Role of Mass Media in the Dissemination of Agricultural Technologies Among Farmers in KADUNA North Local Government Area of Kaduna State, Nigeria. 3(6) 18-28.
- Ariyo, O.C., 2013. Assessment of the Role of Mass Media in the Dissemination of Agricultural Technologies among Farmers in Kaduna North Local Government Area of Kaduna State, Nigeria. *J. Bio. Agri. Healthcare.* 3(6), retrieved from:<<http://www.docstoc.com/docs/159341316/>>.
- Aromolaran, A. S., Colecraft, H. M., & Boutjdir, M., 2016. High-fat diet-dependent modulation of the delayed rectifier K<sup>+</sup> current in adult guinea pig atrial myocytes. *Biochemical and biophysical research communications*, 474(3), 554-559.
- Baig, M.B., Straquadine, G., 2011. "Sustainable agriculture ensures sustainable rural development: a reality or a myth". In: M. Behnassi et al. (Eds.), *Global food insecurity: rethinking agricultural and rural development paradigm and policy*, pp. 21–32. [http://dx.doi.org/10.1007/978-94-007-0890-7\\_3](http://dx.doi.org/10.1007/978-94-007-0890-7_3), Springer Science +Business Media B.V.
- Dethier, J. J. and A. Effenberger, (2011). "Agriculture and Development". Policy Research Working Paper 5553. Research Support Unit, Development Economics, World Bank.
- ECG (Evaluation Cooperation Group), (2011). "Evaluative Lessons for Agriculture and Agribusiness". Paper No.: 3. World Bank, Washington, DC.
- Egbule, P. E and Njoku, E. M., 2010. Mass Media Support for Adult Education in Agriculture in Southern Nigeria. Retrieved: [http://iiz-dvv.de/index.php?article\\_id=4838&clang=26/7/2012](http://iiz-dvv.de/index.php?article_id=4838&clang=26/7/2012).
- Henri-Ukoha, A, C. Chikezie, Osuji, M.N, Ukoha, I. I. 2012. Rate of Information Communication Technology (ICT) Use: Its Determinants among Livestock Farmers in Ukwa West LGA, Abia State of Nigeria. *International Journal of Agricultural and Food Science*, 2(2): 51-54.
- Lwoga, E. T. (2010). Bridging the agricultural knowledge and information divide: The case of selected telecenter and rural radio in Tanzania. 43: 1-14.
- Nazari, M. R. and Hassan, M. S. (2011). The role of television in the enhancement of farmers" agricultural knowledge. *Africa. J. Agric. Res.* 6 (4):931-936.
- Noor, M.A., Fiaz, S., Nawaz, A., Nawaz, M.M., (2018). The effects of cutting interval on agro-qualitative traits of different millet (*Pennisetum americanum* L.) cultivars. *J. Saudi Soc. Agric. Sci.* 17 (3), 317–322. <http://dx.doi.org/10.1016/j.just.2016.07.002>.



- NPC, (2006): National Population Commission, Federal Office of Statistics. Census 2006.
- Okwu, O. J. and Dauda, S. (2011): Extension Communication Channels Usage and Preference by Farmers in Benue State Nigeria. *Journal Agricultural Extension and Rural Development*. Pp. 88-94.
- Oladipo, A. (2013). Investment Opportunities on Nigerian Economy: The fastest Growing Economy in Sub Saharan Africa. A Paper Presented at the 42<sup>nd</sup> Convention of Rain Push Coalition, illusion State, USA.
- Purushothaman, C., Kavaskar, M., Reddy, Y. A. and Kanagasabapathi, K., (2010). Role of Mass Media in Agriculture. Retrieved: [http://docs.google.com/viewer?a=v&q=cache!nXmlzKKU5\\_8j:agropedia.iitk.ac.in/openac26/7/2011](http://docs.google.com/viewer?a=v&q=cache!nXmlzKKU5_8j:agropedia.iitk.ac.in/openac26/7/2011).
- Yawson, D.O., Armah, F. A., Afrifa, E.A., Dadzie, S.K.N. (2010). Ghana's Fertilizer Subsidy Policy: Early Field Lessons from Farmers in the Central Region. *Journal of Sustainable Development in Africa*. The Clarion University of Pennsylvania, Clarion, Pennsylvania. Vol. 12 No. 3. Pp. 191-203.
- Zhang, Y., Wang, L. and Duan, Y., (2016). Agricultural information dissemination using ICTs: A review and analysis of information dissemination models in China. *Information processing in agriculture*, 3(1), 17-29.