

# INFLUENCE OF MASS MEDIA ON THE GROWTH OF AGRICULTURE IN NIGERIA: A STUDY OF IKA SOUTH LOCAL GOVERNMENT AREA, DELTA STATE

Maureen Ugbome, \*

\*Department of Mass Communication, University of Delta, Agbor

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## Abstract

This study examined mass media's influence on agricultural development in Ika South Local Government Area, Delta State, Nigeria. Using cluster sampling methodology, 399 participants were surveyed through structured questionnaires. Findings identified extension personnel, farmers, colleagues, neighbors, radio, television, and print media as primary agricultural information sources. Major barriers to accessing agricultural information via mass media included inadequate electrical power supply, poor network connectivity, expensive media acquisition costs, and insufficient feedback mechanisms. The research recommends governmental investment in rural electrification programs, collaborative government-media partnerships to enhance telecommunications infrastructure, and implementation of improved feedback systems to facilitate effective communication between media institutions and rural agricultural practitioners. These interventions are essential for optimizing mass media's role in agricultural information dissemination and rural development.

**Keywords:** Mass Media, Information, Agricultural Development

**Declaration of conflicting interests:** The Authors declare that there is no conflict of interest.

## Introduction

Agriculture constitutes a fundamental pillar of economic development in developing countries, historically characterized by subsistence-level farming utilizing primitive equipment resulting in diminished production (Mgbakor, Iyobor and Okezie, 2013). The sector fulfills essential functions including food provision, raw material supply to industrial sectors, employment generation, and foreign exchange earnings facilitation (Food and Agricultural Organization, 2006). Agriculture represents the cornerstone of Africa's economic architecture, with approximately 80 percent of the African population being rural inhabitants whose livelihoods depend on agricultural activities (Economic Commission for Africa, 2012). The sector contributes approximately 14 percent of Africa's GDP, employs 60 percent of the workforce, and represents 90 percent of income sources for African rural dwellers (FAO, 2008).

Within Nigeria, the agricultural sector generates over 30 percent of the Gross Domestic Product and approximately 27 percent of agricultural raw materials (FAO, 2010). Historically serving as Nigeria's economic backbone, the agricultural sector demonstrated

substantial contributions to GDP and employment provision. However, concerning trends have emerged regarding declining performance. GDP contributions have diminished from over 60 percent in the early 1960s to approximately 40 percent currently, while the sector's share of foreign earnings declined from 75 percent during the 1960s and 1970s to merely 3 percent by 2008 (Ruma, 2008).

Agricultural sustainability and productivity worldwide significantly depend on extension service quality (Kimaro, Mukandiwa, and Mario, 2010). However, extension worker ratios have declined while farming families have increased, creating accessibility challenges for timely agricultural information dissemination. Mass media represents valuable mechanisms for rapidly disseminating information to expanding farmer populations, providing comprehensive knowledge about new technologies, markets, price trends, and best practices.

This study examines mass media's role in advancing agricultural development in Ika South Local Government Area, Delta State, Nigeria. The study area encompasses 436 km<sup>2</sup> with a population density of approximately 527.8km<sup>2</sup> (National Bureau of Statistics,

2016).

### **Statement of the Problem**

Before Nigeria's oil discovery in 1956, agriculture served as the paramount income source. Despite agriculture's vital functions in food production, employment creation, and foreign earnings generation, increasing disconnection exists between the agricultural industry and public regarding information transmission about agricultural practices. Agricultural challenges persist despite the sector's importance. Most populations experience food shortages attributable to unfavorable climatic conditions, weak stakeholder support systems, poor farming methods, inadequate land tenure systems, insufficient information on new agricultural innovations, and weakened agricultural advisory services (FAO, 2012). Ika South Local Government Area represents a predominantly agricultural region with quality soil and suitable weather conditions for crop production. However, farmers lack basic information on correct farming practices and new technologies, consequently resulting in poor output as they continue subsistence-level farming.

This study concentrates on mass media's function in agricultural growth, critically analyzing its usefulness in establishing connections between farmers and advanced agricultural technologies. The contribution of media channels to farmers' access and application of agricultural information for boosting productivity and alleviating poverty remains insufficiently understood in Nigeria, particularly in Ika South where no comparable study exists.

### **Objectives of the Study**

The basic purpose of this investigation is to analyze the contribution of mass media on the advancement of agricultural practices in Ika South Local Government Area of Delta State. The specific aims are to:

1. Assess the role of the mass media in agricultural development in Ika South Local Government Area;
2. know the obstacles experienced by farmers in accessing the mass media in Ika South Local Government Area;
3. determine the main mass media utilised by farmers in for promotion of agriculture in Ika South Local Government Area

### **Research Questions**

This study seeks to answer the following

questions.

1. What is the role of the mass media in agricultural growth in Ika South Local Government Area?
2. What are the challenges experienced by farmers in accessing the mainstream media in Ika South Local Government Area?
3. Which is the most preferred mass media channel for the farmers in Ika South Local Government Area?

## **LITERATURE REVIEW**

### **Communication as a Tool for Development**

Development fundamentally encompasses comprehensive efforts to enhance individuals and their living conditions through advancement across all dimensions of human endeavor (Nwanne, 2013). Rural communities throughout Africa constitute the majority of the population whose informational and developmental requirements remain inadequately addressed, consequently limiting their active participation in development processes (Chester and Neelameghan, 2006) as cited in Ogidi (2015). This predicament persists because communication channels currently used by various agents to disseminate information to farmers are elitist and urban-centered, thereby widening the information gap between agents and users (Ogidi, 2014).

Development Communication, as conceptualized by Anaeto (2008) as cited in Nwanne (2013), represents "the planned and systematic application of communication resources, channels, approaches and strategies to support the goals of socio-economic, political and cultural development." Arokoyo (2012) defines Communication for Development as "a researched and planned process crucial for social transformation" operating through advocacy, social mobilization, and programme communication strategies.

Mass media strategies in agricultural information transmission demonstrate particular significance in reaching broader audiences at accelerated rates (Gopalakrishna, 2015). Adequate, well-timed, and pertinent information from various communication channels constitutes a fundamental requirement for increased agricultural productivity and enhanced revenue generation, ultimately contributing to poverty elevation among farming populations (Nkrumah, 2008). Mass media assumes a crucial role in raising awareness regarding various agricultural innovations among farmers (Nazari &

Hassan, 2011). Mahmood and Sheikh (2015) assert that mass media represents one of the most effective sources for sharing information about new innovations and agricultural technologies among rural farming communities, proving more rapid than personal contact methods.

### **Challenges in Accessing the Mass Media by Rural Farmers**

According to Umukoro, Irori, Ivwriharen and Ugbome (2018), rural development receives poor media coverage because agricultural reporting frequently receives minimal editorial priority, with news organizations relegating agricultural content to peripheral positions. This marginalization stems from inadequate training infrastructure for agricultural journalism, as effective coverage requires specialized experience in agronomy, economics, nutrition, and environmental sciences.

Ogidi (2014) observed that African communities have suffered from limited access to tangible developmental benefits, partially attributable to inadequate information dissemination mechanisms within agricultural sectors. Ruth-McSwain (2008) noted that agriculturalists use agricultural media but do not feel they adequately reach mainstream media. Many agriculturalists believe news media are insufficient in embracing farming activities, being more interested in breaking news instead of developing partnerships with the agricultural industry (New Agriculturalist, 2009).

According to Ekoja (2013), new agricultural findings must reach farmers through reliable extension officers and mass media channels for adaptation and implementation of new technologies. Rural farmers must be included in decision-making processes to minimize their detachment from issues impacting their livelihoods. Mass media should be empowered to serve their critical role in translating government development schemes and agricultural initiatives into understandable, practical terms (Mgbakor, Iyobor and Okezie, 2013).

### **Mass Media Preferences**

Radio broadcasting has been categorized as the channel demonstrating the foremost prospects for effective communication in developing nations (Rilwan, Suleiman and Fatonji, 2014). Oso (2002) substantiated this assertion, stating that radio "has the greatest reach having penetrated all the nooks and crannies of these countries (developing countries). It is cheap. It is accessible." The Food and Agricultural Organisation (FAO, 2013) emphasizes that in developing countries

where majority populations reside in rural areas and experience limited literacy, radio constitutes an invaluable medium capable of delivering information to substantial populations. Radio's sustained importance received validation through the 2010 Food and Agricultural Organisation International workshop on Nigerian rural agriculture, which recognized radio as the most extensively adopted, effective, accessible, and cost-efficient communication methodology for rural communities.

Television represents one of the principal mass media channels utilized for information dissemination, employing approaches from interviews, panel discussions, lectures, demonstrations to dramatizations (Irfan, Islam, Umber, Khan, Abdal, and Asif, 2016). However, empirical evidence reveals significant limitations regarding television's effectiveness in rural agricultural information dissemination. Omosa (2008) demonstrated that television ownership and utilization in rural communities remained significantly low, consequently limiting its reliability for transmitting agricultural information. Research by Chhachhar, Salleh, Omar and Soomro (2012) in Pakistan indicated that only 18 percent of participants favored agricultural television programming.

Print media encompasses written communication forms including posters, leaflets, brochures, newspapers, journals, newsletters, and magazines. Information disseminated through print media possesses characteristics of permanence, sustainability, and accessibility, enabling easy duplication and distribution processes (Wessler & Brinkman, 2002). Despite advantages, print media faces constraints regarding literacy requirements and distribution logistics. Farooq et al (2007) posited that rural farmers are ready for new information but the main problem is non-availability of or access to information sources.

### **Empirical Studies**

Nazari and Hassan (2011) conducted research on "The role of television in the enhancement of farmers' agricultural knowledge" in Malaysia, demonstrating that mass media constitute effective channels for communicating agricultural information. Their investigation indicated that 68.3 percent of participants believed that producing relevant agricultural programs aligned with regional language and cultural contexts could prove highly effective. Ariyo, Ariyo, Okelola, Aasa, Awotide, Aaron and Oni (2013) assessed agricultural technologies among

farmers in Kaduna North Local Government Area of Kaduna State, Nigeria, showing that most farmers obtain agricultural information through mass media channels.

Abu Hassan, Hassan, Shaffril and Jeffrey (2009) investigated mass media utilisation among farming communities, finding that farmers continued depending on traditional mass media including newspapers, television, and radio. Mboho (2007) examined broadcasting's role in farmer access to agricultural innovations, concluding that broadcast media can play crucial roles in promoting new agricultural farming methodologies. Research by Farooq et al (2007) in Pakistan indicated that print media served as primary agricultural information sources, revealing farmer dependence on pamphlets, posters, newspapers, books/booklets, magazines, and journals.

Van den Ban Hawkins (2008) reported that in less industrialized nations, radio represents the most influential mass medium for rural farmers. Khan and Paracha (2014) determined radio as the primary communication medium among Pakistani cotton-growing farmers. Ahmed, Ahmed and Miah (2014) concluded that farmers received substantially more information from radio than television, attributed to more numerous agricultural broadcasting programs on radio. Mass media are considered efficient tools for disseminating agricultural information among farmers, comprising the most potent means for rapid information distribution (Kakade, 2013; Lwoga, 2010).

### **Development Media Theory**

The theoretical underpinning for this study is Development Media Theory, which explains press attitudes in developing nations. Folarin (2002) in McQuail (1987) described essential principles: media must embrace positive growth tasks aligned with national policy; media freedom should remain subordinate to economic priorities and societal development imperatives; media content should prioritize national culture and languages; and states retain legitimate authority to intervene in media operations for developmental purposes.

Folarin (2002) concluded that Development Media Theory provides conceptual foundations for development communication and development journalism, utilizing journalism and print media to facilitate development in emerging economies. The theory posits that mass media should assist governmental nation-building efforts, necessitating governmental oversight of media institutions to

achieve developmental objectives. Communication promoted by rural journalists fundamentally targets informing, educating, and mobilizing rural populations for development, encouraging acceptance and participation with development agents (Chukwu, 2015).

### **METHODOLOGY**

This study used a survey research method with structured questionnaires to examine farming practices and farmers' access to mass media content in local villages. The questionnaires were designed to be clear and straightforward to gather appropriate responses from participants. The study population consisted of the active labor force in Ika South Local Government Area, Delta State, Nigeria. Based on the 2006 census and National Population Commission (NPC) projections, the area's population was estimated at 229,000 in 2022, projected to reach 239,655 by 2024 using a 2.3% annual growth rate (NPC, 2016). The study population was the active labor force of 130,150 people in Ika South Local Government Area (out of total population 239,655). Using Taro Yamane's sample size determination formula, 399 respondents were selected and distributed among targeted communities based on each community's population structure to ensure representative sampling. The study employed cluster sampling to balance cost-effectiveness with research accuracy, targeting Ika South Local Government Area's Abavo clan. Four villages (Ekweze, Udomi, Abavo Central, and Igbogili) were purposively selected based on agricultural significance and proximity. Two-stage cluster sampling utilized simple random subsampling for structured questionnaire administration.

Data collection involved independent researcher-administered questionnaires to individual farmers, with interpreter-assisted interviews for illiterate participants. Face validity was established through expert review by the project supervisor and lecturers, who assessed question adequacy against research objectives. Expert feedback enhanced instrument validity, ensuring effective data capture on mass media's role in agricultural practices.

### **Reliability of the Instrument**

Test-retest reliability was established using thirty residents excluded from the main study. Internal consistency was assessed through Cronbach's Alpha Formula, yielding a coefficient of 0.802, confirming acceptable questionnaire reliability.

**Data Presentation**

**Table 1: Role of the Mass Media in Agricultural Development in Ika South Local Government Area of Delta State**

Items	N	$\bar{x}$	STD	Decision
Do the mass media provide relevant information to agricultural development?	394	3.51	1.15	Agree
Do the mass media reinforce previously known knowledge?	394	3.99	0.80	Agree
Do the mass media help in overcoming language barriers	394	4.53	0.50	Agree
Are the mass media effective in simulating interest on new agricultural information?	394	3.52	1.10	Agree
Are the mass media effective in getting feedback?	394	1.98	0,81	Disagree

Source: Field survey, 2024

**Table 2: Challenges Faced By Farmers in Accessing the Mass Media in Ika South Local Government Area?**

Items	Yes		No	
	Freq.	%	Freq.	%
When using the mass media specific needs relating to new agricultural development are not covered.	242	61	152	39
There is inadequate capital to purchase any of the mass media	260	66	134	34
When using the mass media, there is poor network reception (broadcasting).	270	69	124	31
There is lack of adequate power supply, hence there is limitation in the use of mass media.	293	75	101	25
Message passed over the mass media are not usually detailed but short lived.	211	54	183	46

Source: Field survey, 2024

**Table 3: Preferred Mass Media**

Preferred Mass Media Channel	Frequency	Percentage (%)
Radio	219	56
Television	101	26
Print media (newspaper/magazine/bulletin/pamphlets/handbills/posters)	74	19
Total	394	100

Source: Field survey, 2024

**Table 4: Preferred Mass Media Use and the Timeliness of the Information**

ITEMS	Radio	Television	Print media Newspaper
I comprehend the information provided by the mass media	3	2	1
Time/pages allocated to information is enough to grasp the content	3	2	1
The time is convenient for me to listen/watch/read the information being passed	3	2	1
Is there a cost associated with the mass media to access to information?	1	3	2

The research reveals a highly engaged farming community (99% response rate) with strong potential for agricultural innovation adoption, dominated by middle-aged farmers (91.87% aged 31-50) and females (65.74%). Radio emerged as the preferred mass media channel, excelling in comprehension, convenience, and time allocation. However, infrastructure challenges—inadequate power supply, poor network reception, and limited capital—represent primary barriers to media access. Effective agricultural extension programs should prioritize radio-based communication while addressing systemic infrastructure deficits and implementing gender-sensitive approaches that recognize women's central role in agricultural production for optimal innovation adoption outcomes.

**Analysis of Research Questions and Discussion of Findings**

The study examined mass media's role in

agricultural development through three primary research questions. Mass media demonstrated strong effectiveness across most agricultural development functions, with overcoming language barriers achieving the highest rating ( $\bar{x}=4.53$ ,  $SD=0.50$ ), followed by reinforcing existing knowledge ( $\bar{x}=3.99$ ,  $SD=0.80$ ), stimulating interest in agricultural innovations ( $\bar{x}=3.52$ ,  $SD=1.10$ ), and providing relevant information ( $\bar{x}=3.51$ ,  $SD=1.15$ ). However, a critical weakness emerged in feedback mechanisms ( $\bar{x}=1.98$ ,  $SD=0.81$ ), revealing inadequate two-way communication between farmers and media sources.

Regarding access challenges, farmers identified significant infrastructure barriers dominated by inadequate power supply (75%), poor network reception (69%), and insufficient capital for media devices (66%). Content-related issues included incomplete coverage of specific agricultural needs (61%) and brief messaging (54%). These findings align with international research patterns, particularly Mtega and Benard's (2013) identification of limited media penetration, rural illiteracy, and poverty as primary obstacles in Tanzania.

Radio emerged as the overwhelmingly preferred medium (56%), significantly outperforming television (26%) and print media (19%). Radio's superiority was evident across multiple effectiveness criteria, scoring highest for information comprehension, time allocation adequacy, and scheduling convenience (all 3/3), while maintaining the lowest access costs (1/3) compared to television (3/3) and print media (2/3). This dominance reflects radio's practical advantages in rural contexts, including portability, minimal power requirements, and resilience to infrastructure limitations, corroborating findings by Nakabugu (2001), Omenesa (1997), and Ifejika et al. (2007) regarding radio's effectiveness in agricultural communication.

### Conclusion

The study demonstrates radio's critical dominance as the preferred agricultural information medium in Ika South Local Government Area, driven by its cost-effectiveness, accessibility, and convenience for rural farming communities. While mass media effectively disseminate agricultural information and overcome language barriers, significant systemic weaknesses constrain overall effectiveness. Infrastructure limitations, particularly inadequate power supply and poor network reception, represent fundamental barriers that extend beyond media access to broader rural development challenges. The absence of effective feedback mechanisms indicates a

unidirectional communication model that fails to address specific farmer needs or adapt content based on user responses. Content inadequacy concerns suggest a mismatch between generic programming and localized farming requirements, highlighting the need for context-specific, culturally appropriate agricultural messaging.

### Recommendations:

1. Government and broadcast media houses should invest in sophisticated equipment to improve rural telecommunications signals and expand transmission coverage.
2. Extended time allocation for agricultural programming should be implemented to provide comprehensive farming information to rural communities.
3. Robust feedback systems must be established to facilitate efficient two-way communication between farmers and media organizations.

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