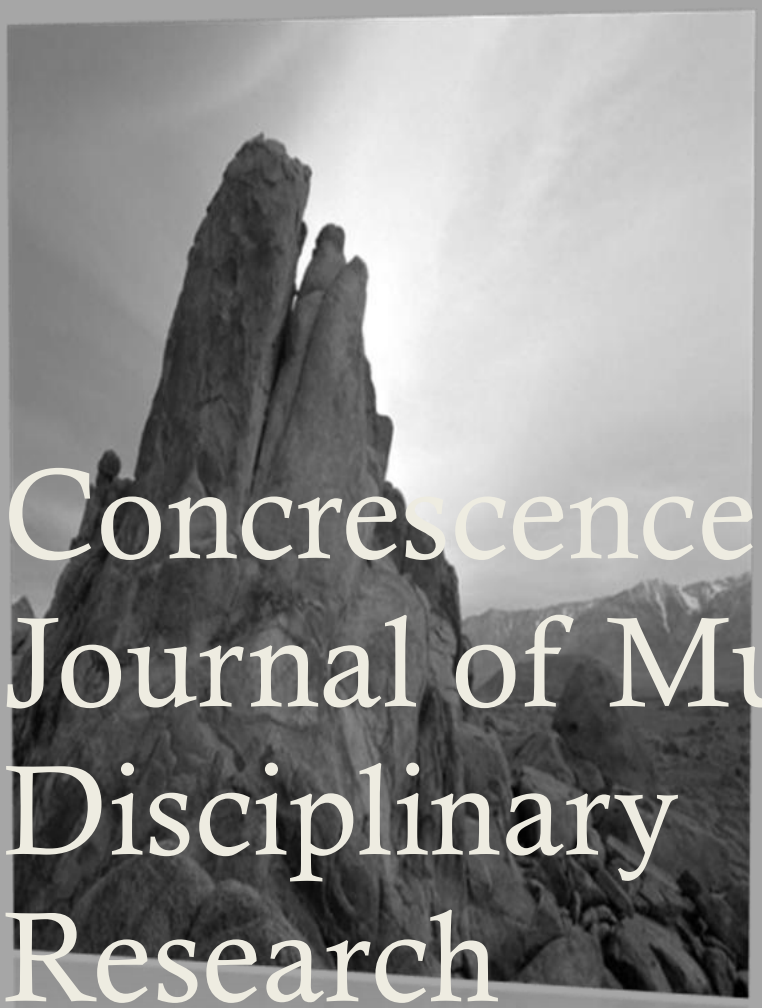


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Awareness and Use of Radio Campaigns for Food Security Messages among Local Farmers in Selected Rural Areas of Oyo State, Nigeria

Adebayo John James PhD
Department of Mass Communication
Faculty of Communication and Media Studies,
Federal University, Oye-Ekiti, Ekiti State, Nigeria
https://orcid.org/0000-0002-5274-9975
adebayo.james@fuoye.edu.ng

Ogundeji Benjamin Kayode, PhD
Faculty of Social Sciences,
Department of Communication Studies
Bamidele Olumilua University of Education,
Science and Technology, Ikere-Ekiti, Ekiti State
benjamin@bousti.edu.ng

Bisi Olawunmi PhD
Department of Mass Communication
Adeleke University,
Ede, Osun State
olawunmi@adelekeuniversity.edu.ng

Abstract
Developing nations like Nigeria are facing a lot of issues with regard to food security as a result of climatic changes, urbanisation and growing population. This study is designed to examine the awareness and use of radio campaigns for food security messages among local farmers in selected rural areas of Oyo State. The survey method was adopted to harvest the opinions of local farmers about the categories of the adopters of radio agricultural innovations for food security in selected rural areas in Oyo state and to determine the effects of radio campaigns on food security among local farmers in selected rural areas in Oyo State. Findings showed that most respondents are laggards of radio agricultural innovations. Findings showed that most respondents maintained that radio food security campaigns are poor. Community leaders, traditional rulers, religious leaders and leaders of

farmers' associations in rural communities of Oyo State must be trained on the need for food security so that they, in turn, enlighten other farmers in their domains. The government of the day must make adult education system available in rural communities of Oyo State and also make provision for accessible markets for the sales of agricultural produce by local farmers in order to promote and boost their economic capabilities. The government of Oyo State, through the Oyo State Ministry of Agriculture, must strengthen agricultural extension services in the states through funding, training and re-training and vehicles for easy mobilisation to different farming communities requiring the services of the extension agents in Oyo State.

Keywords: Awareness, Use, Radio Campaigns, Food Security, Messages, Local Farmers

Introduction

As flooding takes over a substantial portion of farming land, many local farmers have been displaced from the farms. The construction of markets, residential buildings, roads, and industries has also reduced farming activities by local farmers (Zaman, 2008). Enlightenment campaigns are crucial to attaining bountiful harvests and yields among local farmers. Food security is becoming a significant issue globally due to issues of climate change, herdsmen attacks and displacement of people from their ancestral rural areas in Nigeria. With the growing urbanisation, exportation of agricultural produce, and exploding population, the demand for food and the need for food security have become an increasing concern among stakeholders and policymakers in government (Kumar and Singh, 2017). Information is important in the lives of dwellers of rural areas to defeat poverty and ensure food security. No other medium of mass communication has a wider reach and is more influential than radio medium. Radio is the most commonly used medium for rural information dissemination purposes (Hudson et al., 2017). Radio medium's reach and penetration in rural areas and poor communities in African are vast (Hudson et al., 2017). No known mass communication media has the capability to tread remote and far-flung rural areas like radio. Studies have shown that information is important not only to attain higher food production levels among farmers but also to increase food security (Kumar and Singh, 2017). Food security exists when people have unrestrained physical, social and economic access to meet their dietary and daily needs for a healthy life (Regassa and Stoecker, 2012). The most prominent source of information about food security messages in the rural areas, apart from agricultural extension services, is radio medium. Radio and agricultural extension services are the major sources of information about advisory services and enlightenment needed by local farmers and other people in the agri-food system (Oladele, 2013). Knowledge of modern agricultural practices, to a large extent, determines food security among local farmers. Poor or lack of access to agricultural extension services, relevant messages about food security on the radio and the absence of quality government policy on food security have been a serious constraint to local farmers to make enough food production available (Egbule and Agwu, 2013).

Nguthi et al. (2015), while assessing the level of farmers' accessibility to agricultural biotechnology information, found that radio medium is the most prevalent medium among farmers, with 60% and 80% of local farmers accessing various stories relevant to agricultural practices on the radio. Sasu (2021) conducted a study on demographics of Ghana-Statistics and Facts and found that agriculture plays a significant role in ensuring food security among families and radio medium is the leading means by which local farmers and rural households stay informed about agricultural practices. Zougmore and Partey

(2022) studied the gender perspective of ICT utilisation in agriculture and climate response. They found that radio is the most popularly used platform by local farmers in Nigeria as a result of factors such as cost-effectiveness, and access to information in local dialects. Zougmore and Partey (2022) maintained that radio has been used by local farmers in the rural areas for market and weather information, agro-chemicals, soil conservation, climate-risk mitigation practices and agricultural extension practices. Zougmore and Partey (2022) also pointed out that apart from radio, mobile phones are the other technologies or media by which local farmers receive information about agriculture-related activities in Nigeria. Egwuonwun (2018) conducted a study on the awareness and participation of rural women farmers in the selected development interventions and found that the main source of awareness of new agricultural developments and interventions was through radio.

Access to information has been identified as crucial in ending poverty and improving food security among local farmers in rural areas of developing nations (Alam et al., 2019). Singh et al. (2010) conducted a study on the social impact of community radio. They found that community radio traditional messages and agricultural information cater to the information needs of the farming communities in the rural areas. Regassa and Stoecker (2012) conducted a study on household food insecurity and hunger among households and found that poverty, hunger and famine are rooted in food insecurity. Odawa et al. (2024) conducted a study of factors influencing climate information access by farmers and found that 78% of them had access to climate information. The most popular source of information on climate crisis is radio and agricultural extension agents. Dionysious (2018) conducted a study on the use of information communication and technology in the advancement of African agriculture and noted that food security continues to be a serious issue in Nigeria, and one of its challenges is the lack of information on agricultural research and development.

Food is a basic human need, and access to quality and nutritious food is a human right (El-Sughayyar et al., 2013). Food security is crucial to robust economies, healthy population and political stability (Busse et al., 2016). Radio, a ubiquitous and popular medium for developmental purposes, has a significant role in raising awareness about food security issues among local farmers in the rural areas of Oyo State (ATPS). Food insecurity would not only cripple the economy of a nation but may signal the beginning of a national war.

Hunger has dealt with generations in human history and remains a serious problem in developing countries like Nigeria (Asogwa et al., 2015). Developing nations like Nigeria are facing many issues concerning food security due to climatic changes, urbanisation and growing population. Not many countries have responded to these rising challenges through the provision of relevant information to the local farmers through agricultural extension services, radio medium and training of local farmers (Masese et al., 2018). Illiteracy, poverty, high purchasing costs, and language barriers are some of the issues faced by local farmers regarding access to agriculture-related information on the radio (Zougmore and Partey, 2022). Communicating food security messages in the rural areas of the South-West has remained un-investigated and under-researched among scholars of communication in Nigeria. The majority of local farmers are not only poor but are uneducated and, therefore, cannot comprehend information available on the radio and from agricultural extension services about innovation and development in agricultural practices. About 108 million people globally are food insecure and food insecurity situation can only worsen. By 2050, 9.1 billon people globally will be food insecure (Namubiru and Ngaka, 2018). In essence,

there have unmet information needs of local farmers in the rural areas radio and agricultural extension agents (Anaglo et al., 2020). The study is designed to investigate the awareness and use of radio campaigns for food security messages among local farmers in select rural areas of Oyo State.

The objectives of the study are: to know the categories of the adopters of radio agricultural innovation among local farmers in selected rural areas in Oyo state, determine the effects of radio campaigns on food security among local farmers in select rural areas in Oyo State, to know the level of knowledge of food security issues among local farmers in Oyo State; and the barriers to radio campaigns on food security among local farmers in selected rural areas in Oyo State.

The study is anchored on the diffusion of innovation theory. This study is in tandem with the postulations of the theory because local farmers require innovations, new agricultural practices, and the latest developments in the agricultural sector to enhance food security for the people. As Aina (2003) posited, the theory has to do with what individuals do with information received about new ideas. While some local farmers, when new agricultural innovations are introduced, accept such innovation, others reject or find implementing the innovation difficult due to illiteracy and poverty. There are early adopters, early majority, late majority and laggards among local farmers in Oyo State when new agricultural innovations and ideas are introduced. Diffusion of innovation theory is concerned with whether an idea is finally adopted or rejected and not how information is received and passed as postulated by the two-step of information theory. It also addresses the social change that the new ideas have caused. When the idea is introduced, its acceptance or rejection is based on relative advantage, compatibility, complexity, trialability and observability (Aina, 2003).

Materials and Methods

A survey method was adopted for this study. The survey method was adopted to harvest the opinions of local farmers about the categories of the adopters of radio agricultural innovations for food security in selected rural areas in Oyo state and to determine the effects of radio campaigns on food security among local farmers in selected rural areas in Oyo State. The survey method enables the researchers to measure attitudes, opinions and views on an issue under investigation (Yavuz, 20023). The survey method is a means of collecting information from respondents or subjects to describe, explain their knowledge, and compare attitudes and behaviour about a phenomenon under investigation (Fink, 2009). Using a multi-stage sampling, Oyo State is divided into five political zones: Oyo town, Ibadan, Ogbomosho, Ibarapa and Oke-Ogun Zones.

With the use of a purposive sample, rural-rural local government areas were purposively selected in each of the zones. Ndiyo (2010) avers that a purposive sample is more useful and better applied than a probability sample in small-scale surveys. Nigeria has three kinds of Local Government Areas: rural-rural, urban-urban and rural-urban Local Government Areas. The rural-rural Local Government Areas that were selected in each of the zones are: Afijio Local Government Area, Surulere Local Government Area, Saki East Local Government Area, Ibarapa Central Local Government Area and Egbeda Local Government Area. Using simple random sampling, the five local government areas were further divided into five farming rural communities. Thus, Iware farming community was selected from Afijio Local Government Area in Oyo Zone; Igbon farming community in Surulere Local Government

Area was selected from Ogbomosho Zone, Ago-Amodu farming community was selected from Saki East Local Government Area from Oke-Ogun Zone, Idere farming Community in Ibarapa Central Local Government Area from Ibarapa Zone, and Bole village farming community in Egbeda Local Government Area was selected from Ibadan Zone. As Mcleod (2023) maintains, simple random sampling represents sampling procedure that affords every member of the population an equal chance of selection through the use of an unbiased selection procedure. The essence of simple random sampling is to have a manageable and balanced subset of the respondents that is representative of the entire population that may be too difficult to sample (Mcleod, 2023).

Convenient sampling technique was chosen to select participants and respondents for the study. Convenient sampling method for the study because the data could conveniently be collected from the respondents who are willing to participate in the study. Using convenient sampling, participants or respondents were selected in various locations in Iware, Ago-Amodu, Ifon, Idere and Bole village farming communities. Having access to all respondents was basically not possible, and as a result, researchers were made to sample convenient respondents and subjects in convenient places. Thus, respondents or subjects were given questionnaires in their homes, local palm wine spots, village squares, and markets. Respondents were given questionnaires based on their perceived knowledge of awareness and the use of radio campaigns for food security messages in rural areas. Convenient sampling is used based on proximity; respondents' expressed willingness to participate in the study, and researchers' geographical proximity to respondents, participants, and subjects of the investigation (Isaac, 2023).

Moreover, 400 respondents were given copies of the questionnaire to fill in all the five farming communities selected in the five rural-rural Local Government Areas of Oyo State. The questionnaire maintained a high level of confidentiality because the respondents' names, addresses and streets were not part of the questionnaire items. Therefore, depending on the population size of each of the five farming communities, copies of the questionnaire were given to the respondents. 90 respondents were selected in Bole Village farming community in Egbeda Local Government Area of Ibadan for questionnaire administration; 80 respondents were selected in Iware farming community in Afijio Local Government Area of Oyo for questionnaire administration; 80 respondents were selected in Igbon farming community in Surulere Local Government Area of Ogbomosho for questionnaire administration; 75 respondents were selected in Ago-Amodu farming community in Saki East Local Government Area for questionnaire administration, while 75 respondents were also selected in Idere farming community in Ibarapa Central Local Government Area for questionnaire administration. All 400 respondents were selected to fill in the questionnaire in all the five farming communities of the five rural-rural Local Government Areas of Oyo State. However, 395 copies of the questionnaire were returned and found useful for the study.

Five research assistants were recruited to administer the questionnaire for the study. Each of the five research assistants administered a questionnaire to respondents in the five selected farming communities in Oyo State. The five assistants were trained on the subject-matter of the study. Thus, they were armed with knowledge of the subject matter of the research. Therefore, they were able to interpret the questionnaire items to the respondents or subjects in Yoruba Language. Data were analyzed using frequency and percentage with

the aid of Statistical Package for Social Science (SPSS) Version 16. Data gathered in each of the five farming communities were analysed, interpreted and presented using tables.

Result

Table 1: Categories of Adopters of Radio Agricultural Innovation among Local Farmers

Options	Frequency	Percentage
Early Adopters of Radio Agricultural Innovations	7	1.4%
Early Majority of Radio Agricultural Innovations	34	8.6%
Late Majority of Radio Agricultural Innovations	115	29.5%
Laggards of Radio Agricultural Innovations	239	60.5%
Total	395	100

Source: Researchers' Fieldwork, 2024

Table 1 shows that 7 respondents representing 1.4% stated they are early adopters of radio agricultural innovations, 34 respondents representing said they are early majority of radio agricultural innovations, 115 respondents, representing 29.5% maintained that they are late majority of radio agricultural innovation, while 239 respondents representing 60.5% stated that they are laggards of radio agricultural innovations.

Table 2: Effects of Radio Campaigns on Food Security among Local Farmers

Options	Frequency	Percentage
Radio food security message has improved food Production among local farmers	47	11.9%
Radio has enlightened local farmers about food security	8	2%
Radio food security campaigns remain poor	245	62%
Agricultural Extension Agents are effective means of food security information	94	24.1%
Total	395	100

Source: Researchers' Fieldwork, 2024

Table 2 shows that 47 respondents, representing 11.9%, stated that radio food security messages have improved food production among local farmers, 8 respondents, representing 2% maintained that radio has enlightened local farmers about food security, 245 respondents, representing 62% maintained that radio food security campaigns are poor, while 94 respondents 24.1% averred that agricultural extension agents are effective means of food security information.

Table 3: Knowledge of Food Security Issues among Local Farmers in Oyo State

Options	Frequency	Percentage
Knowledge of food security issues is attained through agricultural extension agents	309	78.2%
Knowledge of food security issues is	12	3%

acquired through radio campaigns		
Knowledge of food security issues is acquired through local farmers' Associations	71	18%
Knowledge of Food security issues is acquired through community leaders	3	0.8%
Total	395	100

Source: Researchers' Fieldwork, 2024

Table 3 shows that 309 respondents, representing 78.2% averred that knowledge of food security issues is attained through agricultural extension agents, 12 respondents representing 3% affirmed that knowledge of food security issues is acquired through radio campaigns, 71 respondents representing 18% affirmed that knowledge of food security issue is acquired through local farmers' association, while 3 respondents representing 0.8% maintained that knowledge of food security issue is acquired through community leaders.

Table 4: Barriers to Radio Campaigns on Food Security among Local Farmers

Options	Frequency	Percentage
Prevalent Illiteracy among Local Farmers	98	24.8%
Elitist Nature of Radio food security campaigns	105	26.6%
Absence of Social Amenities in farming communities	42	10.6%
Subsistent nature of agricultural practices in the farming communities	150	38%
Total	395	100

Researchers' Fieldwork, 2024

Table 4 shows that 98 respondents, representing 24.8% affirmed that prevalent illiteracy among local farmers is the barrier to radio campaigns on food security, 105 respondents, representing 26.6% averred that the elitist nature of radio food security campaigns is the barrier to radio campaigns on food security among local farmers, 42 respondents representing 10.6% maintained that absence of social amenities in farming communities is the barrier to radio campaigns on food security among local farmers, while 150 respondents representing 38% averred that subsistent nature of agricultural practices in the farming community is the barrier to radio campaigns on food security among local farmers.

Discussions

Findings showed that most respondents are laggards of radio agricultural innovations. The findings align with the postulation of diffusion of innovation theory, which states that laggards are the traditional-bound lot and individuals of low social and economic status. Laggards constitute the last set of people to adopt an innovation because they are suspicious of new ideas and innovators groups. A distinct feature of this group, as Aina (2003) avers, is that by the time the laggards adopt the new ideas, the innovator group would have considered the new ideas obsolete.

Findings showed that most respondents maintained that radio food security campaigns are poor. The findings align with the position of Zougmore and Partey (2022), who found that

illiteracy, poverty, high purchasing and cost costs, and language barriers are some of the issues faced by local farmers in accessing agriculture-related information on radio.
Findings showed that knowledge of food security issues is attained through agricultural extension agents. The findings agree with the position of Oladele (2013), who found that agricultural extension services are the major sources of information about advisory services and enlightenment needed by local farmers and other people in the agri-food system. The findings also agree with the position of Egbule and Agwu (2013), who found that knowledge of modern agricultural practices, to a large extent, determines food security among local farmers as the lack of access to agricultural extension services, relevant messages about food security and absence of quality government policy on food security have been a serious constraint to local farmers to make enough food production available.

Findings showed that the subsistent nature of agricultural practices in the farming community is the barrier to radio campaigns on food security among local farmers. Subsistent farming practices cannot produce foods enmasse because of the absence of mechanised farming practices among local farmers. The findings also agree with the position of Da Silva et al. (2023), who found that local farmers are slow to adopt new agricultural innovations to increase yields through mechanised farming due to poverty, illiteracy and the blatant refusal to adopt new innovative changes.

Conclusions and Recommendations
Laggards constitute the last set of people to adopt an innovation because they are suspicious of new ideas and innovators group. The worst of the local farmers are the laggards who do not see the benefit in embracing new innovative agricultural practices. Therefore, all hands must be on deck by stakeholders in agriculture to massively enlighten these people and improve food security in Oyo State. Community leaders, traditional rulers, religious leaders and leaders of farmers' associations in rural communities of Oyo State must be trained on the need for food security so that they, in turn, enlighten other farmers in their domains.

Food security campaigns on the radio are very poor because of prevalent illiteracy and poverty among local farmers. Radio food security messages have failed because of prevailing factors of illiteracy and poverty among local farmers. Therefore, the government of the day must make adult education system available in rural communities of Oyo State and also make provision for accessible markets for the sales of agricultural produce of local farmers in order to promote and boost their economic capabilities.

Agricultural extension services are the major sources of information about advisory services and enlightenment needed by local farmers and other people in the agri-food system. Government of Oyo State through the Oyo State Ministry of Agriculture must strengthen agricultural extension services in the states through funding, training and re-training and vehicles for easy mobilisation to different farming communities requiring the services of the extension agents in Oyo State.

Subsistent farming practices cannot produce foods enmasse because local farmers lack mechanised farming practices. Without mechanised farming, food security cannot be attained. Thus, the government of the day has to make tractors and other agricultural equipment for the massive planting and harvesting of farming produce in Oyo State.

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