ASSESSING THE EFFECTIVENESS OF RADIO AS A MEANS OF COMMUNICATING AGRICULTURAL PROGRAMMES TO FARMERS IN OGUN SOUTH LOCAL GOVERNMENT, NIGERIA

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Abstract

Radio in this information age has been recognized as an essential medium of disseminating information, over the years. It has also been proven to be one of the powerful potential tools that can be used for knowledge dissemination. Effective communication of agricultural information most especially to farmers is crucial in achieving optimum efficiency in agricultural practice in Africa. This study assess the use of radio as a tool of agricultural communication in Nigeria It highlights the emerging role of radio in agricultural information service delivery and suggests areas of improvement in fulfilling the roles. Problems identified include that, radio as agricultural information tool has not been effective, countries owing to various problems such as lack of education on the part of farmers and rural dwellers, poor and high charges for radio, limited ownership of adio and poor infrastructure supporting their usage are other factors limiting the level of usage It is therefore recommended that radio should promote their agricultural programmes before airing them; they should also increase the number of agricultural programmes to be aired on weekly basis. Farmers should also be encouraged to buy and utilize radio.

***Keywords**: agricultural knowledge; communication, tool, effectiveness.*

Introduction

Mass media for a known fact plays very important role in societal development in general and agricultural development in particular. Most of the channels of mass media over the years have proven to be veritable avenues for information dissemination, education, entertainment, and motivation to farmers on agricultural related innovations. Stakeholders in agricultural value chain to make informed decisions on agricultural activities. (Global Forum for Rural Advisory Services (GFRAS), 2012; Shema, 2011,Yahaya,, Adamson, Kareem,(2018)

Information dissemination can be said described as key driving force in social and economic development, particularly for agriculture service delivery (Eboh, 2009; Asogwa et.al 2012). Adequate and accurate information is required by farmers to assist in decision on best production methods and practices, on what to produce, where, when as well as the price to purchase inputs, availability of transportation, and where and how to dispose of produce. Timely dissemination useful information is essential to assist farmers to make informed decisions which can be helpful in to farmers in making effective and efficient production and improvement Consumers need it as well, in order to become aware about agricultural products that are of the best bargain and most nutritional value. This information needs must be met in a timely manner as the problem of product surplus or shortages have been attributed to the lack of information (Ayeni, 2008).

Agriculture has always been a highly knowledge-intensive sector requiring continuous information flow. Farmers' quest for authentic, credible and usable information both from established systems and traditional practices is ever-increasing in this fluctuating global environment, to operate efficiently and compete economically. The rapid changes happening around with globalization, uncertainty in climate change, discerning consumer segment and continued farm crisis emphasize the importance of timely, appropriate and need based information and knowledge to meet the myriad challenges of agriculture. (Arpita,2011; Adejo, AdejoAhmed &Bello 2018)

The agricultural sector is the diving industry, which enhances income in rural areas and the long-term stability of natural resources. Ineffective communication can however have negative effect on the agricultural industry Radio has however, conveyed the essential knowledge or information regarding agriculture in emerging nations. These emerging nations are now associated with developing nations and have access to modern information and technologies on natural resources and weather as well as other vital information about agricultural production (Rao

2017;Pandey 2017;Luqma,Yaseen,Ashrraf,Mehmood & Karim 2019;Nawab, Badar,Aanak,Zulfiqar,Sohaib., Hafis,Siyad,Rizwan,Tahir& Abdullah & Awais 2020).Due to changes surrounding agricultural production and the scarceness of important resources for agricultural such as land, labor, capital and the need for quality agricultural produce to meet the expectations of the market, the agricultural sector needs adequate access to agricultural knowledge Schmidhuber et al. 2009; Niragira 2011)

Wulystan Pius Mtega (2018), averred that agriculture is an important sector because it is the source of food and other raw materials for industries. In developing countries, the sector is the major employer and driver of the economy (National Bureau of Statistics 2016). Therefore, making timely accessibility of agricultural knowledge among farmers is important for them to make rational decisions related to agricultural activities.

Various channels are used to disseminate agricultural knowledge to farmers; the most traditional but still used among farmers in developing countries is the face-to-face communication. It is the most traditional channel in the history of mankind (Msoffe & Ngulube 2016). With this channel of communication, communicators may employ different modes (facial expressions, gestures, intonation, words and body language) to convey a single message (Lewandowski et al. 2011). It also enhances immediate feedback because the communicating parties are in the same physical location (Min, 2007). However, the channel is known for its shortcoming of distorting messages as it is passed from one person to another (Velentzas & Broni 2014).

Advancement in technology has however brought about new communication channels which are either standalone or mediated communication devices. These channels include the print media, demonstrations, different mobile phone applications, radio, television sets and web based (include social media) channels (Livondo et al. 2015;; Lee & Ma 2012;). Decision on which communication channel to use depends on the awareness and credibility of media (Livondo et al. 2015), media richness, characteristics of the message being communicated, availability of feedback mechanism and urgency of the message (Ghanbari & Rahmati 2010). Moreover, the quality of the communication infrastructure being used for transferring a message affects the level of usage of some communication channels. Strategies employed in communicating agricultural knowledge may differ by type of a knowledge being communicated, credibility of the channel, level of development of the communication infrastructure, rural-urban settings, intended audience, dispersion of the intended audience and literacy level of the intended audience (Livondo et al. 2015; Mtega & Benard 2013; Mtega 2012;). It is for these factors some communication channels may have a lot of advantages over others.

Radio has a great potential of being able to reach more people at a given time because broadcasting is made possible through satellites and antennas (Wahab 2015). In most African countries like Nigeria, Tanzania and Zimbabwe; radio broadcasts are known to reach most rural and urban areas as there are some radio stations which are limited to urban and rural areas of the country. Ngowi et al. 2016;Ngowi & Mwakalobo 2017; Tanzania Communication Regulatory Authority 2017) All over world, there has been a notable increase in the use of radio. Studies in the past have however explored how radio is used in relation agriculture communication in different countries. Ogunsola.,Alarape.,Aloba.,Osalus (2019) for instance, reported on Effectiveness of Broadcast Agricultural Programmes on Agricultural development among farmers. Toepista 2014) reported on the impact of radio agricultural programmes on small scale farmers.
This study thus presents a comparative review of the effectiveness of radio as a tool for agricultural communication in selected countries.

Specific objectives of the study were to:

1. Ascertain the effectiveness of the roles of radio in agricultural information dissemination in the selected countries
2. Ascertain the benefits/importance of radio as medium of information dissemination in the selected countries
3. Determine constraints limiting effective use of radio in the selected countries
4. Ascertain possible ways of improving the problems encountered in the radio
5. Compare the effectives of radio as medium of information in selected countries

Agricultural Communication

Agricultural communication includes all kinds of human communication that are related to agriculture especially, farmers and rural interest. This majorly has to do with agriculture and communication (Okwu, O.J., Kuku, A.A. & Aba, J.I., 2007;, Obalanlege, A., Okunu, G.,Kudaisi ,M.,& Ganiyu ,S.,2020). Various people have communicated

about agriculture for different purposes using the interaction as a vital tool for survival. Okwu et al,2007; Obalanlege et al 2020 observed that in the United States of America, mediated method began to join word of mouth method as early as the American revolution followed by print media. Over the decades the print media have been joined by radio, television, films, the internet and many other technologies for mediated communication. They are used to convey agricultural news, information, issues and views. Obalanlege et al 2020.

Effective communication has been observed to play a pivotal role in agricultural enterprise of societies .Various studies and reports have also documented the integral that information and communication in every sector of agricultural related programmes and activities from local to international level (Okwu, et.al, 2007).Likewise, the agricultural stream has broadened dramatically in several ways. For instance, the early agricultural journalism focused mainly agriculture as the production of foods, feed and fiber and has broadened to include a total, complex enterprises from production, processing and marketing to consumption, nutrition, health. The concept of agriculture as also increasingly being recognized as a globally-entwined endeavor while it also includes relationship between the agriculture/food enterprise and broader public interests of society (Okwu et al 2007;Obalanlege et al 2020)

Radio as a Medium of Development

Radio Broadcasting has been identified as the medium with the highest potential for effectiveness in developing countries. Oso (2002, 153) confirms this claim when he said: "Without doubt, it (radio) has the greatest reach having penetrated all the nooks crannies of these countries (developing countries). It is the cheapest and most accessible mass medium. Myers (2008) said radio is the dominant mass medium in Africa with the widest geographical reach and the highest audiences compared with television, newspapers and other information and communication technologies (ICTs). Overall, radio is enjoying a renaissance and numbers of small local stations have exploded over the last twenty years, due to democratization and market liberalization and also to more affordable technologies. According to Myers (2008), radio seems to have proven itself as a developmental tool, particularly with the rise of community and local radios, which have facilitated a far more participatory and horizontal type of communication than was possible with the older, centralized broadcasting model of the 1960s and 70s. There seems also to have been a rediscovery of radio in the context of new ICTS, a realization that technology has made radio into a more two way medium and that it can help bridge the digital divide by serving as a powerful tool for information dissemination and access, especially for hard-to-reach rural audiences (Myers, 2008).

The achievement of agricultural programmes in developing countries largely depends on the nature and the extent of the use of mass media. Communication has been acknowledged for playing a prominent role in the success of agricultural development, production, and development of innovation. Developing countries also realized that the development of agriculture could ne hastened with the effective use of the media (Obalanlege et al, 2020).

Roles of Radio in Agricultural information

Venkatesan in Mboho (2009) opined that broadcasting makes farmers aware of new techniques and encourages them to approach extension agents for more details. It is one of the quickest ways of reaching a large number of farmers in a very short time and therefore useful in times of emergencies such as a large pest attack. It can be effectively used to announce meeting points, training dates, work programmes, providing farmers with information on a wide range of topics of interest to them besides technology, such as new prices, materials available in the market, agriculture policy, changes and so on. Broadcasting has the advantages of allowing extension services to communicate with farmers and others to make them aware of new developments in agriculture.

In addition to provision of information on land preparation, planting materials, plant growth, harvest and storage and information on biotechnology as identified by (Mboho, 2009), broadcasting can also be used to facilitate access to small-scale loans and acquisition of helpful ideas about agricultural practices in the country. These agricultural ideas are the innovations.

Obalanlege et al (2020) observed that the success of agricultural development in developing countries, largely depends on the nature and extent of the use of mass media in mobilizing farmers for the need for development. Communication has also be acknowledged for playing a prominent role in the success of agricultural production.

The use of radio as a communication medium for agricultural purposes

Radio is used extensively as a communication medium in developing countries for the promotion of changes in farming practices to improve agricultural production (Nwaerondu & Thompson, 1987). While other communication media like television remain in the hands of a small percentage of people, low-cost transistor radios run on batteries

are now affordable for the poorer sections of the population. Furthermore, radio as a communication medium does not require literacy. The increasing shift to local radio program production and broadcasting is also removing barriers of language and dialect. As a result, radio has become a valuable medium of communication and dissemination of information, as well as for training and education for broad segments of rural communities (Zijp, 1994).Through information from the radio, the peasants have grown to understand how to work better, even with the use of new implements which also require new techniques for the development of agriculture. The success achieved in this direction has demonstrated that through collective listening, discussion, and the use of audio-visual aids, the radio can contribute substantially to the process of transformation of agricultural traditions, as well as some social and economic attitudes in general.

Thus, radio as an agent of information communication medium is deployed to motivate wide range of support and awareness among the mass of people towards a social change, to ensure the appropriateness and relevance of such messages to their audience, so that the mobilization effects would be accepted and adopted Obalanlege et al 2020

Advantages of Radio as Information dissemination tool

Many experts identify radio as the most appropriate medium for rural emancipation programmes (Okwu, Kuku & Aba, 2007). Outline the following as some of the advantages:

- It has immediate effect because it can overcomes distance barrier
- It is widely owned by people because it is cheap and affordable This is made possible by the advent of the battery-operated transistorized sets and the invention of wind-up radio (Kuponiyi, 2000);
- It contributes to mass education because it is easier to attend to than other forms of media like print or social media, and it is more accessible.
- The use of radio to disseminate agricultural information is relatively okay when compared with other forms of media. (Zijp, 1994.
- It offers target audience efficiency based on different listeners.
- It reaches people at relevant time and places.

The disadvantages of radio:

- Ownership of radio can be a problem to rural dwellers because it might seem expensive for rural peasants to buy, especially when it comes to buying batteries to power it. (Makunike-Sibanda, 2001);
- Transmission problems, can also hamper the effective use of radio (Hartley, 2000)

Assessing the Effectiveness of Radio as Agricultural

Nigeria has proven over the years to have one of the greatest agricultural potentials and resources in the world (obi, 2008 cited in Ridwan A.A.,Suleiman ,H.B., Fatonji ,S.S (2014). Agriculture is presumed to provide the main source of foreign exchange for Nigeria and is an important sector of the economy with high potentials for employment generation, Agriculture accounted for over 80 per cent of Nigeria's Gross Domestic Product (GDP) but the discovery of crude oil in the late 1960s and the huge financial gains benefitted from it made the government to shift its priority from agriculture to crude oil and relied on food importation as a means of feeding her citizens.(Oluigbo,2012)
Agriculture has also been described as the mainstay of economic growth in Africa. It is the single largest contributor to the wellbeing of the rural poor in Nigeria, sustaining 90% and 70% of the rural and total labor force respectively (Akpabio, 2005)

Radio for Agricultural Communication

The outcome of the study conducted by Ridwan A.A et.al 2014) on "Radio as Tool of Diffusing Agricultural Innovation in Nigeria" showed that Radio programmes on agriculture has no much impact on farmers both as individual and groups and farmers hardly learn new innovations related to farming on radio programmes

The study also reveals that farmers only use radio for personal interests like commercial and not for agricultural information. Because it does not serve as an avenue for new ideas as the programmes lack adequate information on agriculture

The study also found out that farmers are not adequately exposed to agricultural based programme on radio because majority of farmers do not have time to listen to radio. They do not listen to agricultural programmes on a regular base of radio and there is also low level exposure to agricultural based progrogramme on radio which does not contribute to acquisition of new ideas and knowledge that can aid their occupation

Conclusion

Information is important for farmers to maintain livelihoods and to gain a competitive edge in a rapidly changing economic and production environment where traditional farming methods might be ineffective to meet new demands (Morton & Matthewman, 1996). Unfortunately, most African countries have not devoted enough attention to provide their citizens with access to information, especially in rural areas where 70–80% of the African population lives (Youdeowei, Diallo & Spiff, 1996). Radio plays numerous key roles in helping in expand outreach to a large number of farmers; improving information flow and connecting people within the rural areas; with the advantages of getting feedback using telephone; It is hoped that with proper harnessing of the potentials of radio across developing countries in Africa, agriculture will be transformed such that the rural poor farm families will have access to global information and knowledge system

Regardless of their potential, the use of radio as source of agricultural information communication in the selected countries is still on the low side. The implications of the findings can therefore be summarized that radio as agricultural information tool as not been effective, especially in developing countries owing to various problems such as lack of education on the part of farmers and rural dwellers. Most radio stations do not have innovative agenda for farmers and their mode of delivery is not effective enough. More so, they do not give the needed values to the listeners who in most cases do not even expect such values from the media based on their past and current experiences. Limited ownership of these radio and poor infrastructure supporting their usage are some of the factors limiting the level of usage. Moreover, the very low number of agricultural radio programmes limited the usage of radio as sources of agricultural knowledge. The study holds that radio is not yet an effective tool of agricultural information communication in the selected countries.

This review holds that radio is not fully a tool of agricultural information tool among in most countries in Africa. Problems identified include poor high charges for radio on radio stakeholders to wake up to use the power of the radio broadcasting to inform, educate and enlighten peasant farmers about new ideas on modern practice of agriculture.

Recommendation

More awareness creation and training of both farmers and extension agents on the effective and efficient use of ICT facilities be intensified by the governments through extension agency.
It is therefore recommended that radio should promote their agricultural programmes before airing them; they should also increase the number of agricultural programmes to be aired per week. The Government should reduce tariffs associated with acquisition and maintaining radio and television.
The challenges now rests on radio stakeholders to wake up to use the power of the radio broadcasting to inform, educate and enlighten peasant farmers about new ideas on modern fish farming practices. Community-based approach should be adopted to stimulate interactions among farmers toward accessing and utilizing fish farming innovations to increase fish production in the country.

It is therefore recommended that radio stations should promote agricultural through timely information, they should also increase the number of agricultural programmes to be aired per week. The government should reduce tariffs associated with acquisition and maintaining radio and television. Moreover, the government and the private sector should work together and improve the radio and television infrastructure in the country

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