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Relevance of Mass Media Broadcasting Channels in Dissemination of Agricultural Information to Farmers for Agricultural Development in Nigeria

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INTRODUCTION

Agriculture is an important sector with the majority of the rural population in developing countries depending on it for their livelihoods. According to the Economic Commission for Africa, about 70% of Africans and roughly 80% of the continent‘s poor live in rural areas and depend on agriculture for their livelihood. Agricultural sector in Nigeria depends upon the small scale farmers who form the bulk of the farming community and what constitutes development in agriculture is the extent to which these farmers have access to accurate and reliable information, therefore, farmers on their own parts need quality information for their productivity potentials to be realized. According to some researchers, farmers need to have access to quality agricultural information in order to improve their production.

Information is an essential ingredient in agricultural development that every individual engaged in agriculture should have access to. Information access is a pre-requisite and a valuable resource for agricultural development [1]. Therefore, agricultural information dissemination is a must for every responsible government because it is only when farmers are informed that they will be able to take a rational decision and produce enough to feed their nation.

Agricultural information is a key component in improving small-scale agricultural production and linking increased production to remunerative markets, thus leading to improved rural livelihoods and food security [2]. Through agricultural information, farmers can adopt new technologies or farming systems, know when to plant and harvest, which crop to produce and which animal to rear and where to sell, know where to acquire bank loans and other farming inputs, as well as how to control pests and diseases. According to certain researchers, agricultural information is considered as one of the most important resources in agricultural and rural development that assists the farmers to make decisions and take appropriate actions for further farming-related development.

In another opinion [3], adds that quick access to relevant knowledge and information can enable smallholder farmers to make informed decisions regarding their agricultural production activities, marketing of their agricultural produce for better profits, disease prevention and advice. Adequate and relevant information is one of the key requirements for increased productivity and increased income which could ultimately lead to poverty reduction among the food producers [4].

Agricultural information creates awareness among farmers about agricultural technologies for adoption. Agbamu [5] opined that information is the first and indispensable step of an adoption process. Adefuye and Adedoyin [6] suggested that for a steady flow of accurate, understandable and factual agricultural progress, farmers must know and act in accordance to agricultural information. Effective dissemination of agricultural information remains a promising strategy for increasing agricultural output and mass media broadcasting channels have been considered as one of the tools for rapid transmission or dissemination of information to large audience. The success of the transfers of information to the ultimate users is usually done through the

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use of mass media broadcast which is increasingly becoming a veritable instrument for transforming Nigerian agriculture.

Mass media broadcasting channels play vital role in enhancing agricultural development, thus, they constitute a method of notifying farmers of new developments regarding their agricultural production activities which lead to better methods of farming and increase in food and cash crop production [7]. They play significant roles in increasing agricultural outputs which in turn facilitates an increase in income and poverty reduction. Mass media broadcast channels are seen as a critical resource in the promotion of agricultural development with a power to alleviate poverty [8]. They play important roles in the circulation of knowledge; teach ideas and skills that are essential for the creation of a better life for the farmers. Mass media broadcasting channels have the capacity to uplift the knowledge and having impact on behavior [9].

Mass media are important in providing agricultural information for enabling the rural community to make an informed decision pertaining to their agricultural activities. Among other sources of agricultural information, radio and television constitute the highest preference for information dissemination and they are regarded as critical resources for agricultural development because it empowers people to make informed choices for attaining better livelihoods. [10]. Mass media broadcasting channels have been acclaimed to be the most effective media in communication for the support of agricultural development in developing countries. Radio and television are powerful communication tool [11,12] and they also proved as the most effective media in promoting agricultural development [13,14]. Mass media broadcast channel plays important roles in creating awareness about new agricultural technologies that promotes agricultural development among farmers, thus, the success of agricultural development programmes in developing countries largely depends on the nature and extent of use of mass media in mobilization of people for development. The planners in developing countries realize that the development of agriculture could be hastened with the effective use of mass media). Radio is acknowledged as the most important medium for communicating with the rural populations of developing countries [15,16]. Television also has proved to be a profound means of communication and potentially capable of leaving tremendous effect on the society [17]. Undoubtedly, television is an influential and appealing medium capable to draw the attention of too many viewers regardless of the literacy or illiteracy of its audience. Radio and TV also provide means for dissemination of interesting and appealing messages [18].

Therefore, the relevance of mass media broadcasting channels in the dissemination of agricultural information for agricultural development has attained a growing recognition but they are limited in realizing their full potential in some parts of the world especially in Nigeria. The reality is that they are faced with the various challenges on issues related to agricultural information dissemination for agricultural development.

CONCEPT OF AGRICULTURAL INFORMATION AND ITS TYPOLOGY

There are various types of information on agriculture related activities. These could include information on crop production and protection, livestock production, agro-forestry, pest and diseases control, fertilizer availability and application, agricultural credit facilities, market prices and improved seeds varieties. Some identified various types of agricultural information, such as information on pest and diseases control, marketing farm produce, credit and loan facilities to farmers and utilization of fertilizer.

Certain scientists define agricultural information as knowledge that has been put into a meaningful and useful context which is communicated to the generality of farmers who use it to improve their productivity.

Agricultural information covers all published and unpublished knowledge on general aspects of agriculture and consists of innovations, ideas and technologies of agricultural policies [19].

Tadesse [20] defined agricultural information as the various sets of information and messages that are relevant to agricultural production activities of farmers such as crop production and protection, animal production and management and natural resource production and conservation.

Aina [19,21], Ekoja [22] and Demiryurek et al. [23] defined agricultural information as published and unpublished knowledge on all aspects of agriculture which are interdisciplinary in nature and have universal application. They classified the types of agricultural information into the following categories:

Scientific information

Generally, agriculture is interdisciplinary in nature. For agriculture to be fully developed, farmers need information from different disciplines. Scientific information is one of the innumerable examples which are generated from universities and research institutes. In India, for instance, Chandrasekan et al. [24] and Rao [25] opine that agricultural information in India is mainly derived from universities and research institutes. It includes scientific information which deals with research and development works carried out in universities and research institutes. Scientific information is aimed at providing information on new crops varieties, their requirements and technical assistance during growing season. The characteristic of this information relates with climate, weather, drought and water stress periods, quality and availability.

In Turkey, Demiryurek et al. [23] argue that agricultural research is usually carried out in research institutes and the objectives of such institutes are to provide farmers with information on best practices. Demiryurek et al. [23] further noted that as a result of information dissemination to dairy farmers in Turkey, functional cooperation between public and private information sources in the system is needed to motivate conventional dairy farmers to convert into modern dairy farming systems. In Iran, Emad-Kharasani concurred with Demiryurek et al. [23] view that, "Nowadays, scientific and technical information is considered as a basis for material and intellectual sources in different societies and any society which is able to access more information automatically has more potentiality".

Oladele [26] hold the view that scientific information such as pest and diseases control, weed control, weather forecast and fertilizer application are generated in universities and research institutions. It is indicative that research and development has the ability to create a pool of scientific and technical information with a great wealth in modern societies. Therefore, research and development departments existing in the various universities in Nigeria are a platform for creating material intellectual sources which can enhance Nigeria's wealth.

Commercial information

Commercial information is another type of information generated by research institutes as well as the universities. This information deals with price control, price of fertilizers, price of seeds and sale of agricultural products. Maru [27] and Renwick [28] in separate studies carried out in India and the Caribbean respectively reported that research institutes are behind the generation of commercial information that is related to markets. This type of information is related to production, productivity and profit enhancement. It therefore covers information on commodity price, food quality and safety as well as labeling information. Maru [27] asserts that agriculture is an interdisciplinary activity that requires information from different disciplines and that commercial information is a key to farmers who sell their produce. The availability of commercial information enhances farmers' performances and without it, farmers will be skeptical as to what to produce, how to locate, potential market to sell their produce.

Cultural information

This involves information on traditional agricultural practices, local cultures and background information and training done in different communities.

Legal information

These are generally laws grouped under the heading "agricultural laws", that relate to the production activities, as they are carried out in a commercial setting [21]. There are numerous Nigerian statutes that subsidize, regulate or otherwise directly affect agricultural activity. These cover any law promulgated by either a state, federal or local government. These may deal not only with plants and animals but also with land use, environmental rules, and the use of food products. All legislations that affect agriculture such as land tenure, the production, distribution and sales of agricultural produce come under this category of legal information [21]. This type of information will be the domain of extension workers, policy makers and farmers.

BROADCAST MEDIA CHANNELS

Radio

Radio is one of the favorite and interactive means of communication which give the listeners an opportunity to feature. It is an appropriate technology that is used in communicating information to audience, thus, it draws attention of audience to new ideas and techniques. Radio has been used as a powerful communication tool that has proven to be the most effective media in stimulating agriculture and the development in the rural areas [13].

It is very affordable, easy to maintain, operate and has wider coverage. According to some, the importance of radio to rural farmers is attributed to its merits such as affordability, low cost of maintenance, ease of operation, wider reach, availability and localization of programmes. Radio is a realistic and liberal medium in terms of content relevance to the needs of Nigeria populace. It can be used to motivate diverse audience and create audience participation in any related development activities.

Television

The advent of television was considered the magic solution to communication problems in rural areas as word and sound are complemented by still and moving images. FAO [29] refers television as a highly persuasive and effective communication medium that has become a tool to increase awareness about specific development problems and stimulate local discussion and possible solution. Television appeals to both the auditory and visual senses; hence, it is an important communication device as it beholds the attention of the audience. Television is an advertising hub where advertisers are ready to spend huge amounts of money especially for programmes with high viewership. It offers various programmes to appeal to the masses of different age groups. It is a popular means of communication which provides both information and entertainment. Television can be used in a number of ways to educate, inform, entertain, sensitize as well as generally socialize. Television is one of the mass media that can be used for disseminating information, making use of a variety of techniques ranging from lectures, demonstrations, interviews and dramatisations.

AGRICULTURAL DEVELOPMENT STRATEGY IN NIGERIA

Agricultural development is understood as quantitative and qualitative changes occurring in the agricultural sector in an analyzed period [30]. It is the transformation of agricultural production through the application of appropriate improved knowledge/technology from subsistence practice to commercial operation toward achieving greater socially satisfying needs.

Agricultural development refers to a process of growth within a specified area in (net) incomes from agriculture. The area could be a country or a smaller part of a country, e.g. a region, district or ward. Such growth may come about by many means. It may be due to increasing product prices in international or domestic markets, or due to improved market access increasing producer prices locally. Reduction in input prices may also play a role in increasing net income. Technological change that increases production and productivity is an important source of agricultural development. Such change can take the form of adoption of new crops and crop varieties, the adoption of new or improved livestock or the adoption of new management practices of soils, water, crops or livestock. In addition to the factors mentioned above, there may be areas where production can increase through more land being taken into cultivation, even without changes in prices or technology used.

Nigeria's agricultural development strategy over the years has been centered round certain key policy areas and programmes which the country has pursued with expectation that these will lead to the development of the sector. Some of the policies are outlined below:

a) **Agricultural commodity marketing and pricing policy:** The major instrument of agricultural commodity marketing and pricing policy was the establishment of six national commodity boards in 1997 to replace the regional, multi-commodity boards that had been operating since 1954. The six new national commodity boards were for cocoa, groundnut, palm produce, cotton, rubber and food grains.

b) **Input supply and distribution policy:** Government policy on input supply and distribution focused on instrument for ensuring the adequate and orderly supply of modern inputs like fertilizers, agrochemicals, seeds, machinery and equipment. The key policy instruments were:

   i. Centralized Fertilizer Procurement and Distribution in 1975.

   ii. Creation of a National Agro- Service Centres to facilitate the distribution of modern inputs.

   iii. Creation of a National Seed service in 1972 to produce and multiply the improved seeds for rice, maize, cowpea, millet, sorghum, wheat, etc.

c) **Agricultural input subsidy policy:** This relates to subsidizing the prices of key inputs. This has been on from as far back as the 1950s, but in the early 1970 this policy became centralized Policy and instruments adopted were:

   i. Fertilizer Subsidy which between 1976 and 1979 attracted a 75% subsidy, this was subsequently reduced to 50%.

   ii. Liberalization import policy in respect of tractors and agricultural equipment.

   iii. Massive assistance programme to farmers on land clearing through cost subsides.

   iv. Launching of machinery ownership in 1980.

d) **Agricultural co-operative policy:** A number of policy instruments were adopted to mobilize people for social and economic development through agricultural co-operative. These include:

   i. The use of agricultural co-operatives for the distribution of farm inputs as well as imported food commodities.

   ii. The provision of necessary encouragement for the establishment of co-operative farms and other cooperative enterprises.

e) **Water resources and irrigation policy:** The major instruments of water resources and irrigation policy was the establishment of eleven River Basin Development Authorities in 1977 with the overriding responsibility for the development of the country's land and water resources.

CHALLENGES OF MASS MEDIA BROADCASTING CHANNELS

Challenges of broadcast media in disseminating agricultural information for agricultural development include:

Poor power supply

Listening and viewing of radio and television agricultural programmes or related development news in Nigeria is largely dependent on regular supply of power but due to the unstable power supply, the viewership and listenership of those agricultural development news have been greatly deprived of having access to them which consequently affects mass media agricultural information dissemination.

Language barrier

English language still remained the medium in which agricultural information is disseminated by radio and television in Nigeria but a large percentage of recipients of

those information could not comprehend vividly the contents of the message due to their low level of education, hence, lack of agricultural information in available local languages contribute to mass media broadcasting channels constraint in dissemination of agricultural information to the users.

Lack of fund

This is one of the challenges that rendered ineffectiveness of radio and television broadcast on agricultural issues to farming community in Nigeria. Broadcast media information dissemination on agriculture has been poorly funded by government and donors when compared with other programmes such as sports, politics, fashion and security programmes. Lack of fund on research and development projects on agriculture and communication of agricultural development projects and programmes are problems associated with broadcast media information dissemination.

Lack of qualified personnel

Journalism in Nigeria has not yet reached the level of acceptance because many of the broadcast media station in Nigeria employ unqualified personnel that do not have the required skills and experience on agricultural journalism therefore resulted to poor quality of broadcast media contents.

Lack of training

Journalists in Nigeria lack training that keep them up with the pace of journalistic activities on agricultural matters. This has consequently lead to journalistic blunders in the aspects of news writing and report. Lack of professional training pose threats to the broadcast media agricultural information dissemination specifically in terms of technical information packaged for easy comprehension by the audience.

CONCLUSION AND RECOMMENDATIONS

Conclusion

Agricultural information is considered as one of the most important resources in agricultural and rural development that assists the farmers to make decisions and take appropriate actions for further farming-related development. It is a key component in improving small-scale agricultural production and linking increased production to remunerative markets, thus leading to improved rural livelihoods, food security and national economics. Dissemination of agricultural information remains a promising strategy for increasing agricultural output and broadcast media channel has been considered as one of the tool for rapid dissemination of information to large audience. The success of the transfers of information to the ultimate users is usually done through the use of broadcast media which is increasingly becoming a veritable instrument for transforming Nigerian agriculture. In view of broadcast media in the dissemination of agricultural information for agricultural development in Nigeria, broadcast media channels are faced with the various challenges that limited them in disseminating agricultural information for agricultural development which includes language barriers, unstable power supply and lack of qualified personnel.

Recommendations

Nigeria is a country of diverse tribes and ethnic groups, so information should be disseminated in the native languages of farmers that are spoken by the rural communities.

Government needs to improve power supply for easy access of rural populace to the broadcast media agricultural information.

Journalists in areas of agriculture should be employed so as to be able to deal with any new related to agricultural development.

Training informs of seminars, workshops and conferences should be organized by media houses for journalists to ensure that they are better equipped to perform their duties well.

The broadcast media stations should be improved upon so that they can adequately cover all the rural and remote areas in their transmissions.

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