ORIGINAL ARTICLE

The Role of Radio in Promoting Agricultural Development: A Case Study of National Agricultural Extension and Research Liason Services (NAERLS) Zaria

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Abstract

Over the years, it has become evident that rural people, and people who are marginalised and powerless within their own communities, are excluded from processes of development that are meant to address their basic needs. Resultantly, they find themselves at the extreme end of the communication trajectory as mere receivers of information. Often times, due to certain constraints, they lack the capacity to understand the information received. This paper looks at communication as the heart of change and how Radio is used to communicate agricultural development. Using the National Agricultural Extension and Research Liaison Services (NAERLS) Zaria's efforts in teaching Agriculture on air, the paper finds that NAERLS's mode of communication has achieved success but there are still areas where more participation is needed. The paper therefore concludes that Agricultural Communication requires active participation from all the stakeholders to achieve sustainable development.

Key words: Agriculture, Communication, Development, Participation, Radio

Introduction

In rural areas throughout the world, agriculture represents the predominant land use and a major component of the viability of rural areas. Farming and related activities make up the basic fabric of rural life, contributing significantly to the overall state of rural regions in terms of employment and business opportunities, infrastructure and quality of the environment.

The degree to which farming represents a share of the rural economy, and hence its relative importance as a sector, determines its potential economic contribution to rural development. In some countries, farming may be the primary economic activity of a region and may support the vast majority of the population in employment (Enyi, 2014). In such regions, it is clear that overall social and political stability is inextricably linked with the condition of the agricultural sector.

However, in most economically developed countries, farming accounts for a relatively small part of a diversified rural economy, and in addition the significance of agriculture in terms of the proportion of national wealth and employment is, in most regions, in decline (Wates, 2000). This does not lessen the potential role of farming in rural development in those countries, but the contribution of alternative economic activities, which may offer durable prospects for employment and economic progress, should also be included. Since the contribution of farming to rural development in different countries varies to a great extent, policy responses need to be correspondingly distinguished, with the aim of maximising benefits to society.

Rural development is understood primarily in the economic sense of the process of assuring a progressive improvement in economic security of people in rural areas. Rural areas are usually defined in terms of maximum population density, with figures varying from 150 to 500 inhabitants per square kilometre, depending on the structure of society(Wates, 2000).

The maintenance of appropriate levels of farm employment is a key concern in countries where the greater part of employment is currently provided in the farming sector. Political and social stability could be especially threatened by changes in

economic activity which produce sudden impact on farming. Small and isolated economies, particularly those whose trade is dependent on a limited range of agricultural products, may be vulnerable to changes in global trading conditions (Enyi, 2014). Even in those economically developing countries in which one agricultural sector is considered efficient in global terms, rural society, which overall depends on many other sectors of activity may be at risk of serious upheaval from rapid change. In these regions, efforts to strengthen the farm sector could include investment and improvements in productivity, while assuring the management of consequent changes to rural employment patterns.

The availability of labour can dictate the type of farming practised and in particular the extent of mechanisation. Those employed in farming may have skills which are not easily adaptable to alternative activities, even if the opportunities were available. Many societies have a need to avoid high rates of rural urban migration and to manage structural change in rural areas without excessive disruption (Enyi, 2014)). Thus, even if production of a commodity were to be more efficient in another part of the world, a country should have the means to limit disruptive and potentially catastrophic changes to its rural economy.

It is recognised that, in principle, increasing employment on farms can be achieved, in the short term, by increasing production: more labour is required to produce more output. However, over the longer term, this trend will be superseded by increases in productivity, resulting in the expectation of an overall and continual decrease in farm employment.

In societies which recognise the cultural importance of ensuring a balanced economic development throughout the territory, including in its peripheral areas, particular attention will have to be given to supporting the viability of the farm sector. Efforts to maintain or increase employment in areas suffering from structural disadvantages, such as remoteness and difficulty of terrain, where there may be little alternative activity to agriculture, should inevitably focus on the farm sector (Wates, 2000). However, in rural areas where a diverse rural economy exists, employment and other rural development initiatives should examine all the alternatives to assess the most appropriate and durable options.

The farming sector will require ancillary industries to service and support the production activities. These enterprises are also a source for employment and economic development, although many are not located in rural areas. In peripheral areas, the quality of provision of essential services, such as health care and education, will depend on the level of economic activity and size of local population. These factors may be dependent on the relative prosperity of the farm sector, particularly in areas having few alternative sources of employment.

Increased economic stability can be provided to the farm-based rural economy by encouraging the development of activities to add value to their production, such as processing of consumer products on-farm or in the rural areas. Farmers can also take greater control of their economic position through co-operative ventures or by selling to consumers directly through farm shops and markets. Improvements in infrastructure, notably communications networks, may increase the competitiveness of the farm and other sectors of the rural economy. Infrastructural investments can also facilitate the installation of new enterprises on farm sites.

Communication

The past years have witnessed unprecedented growth in the worldwide spread of electronic mass media, mainly due to the proliferation of communication satellites, along with lowered costs and increased sophistication of receiving equipment. Much of the change was undirected, however, and largely due to the incidental effects of entertainment programming. Its global impact was mainly on people living in industrialised countries, and to a lesser extent those in urban centers of developing countries (Brennan, 2009, p. 6). By and

large, the same pattern of distribution and access has been evident in the 1990's with the emergence of knowledge-based societies increasingly relying on Internet/Web access for information, communication, and entertainment.

Concurrently in the rural areas of developing countries, particularly Asia and Africa which together constitute almost three-quarters of the world's population and where nearly 70% live in the countryside (Brennan, 2009), the idea of using communication for a variety of rural development projects, and agricultural improvement in particular, grew out of relatively consistent research findings that found that audience-oriented communication strategies could play a catalytic role in accelerating the rate of technology transfer through providing relevant information, changing negative attitudes, and skills training.

Littlejohn (1999, p.67) explains further that:

> Small media were mainly used (e.g., video, radio, flip-charts, illustrated pamphlets, village theatre) appropriate to a given community, province or region. Strategies ranged from multi-media campaigns to support for group meetings conducted by extension agents, and materials to strengthen interpersonal communication. Over time, participatory methods were refined to bring in the views of the intended beneficiaries from the start in designing project goals and selecting appropriate communication approaches to support implementation.

The importance of communication cannot be over-emphasized in participation. Closely linked to this aspect of development are two major trends that have developed over time in the area of communicating development to the people. The first according to (Slocum, 1995, 7) is an approach that supports grassroots communication through the use of media forms like community videos, posters and small-scale projects and the other approach supports and relies strongly on the mass media.

Therefore, communication means a process of creating and stimulating understanding as the basis for development rather than information transmission (Abah, 2007). Communication is the articulation of social relations among people. People should not be forced to adopt new practices no matter how beneficial they seem in the eyes of agencies and governments. Instead, people needed to be encouraged to participate rather than adopt new practices based on information.

Because media and technologies were perceived as foreign to local communities, they should be used to supplement instead of dominate interpersonal methods. Community-based forms of communication such as songs, theatre, radio, video, and other activities that required group intervention needed to be promoted. Being more than mechanisms to disseminate information, they could provide opportunities to identify common problems and solution, to reflect upon community issues, and mobilise resources. Community members, rather than professionals, should be in charge of the decision and production processes (Gregory, 2000, p.234).

Agricultural Communication

Agricultural communication is a field that focuses on communication about agriculture-related information among agricultural stakeholders and between agricultural and non-agricultural stakeholders. Agriculture is broadly defined in this discipline to include not only farming, but also food, fiber (e.g., cotton), animals, rural issues, and natural resources. Agricultural communication is done formally and informally by agricultural extension and is considered related to science communication. However, it has evolved into its own professional field.

By definition, agricultural communicators are science communicators that deal exclusively with the diverse, applied science and business that is agriculture. An agricultural communicator is "expected to bring with him or her a level of specialized knowledge in the agricultural field that

typically is not required of the mass communicator" (Chekwendu, 1997). Agricultural communication also addresses all subject areas related to the complex enterprises of food, feed, fiber, renewable energy, natural resource management, rural development and others, locally to globally. Furthermore, it spans all participants, from scientists to consumers - and all stages of those enterprises, from agricultural research and production to processing, marketing, consumption, nutrition and health. A growing market for agricultural journalists and broadcasters led to the establishment of agricultural journalism and agricultural communication academic disciplines.

Increase in agricultural productivity is often linked with questions about sustainability and sustainable development. Changes in agricultural practices necessarily bring changes in demands on resources. This means that as regions implement measures to increase the productivity of their farm land, they must also find ways to ensure that future generations will also have the resources they will need to live and thrive. One of such ways is the use of Extension workers.

Communication is a vital issue in agriculture, conveying improved and recommended agricultural practices through extension workers to clients in order to improve on their agricultural production and in marketing of their produce (Chekwendu, 1997). On the other hand, agricultural extension is an out of school education for rural people. An extension agent is responsible for providing knowledge and information on particular innovations and through communication; he passes such to farmers.

Knowledge and information are essential for people to respond successfully to the opportunities and challenges of social, economic and technological changes, including those that help to improve agricultural productivity, food security and rural livelihood. But to be useful, knowledge and information must be effectively communicated to the people.

Extension work is dependent upon the extension agent who is seen as a critical element in the activity. If he cannot communicate effectively, no matter how impressive the input supplied and the resources for an extension work, his impact cannot be felt. Indeed, the effectiveness of extension agents often determines the success or failure of an extension programme. An extension agent usually works with people; he is an educated, professionally trained person that works with farmers, many of whom might have had little or no formal education and live in rural areas (Onyibe, 2002).

The basic role of an extension agent is to bring changes into rural areas such as new skills to improve or boost agricultural production and marketing of such produce. The method and language used to communicate these are essential. Therefore, there is need to look into areas that may allow gaps in communication between an extension worker and his client which has been one of the major reasons why the clients deviate from information passed to them by extension workers.

The problem of multilingual access to information resources can be seen as an extension of the general information retrieval problems and it is becoming increasingly relevant. English has remained uncontested in the dominance but attention must now be given to other languages and subsequently the development of tools and methodologies to enable this. Consequently, the urgent mission is to demolish the language barrier to broaden information access into multilingual. By combining information retrieval with language translating, the multilingual information access system provides a way for monolingual users to gain access to information in other languages by using own native languages (Omenesa, 1992). This technique has been explored in many countries of Asia, such as Japan, Vietnam, Thailand, China and Indonesia with the attendant transformation of agriculture and improvement in the economy.

In Nigeria, the low literacy level of farmers necessitates the need for the use of multilingual system to provide agricultural information in Nigerian languages which will maximize the

exploration of the full potential of the information services. This will enable extension message to reach all farmers irrespective of their mother tongue or ethnic language.

The benefits of the development communication programmes and policies in agricultural development in Nigeria are indeed quite enormous. The TV and radio programmes can only be successful when they are professionally designed, packaged and executed by the media experts and communication specialists. These individuals should attract governments' attention to provide rural farmers with credit facilities, markets and other resources. Ultimately, there will be better rural development, and by extension national development. Hence, Enyi's view remains instructive (2014, p.14):

> The mass media have performed poorly in disseminating the requisite agricultural information to the farmers. But the effective communication of new research findings and technologies in agricultural development to rural farmers has remained promising strategy for increasing agricultural development.

There is no doubt that agriculture is back on the development agenda. But despite the promises and the rhetoric from governments worldwide, investment in agriculture and rural development is still lagging. Communication for agriculture is also not seen as a major priority at either national or international level and the role of the media as an effective player in agricultural and rural development is undervalued. Reporting on agriculture is largely restricted to natural disasters, food shortages and rising food prices. Some argue, however, that the media has a potentially broader role in raising the profile of agriculture amongst decision-makers as well as the wider public, and in communicating farmers' needs.

The role of the media in agricultural and rural development was the topic of the 2009 annual seminar of CTA the Technical Centre for Agricultural and Rural Co-operation (CTA), an institution which works in the field of information for development. Over 150 journalists, communication specialists and development practitioners gathered in Brussels to discuss the constraints, challenges and opportunities for the media to promote more effective agricultural development. This is the idea of passing information or communicating to a very large number of people inhabiting in different locations or places at the same time. The distances between the various people are never a barrier, neither do they affect the content and structure of the message (Enyi, 2014, p.15).

The mass media perform several important functions for the society, and individuals, by providing not only information, but also offering an even way of escaping the problem that confronts us. Its function of surveillance has to do with gathering and disseminating information on local, national and international issues. Such issues could range from the political, to the economic and the social. Paul Van Mele, a scientist at the African Rice Centre, makes this point:

> Out of so many channels, the conventional media, radio and television have become powerful, accessible and relevant forces of agricultural innovation and transformation to Nigeria's policy makers that have shifted its potentials to unleash innovations on the farmers. Television proved a powerful, low-cost medium for farmer-to-farmer-extension and to expose rural communities to new ideas and practices. Farmer's innovations are often shaped by capital limitations and mainly rely on locally available resources of which knowledge is a key one, (NAERLS, PCU Report, 2004,p.89).

Rural development receives poor media coverage. Most reporters consider the issue to be of little interest and relegate items on them to the furthermost corners of the news. Furthermore,

evidence of this fact is the rarity of specialist broadcasts on agriculture (Wood, 1997, p.12). The problem is partly explained by inadequate training facilities for agricultural journalism since collecting and diffusing this kind of information requires experience and a variety of skills. Knowledge of agronomy, economics, nutrition and the environment are prerequisites for journalists who want to understand agricultural issues. Unlike other sectors, such as human health, there is virtually no complete agricultural journalism programme available in Nigeria that takes all these different aspects into account.

National Agricultural Extension and Research Liaison Services (NAERLS) Zaria - Teaching Agriculture on Air

Electronic communication has become one of those wonders of the modern world, which has transformed the world into a global village. Its immediacy and use of both sound and vision have made distance teaching and learning a pleasure. Radio and television farm broadcasts qualities make them suitable channels for achieving the objective of teaching farmers new agricultural technologies. Omenesa (1992) observed that radio programmes are usually timely and capable of extending the message to the audience no matter where they may be as long as they have receivers with adequate supply of power. The absence of such facilities as roads, light and water are no hindrance to radio reception. Similarly, difficult topography, distance, time and socio-political exigencies do not hinder the performance of radio. He also observed that illiteracy is no barrier because the audience's own language is used to convey the messages. Various studies have shown that radio is effective in communicating with farmers.

Onyibe (2002) found, in a recent media consumption and preferences survey of an audience in Kano State, that listening to radio and watching television confirmed their perception about value of new technology in agricultural practices. They expressed awareness of new improved seeds like ICSV-400 sorghum variety, and Ife brown cowpea introduced to them by KNARDA. Further, they learnt about other high yielding and early maturing qualities and problems of different crops, popularized through radio. However, because the content of the programmes follow the conventional top down approach as the messages are passed down to the farmers without their participation and involvement in the process, the programmes fail to reach their full potential.

The National Agricultural Extension Research Liason Services (NAERLS)'s mandate assigns it the duty to produce agricultural radio programmes. The NAERLS Unit, which has been performing the job, is the Farm Broadcasts Unit. This programme was started in the late 1960's, when the radio broadcast was introduced for disseminating agricultural information in the northern states. The messages relayed mainly in Hausa were well received by the farming families most of which had transistor radio sets. In all, the institute has programmes in Hausa and one in English which are aired through Federal Radio Cooperation of Nigeria (FRCN) Kaduna. NAERLS radio programmes are received in Nigeria and neighbouring West African countries. The programmes are produced every week, and last thirty minutes each. They include *filin Kungiyoyin Manoma*, a programme designed to educate farmers on how to organise clubs and societies: *Noman Zamani* and *Kiwoce-kiwoce* which are targeted at livestock farmers. The English language programme is "Down to Earth". The messages sensitise farmers to the need to adopt modern agricultural practices. This helps extension agents who have face-to-face contact with the farming communities in explaining agricultural extension packages.

The agricultural radio programmes production are problem solving oriented. Logically, all programmes produced are based on the outcome of seasonal field agricultural production assessment in Nigeria. The content of the programmes follow the conventional top down approach as the messages are passed down to the farmers without their active participation and involvement in the process.

Here arises a need for reconceptualization of approach, an approach that involves dialogue, exchange of information and an active participation of the people in the process.

Conclusion

Communication is the pulse of development Communication and it is the key to developing successful participant-led projects, with sustainable and far reaching impacts. Active participation will give a voice to marginalized groups. This paper posits that the way forward for rural agricultural development is through participatory means of communicating development. The farmers need to be in control of the content that gets to them. Issues around their agricultural practices and their cause and consequences need to be grounded in the way the farmers saw them. After all, for a society to develop, it must be able to carry every one along.

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