

Development communication and social engineering: prospects for sustainable food security in Nigeria

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Abstract

This paper brings to the forefront of development discourse the significance of Development Communication as a veritable tool for social engineering. It recognizes the overwhelming challenges inherent in development in general and agriculture in particular that require complementary communication support services. The paper therefore provides conceptual clarifications of the key elements of Development Communication. In an attempt to justify the need for the integration of communication support to achieve the much desired sustainable food security in Nigeria, a comprehensive review of empirically validated communication research findings and postulations was carried out. Findings provided insight on how experts in economics, agronomy, crop protection and environmental sciences, livestock, agro forestry, wild life and fisheries could harness communication potentials to achieve economically feasible, socially consistent and environmentally acceptable technology generation and dissemination. This postulation undoubtedly justifies the need for close collaboration between experts in various specializations in agriculture with extension and communication professionals to achieve the long awaited food security beyond rhetorical levels achieved so far in Nigeria.

Key Concepts: Development Communication, Entertainment – Education, Agriculture, technology generations and food security.

Introduction and conceptual clarification

The concept of Development Communication is gradually becoming a universally accepted tool for social construction. According to Yahaya (2001) Development Communication offers opportunities to advance frontiers in troubled spots of human existence. Development and Communication have historical antecedents and justifications. According to Soola (2003a), the two interrelated concepts date back to the end of World War II, collapse of colonialism and emergence of developing countries, ethnocentrically referred to as third world nations in development discourse. This period also coincides with the formation of bilateral and multilateral financial institutions such as the International Monetary Fund (IMF) and the World Bank, as well as the creation of the United Nations (UN). These were all established to facilitate and rebuild the war devastated Europe and to some extent provide development assistance to developing nations. Consequently, the period witnessed the dominant development paradigm which postulates that development in quantitative terms is synonymous to Gross Domestic Product (GDP), per capita income, high technology (hi-

tech), mass production, urbanization and mass investment in infrastructure development etc (Soola, 2003a). Thus development was perceived as synonymous with modernization. Unfortunately, the proponents of this strategy recommended it for developing nations as a viable panacea to their chronic underdevelopment characterized by depreciating and general low standard of living. To this end, Soola (2003a) concluded that any development and communication agenda will fail so long as it does not pay sufficient attention to the tragedy caused by the historical evolution of each society and the manner in which the world economic system conditions or regulates development. Hence, development is conditioned and can only be explained by endogenous and exogenous enabling and disabling factors, never wholly endogenous (Soola 2003b). It was therefore convenient for experts to consider the option of utilizing the mass media to actualize diffusion of innovations and propaganda mechanisms to create awareness, change people's attitudes and perceptions, especially in developing countries where low level of literacy, hunger, malnutrition

and degrading poverty, fatalism and tradition – bound life styles predominates and account for delay in transformation and attainment of “modernization”. The Latin America countries were pioneers that embraced this phenomena change in the use of media for development purposes in the third world. Therefore, to have an all embracing appreciation of development communication, Yahaya (2003a 18-19) defined it as

a special communication planned and well defined for development i.e. purposely designed to achieve positive changes in income opportunities, improved living standards, dignity, justice, liberty, etc. It is further described as an action-oriented endeavor in human survival mechanism, social responsibility and development. Development communication is not only a means to actualize desired change in both social and economic transformation of developing nations, but an all embracing strategy that will provide the much needed human development in the 21st Century.

Therefore, development communication has taken a new dimension which off course is a departure from the traditional top- down approach in the near past where development planners and communication experts assumed both the problem and solutions with little input from the target population. Hence, the emerging trends in development communication insist on professional responsibility on the part of practitioners on one hand and social responsiveness or sensitivity on the part of the media organization on the other hand. There is no gain saying that the global trend in international relations from both political and economic spheres is centered around globalization and cooperation where communication remains a key variable. Therefore, at all levels of development, communication has become participatory, inclusive and people centred where all the key players have crucial roles to play as it relates to planners and intended beneficiaries.

In summary, development communication, according to Soola (2003b), is systematic utilization of appropriate communication channels and techniques to increase people's participation in development, inform, motivate and train rural

populations mainly at grassroots level. Hence, development communication is a vital ingredient of development. Therefore, utilization of appropriate communication strategies will amplify the nation's match towards attaining desired balance between food demand on one hand and the actual production on the food security equation on the other. This is particularly due to the fact that agriculture is the mainstay and major occupation of the rural population who constitute 60 - 70% of the national population which includes retired but not tired civil servants and military men. Hence, strategic utilization of communication for development purposes will invigorate the productive sector of the nation's social and economic life (Yahaya, 2001 & 2003a). It is against this background that the paper examines the potentials of a number of communication strategies for motivating change in attitude and practices in the field of agriculture in particular and development in general. Some of these are discussed in subsequent sections.

Entertainment –education in social change

The concept of entertainment-education (EE) is the emerging phenomenon in social engineering discourse that is expected to consolidate the firm belief that communication remains a reliable tool for sustainable development. Social engineering, according to Webster's Dictionary, is the application of the findings of social science to the solution of actual social problems. Therefore, EE along other forms of strategic communication methodologies offers a lot of promise in community mobilization for poverty mitigation in Nigeria as witnessed in other crucial areas of development in Latin America, Europe and Asia. The term entertainment-education has been referred to also as enter-educate, edutainment and infotainment. Experts view EE as an activity that provides education through: fun, amusement, arousal and pleasure. Hence, Singhal (1990) referred to entertainment as a performance or spectacle that captures the interest or attention of individuals, giving them pleasure and amusement. On the other hand, education has been viewed by many scholars in various ways to include opportunity to share formal, non-formal,

classroom setting and distance education, as well as individual awareness and public consciousness among others (Singhal and Rogers, 1999). Therefore, education is either a formal or an informal programme of instruction and training that has the potential to develop an individual's skill to achieve a particular end by boosting his or her mental, moral or physical power (Singhal, 1990).

For clarification purpose, both education and entertainment seek an interdependence of each other to bring about positive changes in overt behaviour, attitudes, knowledge and skills of the target audiences of change programmes. This postulation is amplified by Fischer and Malnik (1979) in their observation of the needless dichotomy that exists in almost all mass media content that must either be entertaining or educative. Interestingly, entertainment-education strategy abrogates this arbitrary dichotomy. In summary, Entertainment-education is the process of purposely designing and implementing a media message both to entertain and educate, in order to increase audience member's knowledge about an educational issue, create favourable attitude and change overt behaviour (Yahaya and Olajide, 2003). In a socially responsive perspective, it seeks to capitalize on the appeal of popular media to show individuals how they can live healthier and happier lives (Piotrow, *et al*, 1997; Singhal and Brown, 1996). Hence, in social engineering discourse, entertainment-education programmes contribute directly to social change, where an alteration occurs in the structure and function of a social system. Therefore, entertainment-education strategy provides an opportunity for an instructional message to pay for itself and fulfill commercial and social interest (Brown, 1990).

For instance, the art of story telling and folktales are deeply rooted in African culture; hence, entertainment and education are not alien to Africa. This means that utilization of EE as a tool for social change is not a completely new concept as far as social engineering is concerned. According to Singhal and Rogers (1999), its use in radio, television, comic books and rock music, at least when designed according to communication and social psychological theories, dates back to 1975.

However, it must be placed on record that, the *Archers* broadcast by the British Broadcasting Corporation (BBC) in 1951 provided the historical basis and antecedent for entertainment-education as a strategy to impart educational values and messages on audiences to change their knowledge, attitudes and practices via radio (Yahaya and Olajide, 2003). Furthermore, Singhal and Rogers (1999) identified the role of celebrities that have successfully used music to raise funds for human causes. Two specific examples that are significant to food security are the "Bangladesh-aid concert in 1971 to support the refugees and the "We are the World" concert in 1985 for Ethiopian famine relief Project that featured world-class musicians such as Michael Jackson, Lionel Richie, and Steve Wonder etc. with such "heart touching" lyrics.

In Nigeria, music as an entertainment-education strategy is not new and has been used though not extensively but effectively. For specific example, King Sunny Ade and Onyeka Onwenu, two of Nigeria's leading singers participated in John Hopkins/Population Communication Services (JHU/PCS) programme. Building on the successes in Mexico and the Philippines, the JHU/PCS officials focused on Nigeria. The choice of Nigeria by officials of the centre was influenced and informed by the country's high population growth rate and a high degree of male sexual irresponsibility. The duo of King Sunny Ade and Onyeka Onwenu recorded *choices*, which was aimed at adult men, and *Wait for Me* targeted at adolescents in 1989.

Development communication research efforts in Nigeria

In an attempt to establish the relevance of development communication and social engineering, several studies have been executed in Nigeria. This is evident from various studies reported subsequently. For instance, Yahaya (1995) in a study of the media use pattern of women farmers in north central Nigeria acknowledged the enormous contributions of women to agricultural production in Nigeria. However, the problem of inadequate agricultural information and under-utilization of mass mediated strategies of information dissemination has rendered extension delivery to women farmers ineffective. This is

further aggravated by the socio-cultural barriers to extension agents in reaching women farmers. The study showed that 92.8% of women own at least a functional transistor radio. Women's most preferred time for listening to agricultural radio programmes is 8-10p.m. (19.0%), while more than half of the women farmers (52.1%) listen to agricultural programmes weekly in company of other members of the family (86%) (Yahaya, 2003b). Television ownership is only 31.1%. Only 8.2% watch television every night, while the most preferred viewing hour to 25% of the women is 8-10p.m. Also, a majority of the women farmers (88.5%) listen to folk music on electronic media. Pertaining to readership of newspapers and extension publications, about 41% of the women farmers do read newspapers (vernacular and English versions). Also most of the respondents (69.8%) do read extension publications in Hausa (74.2%).

In general, the major sources of agricultural information are extension agents (92.6%), radio (72.1%), ADPs (58.8%) and women groups (51.1%). However, non secluded women farmers are more willing than secluded women farmers to participate in media programme production. The study further reveals that agricultural information need is significantly related to media use pattern ($r = 53.6$; $p = .001$). The study also indicates that media practitioners are generally favourably predisposed towards coverage of women activities. However, female practitioners are more favourably predisposed than their male colleagues ($\bar{X} = 117.40$ and $\bar{X} = 107.62$ respectively). The major constraint to coverage of activities of women farmers is religious barrier to practitioners.

Yahaya and Badiru (2002) alerts that in Nigeria, as in many other countries, limited number of extension agents (one to 4,000 farmers) make it impossible to reach all farmers by interpersonal means. For this reason, radio and, more recently, television have been used by agricultural organizations to disseminate relevant agricultural information to larger numbers of farm families at minimal cost and to areas hitherto not accessible to extension agents on a regular basis. While prior studies have confirmed that these radio programmes have large audiences, there has been

less attention on the perceptions farmers hold about the specific benefits these programmes provide. This study by Yahaya and Badiru (2002) examined the performance of two long-running Nigerian agricultural programmes, one for radio and the second for TV. Farmers' programme impact assessment indicates that specific programme components such as farm level operational techniques broadcast and the value of the two programmes in agricultural production improvement were perceived to have contributed positively to their enhanced performance based on the parameters considered in the study. In another study that examined the influence of communication channels on farmers' utilization of improved cocoa seed technologies among cocoa farmers in Edo State, findings revealed that communication channels influence farmers' use of improved cocoa technologies ($X^2 = 147.485$, $P < 0.05$). Also, majority of cocoa farmers (93%) ranked extension agents as leading sources of information. Also, only those communication channels that cocoa farmers are aware of and familiar with or within their reach influence use of improved cocoa technologies ($X^2 = 108.5785$, $P < 0.05$) (Yahaya and Omokhaye 2001). In another study that examined the agricultural information needs of crop farmers in Afijio Local Government Area, Yahaya and Akinboye (1999) established that 80.8% of the farmers prefer electronic media like radio and television in obtaining their agricultural information while 19.2% prefer print media such as posters, flipcharts and journals. Also, over half of the respondents interviewed in the study area have access and listen to agricultural programmes on radio.

The prospects of EE for addressing agricultural problems in Nigeria was established by Olajide (2002) when he investigated media practitioners' perception of utilizing EE format for agricultural information dissemination. The study revealed that audience characteristics were favourably perceived by 46.5% of respondents which shows that EE is a viable tool for technology transfer in agriculture. However, majority of the respondents identified funding (72%), neglect of agricultural sector (65%) and infrastructural factors

(52%) as perceived problems for EE utilization for agricultural information dissemination.

Though a higher proportion opined that awareness/mass mobilization (65.8%) and interest booster (65.7%) are some of the promises of using EE format. Hence, given the favourable overall perception of EE format utilization despite perceived problems, integration of EE into media agenda for agricultural information dissemination in Nigeria becomes imperative.

These postulations are quite significant for change in view of myriads of inter-related development problems in Sub-Saharan Africa including multi-faceted development crisis that have resulted in poor socio-economic status, undernourishment, poverty, hunger and diseases. In an earlier study, Olowu and Yahaya (1993) investigated Nigerian Journalists attitude towards rural development news coverage, barriers to such coverage and their sources of rural development news. The findings indicate that Nigerian journalists generally realize the important role they have to play in the rural development process. However, they are not favourably predisposed to the coverage of rural development news neither do they subscribe to specialized agricultural or rural development columns in Nigerian newspaper. The journalists generally obtain their rural development news from institutions that have development experts. They also perceive their personal interest and the financial gains of newspaper organizations as obstacles to the coverage of rural development news. Meanwhile to further ascertain the true picture of print media and rural development in Nigeria, Yahaya and Olowu (1995) further content analysed a number of newspapers to ascertain the content of rural development news. Government owned newspapers published more rural development news than privately owned newspapers. Therefore, the fact that there exists favourable disposition of journalists towards rural development news coverage does not reflect rural news space in Nigerian newspapers. This calls for efforts by stakeholders to integrate Development Communication at all levels of scholarship in communication and development oriented studies.

Hence, the submission, Yahaya (2001) which postulated that:

in development oriented programme, there has always been the need to find the most efficient means through which groups and a great deal of people could be sensitized and motivated for change

In another study, Fawole (1995) reported the need to provide insight into newspaper coverage of women's activities with due acknowledgement that women contribute enormously to the economies of most nations. It is against this background that a study was carried out to investigate the manifest content of daily newspapers with a view to reporting the nature and extent of newspaper coverage of women's agricultural activities during the years 1970-1990. The period coincided with the decades dedicated to women issues particularly United Nations Women's Declaration delineated into three phases: conscientization (1970-74); consolidation (1976-85) and effects (1986-90). Majority of the reported women's agricultural news (93.3%) had favourable disposition towards women's activities. Furthermore, the study shows that the main structural factors of newspapers (ownership, location and size) have differential influence on coverage of women's activities in terms of numbers and space allocated. With regards to ownership, private newspapers allot more space. Location has no significant influence on coverage of women's agricultural activities with respect to number and space allocation. As regards size, small newspapers report more women's agricultural news than large newspapers. Summarily, it was concluded that, even though there is an increase in the reportage of women's agricultural activities in Nigerian daily newspapers, the coverage is still relatively low for an agrarian country like Nigeria.

In his own submission, Oladeji (1999) conducted content analysis of visuals and information cues of agricultural advertisements in Nigeria Daily Newspapers. This was with a view to ascertain the implications of agricultural advertisements in creating opportunities for farmers or agricultural publics to become aware of agricultural products and services that are necessary for agricultural production and increased production capacities. Findings reveal high

patronage, purchase and readership of newspaper with agricultural information among sampled farmers. Similarly, majority of farmers have seen and read advertisement in newspapers. However, agricultural stocks are more prominently displayed especially in the front pages than other types of agricultural advertisements ($X^2 = 12.77$, $p < .01$). Meanwhile, agricultural processed products and produce are the most advertised, followed by machinery/tools services, agro chemicals and agricultural stocks. With regards to information on agricultural product pricing and location, product price and location as well as product utility are more in agrochemicals than processed produce and products.

Meanwhile, evidences are beginning to emerge in research – extension collaboration as shown in citation patterns investigated by Adetunji (2002) where the emergence of Agricultural Extension Society of Nigeria (AESON) in 1998, brought about not only professional cohesion, direction and engagement but also, dynamism in research and dissemination processes in Nigeria. This is evident in citation pattern and research. Findings from the study reveal that Rural Sociology articles are the most published (35%), followed by Communication (27.2%), while Home Economics articles are the least published (6%). Generally, self citation is low among extension researchers, while inter-institutional citation is higher than intra-institutional citation. However, intra-institutional citation was more predominant during pre-AESON period.

Communication for sustainable food security

According to Adegboye (2004), food security is defined in its most basic form as access by all people at all times to the food needed for a healthy life. Access in this circumstance considers both quality and quantity bearing in mind issues of production, supply, demand and safety of food items that are consistent with dietary regulations. Therefore, inadequacies arising from any of these will result in famine, malnutrition, hunger, starvation and death. At this juncture, one will begin to wonder what the business of communication is in all these. The reaction is

simple; communication is catalytic, motivational and universally applicable to diverse social and economic problems. In the early extension programmes and food security initiatives, evidently, there was tremendous commitment on the part of those charged with the responsibility to make a difference in the food system. Therefore, the underestimation of the interdependent nature of the stakeholders in this direction should be revisited so as not to jeopardize the policy moves of stakeholders to achieve sustainable food security. Hence, to achieve this, agricultural extension should be allowed to play its fundamental social and economic roles. For instance, technology generation in agronomy, animal and livestock sciences, crop protection and environmental sciences, forestry, wildlife and fisheries will be ineffective and worthless, if extension is not properly accorded its primary and professional recognition in the entire agricultural and food systems. Since, extension professionals are the only trained people capable of disseminating multitudes of agricultural packages to the target population effectively and efficiently using diverse strategies at their disposal. This is further corroborated by the postulation of Adams (1990) who asserted that:

by far the most difficult problem is how to provide livelihood for a rural labour force which is expected to double by the end of the century through intensive and productive use of land to help solve food security problems. To achieve this, millions of farmers must be given access to agricultural education, the necessary production supplies, and markets

The concept of food security has become so crucial the world over in view of the gloomy picture presented by experts in recent years of the food situation. Meanwhile, communication is the nerve centre of extension. Therefore, common sense conviction shows that for any extension development programme to succeed, communication support mechanisms must be entrenched in the design and implementation process. Unfortunately, many do ignore this and it is responsible for the slow pace of development over the years. Therefore, to achieve sustainable food

security, communication strategies must be integrated. Yahaya (2000), a proponent of the integrated multi-media concept, recognizes its complementary support service to conventional interpersonal communication in technology transfer. This becomes imperative due to fewer number of extension workers to attend to millions of farmers scattered all over the country and anticipation that this strategy involves situational analysis (felt needs assessment) with particular reference to crucial areas of concern to humanity such as agriculture, health, politics, education, economy, social and environmental issues. This is with specific focus on the inputs of audiences and choice of appropriate medium in an integrated manner. It seeks to utilize multi-education format using electronic, print and indigenous media with the integration of entertainment-education strategy across all the media for sustained awareness creation, interest generation and consequent adoption of recommended strategies. Furthermore, in an attempt to combat poverty, diseases and ignorance in Africa, governments in collaboration with international agencies have initiated a number of educational and developmental programmes. These programmes are aimed at improving the conditions of the people as individuals, communities or even nations. One of the world's greatest statesmen Winston Churchill once testified to this phenomenon when he said:

"The future of the world is left to highly educated people who alone can handle the scientific apparatus necessary for pre-eminence in peace or survival in war"

In Nigeria, various innovations have been developed in the fields of agriculture, politics, economics, health and education. Yet, Nigeria agriculture remains subsistence in practice. However, series of research findings exist but remain underutilized. For national progress, substantial change in agriculture is required to bring about improvement in the circumstances of both producers and consumers of agricultural products. Change is needed not only to increase production, but also to liberate households from poverty, drudgery of manual labour, disease and ignorance. These enormous tasks rest on extension agents, representatives of commercial firms, large-

scale farms, progressive farmers and contributions of Non-Governmental Organizations (NGOs) etc.

According to Olowoye (2003) evidences from available statistics show that some of the realities for the majority of Nigerians is the apparent poverty at all levels characterized by high degree of food insecurity and poor living conditions. Even in the rural areas, an FAO official recently estimated that only about 20% of the Nigerian population is food secure all year round. Well over 30% of the population, including rural producers, experience chronic food insecurity. In addition, there is apparent evidence to show that there is seasonal point of impact in poverty times that is manifest with higher incidences during the dry season, for instance all poorer households, whether in the rural or urban areas, the most difficult time of year is the dry season before the next harvest, when food is scarce and expensive. Many farmers have no crops left to sell and often are forced to buy food on credit. A large proportion of the rural population is very vulnerable which means people are exposed to risks and generally unable to cope.

In order to maintain stable increase in productive capacity, extension should continue to play crucial roles in the effort to achieve a balanced social and economic development of rural areas.

Illiteracy is said to be highly correlated with under development. Morgan *et al* (1960) were convinced that societies which did not have zest for learning were backward even though they have many natural resources. It is in the backward countries that majority of the citizens go hungry; they suffer from controllable or preventable diseases. They live in miserable huts, are ruled by dictators and lack basic amenities that enrich living. All these are as a result of lack of education. Breaking this vicious cycle of under-development is a task that must be accomplished if Nigeria is to take her rightful position in the committee of civilized nations especially with the challenges posed by technological advancement, globalization and war against terrorism where hunger stand out as the greatest terror that has besieged mankind in close collaboration with poverty, ignorance and HIV/AIDS. It is against this background that the following interim measures are recommended to deal with the situation promptly:

Extension education

This is an informal, out-of-school system of education where rural people are helped to satisfy their needs, desires and interest. This revolves around enhancing their agricultural production and productivity. For any viable extension education, it is expected that a strong link should exist between extension agencies and the farming population. Extension education could have done better and contribute more significantly to the food security question in Nigeria but for conflicting signals emanating from various extension institutions in the country. The agricultural development programme (ADPs), the non-governmental organisations (NGOs), the University extension services, and extension departments of most research institutions have left most of the farmers more confused and worst off at the end of the day because of different approaches in mode of instruction and message dissemination. It is thus important that extension education is used to disseminate all forms of useful information to the people to break the vicious cycle of poverty

Integrated development and communication strategies for technology transfer

Over the years, dozens of innovations have emanated from our research institute and universities. However, it is sad to note that many of these either does not address the farmer's problem or too complicated for farmers to put into practice. It is important to also emphasize that where technologies are unacceptable, unaffordable, and in cases where technologies are subsidized, sustainability after withdrawal of subsidy is always a problem. Besides the problem of inappropriate technology, mode of transfer in terms of medium constitutes a set back. This is where communication comes in. Therefore, stakeholders must respect the views of communication experts in this direction if desirable results must be achieved. Therefore, giving consideration to integrated development and communication that will facilitate the utilization of multi media strategies including entertainment – education become imperative.

Community mobilization for enhanced agricultural production

Another perspective to increasing food production and security is the effective community mobilization which of course should be a rapid and pragmatic departure from use of agent-individual farmer and contact farmer-non contact farmers strategy. In existing system, agents from extension agency or selected farmers (contact farmers) are expected to reach out to teeming population of farmers with innovations. This strategy has its own demerits, which include the inability of an agent to cover his area of operation on one part and the hoarding of information on innovation by contact farmers on the other hand. In this new dispensation, media support mechanisms shall be integrated into extension outfits with equal emphasis on the use of groups such as co-operatives, social clubs, age grades and women groups to attain a more dependable multiplier effect of innovations on target group. It is envisaged that if these strategies are adopted, group advantages and the magic bullet or hypodermic needle theory of the mass media will definitely bring about adoption of innovations, use of such innovations and consequently boosting production and food security.

Credit support services

The fact that farmers have long been left to carry their destinies on their hands cannot be over emphasized. They take sole responsibility in the production, processing, marketing and distribution of farm products. It is against this background that support services in the forms of credit support services such as loans, subsidies, inputs supply and excess produce buy-off will go a long way to attain maximum production capacity devoid of unnecessary bottlenecks.

Conclusions

In the final analysis, development communication and social engineering are crucial variables needed to advance frontiers in Nigeria's march towards agrarian revolution and indeed the cornerstone that will usher in a new dawn in the food security equation in Nigeria. In the light of this discussion, it is pertinent to justify how the

national food security question in Nigeria can be addressed with appropriate agrarian reforms in close collaboration among facilitating entities. This is where the integration of multi-media strategy becomes imperative for the purpose of generation and implementation of policies directed at agricultural development in a developing country like Nigeria. Consequently, total eradication of ignorance and poverty will usher in a new nation made up of citizens that are happy and well catered for. Undoubtedly, this will positively enhance food security, stable social system, progress and match towards sustainable national development. The forgoing analysis provide additional insight to

existing body of knowledge on how experts in economics, extension, agronomy, crop protection and environmental sciences, livestock, agro-forestry, wild life and fisheries could harness communication potentials to achieve economically feasible, socially consistent and environmentally acceptable technological generation and dissemination. This postulation undoubtedly justifies the need for close collaboration between experts in various specializations in agriculture with extension and communication professionals to achieve the long awaited food security beyond rhetorical levels achieved so far in Nigeria.

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