

Application of Modern Information Technologies for Rural Development in Nigeria

Nwankwo, O. C.

ABSTRACT

Access to information services by rural community dwellers is essential in bringing about sustainable development, economic empowerment, improved agricultural productivity and poverty reduction in the rural areas. Yet, these services are not available in the area due to rural neglect despite the growing trend in technological innovations, economic pressures and regularity reforms which are making information services more affordable and available and as well, providing opportunities to bring these services to the door step of the people (both rural and Urban), thereby closing the information gap existing between the rural and the urban areas. This study has raised issues on the current state of information services to the rural people in Nigeria. The concepts of rural area, community development in the rural areas were identified to include poverty, illiteracy and social exclusion, among others. The study also highlights the information needs of the rural dwellers, and recommends that poverty reduction, reactivating the various information sources and provision of supporting infrastructure should be the priority of the government and related development agencies in Nigeria.

Keywords: *Development, Empowerment, Community, Information and Communication Technology (ICT).*

INTRODUCTION

Information can be defined as the data that has been verified to be accurate and timely. It is specific and organized for a purpose (Mchombu, 1992). It is presented within a context that gives it meaning and relevance. It can lead to an increase in knowledge and decrease in uncertainty. Information is said to be valuable when it can affect an individual's behaviours, decisions and outcomes. As data are raw materials for information, information is equally the raw material for development for both urban and rural dwellers. Prosperity, progress and development of any nation depend upon the nation's ability to acquire, produce, access and use pertinent information. Information means facts or details about something. Communications is the principles of transmitting information and the methods by which it is delivered (as print or radio or television and much more). The practical application of science or the art or science of applying scientific knowledge to practical problems is technology. Economic and national power status is considered to be dependent on the wide dissemination and use of information and knowledge (Issa, 2003). Information is the critical missing link between ignorance and enlightenment, between poverty and prosperity, between dehumanized community and empowerment. Information can be transferred into a powerful tool for the empowerment of the communities in Nigeria where majority of the

Nwankwo, O. C. is a Lecturer in Abia State College of Education (Technical), Arochukwu, Abia State, Nigeria

people occupy the rural areas. These Nigerian rural communities are densely populated with low literacy rate, high crime rate, over exploitation of natural resources, poor health and social services, poverty etc. These problems are highly pronounced in the rural areas. Information availability is a necessary ingredient in the development of a nation such as Nigeria. Having over 70 per cent of its populace living in the rural area and about 30 percent occupying the urban areas the well being of the greater derived from the rural areas, which in turn, could result to national development (Abayode, 1990). While it is evident that most of the developments and survival of the urban sector occur as a result of the efforts of the rural populace, it is ironical to note that the rural sector has constantly been neglected over the years.

Since Nigeria gained her independence in 1st October, 1960, several governments have come into power with different visions and agenda but there has not been any serious, active, conscious, sensitive and organized effort made to bring about a substantial development in the rural communities. Any slight effort in this direction is either frustrated by corrupt officials or sabotaged for self aggrandisement. Thus, this must have been the reason for the slow pace of development experienced in the country. This is because rural neglect has resulted to the exodus of rural dwellers to the urban areas which has given rise to problems such as unemployment, crimes, poverty, bribery, spread of diseases, money laundering, prostitution, child labour, insecurity, shanty living areas, terrorism, kidnapping, bombing like that done by the *boko haram* sect and over stretching of the facilities and infrastructure in the urban areas.

However, access to information services has remained concentrated in a few population groups and regions as a result of the presence of economic activities more in certain regions than the others. This divide is not only prevalent among countries but also exist within a country such as Nigeria between the rural and urban areas. While differences in telephone density, available libraries, radio, and television stations, etc are very large, it is even more pronounced for internet. The aspects of these digital divide are poverty and isolation, though both dimensions are important, isolation is a major challenge to the availability of information services for rural community development in Nigeria. We are living in an information age when development of information technology and information services throughout the world are changing the way and perspectives of human lives. To keep pace with the information age and to face the challenges of the significance of information as it plays an important role in agricultural, economic, social, cultural and political development.

In the area of Agriculture, however, only those in research institutes and some offices in the universities and colleges of agriculture have integrated the technology in disseminating information to the target audience or intended beneficiaries. Rural farmers who are the main producers of food in Nigeria are yet to benefit from the technology. Information technology could help rural communities and areas to upgrade themselves from peasant farming to modern agriculture (Nzeakor, 1999) through:

- i Provision of equitable access to new techniques for improving agricultural production.

- i Reduce food storage losses through more efficient distribution network.
- iii Efficient marketing of agricultural products through information and telecommunication networks.
- iv Establishment of information supplies for monitoring market performance and measuring market failures.
- v Development of information systems to address food security issues such as agricultural production, government subsidies for food security, monitoring of water and land resources, diseases problems, food transformation and storage.

Rural Community Development

A rural area can be described as an area that is characterized by size, sparsely populated, homogenous and agrarian in nature. Poor access to information and infrastructural facilities in rural areas are prevalent. Community, in this context can be seen as a place where a group of people live, associate, relate and possess a communality of interest, needs and objectives which results to a unifying force that gives rise to identity. A community is a group of two or more people who have been able to accept and transcend their differences regardless of the diversity of their backgrounds (social, spiritual, educational, ethnic, economic, political, etc). This enables them to communicate effectively and openly and to work together toward goals identified as being for their common good. Community is referred to a specific group of people (a geographical community, a church congregation) or it can describe a quality of relationship based on certain values and principles.

Rural development is any effort made by the government with the assistance of the rural people in order to improve socio-economic status of the rural dwellers. Rural development should be a conscious effort of the people, that is, being expressed in their active participation in programs designed for their wellbeing in their community (Mgbada, 2010). This active participation could be in their resources, time, energy, etc. where governmental and non-governmental organizations initiate and provide bulk of the resources needed in rural development, emphasis should be on the people's ability to manage those resources in solving their problems. Rural development could be visible and tangible in the case of building hospitals, markets, schools, etc or invisible and intangible which could be in activities that results in a positive change in the knowledge, attitude and skills of the people. For there to be an effective change in and around the people, they have to be well informed on the direction of change required of them. They have to know how to go about the change, when to effect the change, who is fit to occupy administrative position in rural development. Considering that development from whatever point of view is a dynamic task. This work will examine how information services can be gainfully utilized in facilitating the attainment of meaningful, profitable and enduring rural development in Nigeria.

Information Services and Rural Development

There is a popular saying that knowledge is power, which is indeed a fact. The level of community development programs that could be carried out by the rural dwellers depends on the information available to them. The state of the rural dwellers is pitiable as poverty is extreme. Here, one experiences absolute absence of social amenities and essentials of life.

Information is the only means by the real integration of people living in both rural and urban areas could be brought together. The urban area is known for its elite nature as a result of many infrastructural facilities as schools, hospitals, electricity, provision of potable water, industries, and transportation system. The reverse is the case in most rural areas in Nigeria where one hardly finds any of the aforementioned facilities. These facilities and their presence are indicators of development. Development involves economic growth, modernization, equitable distribution of income and national resources and social economic transformation, among other things (Abayode, 1990). This proves that it should be difficult to have development, even in the urban centers without adequate provision of information, not to mention that of rural areas. Human potential may be difficult to tap if the right information is not provided. For man to harness his personal potential and resources around him, he needs to be armed not only with information, but also on how to utilize it. Average rural areas in the country are agrarian communities whose means of livelihood are subsistence farming. The urban drift has consumed most rural areas, leaving behind aged men and women who continue to live in abject poverty. The present picture of the rural areas can be changed only through concerted and well coordinated efforts of information dissemination.

Extension Services as a Source of Information Service

Extension can be defined as a service or system which assist farmers through educational procedures, in improving farming methods and techniques, increasing production efficiency and income, bettering their levels of living and lifting social and educational standards (Obibuaku, 1983). It can also be defined as a conscious use of information to help people form sound opinions and make good decisions (Mgbada, 2010). Agricultural extension services aims at improving the living standard of the people by providing them with relevant information that will bring about increase in their agricultural productivity and as well, improve the general well being of the farmer.

However, the low level of agricultural growth has been attributed to, among other things, poor research – extension – farmer – linkages and ineffective technology delivery systems, including poor or inefficient information and communication packaging and delivery systems (Obibuaku, 1980). This is because of the inadequacy in the abilities of the extension agents, farmers, and research personnel to be able to access internet and others to get relevant information on contemporary issues. The recent refocusing on agriculture through the recognition of the role of extension services by the Nigeria government; the granting of subsidy to agricultural input in order to achieve food security; and with 65% of Nigerians not having good food mixes, coupled with about N3.2trillion spent on the food importation yearly (NCE, 2008), the stage is fully set to encourage the use of information and communication technology to boost agricultural production in Nigeria. The advent of Information and Communication Technologies (ICTs) has made the world a global village through the process of globalization. This means bringing the world to individual's doorsteps irrespective of the distance. This implies that those in the rural areas are no exception. The technology, which involves the use of internet, radio and telephone and many others to

pass information, has been adopted in almost all sectors of the economy, professions-example, commerce, mining and so on, and the result has been tremendous but not so in agriculture.

Library Services as a Source of Information Service

The library, as a repository of knowledge has changed its horizon over the years to become not only a place or building but a thoroughfare through which information can be delivered to people, no matter the location. Since human race and evolution to date, library service has metamorphosed in many ways, information services to man should also change to reflect his present state and status in today's society. For rural development to make a strong impact on the lives of the people, they will need to be provided with the essential materials and technical support that match their needs and cater for their areas of interest. Since the rural communities are farming communities, information on how to improve their farms and means through which they can improve their farming techniques should be provided for them in a format that they will understand (Abayode, 1990). Information on modern farm practices and chemicals that will improve their farm yields should be in a language that they must understand, with pictorial articles or information could be in pamphlets or shown to them through audio-visual aids. The audio-visual aspect has the advantage of combining both vision and sound information especially for the demonstration of modern farm techniques. As a matter of facts, in providing agricultural extension services, librarians should be encouraged to adopt canvassing on mobile library to bring library services to the doorsteps of the farmers in rural areas in Nigeria.

Mass Media as a Source of Information Service

The mass media are the entire array of the envisioned and designed to large audience, like ICT, radio, television, magazines, newspapers, and the World Wide Web (www). The term was coined in the 1920's with the advent of nationwide radio network and mass-circulation newspapers and magazines. The word "media" is widely used as a short-hand for "mass media". "Media" is the plural of "medium", and thus refers to the multiplicity of publications, broadcast outlets, etc. In addition, "media" is often used interchangeably with "news media", disregarding the fundamental distinction between those two terms. Below are explanations of some forms of media.

Information and Communication Technology: This is defined as technology which facilitate communication and thus process and transmit information electronically. Information and Communication Technology (ICT) is a combination of both computing and telecommunications for the purpose of handling information (Uzor, 2003); thus helps in sharing ideas, data and other relevant information for improvement of life. Information and Communication Technology (ICT) is a concept that has become globally appreciated. It has made the world to assume a village status. One will be in his/her office or residence and monitor the events that happen all over the world, as a result of discovery of the internet, e-mail, e-system, digital and metro-digital machines and a host of other information technologies available for the use of mankind. Expanding the concept further, Information

and Communication Technology (ICT) is a generic term referring to technologies that are used for collection, storing, editing and passing information in various forms (Ofojebe, 2006). Ofojebe went further to say that a personal computer is the best known example of the use of Information and Communication Technology (ICT) in education. However, he continued that the term multi-media, is also frequently used and it can be interpreted as a combination of data carried, for instance video, CD-ROM, Floppy disk, the internet and software in which the possibility for interactive approach is offered. Information and Communication Technology (ICT) is an umbrella term that includes all technologies for communication of information. Information and communication technology include technologies that facilitate communication, processing and transmission of information by electronic means (Arokoyo, 2005). This definition if categorized, encompasses the full range of Information and Communication Technologies (ICTs) from radio and television to telephones (fixed and mobile), computers and internets (Ani, 2007). Information and Communication Technologies (ICTs) are electronic devices used in capturing, processing, storing and communicating information. Information and Communication Technology (ICT) covers any products that will store, retrieve, manipulate, transmit, and receive information electronically in a digital form (Heeks, 1999).

Information and Communication Technology (ICT) is defined as all published knowledge in all aspect of agriculture, example, computer, internets, telephones (mobile and fixed), television, e-mail, fax, radio etc. Information and Communication Technology (ICT) encompasses any medium that records information whether paper, pen, magnetic disc or tape, optical disc, CDs, DVDs, flashes etc (Agbamu, 2007). It refers to all kinds of electronic systems that are used for broadcasting, telecommunicating and all forms of computer mediated communications (Obi, 2002). Information and Communication Technology (ICT) is defined as technological tool and resource used to communicate, create, organize, disseminate, store, retrieve and manage information (Nwachukwu, 2004). They comprise computers, the internet, broadcasting technologies (radio and television), and telephone (Chaka, 2008). Information and Communication Technology (ICT) is a vital tool for solving communication problems worldwide. Its applications are making drastic changes both in electronic and social development (Chaka, 2008).

The Federal Government of Nigeria in recognition of the importance of Information and Communication Technology (ICT) in improving knowledge, states in the National Policy on Education that government shall provide necessary infrastructure and training for the integration of Information and Communication Technology (ICT) in advancing knowledge and skills in the modern world (FRN, 2004). Information and Communication Technology (ICT) is a whole range of facilities or technologies involved in the formation, processing and electronic communications to be handled with skills and expertise for effective achievement and realization of its potentials in both education and social economic development of Nigeria society (Ezeugbor, 2008). Basically, Information and Communication Technology (ICT) is not to computer applications; it includes computer applications, internet, newsprints and many others. Information and Communication Technology (ICT) is the study of the technology used in handling of information and aid

communication. Also, Information and Communication Technology (ICT) can be defined as the computing and communication facilities and features that support various teaching and a range of activities in education. Information and Communication access implies not only the physical availability of communication equipment and methods but also the existence of the right conditions for their use in getting information. These conditions include the ease of use or user friendliness of the technologies, regular electric power supply and availability of spare parts. It must be noted that the problem is not only the presence of ICT facility, its use depends on the user's capability. Information technology use refers to the extent to which the technologies are utilized for communication purposes. It also explains the level to which the potentialities of the technologies are harnessed for the information generation and transfer.

Information and Communication Technology (ICT) capabilities refers to knowledge and skills required to effectively utilize communication facilities and correctly receive and transmit information to and from in Agriculture (up and down information flow) in extension administrations. Information and Communication Technology (ICT) capabilities consist of the resource needed to generate and manage information exchange in institutional structures and linkages (Adeyinka, 1990). Information technology can be grouped into broadcast technology, print, telecommunication technologies and computer/micro electronics technology. Print technology includes print media such as newspapers, magazines, bulletins, posters, calendar of work, newsletters, leaflets, pamphlets etc. Broadcast technology refers to the broadcast media such as radio, television, cinemas, media vans, computer fax, e-mail, CD-ROM, GIS and the internet.

Information and Communication Technology (ICT) has become a very important feature in the Nigerian agricultural sector in contemporary times. Even though it is still a new concept an increasing number of professionals and organizations (Agricultural Development Programs) is appreciating its use for development. Through internet one can easily have access to published articles, press released journals, bulletins and comfortably in his house and other destinations. Access to Information and Communication Technology has become crucial to a sustainable agenda of technological development and poverty reduction. Information and Communication Technologies affect poverty reduction through three primary mechanisms, increasing the efficiency of global competitiveness of the economy as a whole with positive impacts on growth and development, enabling better delivery of public services such as health and education, and creating new sources of income and employment for the poor populations (Arowosafe, 2005).

Access to communication network has however remained concentrated in a few regions and groups within the contours of this new digital divide. The digital divide as measured by indicators such as telephone penetration and number of internet hosts exists not only between developed and developing countries but also, within countries, between rural and urban populations and between the rich and poor. While differences in telephone density are very large, these are even more pronounced for the internet. As discussed earlier, the major causes of this digital divide is poverty and isolation which is why rural communications are central to any discussion of universal access. However, there are

wide disparities in access to Information and Communications Technologies (ICTs) among and within countries, a notion which has come to be known as digital divide. Narrowing through accesses and removing barriers to information and access to knowledge is therefore a priority in promoting sustainable development and alleviating poverty. Technological innovations, economic pressures and regulatory reforms are making access to Information and Communication Technologies services more affordable and providing opportunities to close the digital divide. Technological innovations have resulted in falling prices of electronic equipment, convergence between telecommunication computing and the media, and the explosion of the internet. Low costs wireless solutions ranging from multi-access radio, to cellular, to fixed wireless, and increasingly, satellites are now available for rural area at affordable prices. Also, coverage is often available in areas where the fixed telephone infrastructures are poor.

Despite this emerging trend, individuals in many poor locations may not be able to afford the up front and procurement cost of owning a telephone line or an internet-enabled PC, a community as a whole may be able to effectively share such facilities. Thus, the basic concepts of universal access is applicable not only to telephone operations, but value added services such as Multi-purpose Community Tele-center (MCT) model, which provides access to various services including basic telephone, computing and internet access, among others. There is no doubt that Information and Communication Technologies (ICTs) have irrevocably altered the world we live in-accelerating the pace and volume of innovation and fundamentally changing the way we transmit, receive, adapt and use information and knowledge and contributing to changes in the market, production methods, governance and social relations. Among others, the role of Information and Communication Technology (ICT) in rural community development viz. poverty reduction (Ezeugbor, 2008) includes:

- a. Promote the integration of isolated communities into the global economy. The existence of Information and Communication Technologies (ICTs) in all aspects of economic activities in the global economy means that failing to develop technological capacities relegates countries, regions and communities to exclusion. This is because, global businesses, no matter their size, are more likely to establish themselves in countries that offer telecommunication, infrastructure and facilities that provided them with global reach.
- b. Promote productive gains, efficiency and growth. Information and Communication Technologies (ICTs) contribute to economic growth by making both global and economic operations more productive and efficient, equality in the public and private sectors, promoting growth.
- c. Extend the reach of public services to the remotest areas, and allowing information to flow in both directions, thus, effectively empowering the poor and giving them a voice.
- d. ICTs are particularly important for rural and isolated communities. Information and Communication Technology (ICT) allow small-scale enterprises, cooperatives, and farmers to obtain accurate information on fair prices for their products and to

access regions and national markets. It also reduces the cost of transportation and support the local tourist industry. This is done by bringing market to the people rather than forcing them to live in search of markets. Information and Communication Technology (ICT) stem urban migration and generate greater income and employment potential in rural areas, which is one of the most valuable contributions Information and Communication Technology (ICT) can make to addressing poverty.

Radio: Communication through this medium is one of the fastest, most powerful and generally used in the country. It is the most popular means of communicating with rural farmers. It reaches people of different cultural levels who understand the language of transmission (Maunder, 1973). Many studies in developing countries on diffusion of innovation have proved that radio is one of the most important media of information dissemination in agricultural extension work. In southern Nigeria, the expected role of radio technology in information dissemination is not different. Radio is affordable and adaptation to local conditions as it can be used without electricity. Nigeria has the highest number of radio technology listeners in Africa with about 18,000,000 radio sets (Ebii, 2000). There are also 52 radio stations in Nigeria. The medium has become the favorite choice of most Agricultural Development Programmes in reaching farmers in remote areas. However, the information revolution neither has nor spread to majority of the Nigerians rural poor. While internet overall usage has been growing rapidly in Nigeria, there are virtually insignificant number of users among the disadvantaged. Effective use of internet is impeded by low literacy rates, linguistic barriers and general lack of relevant information availability among the rural population. Introduction of radio has been longer than any other mass medium; hence, almost every house hold has a radio set.

In fact, the least mobile phone these days have customized radio in it. The use of local languages and dialect is also more especially in radio than any other channel of communication. Radio broadcast helps to connect users to their world and community. Radio is very persuasive, accessible and is a flexible communication medium. Local radio stations are close to their communities, trusted and have intimate knowledge of their communities' problems and capacities. When provided with access to the internet and with the knowledge to make effective use of that access, these radio stations could be extraordinary intermediaries bringing global knowledge to the most remote communities (Nwachukwu, 2003). As a matter of fact, radio/internet combination could be more effective in making more knowledge and information available to the millions of rural people who do not have access to the internet but do have radio receivers and local radio stations (Nwachukwu, 2003). This can be achieved when the radio stations use the internet as an accessible platform for sharing information among stations. They could also use the internet as a research tool for radio programming, enabling stations to serve as a sort of people's gateway to the internet-a particular promising application for rural area, where libraries and other local sources of information that could contribute to food security and development are inadequate.

Television: This is an audio-visual machine, able to combine both sight and sound, thereby increasing the possibility of grasping and training the subject matter presented. Nigeria already has good television network, making access to television broadcasts easy for those who have receiving sets. However, most of the viewing public resides in urban areas where there are enabling facilities such as electricity. Most Agricultural development Programs and Television stations across the country have collaborative programs of telecasting directed to an unorganized farming audience. Although researchers have credited this medium with some successes, three main problems associated with television as a channel of information dissemination were identified (Moemeka, 1991).

On the advantage side, television provides its audience with a sense of participation, personal access and reality which approximate to face-to-face contact. Nigeria is averagely positioned to use television as a means of massive dissemination of agricultural information pointed out, that apart from Egypt and South Africa, Nigeria is the third country with the highest number of television in use in Africa (Ebii, 2000). Television services have been major sources of information dissemination to those in the rural areas. But because of affordability and outage, majority of the rural dwellers go for radio.

Telephone: This is also one of the communication technology facilities used in extension services. The researchers, extension officers, farmers and other agricultural proprietors are linked with telephone lines. The administrators within the head offices, departmental units and even those in the field (such as Extension Agents) interact with inter-communication gadgets. Telephone are of various types such as mobile phone, land phone etc., they can be used to exchange information about treatment of existing diseases in the field, control of pest infestation or to react to questions relating to farm problems and the advantage is the possibility of getting immediate feedback. Telephone appears to be the most popular means of exchanging information today. Nigeria is known to have 700,000 telephone lines as at 1999 which must have been increased by a reasonable number today. This translates to 1 telephone line to 700 people, a radio that is grossly inadequate in the new millennium. Telephone can easily provide information without one travelling miles to obtain the information (Ebii, 2000).

Printed Materials: These are information in printed forms that are used in disseminating information to a wide range of audience. They include; diaries, calendar of operations, newsletters, posters, pamphlets, bulletins, etc. Apart from the pamphlets that are used in creating awareness, this type of media is not widely used in the rural areas because of its cost and literacy requirement.

Diaries: These are usually published annually, by extension agencies to carry information concerning the agency and their activities which help in extension administration. A typical Diary of the Agricultural Development Program (ADP) contains the following information: Map of operational area, Field visit schedule, Record of daily schedule, Visits to block, circles and sub-circles, Visits to contact farmers, Calendar of fourth nights, Comments and signature of visiting supervisors.

Calendar of Operation: This is an annual publication of agricultural extension agency that indicates what a farmer should be doing at each time of the year. It shows when the farming season begins and the best time to start such farming operations as clearing, tillage, planting, weeding and harvesting.

Posters and Pamphlets: These are also paper prints use in extension communication. A poster is paper or cardboard of various sizes, shapes, and contents design on which illustrations and diagrams are made with short statements giving information. Posters are usually made in bright colours so as to attract attention. A pamphlet like the newsletter is an in-house publication of extension agency but unlike the newsletter which is periodical but continuous in publication, a pamphlet is published only when the need arises. It focuses on the outcome of peculiar activities done, example launching of farming season, demonstration of new technology; generally, pamphlet is always focused on a particular event. Other paper prints include reports, bills, etc. (Maunder 1973).

Newspapers and Magazines: Newspapers are published by either government or private agencies while magazines are published mainly by private agencies. They feature government activities and news on general issues including agriculture. Although they are not published by extension organizations, research agencies could publish their research findings and other extension activities through these powerful media. Resource persons from Agricultural Development Programmes (ADPs) act as columnists in the newspaper where they educate farmers even in the local languages on improved farming practices. Newspaper and Magazines have been credited with little success in transferring agricultural information owing to low coverage of extension news. Agriculture has not been given the necessary and adequate publication it deserves. Their limitation also derives from the fact that only literate people who live in urban areas can read it (Agumagu, 1988). In Nigeria, a lot of attempts have been made to establish local newspapers such as: Ogene, Rural Star, Udoka, Community Concord, etc. to carry the views of rural dwellers most of whom are farmers. However, some of the publications have not stood the test of time due to low or poor coverage (Ebii, 2000).

Interpersonal communication: This can be defined as communication that occurs between people who have known each other for some time. One way of defining interpersonal source of information is to compare it to other forms of information sources. In so doing, we would examine how many people are involved, how physically close they are to one another, how many sensory channels are used, and the feedback. Interpersonal communication differs from other forms of communication in that there are few participants involved, the interactors are in close physical contact to each other, there are many sensory channels used, and feedback is immediate. An important point to note here is that people get well informed here because the communication is two-way.

Information Needs of Rural Dwellers

Human beings are dynamic in nature and their needs are multidimensional, hence, they have varying information needs. In Nigeria, there is no comprehensive list of areas of information needs. But for the purpose of research, attempts have been made to explore

the needs of individuals, group or rural communities. According to Alegbeleye and Aina (1985), information need categories of Nigerian rural communities include: health information, the neighbourhood, agriculture and allied occupations, education, housing, employment, transportation, religion, welfare and family matters, legal matters, crime and safety, policies and government and land ownership among others. Information is needed by rural inhabitants in almost all human endeavours. As listed above, development and transformation can only be possible, effective and relevant when information needs of the rural dwellers are met adequately. The need for improved information services for rural community development cannot be over emphasized as the absence of it defaces the rural communities. Poverty in the rural Nigeria is on the increase and as well, the literacy level is not encouraging especially among the female folks. As a matter of fact, the reason for the under development experienced in the rural areas is because the information needs of the rural dwellers are not met. For them to pilot their destinies there is need for relevant, efficient, current and timely information dissemination.

Constraints associated with Accessing Available Relevant Information

In the field of development, information has some in-built constraints. The present conditions of rural dwellers in Nigeria are pitiable, with the presence of abject poverty, lack of social amenities, illiteracy which is because of rural neglect and social exclusion. All these, giving rise to rural-urban drift, which has been adopted as the only remedy to their present status quo. In spite of the policies and plans by Nigerian government and even NGOs, the conditions of the rural people have greatly degenerated rather than progress. One would wonder what the reason for these retarded conditions of the rural dwellers could be. The answer to this is not farfetched. A high rate of poverty and illiteracy in the rural areas has constituted a major decline in Nigerian rural community development.

In Nigeria, information service is viewed in terms of more enlightenment activities and announcements about what the State does and plans to do for the people and justification for that. Even when serious information like those on subsidies on agricultural product is to be passed to the people, the government makes it look like it is a freewill donation coming from a personal purse (Diso, 1994). For the members of a community to be able to take the right steps to bring about development, they must be rightly informed on what their needs are, how to get the necessary resources to enable them solve their problems; this involves having adequate information on the revenue allocation from the federal and state government and as well, knowing how to generate resources internally for development. Hence, government should consciously aim at providing the right environment that enhances information dissemination and consumption. To bring about progressive change, rural communities should be transformed into information conscious communities that will form the bases for their development.

Social Exclusion: This characterizes contemporary forms of social disadvantage. A country as Nigeria that is multiethnic and multicultural, shows a higher degree of inequality. Thus, depriving individuals or groups from participating fully in the economic, social and political life of the society in which they live. In social excluding communities, weak social

networking limits the circulation of information about a job, improved agricultural technologies, and political activities and community's events. Social exclusion relates to the disenfranchisement of certain people within a society. It is often connected to a person's social class, educational status, relationships in childhood and living standards and how these affects access to various opportunities. If social exclusion are eliminated or weakened, rural development can be achieved.

Illiteracy: A person aged seven and above, who cannot both read and write and do not understand any language, is treated as an illiterate. Illiteracy rates in many third world countries are alarmingly high. High illiteracy rates in rural parts of Nigeria is a serious problem in society that the government should not overlook. Hampered by the government and by other factors, the quality of education in rural districts has been quite poor. High dropout rates and low enrollment by the children have contributed to the large illiteracy rate. While the children living in rural areas continue to be deprived of quality education, part of the reason is attributable to their teachers. A large number of teachers refuse to teach in rural areas and those that do are usually under qualified. As the lack of teachers creates many obstacles for children in rural schools, another setback is the lack of resources which becomes detrimental to the learning process. Lack of books and other reading materials seem to be a widespread problem. The use of high-tech devices such as computers is very rare. Another condition of the schools is the inadequate availability of facilities in the classes, the children are actually taught in. Some schools are located in warehouses while others in small houses. Many of the rural schools operate without electricity. With time, these children grow into incapacitated adults.

Illiteracy can bring down even the most powerful nations, if our rural areas are to become developed, the government should first remove the problem of illiteracy by introducing effective programs with proper implementation and budget. It is ironical that even today, our leaders and people's representatives give literacy a very low priority, putting poverty alleviation, food, clothing, shelter, work, health etc. The failure to perceive literacy as part of the development process as an endeavour to improve the quality of life, as the process of building awareness among the weaker sections, as part of democratization of political power, to bridge the gap between the rich and the poor. They are unable to appreciate the relevance of literacy in matters like infant mortality, immunization, and children participation in primary schools, population growth, and family planning, women's emancipation, social evils like child marriage, dowry, and bride burning and so on. Neglecting the issue of illiteracy can hurt the development of Nigerian rural areas very badly. Literacy enables a person to access available information and then be able to think rationally, to be understanding, to be more responsible and to make his/her own decisions. A literate person is aware of all his fundamental rights and duties. Literacy is the ultimate solution to fight problems like poverty, terrorism, and under development. Our government is of the people, for the people and by the people, but of what use is it if people cannot even make the right choice?

Poverty: This is one of the major factors that hinder the rural dwellers from being able to access relevant information. Poverty is the state of lacking a certain amount of material

possessions or money. In contemporary time, poverty involves the lack of or insatiable quest for worldly possession. This is what makes corrupt officials of government and local representatives to circumvent resources meant for rural transformation to personal and private purses. According to United Nations definition, poverty is fundamentally, a denial of choices and opportunities, a violence of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to go to; not having the land on which to grow crops or a job to earn income, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibilities to violence, and it often implies living in marginal or fragile environments, without access to clean water or sanitation. Poverty can be viewed from different perspectives. Economic aspect of poverty focuses on material needs, typically including the necessities of daily living, such as food, clothing, shelter, or safe drinking water. Poverty in this sense may be understood as a condition in which a person or community is lacking in the basic needs for a minimum standard of well-being and life, particularly as a persistent lack of income. Where the social aspects of poverty links conditions of scarcity to aspects of the distribution of resources and power in a society and recognizes that poverty may be a function of the diminished “capability” of people to live the kind lives they value. The social aspects of poverty include lack of access to information, education, healthcare, or political power. Power may also be understood as an aspect of unequal social status and inequitable social relationships, experienced as social exclusion, dependency and diminished capacity to participate, or to develop meaningful connections with other people in society.

CONCLUSION AND RECOMMENDATIONS

Sustainable development hinges upon communities own initiative and wisdom. Efforts from development activities by the governments and non-governmental organizations can encourage the community in activating their thinking faculties so that they can determine their own destiny and can strengthen their coping capacity in line with the ever changing and challenging situation by generating and providing necessary information to the community in a way and medium which is comprehensible to them. Once it is in process, the community itself will be able to voice their own thoughts and feelings which will subsequently facilitate the toilsome task of community empowerment and enlightenment as well. For this to take place, information should be made available at the doorstep of the community, quality education for those in the rural areas should be provided, programs that will empower the rural dwellers economically should be created and as well integrating the rural people totally in national development programs for them to benefit maximally. Development agencies can play a vital role in this respect. The development agencies can facilitate the process of creating an atmosphere where different groups of the community can interact among themselves, widen their vision, redesign their programs and actions and thereby integrate them in the development process. Considering the importance of information services for rural community development in Nigeria, this study recommends that:

- i. Government should focus more on human development especially those occupying

the rural areas. Efforts should be made to eradicate poverty, illiteracy and social exclusion. This can only be done by giving the rural people timely and adequate information for use for development. All sources of information should be used effectively.

- i Extension services should be given adequate training on Information and Communication Technology and given the resources needed to provide the people with timely relevant information.
- iii The library service should go beyond keeping out dated books but should seek relevant materials that will be informative to the rural people. Audio visuals on documentaries and films featuring development and social issues should be made available at the library as these tapes could be borrowed for seminars, workshops and conferences purposes.
- iv Information and Communication Technology centers should be made available in rural areas. This will help eradicate digital divide that exists as a result of social exclusions. Professionals should be employed to instruct those that are willing to learn. Also, scholarship schemes should also be provided for those who do not have the resources but are willing to take the course.
- v Radio and Television services should not relent in sourcing for relevant information as a result of the crucial role they play in making information available to those in the rural areas. Having majority of the rural dwellers as aged and as well not well literate, the radio should strive to give first hand information to the rural dwellers to help eradicate social exclusion that makes them disadvantaged.
- vi Also, education should be recommended at the early stage with competent teachers, adequate learning environment and their payment of staff.
- vii However, for all these to be possible, all hands (which includes the three tiers of government and as well, non-governmental organizations) would have to be on deck with a unified purpose of eradicating poverty, illiteracy and social exclusion by providing relevant information to the people and as well, making them part of the development process and experience that will enable them tackle similar challenges that will steer them in the face in the future.

REFERENCES

- Abayode, O.** (1990). *The Provision of Information for Rural development*. Ibadan: Foundation Publication.
- Adeyinka, F. M.** (1990). *Technological Response of Firms to Telecommunication Development in Nigeria. An interim Project Report submitted to the African Technology Studies (ATPS)*, Ibadan: NISER.
- Agbamu, J. U.** (2007). *Essentials of Agricultural Communication in Nigeria*. Lagos: Malthouse Press Limited.
- Alegbeleye, G. O. and Aina, L. O.** (1985). *Library Services and Rural Community in Nigeria*. Ibadan.
- Agumagu, A.C.** (1988). Agricultural reporting in Nigerian Newspapers: The case of Daily Times and New Nigerian. *Nigeria Agricultural Journal*, 23, 2.
- Ani, A. O.** (2007). *Agricultural Extension: A pathway for Sustainable Agricultural Development*. 1st Edition; Apani Publications, a Division of Apani Business and Research Consult, Kaduna: No. 27, Bagaruwa Road, Costain Pp. 29 – 35.

- Arokoyo, T.** (2005). ICTs Application in Agricultural Extension Service Delivery. Proceedings, 12th Annual National Conference-AESON (4th – 7th, 2007).
- Arowosafe, G.** (2005). The Use of Information and Communication Technology (ICT) in Technical Education ETF sponsored Capacity Building Workshop for lecturers of Polytechnics and Monotechnics in Nigeria. Pp 4 and 5.
- Chaka, I. G.** (2008). Information and Communication Technology (ICT) as a Vital tool in the Education Sector Reform in Nigeria. *Nigeria Journal of Sociology in Education* (NJSE), 2, 2.
- Diso, L. I.** (1994). Information Policies and Government Guidance in Nigeria. What Hope for Communities? *Resource sharing and information Networks*, 9, 2.
- Ebii, C. O.** (2000). *A Guide in Rural Sociology for Students of Agricultural Science in a Developing Economy*. Enugu: Snaap Press Ltd.
- Ezeugbor, C. O.** (2008). *Information and Communication Technology (ICT) Competence level of Teaching in Nigerian Tertiary Institutions as a Challenge ton Harnessing the ICT Gains in Education*. In Nworgu, B.G. (ed) (2008) *Education in the information Age; Global Challenges and Enhancement Strategies*. Nsukka: Universal Trust Publishers.
- Federal Republic of Nigeria** (2004). *National Policy on Education* (4th Edition). Lagos: NERDC Press
- Heeks, P.** (1999). Information and Communication Technologies, poverty and Development. Development Information working paper Services. Paper 5.
- Issa, A. O.** (2003). *A beginners text on Librarianship*. Ilorin: Wums Commercial press.
- Maunder, A. H.** (1973). *Agricultural Extension: A Reference*. Rome: Manual (Abridged Version), F.A.O.
- Moemeka, A.** (1991). *Perspectives on Development Communication*. Nairobi: Module in Development Communication.
- Mchombu, K.** (1992). Information needs for rural Development. A case study of Malawi. *African Journal of Library, Archives and Information Science*.
- Mgbada, J. U.** (2010). *Agricultural Extension. The Human Development Perspective*. Enugu: Computer edge publishers.
- NEC** (2008). Resolution of National Economic Council meeting and relayed on “AIT” African Independence Television. World News on 10th, March.
- Nwachukwu, I.** (2003). *Agricultural Communication, Principles and Practice*. Umuahia: Lambhouse Publishers.
- Nwachukwu, D. O.** (2004). *Technology Development in Nigeria*. Aba: Ridden publishing House.
- Nzeakor, B. A.** (1999). The Local Government in the Information Age, In: the new Information Workshop for Local Government Functionaries. Nsukka: University of Nigeria Computer Communication Centre.
- Obi, C.** (2002). Information Technology skills needed by Business education Teachers for effective instruction. *Journal of World Council for Curriculum and Institution*, 4, 2.
- Obibuaku, L. O.** (1983). *Agricultural Extension as a Strategy for Agricultural Transformation*. Nsukka: University of Nigeria Press.
- Obibuaku, L. O.** (1980). Administering Agricultural and Rural Development Programs: The Role of the Extension Service. Department of Agricultural Extension, University of Nigeria, Nsukka.
- Ofojebe, W. N.** (2006). *The Place of teacher Education in Manpower Development in Nigeria*. In Maduewusi, J. and Eya, P. E. (eds) *Perspective in Techer Education*. Onitsha: West and Solomon Publishing Co. Ltd.
- Uzor, N.** (2003). Emerging roles of Information Communication Technologies in Agricultural Extension Service. *Journal of Agro- technology and Extension*, 3 (1 & 2), 141 – 145.