

# **ACCESS TO INFORMATION: THE DILEMMA FOR RURAL COMMUNITY DEVELOPMENT IN AFRICA.**

By

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## **Abstract**

The provision of information services in Africa has been dispersed and access to various information services has become more difficult; the principal victims of these developments have been rural people without having any individual means of becoming literate, due to them being too illiterate, too young, too old, too poor or too ill because of the economic and information poverty. The paper will provide a highlight on the value and usefulness of information as it affects rural community development and the need for it to be managed effectively. The premise of the paper is that promoting the role of information through the establishment of innovative community information centre (ICIC) will strengthen and empower the rural people to be among global players in the knowledge-based economy and also it will provide the opportunities for rural community development in general. This entails that the development of any rural community is a positive indicator for the development of a nation. Finally the paper provides a framework for which library and information services can be sustain to foster rural community development by making information as influential factor, which serves as an agent of social, educational, economic and political development.

## **Introduction**

Rural communities in Africa constitutes the larger percentage of the population whose information and developmental needs are not adequately met and consequently they have not been able to productively participate in the development process and enjoy the benefits thereof (Chester, & Neelameghan, 2006). Equity and justice requires that any programme for socio-economic development, whether general or in a specific sector, should cover and benefit all sections of the society, irrespective of race, caste, colour, religion, culture and other social, economic or political differences.

For long, history has shown that rural communities' in Africa has suffered from enjoying any meaningful development largely because of policy implementation gap artificially created by the African governments and leaders. The consequence of these neglect resulted in rural communities lacking access to basic needs such as water, food, education, health care, sanitation, information and security, leading to low life expectancy and high infant mortality. These conditions, considered harsh by the majority of the rural dwellers, which result their massive migration into urban areas to look for greener pasture, and often in search of formal employment, as the only option for survival. Moreover, literacy is quite low amongst the general populace

and, as UNESCO has since established, education is the catalyst of meaningful development without which no nation can propel itself into the modern era.

The emergence of information and knowledge society is a significant intervention with the potential to ensure that knowledge and information are very important for achieving meaningful development. The relevance of this revolution is supported by Balit (1996) who pointed out that the least expensive input for rural development is knowledge. Knowledge and information are basic ingredients of making one to be self reliant and are essential for facilitating rural development and bringing about social and economic change. According to Waterson, as cited by Cohen (1987:23), the purpose of rural development is "to improve the standard of living of the rural population which is multi-sectoral including agriculture, industry and social facilities". In another review Munyua (2000) asserted that rural communities require information inter alia on supply of inputs, new technologies, early warning systems (drought, pests, diseases), credit, market prices and their competitors.

Therefore, creating awareness through provision of information product and services to the rural people should become an essential component for development. It seems that rural people in Africa are not always aware of what information entails (Manzvanzvike 1993; Rosenberg 1993). So far, the nature of information (and particularly its attributes) has not yet been challenged as a possible reason why information is not viewed in the same light as other development resources. On the one hand, (Boon 1992; Martin 1984 and Paez-Urdaneta 1989) share the opinion that information (or knowledge) is power, however, information by itself is worthless and cannot solve problems. Information has power only when used and applied effectively. This apparent contradiction warrants a closer look at the attributes of information, and at how well these attributes comply with development requirements.

Information plays such an important role in almost every human activity; its value in the development process has been a topic of extensive debate. According to a number of authors, such as (Bell, 1986; Boon, 1992; Camble 1994; Sturges and Neill, 1998), all agreed that lack of information has impacted negatively on the development process. In this sense there is some concern that information is still not perceived as being as important as other resources. A number of authors, such as Neelameghan (2006) and Camara (1990: 55), hint that planners, developers and governments do not yet acknowledge the role of information as a basic resource, or are unaware of its potential value (Sturges & Neill 1998).

For this reason, information can be regarded as a basic resource by African communities which the populace may use to improve their conditions of living and is essential to development process. Not only does information expand the possibilities of social, political, educational and economic development of any country, but it also facilitates awareness and empowerment. Information is an asset and a resource for development of communities, governments, agencies, and the target population. That is why; Aguolu (1989) viewed Information as embodying interrelated or structured data which are required to enable one to act knowledgably as well as to take appropriate decisions in any given setting.

## **The Importance of information to rural community development in Africa**

The importance of information in rural community development cannot be overemphasized because information has become a supportive input for any development program. It is so vital that is why Nyerere (1967) stated that, “while other countries in the world aim to reach the moon, we must aim for the time being at any rate to reach the villages by providing them with necessary information”. Thus, it can be said that, information, if well articulated could eradicate ignorance and gives enlightenment on how to achieve economic, educational, social, political and cultural objectives towards the development of the entire community.

In addition to this, utilisation of information in a coherent form can raise aspiration, through arousing people from fatalism, fear of change, desire for a better life and the determination to work for it. This creates an intellectual climate, which stimulates people to take another look at their own current practices and future perspectives. Ideally, information brings about knowledge, and a knowledgeable community is also an informed community. This signifies that no community can develop without knowledge, and a community can only become knowledgeable if they recognize and use information as their tool for development.

It is generally agreed by a number of scholars such as Mchombu (1993, 2003), Corriera et al (1997), Okiy, (2005), Dawha and Makinta (1993), Camble (1994) and others that, rural communities in Africa have invariably lagged behind interms of any meaningful development. This constitutes to a greater extent the underdevelopment of African nations as a whole because rural communities form the nucleus of those nations. Lack of access to adequate and right information at the right time to the rural communities undermines the efforts at improving the living conditions of the rural people by both governments and non governmental organizations.

It has been observed that having access to the right information can address major problems that hinder rural community development and it can also improve chances for livelihoods. Several researchers such as Alex Pox (2003) has reported that an increase income because farmer’s cooperatives which are well informed are able to respond appropriately to changes in the market. This has made them to compete with commercial farmers, through communal viewing of agricultural programs on television and telephone conversation with distance friends and relatives. It also strengthened their social networks, such people today continue developing themselves with information they acquired.

Societal needs are satisfied through various kinds of activities, each of which requires information as an input. These include, for example, education, policy formulation, research and development, personal needs, business, decision-making, mass communications, public goods and private goods. Societal needs are also satisfied at different levels, from individuals through to global communities with information. That is why Panos (1998) Stated that “access to information is an essential condition for development”. From this juncture, it could be said that information if well uttered and packaged for rural communities will exterminate poverty, ignorance and gives enlightenment on how to achieve economic, social,

educational, political and cultural objectives towards the development of the entire society.

Access to information in rural communities of Africa is affected by a number of drawbacks, evident in ways in which rural information services are coordinated. It is agreed that information providers and experts need to pay attention to the information needs of the various groups and the communication process among each group of the user community (Odini, 1995). Therefore, the role of libraries, information centres and other agencies becomes vital in sustaining the information services for the development of rural communities in Africa. In this case, Libraries and information centres should develop their collections, facilities and services to meet the information needs of their patrons.

In addition, to accomplish this task effectively, Government and its agencies must have a careful and thorough understanding of the information needs, information-seeking behaviour, information services and information system of the rural communities. Furthermore, Governments and their agencies must have effective implementation picture that will make the rural dwellers to maximise the utilization of information for their daily activities. It is therefore, desirable to understand the purpose for which information is required, the environment in which the user operates, users' skills in identifying the needed information, channels and sources preferred for acquiring information, and barriers to information seeking and use. Adequate knowledge of the information needs of users is imperative for Government and its agencies in re-orienting the information services and activities to synchronise them with the information seeking behaviour of the rural communities.

Researchers such as (Mchombu, 2003, Aina, 2006, Correa 1997) and others all established that rural communities in African are often left out from participating in government policies, development and other important activities. Why? Because their diverse interest, literacy level, expertise, and their needed information for survival, and development are hidden from the existing information flow. The kind of information delivered to the rural communities is very much system oriented to which most of the rural dwellers cannot understand and benefit from it, and the provision is dependent on the availability, extent of content, Government interest, format and available modes of delivery. This is particularly obvious in developing countries like Africa where infrastructures and development policies are minimally provided due to unplanned development efforts by the Governments.

Today information is conceived as an important resource that contributes immensely towards the development of a nation especially in this era of information explosion. It provides the mainstay for the development of knowledge, the foundation for innovations, the resources for informed citizenry, and as a result, becomes a key commodity for the progress of any society. Mchombu (2003) stated that, "the contradiction between the vital role of information in development and its lack of official recognition in developing countries can hardly escape the attention of Information specialists". Therefore, this unhealthy situation warrants immediate concern of the information workers, professionals, governments and specialists to actively bring about lasting and favourable solutions, so that information can be fully accepted and utilized as resources contributing to the development.

Some researchers have observed this situation as an apparent dilemma of information being a powerful catalyst to transform society, and yet there is apparent weakness of linkage between information investments and the achievement of specific development goals. There is an ironic twist in developing countries, which are the least in terms of development; the trend shows that they are the least awakening to the use of information in overcoming underdevelopment (Stone, 1993).

Part of the reason lies in our information providers, Government, politicians and policymakers for not being exposed to evidence that unquestionably demonstrates the contribution of information to development. The challenge, therefore, is to produce valid models in which the socioeconomic impact of information activities could be assessed. In turn, such an orientation would result in the design and creation of impact-bearing information programs and services that could lead to rural community development (Stone, 1993). If such impact can be demonstrated by the Government, information professionals, decision-makers, resource allocators and politicians, it would definitely increase the support of information as a vital resource for development. Virtually, rural people need accessible information in order to solve problems in their everyday lives. This information provides them with a sense of security, achievement and control.

Belshaw (1965:128) and McAnany (1978:2), share the opinion that for any community to function efficiently and productively, a basic minimum stock of usable information is essential. Every society needs to acquire, store, and exchange this basic stock of information to allow it to survive. They view that information is central to the solution of any society's economic and social problems, and should be regarded as a factor of production, is now widely accepted. Pradervand (1980: 56) has gone even further to insist that information is the most basic of all basic needs. This is why community information should be viewed not only as a way to improve the quality of life of the individual, but also as a primary social concern (Baruchson-Arbib 1996; Wilson 1981).

### **Information scenario in Africa**

However, the provisions of library and information services in Africa to date have focused more on urban areas; hence there is a serious neglect of rural, non-literate masses (Adimorah, 1986, Okiy, 2003). Rural library and Information services in Africa have been modelled on western patterns, without taking account of the local environment and non-literate masses (Kantumoya, 1992; Onwubiko, 1999). In most cases these rural communities have no access to information. Chijioke (1989), Dube (1998), Sturges and Neill (1998) and Tise (2000) all concluded that, in spite of lofty ideals, African libraries have failed in their designated mission and are currently not perceived as significant players in the process of national development. This sentiment is reflected in a study conducted in Nigeria by (Chijoke, 1989; Dawha and Makinta 1993, Okiy, 2003 and Aina 2006)) in which information was emphasized as an important factor in development but libraries were not assigned any role in the process. The poor quality of existing information services are often seen as one of the contributing factors to this oversight on the part of developers. Other factors include outdated and irrelevant materials, lack of facilities, and poor management (Chijoke, 1989; Dawha and Makinta 1993, Okiy, 2003, 2005). Researches clearly indicate that existing library and information services in Africa are not extensively used. For this

reason, governments often withdraw their financial support, which brings about a collapse in services. Mchombu (1991) recorded the findings of several surveys bearing testimony in this process.

From the above discussion, it can be said that the rural library and information services in Africa are not effective and relevant enough to bridge the information and digital gap. Despite all these, researches have shown that in other parts of the world like Thailand, Malaysia, Singapore, Philippines, South Korea, India and Russia etc., rural library services have been successful through the deployment of ICTs to bridge the information and digital gap of the rural communities which virtually lead to their development (Cheunwatanna, 1998, and Yusof, 2004).

In such situation, the need for a new approach is long overdue. The consensus among modern scholars in African librarianship seems to be that libraries in Africa should develop a new approach to information management and provision in order to serve all their communities (Alemna 1995; Banjo 1998; Mchombu 1991; Mchombu 1998; Sturges and Neill 1998). Their unanimity on this point is rooted in the observation that the existence of a library is dependent upon the cultural and social factors within the community. Therefore library services should match community needs and interests rather than preconceived stereotyped information provision models.

### **Promoting the role of information for rural community development in Africa**

Access to information in rural communities of Africa is affected by a number of barriers, such as basic infrastructures, (electricity, telecommunication, utilities, roads and transportation), low level of literacy, lack of proper information services, technical competencies. It is imperative to pinpoint a specific model of community rural library and information centre that enhances innovation, as described by Bell (1979), “the changing pattern of the new information age, the dependence upon information to create innovation and change; places a high premium on the ability of nations to access and use information to create advances in the society”. Therefore, to produce a desire to change in human development, information deserves utmost attention for as long as man natural curiosity inheres in him.

To this end, information resources in all their ramifications constitutes the building block of civilization as it has been confidently postulated by Swank (1971) that no society can advance beyond a certain point without effective access to its collective memory of records or conversely an advanced society that loses control of its records will regress. Information can be influential to a greater extent, which serves as agent of social, economic and political development of any community. Thus, it has become an instrument through which all communities, organizations and individuals come into contact.

Creating demand for information that serves the needs of rural communities will initiate the process of information seeking. Convincing rural communities on the importance of information will result in accepting information as a key for development. This is foreseen as being ‘information-haves’ rather than ‘technology-haves’ is the ultimate goal. Thus, priority must be put on educating rural communities to know the importance information that is relevant to their immediate activities.

However, raising the awareness on the importance and need for information will require us to understand the community itself. Only by knowing them, then we can design and develop proper information products and services. This would include activities relating to the packaging and repackaging of local information.

Harnessing information resources for development can only be achieved when the rural communities value information, such that they are ready to seek and use information in solving daily activities regardless of the distance, format or medium in which the information is available. Empowering rural people to be among global players in the knowledge-based economy can only be done by making them aware of the importance and role of information for development. Therefore, the following should be followed as guiding principles by African leaders to follow as a way to promote information as tool and agent for development in rural areas:

- Creating awareness (i.e. through village heads, community leaders)
- Public lectures (on market days, hospitals and other social gathering)
- Reawakening the role of oral tradition in most of the rural communities and integrating it with digital technologies for enhancement.
- Organising shows and public gathering for education and entertainment
- Constructing Viewing centre
- Festivals and communal functions, meetings etc.
- Establishing innovative community information centre
- Skills acquisition centre
- Deploying extension information workers to rural communities
- Announcement through public address system
- Political campaigns
- Educational institutions
- Non Governmental organisations.
- Rural community networks, resource and cultural sharing

### **Strengthening rural community development through Innovative Community Information Centre (ICIC)**

The development of the rural communities is a positive indicator for the development of a nation. Therefore, establishing an integrated and innovative community information centre is very important, as it will serve as place where information can be organised, stored, accessed and utilised either manually or electronically. Kularatne (1997) pointed out that information is a fundamental resource for development, but even when the necessary information is available not every body benefits from it. There are sectors in the society which are better informed than others. This disparity is more visible in developing countries i.e. Africa. In these countries majority of the people live in rural areas (relative isolation) Metcalfe (1984). This shows that rural communities in developing countries are often left out from the existing information flow.

Connecting the rural communities to the global network is made possible through the establishment of innovative community information centre (ICIC). When carefully designed and implemented, ICIC can promises great potentials in establishing a dynamic network for preserving, ordering and transmitting information to the rural communities. However, in this age of information revolution, providing

the infrastructure, hardware and software alone is not sufficient. Having the right information in making strategic decision making is crucial to gain competitive edge. In order to empower and strengthen the rural people in the digital age and to maximize their potentials, they must be equipped with the necessary skills to gain benefits from being informed citizens. Thus, the challenge is not just about providing the hardware or ICT infrastructure to the marginalized groups, but also ensuring that they have the access and ability to use ICT to obtain and use information effectively.

The innovative community information centre (ICIC) will be one-stop centre in providing information for development. With careful planning, the ICIC has the capacity to incorporate local indigenous knowledge as part of the information components; to deploy the use of ICTs; to provide information intermediaries and to introduce Information repackaging services etc.

To achieve success in the development of the centre (ICIC) that will be relevant and useful to rural community development. The following recommendations should be used as a guiding principle. According to International Development Research Centre (IDRC) cited by Agha and Akhtar (1992) offers a series of recommendations for the planners, information professionals and aid agencies on how to create and enhance condition conducive to sustainability of information system. As indicated in the recommendations they stated that development planners, such as policy makers, and key managers in both public and private sectors, have a fundamental responsibility to support information system in a way that information could play an important role in the development process. As such there is the need to:

- Recognise the value and usefulness of information and the need for it to be managed effectively;
- Initiate, establish and financially support information systems and invest in the phased development of a national information infrastructure; and
- Maintain a regular management audit of their information systems to ensure return on investment and relevance of information system activities to organisational needs (Cheunwattanna, 1998 and Agha and Akhtar, 1992).

On the side of information professionals, they further highlighted that the issues are directly concerned with the provision of library and information services to rural communities. The following framework to be followed as guidelines for sustaining the information services for strengthening the rural community development through the establishment of innovative community information centre (ICIC).

### **Framework for achieving rural community development through the Information services**

*Adopting an orientation where the user is given priority:* - Agha and Akhtar (1992) emphasised the user –oriented or user friendly approach, such as the user’s convenience, more practical rules and regulations, communication practices that inform and raise awareness, affordable fees and user participation in the planning and developing of information system and services. Boon (1992) also agreed that user-friendly interfaces whether computerised or non-computerised, are essential in facilitating the use of information systems and enabling the systems to adapt different user patterns and information literacy levels.

***Keeping track of user needs on a regular basis and determining how the information provided is used:*** - Cheunwattanna (1998) stated that user needs are essential for the existence of any information services. Such a view, however, requires a conviction that the user needs can be clearly identified, and a commitment to identifying the kinds of information people need. In the case of rural information services, Aboyade (1987) suggested providing reference and referral services in the rural setting, to help identify the user's needs and direct them to the needed information from appropriate sources. Kempson (1990) proposed a guideline for research needs, setting up services, and evaluating performance. She recommended three stages in researching information needs: creating the community profile; the information provider's profile; and the information needs profile. She also suggests that the participatory or grassroots approach is needed to get the community involved in the design and conduct of the research. Other recommendations are as follows:

***Ensuring the relevance and the utility of the products and services (which must be designed to suit the user needs) and of the information system:*** - the issue of relevance is widely discussed in the area of information for development, both at the level of local and international levels. (Tocatlian, 1981; Dosa, 1985; Saracevic, 1980, 1986). Through experiences with the information transfer process (which include hardware transfer, information transfer, and knowledge transfer), both developed and developing countries came to realize that the value of information does not lie only in its availability and accessibility, but also in its acceptance and utility. Relevance of information products and services will increase chances for their acceptance and use (Dosa, 1985; Saracevic, 1986).

The same judgment is applicable to information services in local level. A major explanation for the failure of libraries to serve the general publics is that libraries are not able to provide information that is relevant to the needs of its users, (Cheunwattanna, 1998). As Skov (1979: 79) explains "... the fact that resource-poor groups do not use public libraries... has happened because of the provision of largely irrelevant and non-responsive services on the part of the library". In her discussion on the role of community information services Kempson, (1986: 182) stated that "Dissemination of information is primarily through printed materials which are often unreadable, written in the languages of the ruling elite and do not relate to the needs of ordinary people".

Closely related to the issue of relevance is the concept of appropriate information. Saracevic (1980: 214) writing in the context of developing countries, suggests that appropriate information "should be problem oriented, self contained, directly applicable, scaled for local use, able to reach the disadvantaged and communicable through traditional channels". This has implications for the provision of information services for rural communities. Information provided should not only be relevant to the needs and contexts of rural communities, but also processed in a way that will facilitate its use, assimilation, and recall, such as packaging and repackaging (of information) which involves appropriate media choices and formatting. In addition, information should be disseminated through the appropriate channels which will enhance user access (Saracevic, 1986).

Aboyade (1984, 1987) and Aina (2006) conducting an experiment in providing information services in rural setting in Nigeria, recommended that

information repackaging in artistic forms rooted in the future of people, would have a better chance of reaching the target recipients. These artistic forms include tales, songs and enactment traditions (e.g. festival ceremonies).

***Promoting and marketing of an information system to existing and potential users in order to enhance awareness and use of its products and services:*** - According to Saracevic and Wood (1981: 89), marketing of information is “an aggregate of activities directed at satisfying human needs and wants through exchange processes. Marketing involve viewing the whole information service or product from the point of view of the final result, i.e. from the user’s point of view”. They further explained that marketing involves the following activities:

- Marketing research: analysis of user, identification of characteristics, needs, wants, similarities constraints and economics.
- Product: development of a product or services in congruence with the findings of market research; targeting; testing of products; consideration of alternative products and adaptation if necessary.
- Communication: information to users about benefits, usage, uses, user education and promotion.
- Economics: determination of cost factors; pricing decisions; analysis of economic factors(e.g. cost benefits);
- Dissemination: delivery of product or services in an effective way, and at the right time and place (Saracevic and Wood, 1981).

A good example of this approach is that of a public library in Castelfiorentino, a rural town in Italy, which makes itself visible by playing an active role in adult education. The library acts as primary link in the local information system. In addition to studying information needs and adjusting the library service hours, reaching out to the community is an important strategy of this library. In setting up service points, in areas such as beauty salons, recreational and cultural centres, hospitals, supermarkets, schools, parks and even the favourite meeting places of elderly people, the library responds to the educational needs of the community as a whole. The relationship that develops between users and service point operators helps users become more aware of how reading is essential to a successful pursuit of their everyday interests and fulfilling their cultural needs (Federighi & Parlavecchia, 1994).

***Adopting effective management practices to ensure formulations of an efficient policy and its effective implementation:-*** Agha & Akhtar (1992) identified factors that are vital for effective management: strong leadership, participative management, team building, effective human resources management, and appropriate organisational structures. For organisational capacity building, it is also essential to develop information centres for management to support policy planners, administrators, and practitioners at all levels to make informed decisions and effectively handle their jobs in a decentralised fashion (Menou, 1991; Bholra, 1995). Bholra (1995) postulated that creating a culture of information as an approach to capacity building. A culture of information emerges from value and norms held by participants in a system in relation to the development, validation, and utilisation of information in decision-making; patterns of social and organisational relationships within which information is held, withheld, and used; and tools used for acquiring, organizing, storing, and retrieving

information. After the culture of information is created, it will make it visible, current, accurate and dynamic through its utilization.

***Developing and maintaining high levels of professionalism:-*** In the contexts of developing countries, in general, and of rural information services, in particular, the issue of human resources development is a serious one. For example, the inadequacy of staff, both in quantity and quality, and the inappropriate roles of information personnel (Cheunwatanna, 1998). Mchombu (1982) contended that information personnel “need to develop an aggressive attitude and to participate fully in the social struggle for national development”. He suggested that, in a context of poverty, the education and training of information personnel should focus on producing technicians rather than librarians, and having well trained personnel train staff who are under them. However, Yaacob (1996) argued that lack of academically trained staff has been the most crucial problem in the development of rural library and information services. According to Agha & Akhtar (1992), information personnel should play a more visible role as contributors to societies. They should strive to respond effectively to the information needs of users. They should study the various modes in which information is used, and its potentials benefit to users. Such study would enable them to track information needs and use, to better understand the role of information, to identify effective methods of disseminating relevant information, and to educate potential users and society at large about the benefits of and need for effective information management and use.

***Using, where possible, appropriate information technologies to effectively manage information:-*** The intelligent use of information technology increases the already tremendous potential of information systems and services. e.g. vast information storage capability, fast and inexpensive transmission of information to an entire region, links between different types of media, networking capacity, and provision of other means of communication other than face-to-face (Zijp, 1994).

However, there has been a great deal of concern about the applications of information technology in developing countries. Information technology transfer from developed to developing countries, has sometimes led to disappointment, disillusionment, and many problems or even failures (Davies, 1985). The reasons cited are numerous, e.g. differences in the information environment between developed and developing countries, particularly cultural contexts. Poor information infrastructure in developing countries; lack of information expertise as well as of trained and qualified personnel; lack of financial resources; the absence of or inadequate selection, control, reproduction, and adaptation of technology obtained. Others are problems of hardware maintenance; difficulty of adapting software to local conditions and requirement; lack of awareness of the value of information and a low demand for information services.

In the area of rural development Zijp (1994:36) discussed the potential of information technology for the effective transfer and use of agricultural information. He contended that, “Like water and electricity, information technology can be made readily available to rural communities, due to increasing cost off hardware and the availability of “information utility”. However, to make this possible, a software is also required which is tailored to different users, along with the establishment of community information centres, the investment in telecommunication systems and

enhancement of awareness and skills through information dissemination and training. Some of the examples of how information technology can be used to serve rural development are described as follow:

- Farmers and other rural groups can easily use powerful multimedia training programmes with touch screens, even if they are illiterates;
- Farmers can get information about daily market prices on the radio or through e-mail notices posted at a local centre before taking products to a market;
- Rural midwives can get immediate information about particular health problems from microcomputer at a local clinic;
- Rural people can get high quality, consistent training at low cost via distance education or interactive training technologies (Zijp, 1994).

Zijp (1994) believes that applications of information technology in rural development can be made sustainable as has been done in other developing countries as India, Malaysia and South Africa. He also provided a useful guide for using various information technologies in rural development –CD- ROM, computer networks, desktop publishing, decision support system, geographical information system, interactive multimedia, packet radio, radio, satellite communication and video. The guide includes descriptions of each technology, its requirements (e.g. design, hardware and software, financial and human resources), examples of applications, advantages and disadvantages and comparative costs.

***Promoting among staff an outlook of self reliance, resourcefulness and other positive attitudes to minimise the use of existing resources:-*** According to Cheunwattanna (1998), information professionals in developing countries may suffer from low morale, attitudes of hopelessness, and even depression, due to limited resources and lack of support. Agha and Akhtar (1992:288) recommended that some mechanisms encourage “a self-reinforcing upward spiral of professional achievement and incremental developments”. Capacity building is a strategy aimed as improving the ability of information personnel to provide need-based services and maximize the use of existing resources (Cheunwatanna, 1998). Training of information personnel in needed areas should be accorded the highest priority. Institutional strengthening, continuing education, exchange programmes, consultancy and advisory services and research are examples of capacity building activities in developing countries (Akhtar, and Melesse, 1994).

***Developing databases or knowledge sources of local or indigenous information:-*** Indigenous (traditional) knowledge is referred to as “ the knowledge held by people from a particular locality” (Heyd, 1995:63). According to Heyd (1995) indigenous knowledge can be explicit- expressed in the lore or advice, passed on from generation to generation- or may be implicit and embodied in specific cultural practices. Indigenous knowledge is contrasted with exogenous knowledge or scientific knowledge. Indigenous knowledge, passed down through oral tradition means or cultural practices, has rarely been recorded, and is at risk of being lost to future generations, (Mundy and Compton, 1991; Zijp, 1994). The development trends today which includes the cultural dimension has brought the issue of indigenous knowledge, particularly technical knowledge, into focus. There has been an increasing recognition that indigenous technical knowledge offers an inexpensive, locally-adapted solution to

development problems, and that it can merge with scientific knowledge to improve productivity and living standard (Mundy & Compton, 1991; Hill, 1995).

In order to minimise the degree of dependency on the developed countries and to achieve sustainability of information services. Developing countries i.e. African countries need to establish a balanced pattern of production and consumption of relevant information by developing their own indigenous knowledge sources or databases and making the optimal use of local technical expertise as well as information sources already concentrated but largely untapped ( Tocatlian, 1981, Bell, 1986; Akhtar & Melesse, 1994). Agha & Akhtar (1992) suggested that local information must be properly managed for local use, and that the potential of marketing the information both within and outside the country depends on its quality and relative value to potential users.

***Establishing and actively participating in cooperatives schemes and resource sharing programmes:-*** participation is fundamental to sustainability of development programmes; as Dudley (1993:7) “ ... its presence is now effectively obligatory in all policy documents and project proposals...”. However, participation at any level can become a manifestation of power, manipulation or more meaningless rituals (Bhola, 1991, 1993; Dudley, 1993). According to Bhola (1993:15), participation should be “a genuine coming together of people to engage in dialogic action”. Which involves an equal participation and equal access to knowledge?

Information services to rural communities should enable rural people to participate in an interactive dialogue on issues important to them. It can help the government or other agencies in reinforcing specific directives affecting the lives of rural people through constant provision of information. On the other hand, it should also enable the people to inform the government about the impact of the policies and services (Aboyade, 1987; Kempson, 1990; Akhtar & Melesse, 1994). Participation in and cooperation with other programs, institutions, organisations and network at local, regional and international levels, should be enhanced to ensure maximum utilisation of all resources and services, as well as to provide useful exchange of information, ideas, and experiences ( Montiviloff, 1991,; Agha and Akhtar 1992).

## **Conclusion**

In summary, access to information by rural communities in Africa will serve as a panacea to the problems that long time exist and hindered them from exploiting their potentialities. Rural community development is the back borne of a country's development, ignoring rural communities for not providing them with basics needs and access to information infrastructures will basically lead them to migrate from rural communities to concentrate in the urban areas which will not augur well for African development. Therefore, there is the need for refocusing on the role of information in rural community development and ICT as a tool for change agent. Initiatives for rural community development must then emphasize on the importance of information in addressing the information needs of rural communities. At this juncture it is imperative for the Governments, Information professionals and NGO's to actively mobilize rural communities to fully realize, utilize and appreciate the value of information in their development.

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