

# **ENHANCING INFORMATION COMMUNICATION TECHNOLOGY (ICT) USE IN PROVIDING LIFE CHANGING SOLUTIONS IN RURAL COMMUNITIES**

## **INTRODUCTION**

The advancement in the field of Information Communication Technology (ICT) has opened up a wide range of opportunities for improvement and well being of humans. ICT has redefined how we live, how we socialise, how we do business and how services are delivered. ICTs can play a major role in addressing rural poverty and improving the economic well-being of the people through access to adequate and right information. Rural communities in Nigeria and Africa as a whole are faced with the challenges of infrastructural deficit that would help stimulate development. This affects access to adequate and right information by the rural communities. The challenge is how to leverage the bountiful opportunities in the sector to improve service delivery in the rural communities.

Rural development has remained a key agenda of Governments in Nigeria and other countries. However, the use

of ICT in the rural areas for development has been relatively slow due to the lack of general and basic infrastructure as well as absence of ICT infrastructure, especially in the rural areas. The Nigeria Government has been making efforts to provide communication services to rural communities and enable them to be included in an increasingly more electronically connected world by establishing the IT Policy in 2001.

The Nigeria National Development Plan tilted “Nigeria Vision 2020 captures this objective. According to the document, “the increasing globalisation driven by ICT makes it imperative for Nigeria and other emerging market to irreversibly consider the application and promotion of ICT strategy to facilitate its rapid growth and development. This will involve the development of a vibrant ICT sector to drive and expand the national production frontiers in agriculture, manufacturing and service sectors. It would also require the application of new knowledge to drive other soft sectors: governance, entertainments, public services, media sector, tourism, etc”.

The Nigeria National Vision 2020 document indicates the role of ICT in respect of several sectors and offers specific examples as to how ICT can propel development of the

national socio-economic sub sectors with respect to Agriculture, oil and gas, Health, Education, Finance, governance, infrastructure support, knowledge based economy, labour employment and productivity and Research and Development.

Agriculture remains an important sector contributing 40% of the Gross Domestic Product (GDP) and employs about 70 percent of the working population in Nigeria. Agriculture is also the largest economic activity in the rural areas where almost 50 percent of the population lives.

The agricultural sector in Nigeria faces major challenges of improving production as a growing population through the use of modern agricultural tools. The renewed government attention in the sector against the background of dwindling oil revenue and youth unemployment has opened up new opportunities in the sector as more youth are taking up careers in agriculture.

In order to retain this new found interest in the sector, and derive maximum benefits, there is the need to maintain quality standards and regulation of production and handling of

agricultural produce. This requires new approaches and technical innovations to improve the livelihoods of the rural population.

The role of ICT in enhancing food security and supporting rural livelihoods has gained currency across the world. This includes the use of computer, internet, geographical information systems, mobile phones, as well as traditional media, such as radio TV.

A major challenge is the issue of connectivity in the rural areas, and to address this, broadband internet access should be deployed. Also, rural communities are not only lacking in ICT infrastructure but also in general infrastructure such as Health Centre, roads, clean water and power supply. Therefore, the provision of these facilities is necessary for a meaningful ICT project in the rural communities.

There is also the need to address the obvious manpower gap in the administration of ICT in the rural communities. Deliberate efforts should be made to provide tailor-made training for the rural dwellers, through bodies such as market women, farmers, as well as youth based associations. The successful implementation of the training programme will

create manpower base in the communities that will drive the project beyond government.

As noted above, the general lack of ICT infrastructure within Nigeria especially in the rural areas is evident. In terms of backbone and bandwidth, this infrastructure is provided exclusively or has a deployment strategy that concentrates on urban areas as opposed to rural areas. Lack of financial support to maintain the existing infrastructure has become another major obstacle. Thus, the lack of ICT infrastructure negatively impacts on the entire infrastructure and poses a grave threat to the implementation of ICT services in rural areas.

## **ICT AND AGRICULTURE**

A substantial part of the population in Nigeria lives in the rural areas and depends on agriculture for their livelihoods. The deployment of ICT in the sector would increase efficiency, productivity and sustainability of small-scale farms. The agricultural sector will be strengthened with the application of ICT as it opens up access to information.

ICT increases the knowledge base and choices of farmers in terms of quality of soils, seedlings, management of drought and erosion as well as pest and disease control. It also provides farmers with useful and timely information on crops, animal husbandry, fertilizer and market prices. The corollary effect of all these is increased productivity and high income.

The availability of mobile phone services in the rural areas has helped farmers to deal directly with buyers and cut out the activity of middlemen. Farmers can easily monitor market situations and conclude transactions on the phone. This saves productive time and enhances the income and profitability of the farmers. The use of television and radio by agricultural extension workers helps in disseminating vital information on new methods to farmers.

## **ICT AND EDUCATION**

The use of ICT in a dedicated manner within the education sector in the rural areas would help increase the literacy level of the rural population. There is need to embark on aggressive sensitization drive to educate the rural communities on the

importance of ICT. In Nigeria the establishment of Open University, which is essentially an online based educational system has helped stimulate interest in higher education and thus increased the number of the population seeking university education.

The deployment of ICT in the educational sector in the rural areas would improve efficiency in the education management and increase access to education at the rural areas.

## **ICT AND ECONOMIC PARTICIPATION**

Information and Communication Technology can help connect the rural areas to the outside world and thus enjoy access to information sharing for greater economic activities. The contact with the outside world would no doubt increase the volume of economic activities in the rural areas as the rural population becomes more aware of untapped opportunities and new ways of doing business. ICTs can increase access and mobilisation of financial assets, particularly through the instrumentality of mobile banking and mobile finance. This would ultimately increase general economic activities in the rural communities.

## **ICT AND HEALTH**

Health Care Delivery remains a challenge in the rural areas due to a number of factors. ICT is being used to facilitate remote consultation, diagnosis and treatment. The use of ICT to deliver health care will enable health care professionals and institution to address the critical medical needs of rural communities. This will bring about improvement in the health of rural dwellers and their economic well being. This is so because poverty increases poor health and poor health in turn reinforces poverty.

## **ICT AND URBAN MIGRATION**

ICT creates an opportunity for new activities and services to be introduced into the rural areas. Its effective deployment can help in combating rural-urban migration. It may also assist in addressing rural-urban poverty and fostering sustainable development through creating information rich societies and supporting livelihoods.

## **ICT AND POLITICAL PARTICIPATION**

The effective use of ICT can help to sensitize and mobilise the rural population on activities of government. This would expand political space and participation as rural dwellers become more aware and follow closely activities of the government. Television and Radio traditionally perform this role. Therefore, Government should endeavour to complement the existing Federal or State radio and Television stations through the establishment of community radio stations.

## **CONCLUSION**

From the foregoing it is evident that effective deployment of ICT tools in the rural communities would help empower the rural dwellers and stimulate increased economic activities among them. In rural communities across Africa where poverty and diseases are prevalent, ICT tools have emerged as veritable instruments to reverse the trend. Although, the successful implementation of any policy on ICT is dependent on addressing the challenges of funding, infrastructure and manpower.

