

THE NEED FOR INFORMATION AND COMMUNICATION TECHNOLOGIES IN RURAL AREAS



Chiefs and Fred Mweetwa conferring on ICT development

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1 SUMMARY

Having realised the importance of introducing and promoting Information and Communication Technologies (ICT) in the development of the country of Zambia, the government of the Republic of Zambia came up with an ICT policy¹, which was launched March 2007. The main goal of the ICT policy is to integrate ICT in most of the institutions of the sectors of the Zambian economy and develop the nations research or development capacities to support facilitate and contribute to the development of all especially key sectors of the economy including of the appropriate local ICT product and services. In order to realize the goal of the policy, government has put in place commitments, objectives and strategies.

In this article a few sectors are highlighted as to illustrate the specific need for ICT development in rural areas.

2 EDUCATION, RESEARCH AND DEVELOPMENT

It has to be recognized that for developing countries like Zambia, to make major progress in social and economic development, there is need to invest significant effort and resources in the education system². Zambia's education system in rural areas is currently under resourced, with a substantial section of the population without access to high school and tertiary level education as well as professional training. Therefore, a significant percentage of the population is education attainment required for meaningful contribution to national development.

Against this background, there is great need to integrate ICT in the education system and develop the nation's research and development (R&D) capacity to support, facilitate and contribute to the development of key sectors of the national economy.

At local levels in rural areas, teachers spend a lot of time and money travelling to their district headquarters for either administrative programs or to get their salaries. Such is needed due to lack of proper communications due to lack of ICT facilities or services. They usually come back without meeting their supervisors or without collecting salaries.

There is great need to have Internet at every school to improve on teacher's output and expose pupils to internet at the early stages of their education. This will enhance the research component as it will cover wider and deeper areas of our rural communities and researchers will see the challenges of introducing ICT at grass roots level.

3 CULTURE AND HERITAGE

Access to information through Internet forms the basis for creating an information society. Therefore the availability of 'internet access points' to the members of the communities is as important as the information itself. Development and exploitation of ICT supports rural development, community based initiatives and projects.

Information on our Cultural Heritage is passed from one generation to another by oral means. This means over a period of time, the information could either be misrepresented or misinterpreted or indeed diluted. There is therefore great need to introduce and promote ICT in rural areas to safeguard African Cultural Heritage³, also through the Internet. This was discussed during the Lwiindi Ceremony. Apart from safeguarding our Cultural Heritage, the use of internet in rural areas will enhance our ability to communicate this heritage to the internal communities for their benefit and the social and economic advancement of our

1 National ICT Policy - Launched 28th March 2007, http://www.caz.zm/pdf/NATIONAL_ICT_Policy.pdf

2 Rural teachers: rural schools understaffed due to lack of technology in rural areas

3 Culture: culture preservation of African culture on the internet is vital in the African communities: chief's forume during Lwiindi ceremony; www.macha.org.zm

country.

The emphasis should be to promote wide spread public access to information through appropriate traditional and new technology solutions based on relevant local content while promoting cultural heritage.

4 HEALTH CARE DELIVERY

The performance of the health care delivery system over the years has been affected by communication problems⁴. This is mainly due to distances between health delivery points and administrative centre, just like in the education sectors. This draw back has affected the delivery of drugs, messages and date collection/dissemination. Most specialist like doctors, nurses and teachers are confined to the line of rail leaving rural areas to cope with very inadequate staff levels.

It is important to note that the introduction of internet in rural areas will play a vital and effective role in the organization and delivery of health care health services. The emphasis here will be to improve access to quality health care as close to the family as possible through the development and exploitation of internet and other modern technologies since the existing of communications between health centres and administrative centres are inadequate.

5 AGRICULTURE AND DEVELOPMENT

Agriculture is Zambia's economic backbone⁵ as it plays an important role in the social and economic development in many Zambian communities. There is need to integrate ICT in the agricultural sector through the use of internet in the planning, implementation, monitoring and the information delivery process.

6 TOURISM, ENVIRONMENT AND NATURE RESOURCE MANGEMENT

The tourism sector constitutes one of the economic pillars of Zambia's economy, this includes both wildlife and no-wildlife tourism.

Over the recent past, Zambia has positioned herself well in the tourism market. By its very nature, the tourism sector is well suited for integration and application of ICT which potentially enhances marketing of tourism products and services, will increase efficiency and effectiveness of transactions, and service delivery. It is therefore necessary introduce internet in rural areas for the development of the tourism industry and facilitate the conservation of our natural resources and Cultural Heritage as well as to protect the environment.

7 MAINSTREAMING YOUTH AND WOMEN ISSUES

The successful penetration of internet with existing social and economic structures depends on its people. Usually in most of our communities youths and women are heavily marginalised. However, in most activities they constitute a very important segment of society. They are actually the majority in all communities. Therefore, there is need to address youths and women as special groups in society that positively contribute to the growth of ICT as well as the use of Internet as empowerment tools in their daily activities.

It is becoming very clear that we have to use Internet as an instrument to mainstream youths

⁴ Rural health centres: health delivery has been affected due to poor communication in rural areas; community forum at Chief Chikanta's area

⁵ Small scale farmers: agriculture is the backbone of Zambia's economy; by rural farmers in Chief Chikanta

and women issues in most activities of the rural economy and society and to empower youths and women through opportunities created by implementation of ICT projects and programs in the rural areas.

8 TELECOMMUNICATIONS AND SUPPORTING INFRASTRUCTURE

It is commonly understood that ICT infrastructure encompasses telecommunication networks, radio and TV transmission systems, the internet and other multimedia delivery platforms. It should be generally acknowledged that transmission networks for radio, telephone, TV and internet are the basis for mass media development. This is further enhanced by associated physical infrastructure such as roads, electricity and general utilities. With respect to ICT, lack of reliable, widely distributed and high capacity data network for data, sound and video has contributed to the low availability and penetration of ICT services as well as cost effective deployment of basic services especially in rural areas.

All this has resulted in inadequate or complete lack of telephone and internet services, high start-up costs and long bureaucratic procedures for radio, especially community radio and TV broadcasting. The major emphasis here is to increase access and promote widespread deployment of ICT services through the expansion of the nation's telecommunication backbone infrastructure covering the remotest part of Zambia.

The opening of Vision Community Radio Macha and internet services offered by LinkNet are efforts which need to be supported by all stakeholders and promoted to enable them expand their catchment areas from Chief Macha, into other chiefdoms such as Chikanta, Muchila, Hachitema, Mapanza, Shezongo, Singani, Nalubamba, and Moonze. The new catchment area would house more than 65 basic schools and slightly more than 13 Rural Health Centres and 15 palaces.

9 CONCLUSION

This paper is initiated by the authors as to build upon the unique knowledge gained before and after introduction of ICT in rural areas. The results have been encouraging and further developments are highly needed. There is a good rationale for these developments. Support is solicited for further research and development of ICT in rural areas, also with an angle towards supporting the preservation of African culture.

Authors

His royal highness Chief Chikanta, was born and raised in Chief Chikanta's area. He was anointed Chief in 1995 after the death of His uncle, his mother's brother. Chief Chikanta is seen as the wisest Chief who ever ruled the chiefdom. In 2004 he was appointed by his fellow chiefs, and represented them in Parliament. His main goal as chief is make sure that his subjects lives are continuously improved. Chief Chikanta's statement is that better life can come out of Information and Communication Technology, which is the cry of his heart.

Fred Mweetwa grew up and lives in the rural area of Macha, Zambia. He is Executive Director of rural innovations hub Vision Community Center Macha, Station Manager of Vision Community Radio Macha, and Secretary of the Board of LinkNet Multi-Purpose Co-operative Society. He is student at the University of South Africa, via Internet. His interests are history, community development and showing visitors to Macha around in the rural area.