

# TANZANIA COMMISSION FOR SCIENCE AND TECHNOLOGY

*DPG – ICT SEMINAR ON MKUKUTA & ICT*

DAR ES SALAAM  
26<sup>TH</sup> MAY, 2005

*Potential of ICT in Development*

*By*

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# **1.0 DEPRESSING INFORMATION**

- **Every hour about one girl or woman in Tanzania dies from pregnancy or childbirth related causes. Many more cope with serious damage to their health for the rest of their lives.**
- **Bad governance is the cause of poverty in many developing countries.**
- **Half of the number of children born in Sengerema District are not vaccinated even through this service is offered free**
- **Research done on poor performance in basic science by standard seven pupils in the Coast Region revealed that up to 80% of schools recorded on zero mark in mathematics**

- **Production of food crops in Tanzania is lower than consumption.**
  - **95,000 tons of wheat against 135,000 tons**
  - **2,447,000 tons of cereals against consumption of 3,435,000 tons**
  - **597,000 tons of rice against 658,000 tons**
- **Serengeti Boys football team was recently nullified in participating in African Youth Championship in the Gambia**
- **Crop yields from ordinary farmers is 25% of what is produced in a research environment**
  - **Maize per hectare – 1.5 Tons vs. 8 tons**
  - **Sweet Potatoes – 5 – 10 Tons vs. 30 – 40 Tons**
  - **Beans per hectare - 0.4 Tons vs. 2.5 Tons**
  - **Coffee - 400 Kg vs. 2 Tons**

- **43 out of every 100 patients receiving treatment at Sengerema Hospital suffer from worms/hookworm**
- **More and more knowledge and publications are becoming available “online” – [www.....\(url/irl\)](#)**
- **40% of the patients attending Lunga Lugoba Health Centre suffer from Malaria while 25% suffer from Pneumonia and Bronchitis**

## **2.0. ENCOURAGING INFORMATION**

- **Announcements prepared and broadcasted by the Community Radio in Sengerema reminding mothers to send their children for vaccination, has increased the number of vaccinated children from 50% to 100%.**
- **Mbonea Msuya who sells green bananas uses his mobile phone to communicate with his agents at Kariakoo Dar es Salaam; Moshi Town; Rombo; Hai District; Marangu – Moshi; Mwika – Moshi; mainly on issues related to prices.**
- **Abasi, a teacher at Mtakuja Primary School in Dar es Salaam uses the Internet to study for his degree course of one of the colleges in USA.**
- **Kinondoni Municipality has increased its number of computers after the e-Governance pilot project was introduced, from 2 (1998) to 128 (2005). It sets aside TShs. 80 million a year on ICT and has established an ICT Unit under the Municipal Director**

- **A carpenter in Sengerema was able to make differently designed furniture after visiting the IKEA website using Internet facilities at Sengerema Telecentre.**
- **Property owners at Sinza Dar es Salaam are now receiving, door to door, their computer generated land rent demand notes.**
- **India is finalizing the production of its computer which will sell at US \$ 225.**
- **Demand for mobile phone connection at Kaliua in Mpanda jumped from the researched 1000 lines to 3000 lines.**

- **Peasant farmers at Lunga Lugoba in Bagamoyo are able to follow the contents of Knowledge CD Rom produced by CABI containing information on crop pests and diseases**



- **There is now a convergence of earlier ICT - radio, telephone, films, television, fax; and later ICT – satellite, computer and computer networks, internet, web, mobile phones etc**



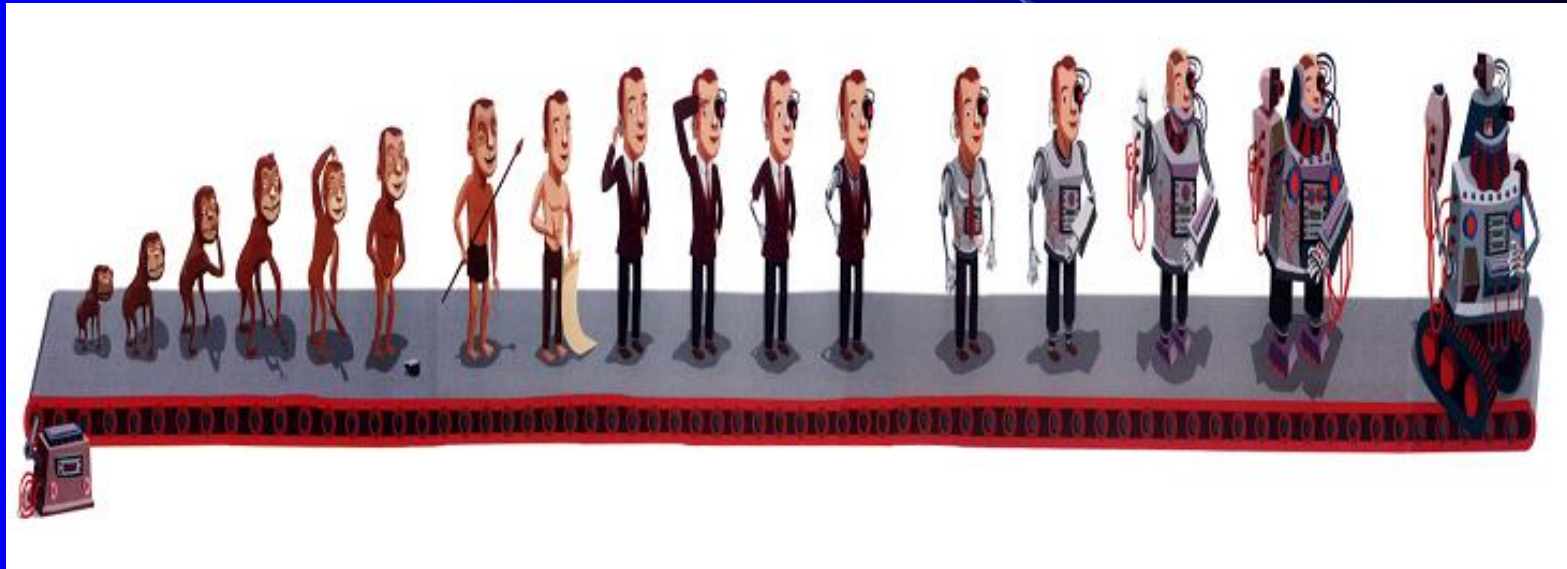
## 3.0 PHILOSOPHY

Maendeleo ni ya Watu siyo ya vitu

- Embrace Science and Technology as a vital tool for accelerating socio-economic development
- Technology is only useful if it is internalized and accessible to *all people*



- **Technology cannot and will not exterminate the human society**



**Future human societies will be Knowledge Based.**

- **Access to knowledge must be the right of every citizen.**

- **Innovation is the key to the production and processing of knowledge. An individual organization or a nation's ability to convert knowledge into wealth and social good through innovation determines its future.**
- **Everyone has the right to communicate**



- **ICT (earlier – radio, films, television, telephones, fax & never-satellite, computer networks, Internet, Web, Mobile phones) is not rocket science**
- **Development is a comprehensive process. First and foremost it is social, focusing on people**

## 4.0 HUMAN DEVELOPMENT

- The concept of human development has become the leading alternative to the view of development equated exclusively with economic growth. Human development focuses on people (UNDP).
- Beyond being an economic growth, which is considered an engine and not an end in itself, development is also linked to peace, human rights, governance and culture and life styles of the people (Unesco).
- Human approach does not ignore the importance of economic growth and productivity but dwells on how economic performance relates to *human empowerment* and whether such growth is equitable and sustainable.
- Human development implies that *people's capabilities are enhanced* and their lives enriched. It is a process of enlarging people's choices', which is achieved by expanding human capabilities and functioning.

- **Essential capabilities for human development are:**
  - **people to lead long and healthy lives**
  - **to be knowledgeable**
  - **to have access to resources for decent living**
  - **participation**
- **New focus on development has resulted on eradication of poverty becoming a multi-dimensional activity.**
- **Poverty is more than lack of material well-being. It also reflects poor health and education, deprivation in knowledge and communication, inability to exercise human and political rights and the absence of dignity, confidence and self-respect.**

## 5.0 ICT AND DEVELOPMENT

- **ICTs are used to produce and manage information. As an intermediate good or product, the value of information in use varies dramatically depending upon the context.**
- **It would seem logical to conclude that better access to a resource as basic as *information* and *knowledge* would greatly improve standards of living of the people. However it is very difficult to provide solid empirical evidence to support this conclusion.**
- **ICTs play a prominent role in the broader conception of poverty. They provide important tools for improvement of health, education, governance, and enhance people's capabilities. ICT offer new channels for the diffusion of knowledge and create physical and virtual spaces for social communication.**

## **6.0 ICT IN SECTORS**

**All sectors and areas related to human activity and development benefit a lot in the use and application of ICT.**

- Education – for teaching, learning, sources of knowledge, distant education, digital libraries, increasing the power of understanding, sharing experiences, etc. (Strategies on ICT in Education are in full swing).**
- Health - Information intensive sector; managing information and patient records, diagnostics, treatment, knowledge dissemination, research and analysis, management and administration, Tele-Health and Tele-Medicine. (Round table discussion have been initiated).**
- Culture – Music, Sports, Theatre and Arts.**

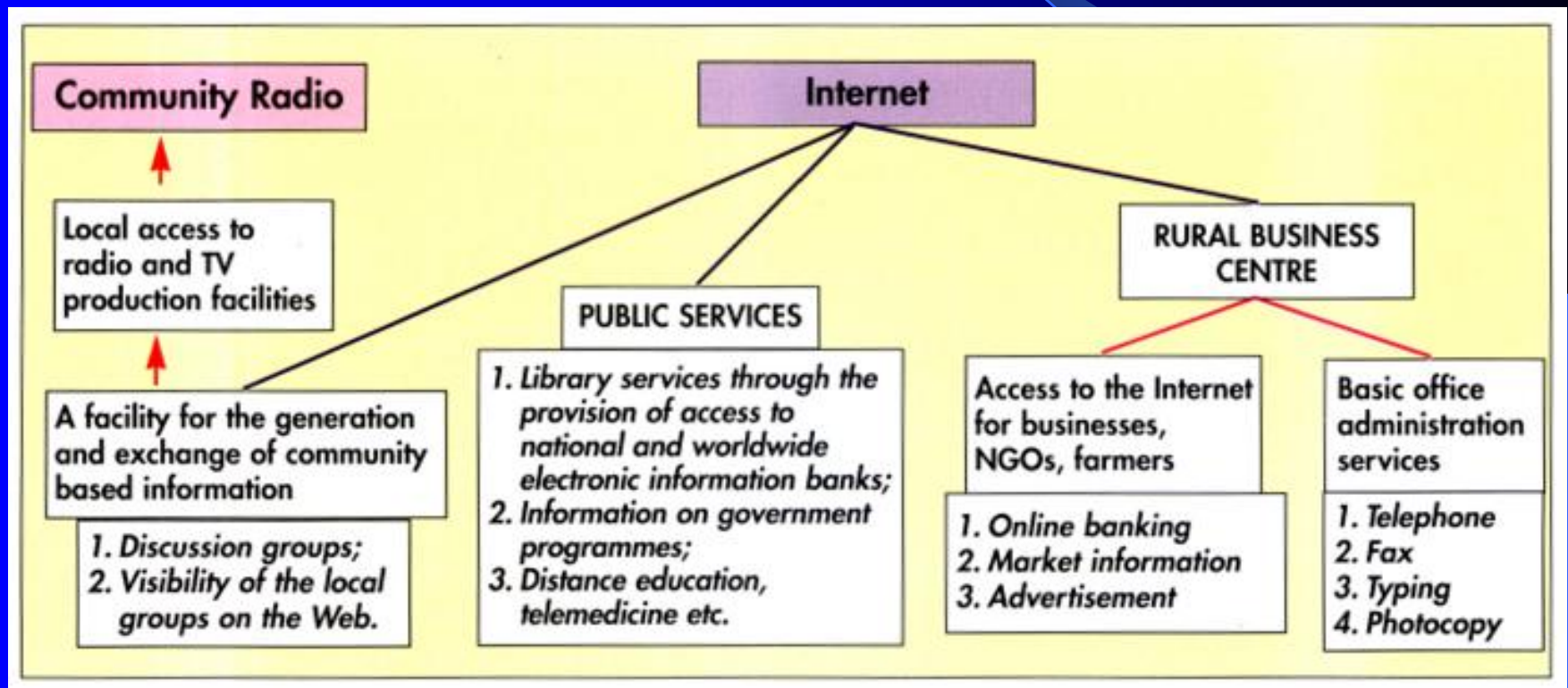
- **Governance** – “A successful government is that which communicates to its people”. Decision making, reforms, globalization, improve quality of services and transparency, management. Example of Kinondoni Municipality, Sengerema District, Lugoba village ([www.lungalugoba.go.tz](http://www.lungalugoba.go.tz); [www.kmc.go.tz](http://www.kmc.go.tz); [www.sengerema.go.tz](http://www.sengerema.go.tz))
- **Agriculture** – knowledge building, research, extension, education and training, Crop prices (CABI CD Rom; [www.bcstimes.com/bis](http://www.bcstimes.com/bis)).
- **Trade, Industries, Planning, Finance, Economics, Mining, Fisheries, Tourism, etc.**

**ICT is also Cross-cutting and can be used collaboratively by several sectors. Removes compartments and boxes.**



# 7.0 RURAL VILLAGES AND DISTRICTS

- ICT must reach rural areas
- Telecenters



- **Sengerema Community Telecentre**

**(COSTECH/TTCL/TCRA/Unesco/ITU/IDRC/ Sengerema Community)**

- **Pilot Project from 2001 – 2004; More than 3000 people ICT trained of which 40% are women; Full Community participation**
- **Women managed Community Radio**
- **Local content ([www.sengerema.go.tz](http://www.sengerema.go.tz)) and Local Video produced**

- **Self Financing - TShs. 30 million per year.**
- **Researching on District Television, District Telephony, Knowledge Centre.**



- **More Telecentres envisaged – Kilosa, Ngara – All Districts. District to be the base of ICT development in rural areas.**

- **Village ICT Project (COSTECH/COMNET.IT/ UNESCO)**

- **Lugoba Bagamoyo and Wami Dakawa Morogoro**

- **Village governance – data and information management**

- **ICT training for 35 village officials**

- **Hardware, Software, Applications provided**

- **Internet access via VSAT**

- **Website – [www.lungalugoba.go.tz](http://www.lungalugoba.go.tz)**

- **100 Email users**

- **To be a village ICT Center**

- **ICT for every village (12,000 villages)**

## **8.0 ICT FOR GROUPS**

- **Youth – Kilosa Youth Training Centre (UNESCO, COSTECH, Ministry of Labour, Youth and Sports)**
- **Women – Women Telecentres – Mpwapwa, Mtwara (ITU, Ministry of Communication, TCRA, COSTECH)**
- **Refugees – Ngara (ITU, UNESCO, UNHCR, COSTECH)**
- **NGOs**
- **Religions Organisations**
- **Institutions, Companies, Business**
- **Individuals**

# 9.0 CONCLUSION

- **The poor countries of the World today are those which came late in the industrial revolution. The poor countries of the future will be those which will fail to embrace knowledge utilisation and ICT**
- **Innovation and change necessary**
- **Society participation and involvement absolutely essential**
- **Future bright and exciting**

**THANK YOU FOR YOUR ATTENTION**