MALAWI COMMUNICATIONS REGULATORY AUTHORITY (MACRA)

m a c r a

ITU/BDT Regional Broadband Wireless Access for rural & remote areas for Africa

Overview of Malawi's Rural ICT Development Programmes

Presented by

Emily Heather Khamula
Manager- ICT Development & Policy Analysis
heatherkhamula@globemw.net

Presentation outline

- **Malawi Communications Regulatory Authority (MACRA)**
- **ICTs Development - Rural Areas**
- **Technology Solution**
- **Challenges to ICT Development in Rural Areas**

Telecommunication Statistics for Malawi

- 70,000 fixed telephone lines
- 2.19% aggregate teledensity
- 1.56 % mobile density
- 80 % of lines in urban centres

Source: MACRA, 2004

- This paper will describe briefly some of the projects or programmes being
- undertaken to ensure that rural masses access ICT services in the country.

Malawi Communications Regulatory Authority (MACRA)

✓ MACRA is the regulatory authority that was established under the 1998 Communications Sector Policy & the Communications Act of 1998

✓ The Communications Sector Policy Statement laid the foundation for the liberalization of the sector and enhancing private sector investment to ensure affordable, efficient and high quality service.

MACRA's MANDATE

✓ Under the provisions of the Communications Act and the Communications Sector Policy Since MACRA has been mandated to
  ✓ Plan and manage the Radio Frequency Spectrum
  ✓ Regulate the entire communications sector : telecommunications, broadcasting and postal services

Roles and responsibilities

- MACRA ensures that as far as it is practicable there are provided throughout the country reliable and affordable services sufficient to meet the demand

- MACRA promotes the development of and access to Information and Communication Technologies (ICTs) and other forms of communication services in Malawi

ICT Development Initiatives /Programmes

✓ ICTs for Sustainable Rural Development (ISRD) Project
✓ Infrastructure Services Project (ISP)

ICTs for Sustainable Rural Development (ISRD) Project

- ISRD project is a project being undertaken by the Malawi Government with the support of ICS-UNIDO of Italy.
- The project is being coordinated the Ministry of Information and Tourism through MACRA
- Aim: To reduce poverty and isolation of the rural communities by making accessible ICT enable services through scalable and cost effective communication infrastructures.

Implementation arrangements

- The project will be implemented by installing multi-purpose community telecentres in the rural areas
- The implementation of the pilot telecentres calls upon the financing from the donor community and government as well as a public-private-partnership for the operation of the telecentres.

Infrastructure Services Project (ISP)

- The ISP Project is being coordinated by the Ministry of Economic Planning and Development with the support of the World Bank.

- The project focuses on priotized service delivery in the water and sanitation, electricity, roads and including the ICTs in the some selected rural areas

- Service provision in rural and unerserved areas through target interventions will be financed by the Universal Access Fund introduced by the the Universal Access Policy *(to be formulated)*

ISP Project Description

- The GoM will procure consulting services to advise on best approaches to improve connectivity in rural and under-served areas and creating the policy, legal, regulatory and institutional conditions for improved access.

ISP Project Description *(cont)*

- Focus on improving access to telecommunications and information services in targeted areas
- Providing rural telephone connections to communities
- Public phones and MCTs to be used
- The project focuses on rural & under-served areas where people cannot access ICT services

Implementation arrangements

- Endorse the Universal Access Policy (GoM)
- MACRA will administer the UA Fund and ensure that the Universal Access Fund place is utilized
- MACRA will make regulations for rural telecommunications development (license conditions for operators)
- The project calls for public-private partnership for successful implementation

Technological solution

- VSAT connection to provide to provide voice (using VoIP), Internet, E-mail and other web-based applications.
- The connection can also be extended to other institutions and centres and form a cluster of telecentres sharing a single connection and benefit from economies of scale. But
- VSAT solution would require substantial amount of operating costs paying for bandwidth.
- Further in hilly areas like Cape Maclear; the fixed operator proposes to use optical fiber technology

Challenges

- Universal Access is only attainable where all concerned parties i.e. Government, Public and Private sectors and all other stakeholders are willing to show commitment to the cause.
- Managing public- private projects may be hectic due to different interests:
  - the private sector is profit oriented
  - the public sector would ensure that services are provided even in areas where it is not economically viable.

Technological solution

- Wireless technology provide cheaper solution to the rural communities;

- Installation of a VSAT connection to provide (possibly VoIP), Internet, E-mail and other web-based applications.

- The connection can also be extended to other institutions and centres and form a cluster of telecentres sharing a single connection and benefit from economies of scale.

- However VSAT require substantial amount of operating costs paying for bandwidth, but

- Wireless technology (VSAT)- proposed to be the best solution and has these advantages: Fast and easy deployment, Reliable and secure

- Scalable and flexible

Technology solution

- Use of electricity to provide broadband Internet service..........................

Challenges

- *Other technologies may pause challenges since other they are expensive to deploy causing higher tariffs to the end user; for example terrain would pause challenge to wireless technology deployment in other targeted hilly areas (Neno, Cape-Maclear).*

Broadband over power lines

- Broadband over powerlines is another option which the electricity company in Malawi has already started implementing it.

■ **Thank you for your attention**