# Communiqué

# **Regional Community Fibre Training Workshop**

# Dar es Salaam, Tanzania; June 12, 2009

Community fibre networks are not only within reach to serve and empower our communities in the region, but also, the cost of implementation is now affordable. With emerging national fibre infrastructure currently under implementation as well as the launching of submarine cable to link East Africa with the rest of the world for the first time, it is necessary for communities in rural and remote areas to prepare to take advantage of this fibre infrastructure to stimulate socio-economic development. Services may take long time to reach the last mile in each country and therefore it is important for the communities to be sensitized about possibilities of building their own local networks bottom-up or the first mile. The greatest challenge is to create awareness for the benefit of community fibre networks among the communities. In this regard, governments have an important role of creating an enabling environment for community networks to thrive. A high level regional workshop attended by participants from Burundi, Kenya, Rwanda, Tanzania and Uganda meeting in Tanzania Dar es Salaam on June 9-12<sup>th</sup>, 2009 recommended that all stakeholders should take advantage of emerging national fibre networks to provide unserved rural communities with communication services.

The regional workshop convened and organized by Tanzania Commission of Science and Technology (COSTECH) and sponsored by Canada's International Development Research Centre (IDRC) was inspired by the availability and potential applications of emerging national fibre networks in the region. The fibre networks are being built by governments, national operators, and power, rail, water and energy utilities among others. Unfortunately the limited synergy among the projects resulted in duplication of resources and often underutilization of existing infrastructure. Where the networks traverse, they provide an opportunity to serve the rural communities.

The objective of the workshop was therefore to;

- 1. create awareness on the potential for community fibre deployment to meet connectivity needs in rural areas;
- 2. explore and identify relevant policy interventions that will promote the development of community fibre networks in commercially non-viable areas, and
- 3. explore the utilization of existing fibre networks to improve local connectivity,
- 4. share ideas on the potential social economic applications of community fibre networks

The regional workshop brought together 28 participants who included ICTs regulators, ICT ministries, Chair ICT Parliamentary Committee in Kenya, managers of community owned networks, civil society organizations, consultants and academia. The Royal Institute of Technology of Sweden facilitated the workshop.

The workshop provided a learning experience and an opportunity to exchange ideas. This was realized through lectures, group sessions, debates and hands-on demonstrations. Importantly, the participants visited Wami Community fibre pilot network which is located 100 km west of Dar es Salaam to get a first hand experience on a functional community fibre network.

The field visit was very enriching allowing the participants to experience; an impressive symbiotic working relationship between two disparate organizations – the community and the Ministry of water staff in providing communications services within the locality achieved by exploiting extra capacity of the fibre for local development; a simple yet effective implementation arrangement among fibre owners and the community; demonstration of the excellent potential for stimulation of partnership growth; and the effective linkages with private sector within the community network.

The participants learnt about fibre technology, its applications and limitations, radio technology as the last mile technology and discussed applications in a typical community network in Sweden and Wami in Tanzania. Key areas discussed were the role of the stakeholders – the community, government agencies and other partners and a framework for interaction. The workshop reviewed the challenges that need to be overcome to ensure success of community fibre networks in stimulating development, and potential applications of community fibre networks. Most importantly, the workshop explored how communities can tap into such networks for local social economic development.

After four days of the workshop and exchange of ideas the participants observed that;

- Fibre is affordable with the potential of providing high capacity to local communities that will enable applications such as ecommerce, e-learning and social interaction at the local, national and including international levels
- The national operators driven by commercial interests have a limitation and have not provided services to rural and remote areas in each country. It is therefore imperative for the communities to take the initiative to extend fibre to communities bottom-up.
- The existing policy and regulatory framework have not been adapted to incorporate the needs of the community networks.
- The need for community ownership is critical in the success of community networks projects
- A combination of technologies which include fibre and radio have to be deployed to provide services
- The community fibre network is a complete system which integrates, technology, services, target consumer and financial aspects namely input costs structure and output revenue streams. The management of the community network has to balance these factors to ensure sustainability. In principle, the benefits from the project should be ploughed back to strengthen the project

• there is a possibility of rural communities being left out on the benefits of the national optic fibre infrastructure and international connectivity if specific policy initiatives are not put in place now

With high level discussions and cognizant of the need to serve all communities, the workshop recommended the following;

#### Governments

- Review relevant policy and regulatory frameworks to accommodate and support community owned fibre networks
- Consolidate and provide information on existing telecom/fibre infrastructure deployed by public utilities
- contract the communities to undertake government business outsourcing work to gain income by exploiting community networks
- Define access principles for national fibre optic backbone that will ensure maximum utilization in rural and remote areas
- Facilitate landlocked countries to access submarine cable networks

## Regulators

- Design and promulgate enabling guidelines to govern community networks
- Eliminate fees or charges for community networks including spectrum etc
- Support such initiatives through the universal services funds

### Academia

- Develop and include appropriate courses for establishment of community networks and applications in relevant academic curricula.
- take leadership to champion fibre technology skills and its application to the community

## Communities

- explore their specific environment and how they can take advantage of the national fibre in the neighbourhood
- establish management systems to develop and run their networks
- undertake a stakeholders analysis and mechanism to address all the stakeholders
- determine an appropriate ownership model that encourages partnerships including private sector entrepreneurs
- develop an innovative catalogue of services to offer to the community

Civil society organizations

- create awareness of the opportunity and feasibility of community fibre networks for local development
- educate rural poor on applications of community networks
- establish a forum for community networks to share ideas and experiences of community based networks
- create advocacy forums to lobby for an enabling environment for community fibre networks

Private and public sector operators (includes power, water and rail utilities with fibre)

- Explore areas to create partnerships with communities to extend their reach to rural areas
- Implement points of presence along the national fibre to serve community that the fibre traverses

Development partners

- support community fibre initiatives as demonstrated by SIDA who are funding the pilot projects - Wami and Serengeti Community fibre networks in Tanzania

The workshop participants committed to catalyse development of community owned fibre networks and to disseminate the knowledge they have acquired in their respective countries to stimulate rural development. In particular, participants from Tanzania, Kenya and Uganda committed to implement three community networks to exploit fibre in their neighbourhood namely; Sengerema Telecentre, Sega Silicon Valley, and a community wireless network in Kotido District connected to optical fibre.

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Dar es salaam Friday, June 12, 2009