



Main Challenges on ICT RESAERCH IN BURUNDI

Pierre NDAMAMA
Technical Manger SETIC

EuroAfriCA – ICT research Workshop
KIST 2-3 March 2009

BURUNDI NICI PLAN

In the aim of the ISWS (SMSI) Recommendations a
NICI was developed (6 Pillars)

1. **Capacity Building and Human Resources Development**
2. Legal, Regulatory and Institutional Provisions and Standards
3. **ICT Infrastructure, Equipment**
4. Applications and Content development
5. eGovernment and eGovernance
6. Private Sector Development



Advantages From S&T cooperation

- Accessing new knowledge, foreign skills and training opportunities
- Accessing larger research facilities
- Avoiding the cost of duplication of research
- Widening social networks and establish fruitful relations at an international level
- Opportunities to establish multidisciplinary research activities and teams
- Easier access to international funding
- Building or strengthening local and regional R&D capacities, including R&D management
- Stimulating investments in R&D at a national or regional level
- Enhancing the quality of academic education

What are the prerequisites to doing Research

- Critical Mass of Highly qualified Human Resources in the area of interest
- Clear Policy and Research Strategic Plan
- Research Infrastructure and Equipment
- Cooperation between Researchers and/or Teams of Researchers
- Dissemination and Publication of Results



What is the situation in Burundi



Workshop on Research recently held in Bujumbura

- Objectives:
 - Assessment on Research Activities
 - **Gaps in Research development**
 - Strategic Plan
 - The way forward

Main Challenges for ICT Research Development

- No National Strategic Policy on Education and Research based on ICT as yet;
- Lack of Awareness among Policy and Decision Makers
- Lack or Insufficient ICT Infrastructure;
- Insufficient number of ICT Experts at all levels and sectors;
- Institutional Networks yet to be setup in some of the potential shareholders
- Awareness in the importance of ICT and all the related services among potential users
- Very low Connectivity if not totally inexistent
- Very little ICT Research Activity
- High illiteracy in ICT

Main Challenges ctd.

- There are neither sufficient facilities available in the country for advanced research and development in ICT and in other important subjects nor any research and education networks so that available resources in the globe can be accessed efficiently. Due to the lack of research infrastructure, people are compelled to go abroad for research work.
- In fact, a significant number of people left the country for promising opportunities and jobs in developed countries or in the neighboring countries.

Main Challenges ctd.

- The Government has been spending a huge budget for higher education by sending students for advanced courses in developed countries, the majority of whom do not come back to the country. This leaves a big negative impact on the country's economy as well as on the human resource development for the country's overall development.
- Universities lack state-of-the-art ICT infrastructure and connectivity to carry out teaching and research, not only in the ICT sector but also across all other disciplines.

Main Challenges ctd.

- The lack of ICT infrastructure has resulted in the isolation of universities in Burundi, with little national and regional collaboration possible due to the limitations imposed by expensive and unavailable broadband capacity.
- Efforts to develop National Education Research Network that promote advanced broadband connectivity are at an early stage of development

Expectations from EuroAfriCA- ICT Project

- Creation of ICT R&D Centres of Excellence
- Development of partnerships between universities
- Creation of the National Research Network in Burundi
- Building the capacity of academia to enable active and meaningful contribution to government policy processes



Priority actions to be taken

- Significant and sustained Capacity building programmes
 - ICT Department
 - NREN SETUP
- Internet Access and Connectivity Improvement



RCIP Contribution

- **Enabling Environment**
- **Connectivity**
- **Transparency: Preparation for eGovernment applications**

Enabling Environment

- Regulatory technical assistance to promote further sector reform as to maximize benefits from access to capacity (regulatory tools to guarantee open access to national and international infrastructure, cost-modeling, price control mechanisms, interconnection, essential facility regulation, policy and regulatory competition law, spectrum management, etc.);
- Policy and regulatory capacity building, consensus building activities, training in the topics mentioned above (sector policy and implementation of regulatory reforms);

Connectivity

- This component will support connectivity in Burundi through several subcomponents:
 - Support for equipment and construction of a virtual landing station and the establishment of an internet exchange point (IXP);
 - Support for the rollout of a national backbone, the Burundi Backbone System (BBs);
 - Support for purchase of capacity for targeted users;
 - Support for financing the Governments' communications network; and
 - Support for the extension of ICT coverage in rural areas.



Transparency: Preparation for eGovernment applications

- The aim of the intervention is to create the basis for further development of eGovernment applications in Burundi through specific identified actions



**THANK YOU FOR THE
ATTENTION**