



Exploiting e-Infrastructure Potential for Boosting Research and Innovation in Africa and Fostering Euro–Africa Cooperation

**Investigating Best Practice for e- Infrastructure
Application Development . Part 1**

Dec. 9-10, 2010



Digital Education Revolution in an LDC Environment

A Case of Rwanda Education Commons

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Rwanda Education Commons**

**2010 Euro-Africa e-Infrastructures Conference, Helsinki, Finland
Dec. 9-10, 2010**

Presentation Outline

- ❖ **Background**
- ❖ **Rwanda Framework**
 - ✓ Policy
 - ✓ Strategic Plan
- ❖ **From Policy to Implementation**
 - ❖ Rwanda Education Commons





Facts about Rwanda



Facts about Rwanda

- ❖ **Population: 9.2 Million**
- ❖ **Land area: 26,340 sq. km**
- ❖ **Land with forests: 12.4%**
- ❖ **Literacy level: 64.9%**
- ❖ **GDP per Capita: US\$ 520 (Year 2009)**
- ❖ **GDP Growth: 6.2% (Fiscal Year 2009/10)**

- Source NIST

❖ **Primary (Grade 1-6)**

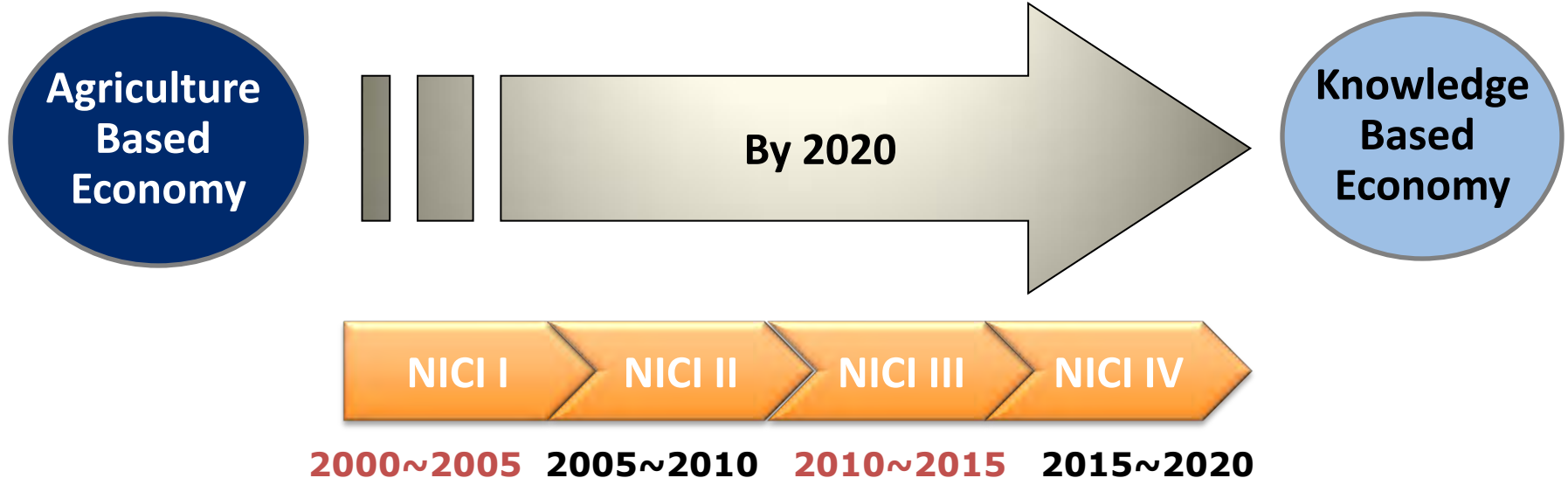
- ✓ Population: 2.15 Mil.
- ✓ Schools: 2,430
- ✓ Teacher students ratio: 1:74

❖ **Secondary**

- ✓ Population: ~410,000
- ✓ Schools: 760 (2008)
- ✓ Teacher students ratio: 1:32

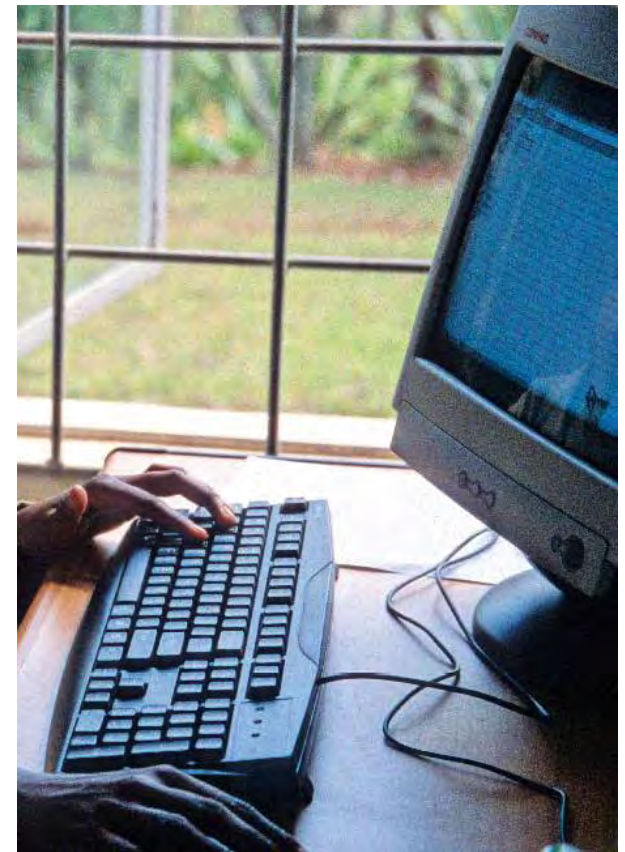
- Source MINEDUC (2008)

Government of Rwanda's Vision



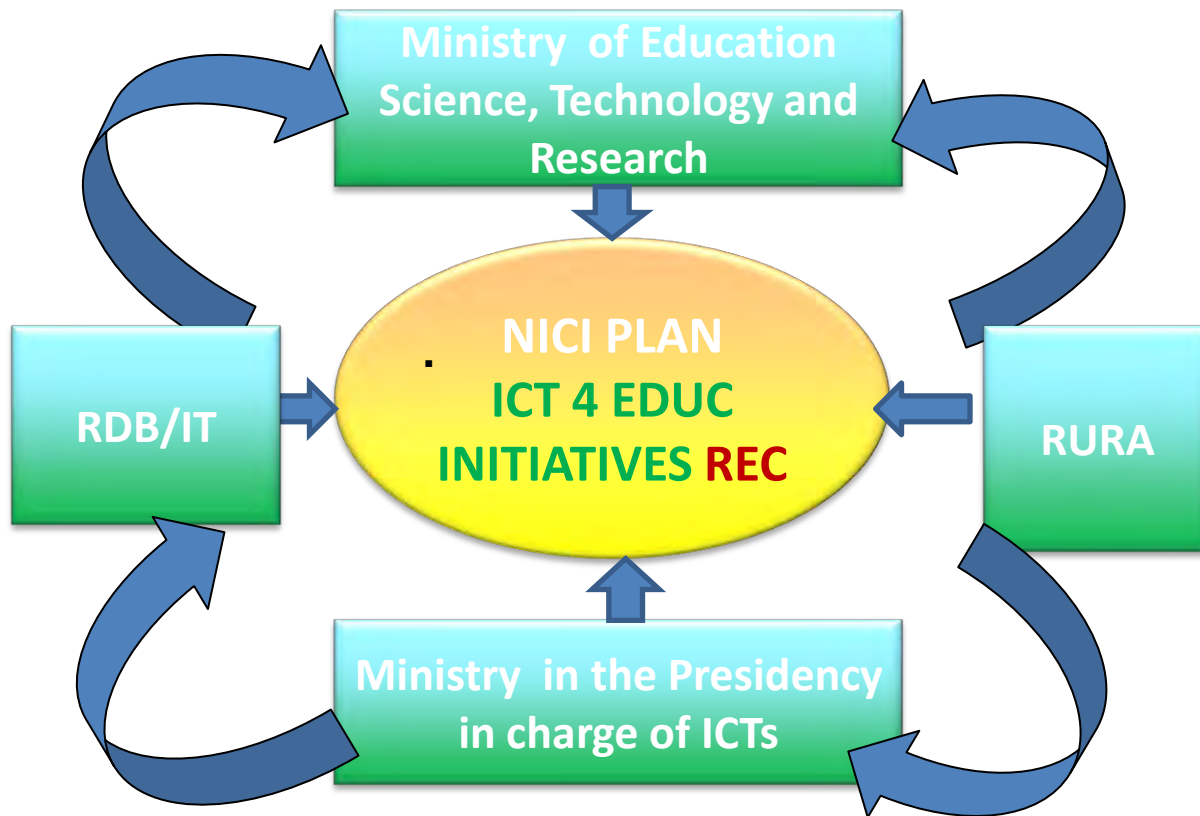
Vision 2020 – Pillars of NICI II

- 1. ICT in education**
- 2. Human resource development**
- 3. Infrastructure, equipment & content**
- 4. Economic development**
- 5. Social development**
- 6. E-government and e-governance**
- 7. Private sector development**
- 8. Rural and community access**
- 9. Legal, regulatory and institutional provisions and standards**
- 10. National Security Law and order**





Institutional Arrangement - ICT in education





From Policy to Implementation

**Education Sector
Strategic Plan
2006 – 2010**

**National information
Communication
Infrastructure Plan
(NICI II PLAN – 2005~2010)**

**ICT In Education
Strategic Plan**

**ICT For Educ. Initiatives
REC, OLPC,SGIS & RDG@NUR,
RITC @KIST, RWEDNET...**



Rwanda Education Commons (REC)

- **Four-year, US\$ 4.8 million project**
- **Launched at Africa Regional Higher Education Summit in October 2008**
- **Objectives:**
 - ✓ Improved climate for coordination and collaboration around the use of ICT in education
 - ✓ Improved teaching and learning through the cost-effective use of ICT
- **Implemented by The Academy for Education Development AED, with the Ministry of Education**

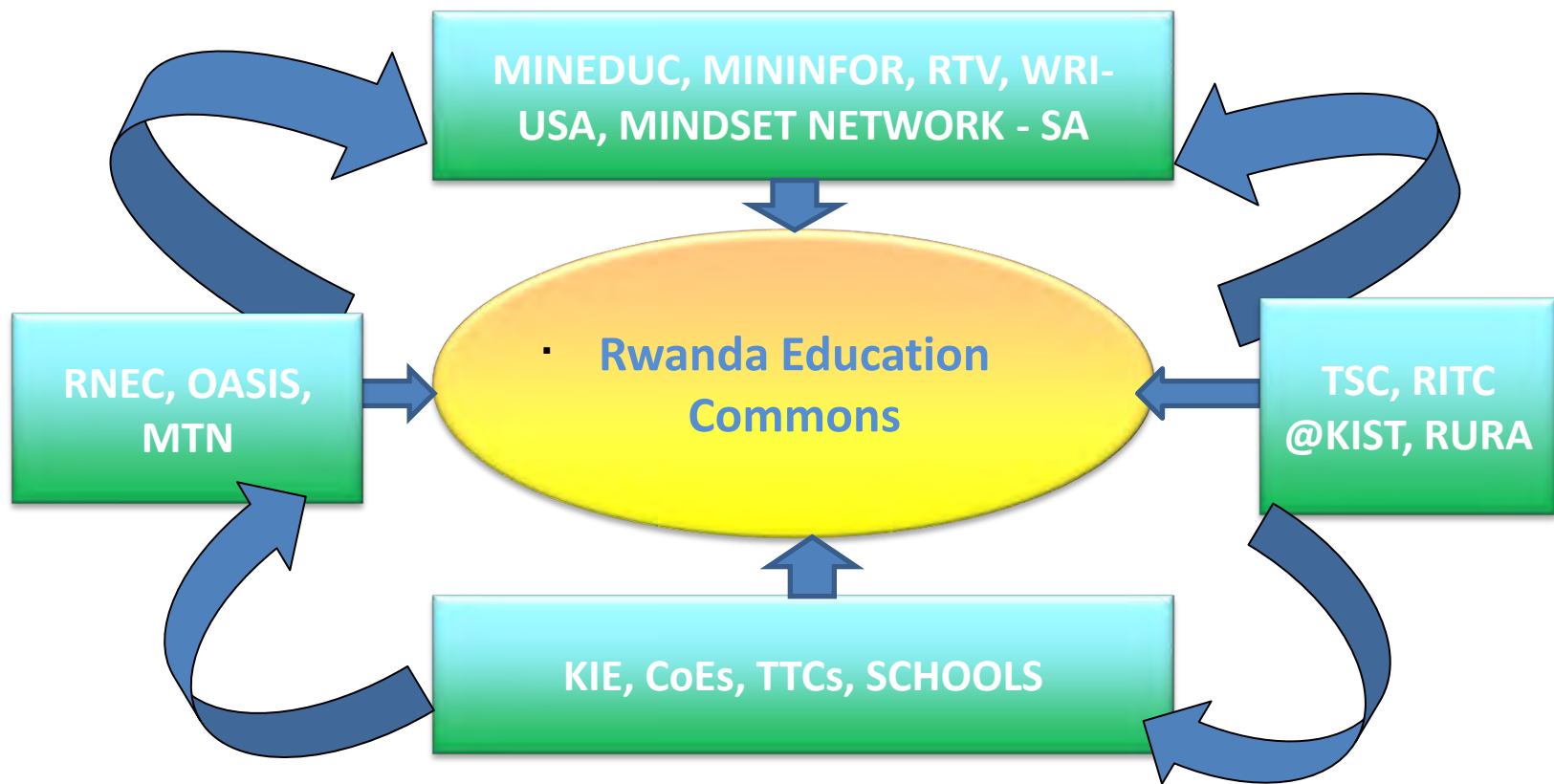


Focus Areas

REC

5 Areas	1. Content Development and Delivery	√
	2. Capacity Development and Teaching	√
	3. Infrastructure and Access	√
	4. Innovative Solutions	X
	5. Monitoring and Evaluation	√

Implementing Stakeholders Arrangement



REC Accomplishments

- ❖ **Policy support**
 - ✓ **ICT in Education policy and implementation plan**
- ❖ **Coordination**
 - ✓ **REC advisory and working groups**
- ❖ **Partnerships**
 - ✓ **ICT in Education conference (June 2009) and outreach efforts**
 - ✓ **Partnerships with WRI, RNEC, Microsoft, and Intel**



REC Accomplishments

❖ Capacity building in IMM Resources Development

✓ With Mindset Network, SA

- ✓ Enhanced skills of 24 curriculum developers
 - National Curriculum Development Center
 - Kigali Institute of Education
 - Rwanda Development Gateway
 - Regional ICT Training and Research Centre @KIST
- ✓ 32 Interactive locally-produced multimedia modules for science

"I gained from the training a new way of thinking in terms of interaction between student & Content. I will use the student centered methodology and Student- Content interaction while developing curriculum and teaching my lessons my advice is to integrate IMM production in KIE's Curriculum"

Faustin Habineza, Lecturer, Kigali Institute of Education



Content Development & Delivery

- **Content acquisition & development**
 - ✓ Over 300GB of multimedia acquired from Mindset Network, Azim Premji Foundation , NCDC, etc...

- **Content library of around **9,380** teaching resources, lesson plans, and other materials is being developed**
 - ✓ **Lycee de Kigali & Fawe Girls School Teachers**



Content Delivery

Online Delivery

❖ Delivery of education resources through the Rwanda Education Portal www.educationcommons.rw

❖ Partnership with RTV on Broadcasting “Best Practice” Video in Maths, Science, and English - twice a week

Offline Delivery

❖ Develop & Deliver Experiment Video for Science , Maths for A Level in Partnership with NCDC

❖ Delivery of several external hard disks of multimedia education content acquired from Mindset Network (worth 3.5 million USD) to TTCs

Others: Delivery of Rwanda National Examination past papers in News papers (**Imvaho and Oasis**)

✓ **125,000 students are able to use past papers for practice**



Teachers



Guide students, facilitate lessons effectively.

[Read more](#)

Learners



Learning and revision made simple online.

[Read more](#)

Welcome to the Rwanda Education Commons, a place for educators and learners to share resources and ideas.

Not yet a member?
Join now!

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twitter

YouTube

Policymakers



Offer advise to educators and promote elearning.

[Read more](#)

Resources



Resources for online teaching and learning

[Read more](#)

Ntare Old Boys to build Rwf 2.5bn school in Bugesera



Former students of Ntare School in Uganda, under their umbrella organisation, Ntare School Old Boys Association (NSOBA) Rwanda Chapter, are set to embark on a major fundraising drive to build a model secondary school to the level of their former school.

Primary final exams to be done in English



Candidates who will sit the 2010 Primary Leaving Examinations (PLE) will take their exams in English. This is part of the implementation process of the 2008 government policy of adopting English as a medium of instruction in schools which began at the beginning of the 2009 academic year.

[Read More »](#)

Rural Schools Connectivity

❖ RURA-REC Partnership in Connecting TTCs

- ✓ **VSAT Connection to all Rwandan TTCs**
 - **Monthly fees**
 - **RURA (Universal access fund) → 80%**
 - **REC → 20%**

❖ REC is working with MINEDUC

- ✓ To issue a RFP to deliver wireless connectivity from the national fiber optic cable to rural schools
- ✓ **Pilot in 6 to 10 schools**

Q&A Session

