



# **ICT in Education, Rwanda**

**Theoneste MUTSINDASHYAKA**  
**Minister of State**  
**in charge of Primary & Secondary Education**

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# Rwanda: Reality & Challenges



Teacher student ratio of 1:74 in primary



Primary: Grade 1-6  
2.15 Million Children  
in 2370 schools  
31,037 teachers

Secondary: Grade  
7-12  
0.266 Million  
Children in 643  
schools

Teacher student ratio of 1:22 in secondary

**9.2 Million Population,**  
**26,340 sq.km land area**  
**12.4% land with forests**  
**Literacy level is 64.9%,**  
**GDP of USD 2.5 billion**  
**Annual GDP growth of 5-6%**



Trilingual system  
Kinya-rwanda / French / English



Net enrolment of 10% in secondary education and 1.7% in tertiary

• 45.3% population is less than 15 years of age



- Shortage of qualified Teachers
- Shortage of printed books
- Only 39% completes primary education

Gender ratio is a concern at Tertiary level (girls to boys ratio of 0.4)



- The present ESSP is the forth update
- Emerging priorities of the nine year basic education policy is;
  - integration of science and technology
- ESSP is focused to contribute the economic development and
  - poverty reduction (EDPRS)
- It underpins the concepts of universal access and equity
- The ESSP is derived from the long term strategy and financial
  - framework (LTSFF)
- We will continue to work with our partners to ensure we

provide

Science and technology in education is emerging as a key priority area



# **ICT as a tool for Teaching – Learning in achieving the ESSP...**

# Efforts initiated by MoE ...



- **National Information & Communication Infrastructure Plan 2006-10**
- **Infrastructure (10 PCs /school) deployed in 400 secondary schools**
- **Connectivity is being established – 83 schools connected so far**
- **3000 teachers training in partnership with Microsoft**
- **GIS pilot initiative started in 10 schools in partnership with ESRI**
- **NePAD e- Schools initiative in 6 schools**
- **OLPC pilot in one primary school**
- **EMIS packaged in being developed**  
**The Educational Management Development is another key priority area**
- **Dialogue initiated with many partners for “ICT in**



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# Going forward ...

# Addressing the critical factors...



- **Teacher involvement**
- **ICT in Education as an integral part of teachers' pedagogy and classroom process**
- **Dedicated Government / partner resources**
- **Prescribed infrastructure, hardware and power availability**
- **Process guidance, ongoing support and teacher development**
- **Digital learning material (relevance, quality & quantity)**
- **Monitoring and Evaluation**



# **How OLPC can assist in achieving the ESSSP and Critical Success factors?**



# Positives of OLPC



- **The idea and ambition is very appreciable**
- **Packaged with all possible features – Specific to hardware**
- **The video and photo clarity is good**
- **Compact, good looking and less weight**
- **Attractive capital cost (If it is sold at USD 100/- Per Laptop)**
- **Meets most of the Environmental & Regulatory requirements**
- **Focused to support education**
- **Dual operating system compatibility – News from BBC News**

# Discussion points...



- **Rwanda is looking for XO laptops for both children and Teacher**
  - **Is the same configuration is good enough for the teacher?**
  - **Do we need to install server in the school / classrooms?**
  - **Battery back up – Enhancing the duration of back up**
  - **Addressing the breakage/hardware failure/software problems**
  - **Service back up at the filed level including components and AMC**
  - **The framework for ICT integration and classroom management**
  - **OLPC hangs if the children open couple of applications together**
  - **Reliability of open source OS and support services**
  - **Training and capacity building – teachers & administrators**
  - **Curricular and Co-Curricular content in Regional Languages**
  - **Upgrading / replacement and electronic waste disposal**
- Almost 50% of the “OLPC” is not functioning in the pilot school*

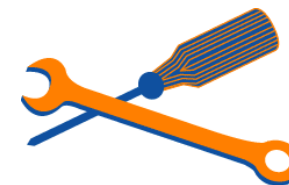
# Some other challenges...



## Power availability



## Computer uptime



## Infrastructure cost



## Languages and trained teachers



## Monitoring

# Thank you

