ASSESSING THE FEASIBILITY OF A REGIONAL TRAINING CENTRE TO PROMOTE HUMAN RESOURCE DEVELOPMENT IN ICT SECTOR IN THE IOC REGION

WORK IN PROGRESS: PRELIMINARY FINDINGS

Sushita Gokool-Ramdoow, D.Ed.
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TERMS OF REFERENCE

• # 1: Current ICT Training Capacity in the region and gap analysis
• # 2: Business case for a Regional ICT Centre of Excellence with emphasis on usage of existing infrastructures and institutions and regional value-addition

• ICT key enabler in promoting sustainable development
AIMS OF STUDY

• Identify ICT4D capacity gaps in the 5 islands

• Identify possible solutions

• Defining the main characteristics of proposed inter-country collaborative platform

• Taking into consideration that such a platform for inter-country collaboration can have a distributed structure across the Region to promote ICT as a key enabler in promoting sustainable development.
ONE PROBLEM AND...

• One solution that incorporates 5 islands:
  • At different levels of development
  • With different strengths & capacity gaps
  • With different development priorities
CONCEPTUAL FRAMEWORK

  • ...Assumption: more and better information and communication further the development of society.

• UN Declaration of Human Rights (1948)
• UN Agenda 21 (1992)
• OER Paris Declaration (2012)
CAPACITY BUILDING PRIORITIES INFORMED BY:

UN DECLARATION OF HUMAN RIGHTS (1948)

**Article 26- Education:**

Everyone has the right to education...directed to the full development of the human personality

UN AGENDA 21 (1992)

36.3. Education, including formal education, public awareness and training should be recognized as a process by which human beings and societies can reach their fullest potential.

PARIS OPEN EDUCATIONAL RESOURCES (OER) DECLARATION (2012)

- “teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain”
  ...to widen access to education at all levels, both formal and non-formal, ...for lifelong learning, contributing to social inclusion, gender equity and special needs education...improved cost-efficiency and quality of teaching and learning outcomes
ICT FOR DEVELOPMENT (ICT4D) PENETRATION POINTS…

Aspects relevant to ICT for Development (Okinawa Summit of G8 Nations)

- ICT for Climate, Weather and Emergency Responses
- ICT for Education
- ICT for Livelihood (esp. Agriculture)
- ICT for Inclusion- women, people with disabilities, elderly, isolated communities…
- ICT for Government (business, health, employment, payment, etc…)
- ICT FOR SUSTAINABLE DEVELOPMENT
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<tbody>
<tr>
<td>Fixed-telephone subscriptions per 100 inhabitants</td>
<td>26.6</td>
<td>34</td>
<td>0.7</td>
<td>3.1</td>
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<tr>
<td>Mobile-cellular subscriptions per 100 inhabitants</td>
<td>113.1</td>
<td>158.6</td>
<td>39.1</td>
<td>32.33</td>
<td>224</td>
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<tr>
<td>Fixed (wired)-broadband subscriptions per 100 inhabitants</td>
<td>10.6</td>
<td>11.7</td>
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<td>5.98</td>
<td>90.6</td>
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<tr>
<td>Mobile-broadband subscriptions per 100 inhabitants</td>
<td>21.5</td>
<td>8.7</td>
<td>0.1</td>
<td>0.03</td>
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<td>Households with a computer (%)</td>
<td>40.6</td>
<td>51.9</td>
<td>2.8</td>
<td>n/a</td>
<td>67</td>
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<tr>
<td>Households with Internet access at home (%)</td>
<td>42</td>
<td>41.9</td>
<td>2.7</td>
<td>2.38</td>
<td>64</td>
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<td>Individuals using the Internet (%)</td>
<td>41.4</td>
<td>47.1</td>
<td>2.1</td>
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<td>78.6</td>
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Pillars of ICT 4D initiatives

## CAPACITY GAPS

<table>
<thead>
<tr>
<th>Priorities for ICT4D</th>
<th>Knowledge Gaps</th>
<th>Research Gaps</th>
<th>Individual capacity gaps</th>
<th>Institutional Capacity Gaps</th>
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<tbody>
<tr>
<td>Promotion of ICTs</td>
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<tr>
<td>Access to knowledge and information</td>
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<td>Capacity Building</td>
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<td>Applications of ICT in everyday life</td>
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<td>E-Government Services</td>
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<tr>
<td>What more can be done that what is being done</td>
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<tr>
<td>What more can organizations do?</td>
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<td>How do you see this happening?</td>
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<tr>
<td>What support is required?</td>
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</table>
ICT4D COUNTRY STRENGTHS

Madagascar
- High connectivity
- Collaboration with India and France
- Strong French aid
- ICT integration at Higher Education level esp. University admin

Seychelles
- ICT Strategic Plan
- Structured approach to ICT
- Research & Development -present
- Very high connectivity
- Government services
- Leadership

Mauritius
- Leadership
- ICT and Education Strategic Plans
- Budget line
- Legal & Regulatory frameworks
- High connectivity
- High rating in ICT indices
- Forthcoming e-Government Strategy

Reunion
- Structured & inclusive approach to ICT in Ed
- Research Development -business & HE
- High connectivity to very high connectivity
- Technopole strong ICT focus

Comoros
- Promoted at university
- Talented youth
- Keen interest
- Willingness for regional integration, collaboration & experience sharing
- Growth in interest and use
ICT4D NOTED CHALLENGES

Madagascar
- Crisis
- Poverty reduction is priority
- Electricity and infrastructure need to be addressed
- WORKFORCE SURVEY REQUIRED

Seychelles
- Teaching capacity
- Low interest in ICT at school level
- Resistant mentality, esp elderly
- More research reqd.
- Repositioning ICT
- WORKFORCE SURVEY REQUIRED

Mauritius
- WORKFORCE SURVEY REQUIRED
- More coordination among private/public sectors
- Alignment of training with industry needs
- More uptake in ICT educational programs

Reunion
- Decision-taking may be difficult and slow
- WORKFORCE SURVEY REQUIRED

Comoros
- Monopoly situation
- Cost of ICT high
- Access made difficult
- Training at all levels required
- WORKFORCE SURVEY REQUIRED
IOC REGION CAPACITY GAPS - GENERAL SUMMARY

• ICT lesser priority in some countries - repositioning required
• LACK OF WORKFORCE SURVEYS TO INFORM HUMAN CAPACITY BUILDING DECISION
• Difficulty to gauge number of ICT-related graduates and specific areas of employment
• Sometimes unstructured approach to ICT in education matters
• Numbers of graduates in scientific and technical fields both at secondary and tertiary level are inadequate.
• Lack of interest in science, Math and ICT-related subjects in some countries & ICT deficit in curriculum
• Low literacy rates reported in some of the countries which is even further worsened by brain drain.
• Lack of research and knowledge production capacity
• Inadequate human capacities to plan for and implement development strategies.
COLLABORATIVE PLATFORM WAS REQUIRED

To collectively build capacity for ICT for development, the need for a platform for collaboration from a multi-sectoral approach that would include academia, IT professionals, governments, businesses and other stakeholders emerged from the study.
RECOGNIZED NODES FOR ICT (&ICT-BASED) CAPACITY BUILDING COLLABORATION

• Leadership & Legal issues- highest level

• E-governance

• Awareness raising and advocacy for an inclusive range of audiences, especially adult education

• Pre-primary to secondary school level- Integration of ICT, especially programming in curriculum & Teacher education

• Higher Education with: Research, Development, Business and Industry foci

• Sustainable Development: poverty reduction, gender equality, health promotion, sustainable lifestyles, peace & human security, biodiversity, sustainable urbanization, water (consistent with UN ESD themes)

• Climate Change, Disaster Risk Reduction & Geographical Information Systems
SOME ESSENTIAL FACTORS

• Public/private partnership and Multi-sectoral partnerships are central to the governmental development agenda.

• Public-Private Partnership- Should be strictly quality controlled

• Reliance on Open Source Software and Educational Programmes

• Harmonised policies, strategic plans, qualification frameworks and credit accumulation & transfer systems

• Level of reliable connectivity
AIMS OF THE A PLATFORM FOR CAPACITY COLLABORATION

• providing high quality & CERTIFIED training and research facilities related to the use of ICT for development (ICT4D) purposes and knowledge sharing of best practices among the Island States of the region

• fostering the sharing of knowledge between different stakeholders of the regional ICT industry, including Government officials and small and medium enterprises.

• enhancing the development of start-ups in Science and Technology

• stimulating the development of ICT in countries in the region

• enhancing research and development in ICT
COLLABORATIVE PLATFORM: CRITICAL SUCCESS FACTORS 1/4

• Political will: National development policies
• ICT Strategic Plans for an enabling and competitive environment
• Infrastructure
• National Education Plan
• Human Resource Development Plans
COLLABORATIVE PLATFORM: CRITICAL SUCCESS FACTORS 2/4

• Stated goal of digital inclusion, enabling universal, sustainable, ubiquitous and affordable access to ICTs by all, taking into account relevant solutions already in place ..., to provide sustainable connectivity and access to remote and marginalized areas at national and regional levels.
CRITICAL SUCCESS FACTORS 3/4

• As part of their e-strategies, Governments have developed appropriate benchmarks and ICT connectivity indicators.

• Plans to provide and improve ICT connectivity for all schools, universities, health institutions, libraries, post offices, community centres, museums and other institutions accessible to the public, in line with the indicative targets.

• All local and central government departments and establish websites and email addresses.
CRITICAL SUCCESS FACTORS 4/4

- Engagement in appropriate research to gather knowledge based evidence in support of technical, regulatory and operational matters.

- National e-strategies are inclusive- the elderly, persons with disabilities, children, and other vulnerable groups

- Make ICTs relevant for goals of sustainable development, especially poverty reduction.
HARMONISING ALL FRAMEWORKS

- ICT Frameworks
- Educational Frameworks with a stronger focus on integration of ICT especially programming from a young age
- National Qualifications Frameworks
- Credit Accumulation and Transfer Systems for portability and transferability of learning
IMMEDIATE ACTIVITIES

- Develop Country level National ICT Policies and Strategic Plans where the focus on capacity building and the bridging of capacity gaps will be clear.
- Harmonizing regulatory frameworks especially with regard to ICT & Education
- Workforce surveys to understand and address gaps
- Necessary linkages and arrangements with the country level or regional level Qualifications Framework & Credit Accumulation Transfer System for portability and transferability of qualifications
- ICT-related legislations, especially broadband policies to enable more intense digital circulation
- MoUs for collaboration among the networked members of the RCoE.
THANK YOU!!

• Questions??