

Challenges of Scientific Re-Awakening in the Developing Countries: Action Agenda for the World Summit on the Information Society

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INTRODUCTION

- Sustainable generation of wealth rests on scientific research
- Motivation: Not scientific research but the consequent human development
- Access to knowledge creates synergy digital divide converting to knowledge divide
- **Positive change in Africa: facing up to the challenges and a scientific re-awakening**
- Specific focus :enabling developing countries to create and exploit scientific intellectual property.



Challenges

- Lack of awareness/conviction among our leadership about the benefits of joining the knowledge society
- Very limited content generated by LDCs, something to sell in the market
- Limited access to, and high cost of current scientific publications, and limited internet literacy
- Lack of appreciation of intellectual property value or how to manage it
- Limited and very costly access to the Internet
- Challenge is primarily to developing countries (commitment and ownership), and then to developed countries (support)



Awareness and Conviction about Benefits

- Action Point 1: Conduct research to establish clear objective linkages between investment in scientific research and ICTs and repackage the awareness message.
- Action Point 2: Link international/ multinational support for initiatives that promote access to knowledge, to demonstrated national ownership, including an acceptable level of financial commitment that will ensure sustainability.



Limited Content from LDCs: Capacity (Makerere Example)

- Action Point 3: Setting up and funding for capacity building models that do not lure expertise away from LDCs, enhance the expertise of researchers (already PhD level) in LDCs, and focus on areas with nationally defined development relevance and priority.
- Action Point 4: Parallel with the creation of research capacity, fund the establishment and equipping of laboratories that permit researchers in the developing countries to carry out frontline research.



Access/ Cost of Publications; Internet Literacy

• Action Point 5: International Support for **INASP** and its **PERI** programme; expanding role as a neutral negotiating body for academic and research institutions for access to scientific literature; pushing for unbundling of access to the various databases; developing *countries to take a more active participation in* both identification of relevant sources and negotiation, to build their capacity for eventually leading the initiative



IP Value and IP Management

- Action Point 6: Work with African Academic and Research institutions so that they lead in establishing environments where intellectual property value is recognized and protected, with objective targets for generating patents.
- Action Point 7: Support for cross-national movements that are working towards the growth of open source copyright as a critical transition stage in the promotion of scientific research in LDCs.
- Action Point 8: Back up the ongoing debate on open source IP with support for objective research of current advantages and disadvantages of alternative approaches to IPR.



Access to Internet/ Cost

- Action Point 9: The ITU should encourage the recognition of academic and research institutions as deserving of any regulatory decisions that would lead to a reduction in the cost of internet access; includes enabling institutions based in different countries to creating access and negotiating with major Internet access providers as a block.
- Action Point 10: Support for regional consortia of academic and research institutions that are working towards low cost of Internet access.
- Action Point 11: Support / funding for the penetration of optical fibre internet backbone into the African continent: Realistic long term solution.



The Gospel of Knowledge?

"The problem of our age is the proper administration of wealth, that the ties of brotherhood may still bind together the rich and poor in harmonious relationship..... This, then, is held to be the duty of the man of wealth: To set an example of modest, *unostentious* living, shunning display or extravagance; to provide moderately for the legitimate wants of those dependent upon him; and after doing so to consider all surplus revenues that come to him simply as trust funds..." Andrew Carnegie

• HOW DOES THIS APPLY TO KNOWLEDGE?

– THANK YOU