

## AN APPROACH TO eREADINESS AND UNIVERSITIES

R. D. Colle (rdc4@cornell.edu)

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A report released at the World Summit on the Information Society identified a significant role for information and communication technologies (ICT) in strategies for African development. The report notes that NEPAD<sup>1</sup> includes a strong focus on the dual strategies of *ICT Development* (ICTD) and *ICT for Development* (ICT4D). In this paper we argue that universities in developing nations are potentially important players in both of these NEPAD strategies, and that the "eReadiness" of universities is a vital issue in [rural] development. The eReadiness of universities is clearly relevant to the global creation and distribution of knowledge — which, in turn, is a core challenge in the world's thrust toward the Millennium Development Goals.

First a clarification. We apply the NEPAD terms to universities this way:

- *ICT Development* in the university context refers to building media and digital facilities to support university internal functions, along with an academic and research program that prepares students to function effectively in an information society — in both the public and the private sectors.
- *ICT for Development* refers to the university applying ICTs in programs outside its walls in the service of communities and the nation. *We know of no convincing evidence that universities spontaneously move to ICT4D after, or while, achieving ICTD.*

Central to creating a digital resources and academic infrastructure is the question of universities' relevance to the world around them, and especially to the challenge of being an active player — "an anchor of a broad-based poverty alleviation strategy" in an increasingly knowledge-based economy.

Recently we raised this relevance issue when the National Alliance for Information and Communication Technologies for Basic Human Needs came into being in India and immediately set a goal of bringing all of the nation's 600,000 villages into the modern "information society" by 2007, the 60th anniversary of Independence. When we proposed that the agricultural universities in India be explicitly included in the National Alliance, we received this terse response:

The universities have failed miserably in many respects. Most university faculty have no clue to life outside the campus nor have they any social concerns. Sorry for being very forthright or even blunt.....

We went beyond the rather general indictment of academics illustrated by my email correspondent and looked at five dimensions of what we called university *eReadiness*. These included:

- (1) ICT facilities and network access for the university community
- (2) Personnel available to support design and production of digital materials such as CDs, web pages and distance learning (training) packages
- (3) Academic programs including field experience that prepare students for applying ICTs to community development
- (4) University policies that apply to faculty participation in outreach programs

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<sup>1</sup> New Partnership for African Development

(5) Respondents' ICT posture, for example, what is their disposition regarding the use and efficacy of ICTs in education and learning.

### **Moving forward**

What might be done to promote greater involvement of African universities in ICTD and ICT4D institution-building initiatives? Based on our research and observing ICT and development initiatives around the world, we have proposed an initiative to build the ICT4D capacity in a *regional group* of African universities. The intent is to demonstrate the potential of universities as partners in such ICT-related development activities as community telecenters, and to persuade important policy-makers to factor universities into their ICT policies. The components of the initiative, expressed as outputs, include

- A consortium of networked east/southern Africa agricultural/technology departments/universities to collaborate with a North American university consortium in ICT-for-development programs;
- Creation of a university-based center of excellence (ICT Resource Centre) in east/southern Africa for supporting the university consortium's ICT activities including practical training, production of educational and training materials, collaborative research, and exchange of information, knowledge and experience;
- A model curriculum and learning materials for ICT-for-rural development academic and training programs, adapted to the learning culture of the participating universities;
- A cadre of trained ICT for rural development "champions" on the staffs of the participating universities, accomplished through collaboration with U.S. universities;
- An explicit policy and program at each participating university for recruiting students and in-service training candidates into ICT-for-rural development courses and workshops;
- A plan of action for establishing communication linkages among ICT policy makers in Government, faculty in universities, scientists in research institutes, agricultural enterprises, farmer groups and rural communities especially to promote development issues such as the Millennium Development Goals.....

### **The telecenter challenge**

There is a strong interest and a great deal of activity in Asia, Africa and Latin America in using telecenters as a means of providing ICT resources for people who do not have their own computers and network connections. Many of these telecenters are struggling to survive. What they need are resources that universities might provide. For example:

- **Research** — Telecenters need to find out what kinds of information and communication resources their communities want and need. This is what helps telecenters become demand-driven – a vital issue in their sustainability. Telecenters need research also to evaluate continuously how well they are serving the needs of their communities. Many universities have research capabilities that could be applied to the telecenter research needs we mentioned. And universities could use telecenters as social research labs for their faculty and students.

- **Local and relevant content** — Too much content on the web is not relevant to farmers and other rural people. It is a common problem around the world, where external information dominates locally-tailored material. This is where credible, useful and user-friendly information needs to be crafted. The UNDP has suggested that the most important reason for the failure of telecenters is their lack of suitable content.

Universities such as agricultural universities have access to science-based information that could be tailored to regional, provincial and local social, linguistic, and cultural characteristics, and could be matched with many of the Millennium Development Goals.

• **Training and Learning resources** — People in telecenters need to be trained in how information can contribute to development. We have found telecenter managers who know a lot about computers but don't know how to link telecenter potential to health clinics, schools, agricultural extension, or local government. Likewise, telecenters need to make their communities aware of the value of information, such as peanut marketing information and technology transfer in silkworm enterprises, or the chances for more education through distance learning. Awareness of the value of information will help the communities realize the value of the telecenter. Naturally, universities have the capacity to teach and train, but equally important, they have the cultural credentials to give credibility to their knowledge resources.

• **Human resources.** — Telecenters need volunteers who can help make telecenters good places to visit – volunteers who can help people search and understand the basic rewards of a digital experience. And who can welcome special groups such as women and the elderly who are frequently shutout by culture. Universities have human resources such as students who could serve as telecenter interns, and faculty members who could serve as content and development advisors. We are working on a plan to incorporate telecenter internships as part of one African nation's post graduation service requirement (in Ghana). For some places perhaps service in a telecenter for young men and women could become an alternative to military service.

### **Conclusion**

Our research in south India and Africa focuses on public access telecenters and especially on issues related to public demand for their services and their sustainability. We believe that telecenters constitute an important force in efforts to build an Information Society and to join the march to the Millennium Development Goals. Our experience in India suggests that universities can be valuable actors in providing some of the resources telecenters need for their survival. This is important because colleges and universities are enduring entities in most nations, and the social role of the university historically has been to create, store and diffuse knowledge, a collection of activities that partially parallels some telecenter operations. Yet, few major programs link universities to telecenters as an institutionalized source of information, knowledge and training — the basic commodities of a telecenter. University eReadiness is a good place to start.

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