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This week's readings cover ICT4D projects, assessments, and prognostications. The most detailed analysis comes from McNamara<sup>1</sup>, who provides a pragmatic approach to ICT4D based on lessons learned in the previous decade. He takes on some sacred cows around ICT4D (e.g., questioning the very concept of "attacking the digital divide" and the value of telecenters built for their own sake and not to address specific community-driven needs). But, far from abandoning ICT4D, the paper provides recommendations for future, more evidence-based endeavors. This includes providing a "framework for thinking about ICTs, poverty, and development" (p. 2) that reframes the question. That is, rather than leading with technology, the goal should be using technology as a means to an end. "Few people in poverty, more vibrant developing-country economies, more responsive government institutions, reduced disease and illiteracy, greater gender equality----are the ultimate measure of the value and impact of ICTs in development" (p. 2).

McNamara describes the "incredible array" of experiments, conferences, etc. that accompanied enthusiastic, if not fad-driven, deployment of ICT4D. The results are inconclusive, however. There has not been good monitoring and evaluation of ICT4D projects. And, the technology-centric targets should be re-conceived. ICT is a tool not a goal and "the presence or absence of ICTs .... is a symptom, not a cause" (p. 4).

Heeks's introduction of ICT4D 2.0 could raise concerns that we're seeing another fad-driven phase appear, analogous to the web 2.0 hype. But, Heeks is careful to note the failures of earlier eras, such as anecdote-driven assessments rather than rigorous evaluation and the lack of consideration for sustainability and scalability. Still, I think he begins to strain credulity himself when he writes of a time when the local content development trend could "spread further to encompass all of Web 2.0----drawing bloggers, mashers, and wiki-writers from the ranks of the world's most disadvantaged" (p. 29). Not that I don't think that's possible and, over time, inevitable. I'm just concerned with unreasonably ramping up expectations.

Turning back to McNamara, we read the lessons that:

1. Poverty and uneven development have complex, interdependent causes. Addressing those underlying causes is the only way to combat poverty. "The poor are not simply lacking in material and financial resources. They lack opportunities to convert the resources they do possess ... into value-creating activity. They lack information of many sorts. They lack access to education and knowledge. The poor lack access to capital. More generally, the poor lack voice and power in institutions that affect their lives" (pp. 24-25). Power and voice is specifically addressed by Gurusurthy, who states "with the help of ICTs, building women's capacity in decision-making structures, especially in government, can bring unprecedented gains for women" (p. 612).
2. The "digital divide" is a symptom (among many), not a diagnosis, and bridging or closing it is a slogan, not a strategy.
3. ICTs enable change; they do not create it (and the change they enable can be good or bad).
4. ICT strategies are only effective, sustainable, and worth the effort if they are integrally linked to broader, more comprehensive development and poverty-reduction strategies.

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<sup>1</sup> The bulk of the McNamara summary comes from last semester's reading notes.

5. “Mainstreaming” ICTs in donor programs means subordinating them as tools of other, more fundamental objectives, not inserting them everywhere. It is best to “link ICTs to core development goals and projects” (p. 7).
6. Newer is not necessarily better. Radio and paper are still effective technologies. In fact, “the newest technical innovations (including the internet) are not automatically an improvement over earlier innovations unless they provide some additional benefit that is directly relevant to (and cost-effective relative to) the need they are addressing” (p. 21). Heeks makes the same point, noting that we should look at older technologies when “something like 80 percent of the population in developing countries has access to a radio, 50 percent to a television” (p. 28). The enthusiastic discussion about mobile phones (e.g., in Khalil et al.) raises concerns that lessons from earlier projects may be overlooked in the rush to provide mobile phone applications that “leapfrog” past the wireline-centric infrastructures of developed countries.
7. ICTs are, to some extent, social constructs. Therefore, they need to be adapted to different social contexts.
8. Priority-setting is crucial to successful development and poverty reduction.
9. Learning new lessons is good, but fully absorbing old lessons is just as important (ICT4D goes back decades and covers efforts around radios, televisions, etc.)

Identified priorities for action articulated by McNamara include:

1. Deeper, more rigorous analysis of the ICT-related dimensions of poverty and low growth and of the possibilities and limits of ICTs as tools to address poverty and promote development. The link between broadband deployment and economic growth is noted in Khalil et al. (p. 5), but there should be caution in taking a purely technologically deterministic lesson from this analysis. Where and how is this economic impact occurring and what other factors may be contributing that also require attention?
2. More extensive and honest assessment of experience thus far with ICT-for-development programs. There is a “serious shortage of rigorous impact evaluations of these projects” (p. 9). Khalil et al. reference the “Partnership on Measuring ICT for Development” that was launched in 2004 and has published a variety of indicators, showing ongoing activity.<sup>2</sup>
3. A greater strategic focus, in ICT programs, on levers of change and agents of change.
4. A priority focus on development and poverty reduction, and on the Millennium Development Goals (MDGs), not on ICTs.
5. More rigorous priority setting both in ICT programs and between them and other interventions. “The ability of ICT projects to show certain tangible results ... sometimes serves as a way to avoid the tougher questions of whether those first-order changes lead to the desired deeper changes” (p. 10).
6. Greater cooperation and information sharing among donors and others involved in ICT-for-development programs.
7. Stronger support for pro-poor innovation and innovators.

Echoing some of the discussion of local knowledge from earlier readings this semester, it is important to note that ICT4D is not a one way street, delivering resources from the developed to

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<sup>2</sup> [http://new.unctad.org/default\\_\\_\\_575.aspx](http://new.unctad.org/default___575.aspx)

the developing countries. The poor are “deprived of the opportunity to share their own, often extremely valuable, centuries-old local knowledge” (p. 28). Key opportunities are noted in higher education (p. 52), health (p. 55), environment (p. 56), and government capacity, efficiency, and accountability (p. 57). Regarding the latter, simply bringing technology to governments with limited resources and entrenched interests will not effect change. In fact, there is a high rate of failure for e-government projects in developing countries (Khalil et al., p. 9). But, ICT can reduce corruption if it allows disintermediation of corrupt layers of government or enhances transparency through information dissemination (including empowering the media). Khalil et al. note that land registration bribes have been cut by \$18 million/year (p. 9). Khalil et al. further outline four models for e-government strategies and offer pros and cons for each (p. 12).

### **Week 7: ICTS AND DEVELOPMENT: PROJECTS AND PROGRAMS (Mar 8<sup>th</sup>)**

Kerry McNamara, “Information and Communication Technologies, Poverty, and Development: Learning from Experience” (World Bank, 2003).

The World Bank, *Information and Communication for Development: Extending Reach and Increasing Impact* (overview) (Washington DC, 2009).

Anita Gurumurthy, "Promoting gender equality? Some development-related uses of ICTs by women," *Development in Practice* 16:6 (Nov 2006), pp 611-616.

Ahmed Tareq Rashid and Laurent Elder, “Mobile Phone and Development: An Analysis of IDRC-Supported Projects,” *The Electronic Journal of Information Systems in Developing Countries* 36 (2009).

Heeks, R. (2008). ICT4D 2.0: the next phase of applying ICT for international development. *Computer*, 41(6), 26-33.