Review of "Taking ICT to every Indian village: Opportunities and challenges"

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Review of Garai, Atanu and B. Shadrach (2006): *Taking ICT to every Indian village: Opportunities and challenges.* New Delhi. OneWorld South Asia. xix, 133 p.

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Skewed growth seems to remain the world order among and within countries. While, on the one hand, there is astounding growth in technologies, which include information and communications technologies (ICT), biotechnology, space technology, etc., contributing to improving the quality of life, on the other, countries are getting devastated for reasons ranging from HIV/AIDS, food insecurity, malnutrition, environmental degradation to engineered political instability cankering on human value systems. And this 'divide' embarrassingly exists both among and within countries.

This malaise paradoxically throws up opportunities for multi-stakeholder partnerships for the improvement of people's livelihood and quality of life. It is in this context that education, or in the politically correct expression knowledge, plays a catalytic role. That knowledge can make a difference in the quality of life is not something novel. We are aware that knowledge holds the key for development, and countries that are now affixed with the qualifier 'developed' bear testimony to the phenomenon that knowledge has been and is contributing to national development. That is to say, if knowledge can improve the quality of life, work towards wealth creation and make the world a better place to live, what prevents us from implementing policies that guarantee education to all and a corresponding plan of action for implementation? What prevents us from creating the required human and material resources to address the issue of education for all? What prevents us from redistributing resources to take education to all? What prevents us from reforming our educational systems in order that equity and quality are assured in education, no matter who and where the learners are? If investments in education do assure rich dividends in terms of national development and social transformation, what is the stumbling block? Whose responsibility is it any way to make education available to all who aspire for it? These are not merely rhetorical questions but questions that demand convincing answers.

What this boils down to is that governments alone will not be able to effect the necessary changes, but multi-stakeholder partnerships and linkages among civil societies, local communities, government agencies, etc., will certainly help bring about the desired results. With the advance in technologies, particularly in ICT, the possibilities of creating inclusive knowledge societies appear brighter than ever before.

Recognizing the powers of ICT to achieve a knowledge revolution in rural India, a National Alliance involving the private sector, cooperatives, NGOs, R&D institutions, government agencies and the mass media was forged in 2003 and subsequently *Mission 2007* was set up to establish robust rural connectivity by the 15th of August 2007, the 60th anniversary of Indian Independence. The first two National Alliance Conventions were held in New Delhi (2004 and 2005) and the third was held in Chennai in July 2006.

It is against this backdrop that this book, published by OneWorld South Asia, one of the partners of the National Alliance, is viewed.

Consisting of four thematic chapters, this book revolves around the concept of wired or wireless infokiosks, which may be conventionally or non-conventionally powered, and seems to recommend it as a viable rural connectivity model. Building a case for infokiosks, the book reports on the various civil society and government initiatives in India over a period of three years since 2003 to extend the benefits of ICT, which have hitherto been within the urban domain, to the rural India represented by 600,000 and odd villages that house about 700 million of the more than 1 billion population. The first chapter projects knowledge as the key ingredient for sustainable human development; the second suggests an institutional framework required for effective implementation of ICT-interventions; the third reviews some field-based rural connectivity projects and the fourth makes suggestions for informed decision-making in technology management.

Chapter 1 entitled Processes and appropriation of ICT in human development in rural India: Bridging the research and practice gaps provides theoretical scaffoldings for the whole discussion of rural connectivity – the focal point in the book. It examines the various conventional dimensions of human development, sustainable social development, ICT, etc. By presenting the notion of social development through the intervention of ICT and suggesting that the developmental impact of ICT on society can be assessed using the human development measurement tools developed by the United Nations Development Programme (UNDP), the chapter seems to dismiss as naïve the customary criteria that are anchored in economic prosperity, which are generally considered an indicator of human development. The authors advocate a human capacity or capability approach that views "economic growth only as the means rather than the 'ends' to human wellbeing, while expanding people's capabilities is seen as the 'ends" (p. 6). With this, the chapter takes us to a compendious account of the constituents of human capabilities and ICT dimensions. and a stimulating discourse on the need to blend scientific and indigenous knowledge bases for sustainable development. The authors argue that human capabilities expand in a context that guarantees the fundamentals of well-being such as high level of health care, arresting prenatal/child mortality and morbidity, among others, and contributing to longevity, easy educational access, food/nutritional security, personal liberty/freedom, etc. Knowledge is the key to build and sustain the fundamentals of well-being and "Being 'knowledgeable' by its very nature has been recognised as an end of human development; and, the state of 'being knowledgeable' has been recognised seen [sic] as the means for attaining the goals of human development" (p.14). The chapter recommends the use of various "capturing, storage, processing, communication and display" (p. xiii) forms of ICT to help in accelerating knowledge generation, which in turn helps in the expansion of human capabilities.

Illustrated by the story of Yagjung, an illiterate village elder woman, chapter 2 *Human agencies for knowledge connection: Governance of ICT in rural India* reminds us that "millions of illiterate villagers are key stakeholders of the emerging knowledge society, though their inclusiveness is seldom discussed" and suggests that understanding their problems is crucial "to designing locale-specific services through infokiosks" (p. 37). Besides public, private and civil society actors, therefore, communities and individuals must form the ICT governance structure. As regards the economic viability of infokiosks, a concept introduced abruptly, the chapter paints a promising picture with "an average population density of 324 people per km" (p. 38) and with decreasing poverty and increasing literacy.

Entitled How the promises of ICT in development being met in India: An illustrative comparison and future directions for planning, implementation and evaluation of ICT projects chapter 3 analyses the characteristics and relative merits of existing knowledge gateways (e.g., infokiosks) insofar as they play the avowed catalytic role in sustainable human development in rural India. In order to assure the validity and reliability of the analysis, the authors have evolved an

empowerment-based evaluation methodology on the lines of the capability approach. In other words, the analysis goes beyond the infrastructure deployment, resource commitment, etc. Table 3.4 (p. 67) contains a list of projects that were subjected to the analysis.

The final chapter (chapter 4) ICT diffusion in rural India: Current trends and emerging options gives statistics relating to teledensity, Internet connectivity, energy status, etc., as well as suggesting various technology and energy solutions for infokiosk operation. It also lists the myriad ways in which infokiosks could be put to effective use, including public health, education, etc. Admittedly, the statistics though dated illustrate the enormity of the task involved before Mission 2007 is accomplished and remind us that "promises of ICT in enhancing citizen's capacities remain unmet so far largely because ICT infrastructure is lacking in rural areas" (p. 33).

The area the book covers is quite topical. The introduction of the concept of 'voice' as an effective instrument for empowerment and the result-based methodology adopted in the book for project evaluation are refreshing. However, to make the book more complete than it is now, an internalization of the observation that "connectivity and content are the two pillars on which the entire structure of a nation-wide infokiosk movement rests" (p. 90) is imperative, since the current focus of the book through and through is on technology and the discussion on content issues is conspicuous by its absence.

Though having acquired the status of a cliché, the observation in the book that knowledge is the key for sustainable human development does merit repetition. The way the message has been delivered in the book, nevertheless, is tortuously circuitous. The description of 'human agencies', for example, is naïve despite the claim that "the concepts of 'human agencies' will be central to the discourse in this paper and elsewhere....The term 'human agencies' refers to the capacities of human beings to make choices and to impose such choices on the world on a collective basis, usually through democratic means" (p. 14). A more lucid presentation would have certainly made the message more powerful.

The research undertaken sounds avoidably sketchy and academic in tone though the book contains developmental aspects. As regards the suggestions made for integrated ICT for human development, they are imitative in nature and devoid of innovative concepts. The initial stimulation of the authors' invitation in the preface "to explore and learn what is the most promising, yet challenging, developmental intervention happening in India..." (p. v) could not be sustained as the book fails to give much scope for exploration. The book does "raise(s) many questions for practitioners, policy makers, planners and researchers on the emerging ICTD paradigm in India" but its attempt at answering such questions as "What can ICT bring for the inhabitants of 600,000 Indian villages? How India is empowering the poor and marginalised citizens to participate in the emerging knowledge society? How will India provide voice to her millions of citizens?" (opening page) proves abortive.

Admittedly, however, given the multi-dimensional socio-cultural and economic issues that the rural connectivity initiatives and mission in India must address, including the 34 million people who are said to be at or below the poverty line (BPL), in an environment that is largely agrarian in character, any expectation for a comprehensive report based on a project study "conducted between August 2004 and March 2006" is foolhardy. The authors' attempt, therefore, at touching upon "four key distinct aspects" (p. viii) of the initiatives, each occupying one chapter, must be considered sensible. Nonetheless, more field research with content analysis perhaps is needed before any conclusion on the merits or demerits of the various projects the authors have selected for review could be arrived at.

Sufficient time should have been given for proofing the text, which would have removed embarrassing factual, spelling and syntax errors (e.g., "6 million villages" (pp.17 & 34) in place of 600,000 villages, etc.) Certain expressions, though very insignificant in number, in the book are in Indian languages (e.g., *Panchayati Raj*). By design or by an oversight, their English equivalent is not available. The list under Bibliography is quite impressive and the index is highly useful.

In the final analysis, considering the nature of the topic, one could not but wish that the book was more "argumentative, analytical and thoughtful" than it currently is. On hindsight, however, the list of projects the book gives is valuable in that it helps the reader get an idea of the types of projects available and also may prevent civil society, government agencies and donors from duplicating them.

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