

Chapter 4

Analysing an ICT4D Project in India Using the Capability Approach and a Virtuous Spiral Framework

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ABSTRACT

The field research covered in this chapter represents the first wave of a longitudinal study, aimed at testing a framework for evaluating the contribution to capabilities, empowerment and sustainability of information and communication technology for development (ICT4D) projects. Key features of the framework are: it is conceptually informed by Amartya Sen's capability approach (CA), uses a participatory methodology and longitudinal timeframe, and considers the micro-, meso-, and macro- levels in understanding the role of ICT in development. Despite the longitudinal nature of the framework, each stage of the research is designed to be a case study in its own right. The research, conducted at a computer centre in the Indian state of Tamil Nadu, centred on the perception of participants with respect to whether the centre had played a role in any improvements in the community and whether they could see a role for it in changes they would like to see, or aspirations they may have for their communities.

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A key finding of the field research was that participants valued the centre mainly for its contribution to education of their children. Education was appreciated beyond its instrumental utility and included intrinsic value, i.e. value that exceeds its potential as a path to higher incomes. Participants frequently referred to how a higher level of literacy would empower them to deal with government officials without intermediaries. This finding is consistent with the CA's emphasis on development as a process facilitating capabilities that enable people to lead lives they have reason to value.

INTRODUCTION

When allocating scarce development resources, governments like to see hard evidence of the benefits. In the absence of such evidence, there is a risk that decision-makers misallocate resources, either through ineffective ICT deployments or no deployments. An appreciation of the environment in which ICT infrastructure is considered or deployed will “make us wary of blindly following the technological imperative and alert to situations where there is a trade-off between efficiency and human well-being” (Sawhney, 1996, p.311). It will also contribute to awareness of many benefits of ICT that are not necessarily quantifiable in economic terms, e.g. in the exchange of ideas and for governance processes.

As recognised by many researchers in this field, research aimed at understanding environments in which ICTs have been deployed and their impacts has not kept pace with the significant investments in ICT4D initiatives (e.g. Alampay, 2006a; Batchelor & Norrish, 2004; Gagliardone, 2005; Harris & Rajora, 2006; Hudson, 2006; Nielsen & Heffernan, 2006; O’Neil, 2002; Sciadas, (Ed.) 2005; Souter, Scott, Garforth, Jain, Mascarenhas, & McKemey, 2005; Torero & von Braun, 2006; Warschauer 2003). Torero & von Braun (2006) recommended investigations of the conditions required for ICT to contribute positively to sustainable development. Gagliardone (2005) argued that problems arise when localised experiences are scaled and identified the absence of an innovative culture, capabilities and links between ICT enclaves and the rest of society as factors impeding the beneficial use of ICT. Noting that ICT can contribute to

inequalities, some authors have called for further research to improve knowledge of this aspect of ICT4D (Forestier, Grace, & Kenny, 2002; Kumar & Best, 2006; Souter, Scott, Garforth, Jain, Mascarenhas, & McKemey, 2005; Torero & von Braun, 2006; van Dijk & Hacker, 2003).

ICT4D project evaluations exhibit diversity in frameworks, methodologies, methods and focus. They can be analytical, descriptive and/or prescriptive. Case studies represent a common approach (e.g. Batchelor & Sugden, 2003; Evans & Ninole, 2004; Falch & Anyimadub, 2003; Harris, 2001; Meera, Jhamtani, & Rao 2004; Overå, 2006; Talyarkhan, Grimshaw, & Lowe, 2005) and, apart from a few macro-level studies, they provide much of the evidence of the benefits of telecommunications in rural development (Hudson, 2006).

Whereas case studies indicate the importance of telecommunications in different sectors, such as agriculture, education and health, and functions such as marketing, they do not in general include any systematic analysis and are not undertaken within a specific theoretical framework. Some of the case studies include assertions based on varying levels of analysis, concluding with recommendations for authorities and other implementers of future projects. In commenting on the inadequate theoretical depth in ICT4D research, Heeks (2006), noted that while there has been reasonable theoretical underpinnings related to the first three letters of the ICT4D acronym: ‘I’ (library and information sciences), ‘C’ (communication studies), and ‘T’ (information systems), this is not the case for ‘D’ (development studies), which in his view have been meagre.

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