Chapter 13
iREACH:
Lessons from a Community Owned ICT Network in Cambodia

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ABSTRACT

Cambodia is for various reasons a challenging environment for ICT development. This did not deter IDRC (Canada) from funding an ambitious and ground-breaking project designed ultimately to influence ICT policy in Cambodia but initially to establish two pilot community-owned networks in poor rural areas. Each comprises both a cluster of local telecentres (10 in each area), and a mini telecoms enterprise run by the communities. Begun in May 2006, with initial funding of USD1.3 million the project runs to May 2010 when the question of sustainability comes to the fore. Additional support is likely to be needed. iREACH' experiences are being fully documented and lessons are emerging around community capacity building and empowerment; technical challenges in a rural environment; developing relevant and appropriate services; creating a community based enterprise; deploying a range of participatory monitoring and evaluation approaches; and working within a centralised and fluid political context.

INTRODUCTION

The Informatics for Rural Empowerment and Community Health (iREACH) project in Cambodia takes a holistic view of ICT. Rather than treating users as consumers of ICT, it has invited community members to become active participants in the production of the ICT environment, including the physical infrastructure, management structures and processes, training, capacity building, content development and use.

DOI: 10.4018/978-1-61520-997-2.ch013

This chapter sets out the paradigm within which iREACH has been established and moves on to describe, analyse, and interpret the project by addressing its objectives and processes, and the issues faced. It concludes with a consideration of what lies ahead for this unique approach to using ICT for rural development.

BACKGROUND AND CONCEPTUAL FRAMEWORK

The traditional way of deploying telecommunications networks is to build hierarchical, centrally controlled structures (Davies, 1994, Noam, 1987;), starting at the 'centre', and gradually expanding the network outwards towards the 'periphery' (Souter, 2008). The centre is normally in densely populated urban areas and network growth would continue as far as is considered commercially viable. As telecommunications became integral to the social and economic development, most western governments in the developed world introduced some form of subsidy system, usually involving universal service obligations (USOs), to encourage extension of networks to geographic areas and user communities that would not be sufficiently profitable for commercial operators.

Many countries in the developing world have embraced the concept of a universal service policy (or universal access policy), and a variety of mechanisms have been developed to implement it (Gillwald, 2005; Ó Siochrú 2009). But the resources available and the approaches adopted are rarely equal to the scale of the challenge. The access gap between urban and rural areas remains extremely high. This is particularly the case for internet-based and broadband services, which in many countries are in any case not included under universal service policy.

In response to the limited reach of market-driven services, and as an alternative to top-down, centralised approaches to network deployments, some communities have taken matters into their own hands and established small operators designed to service their local areas. Deployments of this nature, referred to as community–driven operators, or micro-telcos, represent alternative and innovative business models and strategies to service markets that are normally not considered profitable by other operators (Galperin & Bar, 2006; Galperin & Gerard, 2005; Ó Siochrú & Girard, 2005). Rather than building from the centre to the 'periphery' using top-down design methods, these networks start with the users and build towards the centre through various interconnection arrangements with the major operators that control national backbone networks. In addition to the benefits of the actual services coming available through this process these alternative networks incorporate the specifics of local contexts, which the top-down approach may be unwilling or unable to do (Harris, 2004).

Ó Siochrú & Girard (2005) identified three types of community driven ICT models: user/community-owned cooperatives, local authority owned networks, and hybrid entrepreneur/community driven approaches. The cooperative structure has, they noted, been recognised by the UN as conducive to combining commercial and development activity and accordingly it has adopted guidelines to assist governments in formulating legislative environments that facilitate the establishment of cooperatives.

There are combinations and permutations of these, for instance where a community-owned utility, e.g. in the power sector, expands into telecommunications, but through a separate subsidiary; or the Tamil Nadu SARI project, where a majority of the kiosks are locally owned and operated by self-employed entrepreneurs, while some are operated by self-help groups of a local nongovernmental organisation (Kumar, 2007).

Small-scale operators can also be at the initiative of a government seeking to pursue several objectives simultaneously, with more or less community participation. This was the case with the Akshaya project in Kerala, a state govern-