

## Chapter 14

# Moving with Time and Strategy: India and Bangladesh's Development in the Era of ICTs

**Sandeep Bhaskar**  
Temple University, USA

### ABSTRACT

*This chapter presents evidence of using information and communication technologies (ICTs) towards the goal of sustainable community development. It argues that the biggest impediment to the growth of communities in the developing world is a lack of information and a fair incentive system, both of which can be addressed through ICTs. A three pronged action plan comprising of a development strategy, an information strategy, and a technology strategy is proposed towards this effect. The paper also showcases how a for-profit business, ITC Limited, transformed the face of agriculture in some parts of India, and how this model can be replicated in other parts of the world. It concludes with a description of the agricultural sector in Bangladesh and show how lessons drawn from the Indian case can be applied to Bangladesh and other developing countries.*

### INTRODUCTION

Development is a term that comes with multiple connotations, the most common one being that of growth in income. But many argue that this does not accommodate all dimensions of the de-

velopment. Sen (1999) understands development as a process of expanding the real freedom that people enjoy. Growth in income can, of course, be an important driver to expanding the freedom enjoyed by the members of the society, but real freedom is complex to define. It is multifaceted. It is shaped by the social and economic arrangements or practices, as well as political and civil

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rights one enjoys. Though it may be useful to have a broader understanding and conceptualization of the term development, in this paper, a more narrow definition of development as income growth is applied. Income growth as a tool is easier to construct, and once made is a very formidable means to achieve other goals.

Lonergan (1971), Prahalad (2005), and Wankel (2008) argue that a major reason for the under-achievement of grand social engineering and development projects is that they provide an exalted role to social goods and not actual production, conveniently ignoring the fact that capitalism has been the most effective weapon against poverty. Most development projects are based on the premise that the poor lack resources, and that private, for-profit business, cannot help alleviate poverty. They refuse to go beyond the familiar, or to modify abstract ideas in light of emerging realities. They also ignore the fact that incentives play a major role in individual decision making and unless these incentives and incentive mechanisms are addressed the lofty goals will remain unattainable.

The chapter posits one possible way in which the emerging information and communication technologies can be used to address the issues of incentives, particularly those in the primary sector. It is important to focus on the agricultural sector since most developing countries are overwhelmingly dependent on agriculture. Even in the cases where agriculture's contribution to gross domestic product (GDP) has become very small, it still supports the biggest chunk of country's population. Therefore, it is imperative that any sustainable development program should involve agriculture, either directly or indirectly, and also work around the incentives of the primary stakeholder: the farmer. Information and communication technologies can help design, support, and sustain such mechanisms.

The chapter is organized as follows. Section 2 explains the working of agricultural markets in the Indian subcontinent. This is followed by a model

of using ICT for direct marketing of agricultural products in Section 3. The section explains the structure and technology that can help create this direct marketing network, and argues that while ICTs offer a lot of promise one should remember that ICTs are a means and not an end unto themselves. In Section 4 I provide an example of how an Indian conglomerate, ITC Limited, set up a direct marketing initiative, *e-Choupal*, and the successes that the initiative has achieved. Section 5 then presents the case of Bangladesh and the need of a similar model there. I conclude in Section 6.

## **Agricultural Markets in South Asia**

Agricultural marketing in the Indian subcontinent is still based on the colonial Agriculture Produce (Grading and Marketing) Act of 1937. The act prohibited procurement of grains outside government designated markets called *mandi*. The Great Bengal Famine of 1943 that claimed more than 1.5 million lives and the socialist programs adopted by the governments of the region after independence meant that this act was never revoked, and the governments continued to have very tight control of food-grain production, supply, and distribution. The shadows of those policies still haunt food policy in the subcontinent. The little agricultural liberalization that countries saw in the 1990s dealt with input markets, and not with the produce market. In the meanwhile a small group of individuals ended up monopolizing agricultural trade in the government designated markets killing all competition and incentive mechanisms.

In traditional economics, a market's efficiency and development outcomes are taken to be axiomatic and underdevelopment is then characterized by an incomplete correspondence of markets with productive activity. Various studies including Bharadwaj (1974), Bharadwaj (1985), Bhaduri (1983), Chowdhury (1992), Chowdhury (1994), Crow (2001), and Rudra (1984) also point out that these axioms may not be entirely true in these markets. Some authors argue that large traders control

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