

Chapter 8

Digital Divide in India: Measurement, Determinants and Policy for Addressing the Challenges in Bridging the Digital Divide

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ABSTRACT

Existing studies of the digital divide reveals the gap that exists between those who have access to ICTs and those who do not create exclusion, endanger social integration and hamper economic growth. The digital divide has many dimensions and can be categorized as global, regional and national. At national level, there is no single divide, but multiple divides: for instance, within countries, between men and women, young and elderly, rich and poor and most importantly rural and urban. The present paper is mainly focused on India and tries to explore the problem of digital divide mainly in rural-urban India. In the context of the present paper digital divide essentially means tele-density, mobile and Internet divide between the rural and urban areas. In this paper, the author reveals that obstacles such as illiteracy, lack of skills, infrastructures, and investment in rural areas must be tackled if India is to diminish the gap of the digital divide. The government should work toward connectivity provision, content creation, capacity augmentation, core technologies creation and exploitation, cost reduction, competence building, community participation and commitment to the deprived and disadvantaged to bridge the digital divide.

INTRODUCTION

The Information and Communication Technology (ICT¹) is one of the important driving forces for modern civilization. The rapid development and proliferation of ICTs has accelerated the economic

and social change (Nandi, 2002), across all areas of human activity worldwide-and continues to do at the rapid pace. ICTs enable interactive communication unhindered by distance, volume, medium or time and also reduce the cost of co-ordination (Fletcher et al., 2000), communication and information processing (Dean, 2002; Gordon, 2000). ICTs hold great promise in derive for development

DOI: 10.4018/978-1-4666-1556-4.ch008

and poverty reduction in global south. In many instances, poor people have experienced benefits in the form of increased income; better health care; improved education and training; access to job opportunities (Kuhn & Skuterud, 2000; Sumanjeet, 2008; Hecker, 2001; Motohashi, 2001); engagement with government services; contacts with family and friends; enterprise development opportunities; increased agricultural productivity (Poole, 2001; Hooker et al., 2001), and so on (Sumanjeet, 2009). The issue of transparency is easier to manage with ICTs, which may result in monetary savings in addition to stakeholder confidence in the development process and system (Jesus, 2003). ICTs have radically changed the way of doing business. Internet and its enabled business technologies like e-commerce have opened up vast business avenues and transformed the whole business world into a global village. Further, it is expected that ICTs will play a crucial role in the

socio-economic development process, and change the pattern of people's economic models and lives. But, the potential to exploits the benefits of ICTs largely depends on the access and adoption of these technologies. In fact, the status of ICT adoption of an economy is an indicator of its potentiality to exploit the economic opportunities affordable by the new technologies-more generally, its prospects for the transition to the 'new economy'. But, as expected the adoption of ICTs vary significantly across countries.

Table 1 indicates that high-income economies have twice as many fixed telephone lines per capita as middle-income economies, and 11 times the number in low-income economies. In the low-income countries and SAARC member countries-the number of fixed telephone lines per 100 people was just 4.0 and 3.3, respectively. In the least developed countries the number did not even reach 1 in 2006. At the same time, the

Table 1. Status of ICTs adoption among different regions (per 100 inhabitants)

Regions	Fixed Telephone	Cellular Subscribers	Internet Users	Broadband Subscribers
ESCAP ²	16.2	31.5	11.9	2.9
LLDC	6.6	13.3	4.0	0.1
LDC	0.9	9.3	0.5	11.8
SIDS	15.4	39.5	15.0	0.5
ASEAN	8.6	33.8	10.2	0.2
SAARC	3.3	15.3	5.0	0.1
Central Asia	11.1	20.1	6.3	--
Low Income	4.0	14.5	5.4	2.8
Middle Income	23.5	40.2	11.4	22.0
High Income	46.7	84.6	68.4	--
Africa	3.1	20.9	4.7	--
Latin America & Carib.	17.7	54.2	18.2	2.7
North America	57.8	75.0	69.0	19.7
Europe	45.0	101.4	43.1	15.6
Other Asia Pacific	22.5	51.2	19.3	7.1
World	19.4	40.9	17.4	4.3

Notes: Data for year 2006, compiled by researcher; LLDC (Least Developed Countries); LDC (Least Developing Countries); SIDS (Small Island Developing States)

Source: Statistical Yearbook for Asia and the Pacific, 2007;

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