

## Chapter 7

# Availability of Infrastructure Facilities in India: Prospects and Challenges

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### ABSTRACT

*It has been a well-accepted fact that there exists a strong relationship between infrastructure and economic growth. Like many other developing countries, lot of emphasis has been placed on the importance of investments in infrastructure for fostering economic growth in India. A state-wise analysis of five support infrastructure in India shows improvement in infrastructural facilities in 2014 as compared to 2007. Rural–urban gap is converging for most of the states, showing that the rural areas are catching up with their urban counterparts. However, the availability of infrastructure can be termed anything but inadequate. The infrastructural deficits can be met possibly through better management of publicly funded projects and greater role of private players. Given the resource crunch at government level, private financing of investment is simply a matter of necessity rather than a matter of choice. Therefore, this chapter argues for creation of an enabling environment and to facilitate the infusion of adequate private fund while keeping the interest of vulnerable sections in mind.*

### INTRODUCTION

It has been a well-accepted fact that there exists a strong relationship between infrastructure and economic growth, albeit some disagreement remains on the direction and magnitude of causality. Infrastructure contributes to growth by increasing farm efficiency through reduction in input costs and increase in overall capacity utilization. Infrastructure also plays a significant role in achieving human development objectives through, e.g., poverty reduction and promotion of education. Lack of infrastructure can seriously undermine the growth prospect of any country.

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More than two decades of economic reforms in India has improved the growth potential of the entire economy, but its infrastructure sectors have remained shackled. Availability of infrastructure can be termed anything but inadequate. Unfortunately, even the existing available infrastructure remains underutilized mainly due to lack of coherence in the approach to infrastructure planning in the past. India needs an adequate and efficient infrastructure to keep pace with the envisioned growth rate of 7-8 percent. Consequently, like many other developing countries, lot of emphasis has been placed on the importance of investments in infrastructure for fostering economic growth in India. Although India has progressed in terms of economic development and growth, the state level scenarios have not been consistent in the sense that some states have performed better than the others in development front. Interstate variability in the availability of quality infrastructure facilities is one contributing factor behind the uneven development performance of the states. Before examination of such variability, the next section explores the theoretical and empirical relationships between infrastructure development and economic growth.

## **REVIEW OF RELEVANT LITERATURE**

Both the academic literatures as well as the policy debates acknowledge that infrastructure development is one of major determinants of economic growth and can affect poverty and inequality, particularly in developing countries. Economic theory points out that direct investment in infrastructure stimulates production activities by (i) acting as a direct input into the production process, (ii) complementing the other inputs of the production process and (iii) stimulating factor accumulation through provision of human capital development facilities (Kumo, 2012). Further, the infrastructure investment reduces the transaction costs and trade costs and improves competitiveness (Sahoo *et al*, 2010).

Growth theory provides the theoretical basis for understanding the impact of infrastructure on economic growth. Arrow and Kurz (1970) considered public capital as an input in the economy's aggregate production function in the framework of Ramsey type exogenous growth models. Barro (1990) developed the endogenous growth version by assuming that government's contribution to current production is driven by its flow of productive expenditure. Futagami, Morita and Shibata (1993) added private capital stock into the model. A key insight of the Barro (1990) framework is that increase in public capital stock improves the private sector productivity through positive but decreasing impact on marginal product of inputs that reduces cost of production inputs and increases the level of private production. Agenor and Moreno-Dodson (2006) showed that public infrastructure led increase in marginal productivity of private inputs improve the perceived rate of return on private capital which, in turn, may lead to increase in private sector demand for physical capital. They further showed that increase in public capital stock may crowd out private investment that may lead to decrease in private capital formation in the long run. Improvement in the labor productivity, owing to better access to infrastructural facilities, is another channel through which infrastructure indirectly influences economic growth. Several other positive externalities in the form of greater regional and international trade, higher inflow of foreign direct investment and prospect of higher profitability of domestic and foreign investment enhances investment ratios and thereby the per capita income (Dissou & Didic, 2013).

Importantly, the results of empirical analyses exploring the infrastructure-growth nexus are not unanimous in the sense that the impact of infrastructure development on promotion of economic growth is context specific as well as dependent on quantity and quality of capital stock and infrastructure development. Following Aschaeur's (1989) seminal finding that stock of public capital is a significant determinant

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