

Infrastructure

With the rapid growth of the economy in recent years the importance and the urgency of removing infrastructure constraints have increased. Traditionally, power, railways, roads, ports, airports and telecommunications were the exclusive domain of the government. Policy has changed gradually over the past two decades under the pressure of rising gaps between demand and supply of infrastructure and deteriorating quality of assets. Government has made an effort to facilitate the entry of private enterprise into this sector through changes in the legal framework. A role for private sector participation has also been facilitated by technological change that allow unbundling of infrastructure, so that the public and the private sectors can take up the components most suited to their capacities. Government continues to invest significant sums in areas where private participation is minimal or not forthcoming. It will continue to play a lead role in infrastructure development during the Eleventh Plan.

9.2. The public good character of parts of the infrastructure makes it necessary to adopt an eclectic approach to the participation of the public and private sectors. Roads are the classic 'public good' on account of non-rivalness and non-excludability in use. However, as demand expands, and an inter city road becomes a high density highway, pricing and exclusion can become economically feasible thus changing the character of the service from 'public good' to 'private good'. Many types of infrastructure therefore have a mix of public good and private good character, with the mix generally weighted towards the former in rural and remote areas and towards the latter in the large towns and metro areas.

9.3 There is also a need to distinguish between physical infrastructure and infrastructure services.

Most infrastructure services are non-tradable in nature. For these reasons, the stock of infrastructure services may not be readily augmented through imports as in the case of other goods and services. Many infrastructure facilities have a significant component characterized by declining costs, leading to a "natural monopoly" situation. Though the extent of such monopoly may vary, such situations usually warrant the regulation of the pricing of such services. In essence, therefore, the public and private good characteristics of infrastructure may vary depending on various factors that include the size of investment, geographical location, demand and supply conditions, the stage of development and technological factors. There is a consensus that well designed infrastructure projects with good implementation can yield positive externalities and spin-offs for other sectors. Infrastructure also has backward and forward linkages with the rest of the economy.

9.4 This chapter examines the progress made in the growth of power, transport, communication and urban infrastructure in India during 2007-08 with a focus on the policy initiatives taken towards capacity augmentation through public and private investment and through public-private partnerships and on the challenges that lie ahead in developing physical infrastructure.

Review of 2007-08

9.5 The overall performance of the infrastructure during April-December 2007-08 presents a somewhat subdued picture compared to the corresponding period of last year. Growth in electricity generation has decelerated to 6.6 per cent from 7.5 per cent in the corresponding period in 2006-07. The transport sector presents

Table 9.1

Infrastructure & Universal Intermediates — Output Growth (%)		
	(April-December)	
	2006-07	2007-08^a
1 Power		
Electricity generated	7.5	6.6
2 Transport		
Railway (freight)	9.7	8.2
Ports (cargo)	8.3	12.5
Air - Export cargo	-1.3	6.7
Air - Import cargo	19.6	21.5
Air - Passenger traffic (Inter.)	11.8	12.7
Air - Passenger traffic (Dom.)	37.0	24.1
3 Telecom		
Wireless connections	46.9	44.5
Total telephones (including Fixed)	33.7	32.6
4 Universal intermediates		
Coal	4.5	4.9
Steel	11.1	6.4
Cement	10.5	7.0
Petroleum - Crude	6.1	0.3
Petroleum – Refinery	13.2	7.5
Natural Gas	-1.7	2.2

^a Provisional

Source: Items - 1, 2, 4: Capsule report on Infrastructure performance: Ministry of Statistics and Programme Implementation, 3 - Department of Telecommunications.

a mixed picture, with a deceleration in the growth of railway traffic and an acceleration in the growth of traffic through ports and in air cargo. The highly competitive telecom sector has maintained its phenomenal growth rates for addition of new connections. The production of universal intermediates like steel, cement and petroleum showed a distinctly weaker performance during April-December 2007-08 as compared to the corresponding period of the previous year while the performance of coal shows a marginal improvement (Table 9.1).