

Outlook

9.128 There is considerable consensus that improvements in infrastructure will have a strong impact upon GDP growth and poverty alleviation. International experience shows that there are many subtle difficulties in finding the right infrastructure policy framework. A delicate system of checks and balances is required, with careful calibration of incentives, so as to give the private sector the right incentives to invest adequately while at the same time preventing it from extracting monopoly rents. A key part of this is establishing a framework of rules, and limiting arbitrary State power, to give the private sector confidence in embarking upon the multi-decade horizons of these projects.

9.129 The most striking success is visible in telecom. Tele-density has risen dramatically, an entire industry with private players has come about, privatisation has begun with VSNL, and new technologies have come about. Telecom, where competition has delivered benefits, can serve as a role model for most infrastructure sectors of the economy. Looking forward, the telecom sector will feature lively competition between multiple private firms, with a strong role for TRAI for establishing pro-competitive policies. The sharp drop in broadband telecom prices in late 2004 may represent the beginning of a phase of hectic expansion of the broadband telecom sector. This may have an even bigger impact upon the economy as compared with the growth in ordinary voice telephony. An important area requiring a fresh policy impetus is that of reducing the extent to which a State-led planning approach is used in the utilisation of the electromagnetic spectrum.

9.130 In the area of roads, substantial portions of the Golden Quadrilateral have been completed, and are already fueling the growth of productivity in the country. For completed stretches, the focus needs to shift from construction to corridor management, i.e. for optimally utilising the capital assets to deliver the maximum throughput and world class levels of road safety. At the same time, a continuous, competition driven process needs to be in place for upgradation from four-lane

highways to expressways in high-density stretches, and for construction of new links, such as a highway from Mumbai to Kolkata.

9.131 The ports sector has obtained sharp improvements in efficiency parameters through new kinds of contracting. It has benefited from vigorous levels of inter-port and intra-port competition. However, as the recent problems at JNPT have demonstrated, much more work needs to be done in crafting an adequate policy framework. This requires a fresh examination of questions of port-connectivity through rail and road, and international benchmarking on performance parameters and price. India has experienced, and will continue to experience, high growth rates of international trade. The growth of ports needs to be planned in a futuristic way, reflecting projections for traffic rather than meeting existing needs, so as to ensure that India's needs are adequately met.

9.132 The railways remain an extremely important area, given the fact that transportation by rail has the highest energy efficiency as compared with the options. This suggests that if the institutional mechanisms come about, then the cost of transportation by rail could be much lower than that seen in the road sector. However, this will require substantial reforms in the functioning of the railways. The experiences with the transformation of telecom, roads and ports can serve as role models for the scale of transformation that may be required.

9.133 The civil aviation sector is an area where major progress has been achieved in 2004. It is increasingly clear that there are two very distinct aspects of the civil aviation sector. On one hand is the airline industry, which is analogous to the shipping industry, where the only goal of public policy is to have low entry barriers and high levels of competition. On the other hand are the airports, which have 'public goods' characteristics, and there is a case for a bigger role for the State. In recent months, limited progress has been obtained on both fronts. In particular, improvements in the degree of competition have helped deliver lower prices and a sharp increase in both domestic and international traffic.

9.134 In the area of power, there is clarity on the separate issues in generation, transmission and distribution. Generation does not pose problems of public goods, and it can be a normal private industry, provided the downstream buyers are operating in a sound institutional framework. Once reforms in transmission and distribution are in place, it will not be difficult to attract private investments in generation. The Electricity Act and recent reforms in distribution have served to revitalise investments in this area. The 'unscheduled interchange' (UI) market is a major advance in moving towards a normal spot market for electricity, comparable with spot markets for other commodities and financial products in the economy. However, policy bottlenecks continue to inhibit supply of power into the UI market from the private sector.

9.135 The losses in power distribution in the country are enormous. They are important from a different perspective: that of obtaining a fiscal correction. Improvements in distribution alone could account for over 1 percent of GDP of fiscal correction.

9.136 Finally, the most important frontier in Indian infrastructure consists of urban infrastructure. The techniques and strategies which worked for national public goods cannot be directly applied to local public goods. Here, the focus has to be on the 74th amendment to the Constitution, on empowering cities, on supporting institutional reforms at cities, and directing fiscal transfers for paying transition costs and poverty targeting.