## INFRASTRUCTURE FOR THE ELEVENTH PLAN—INVESTMENT REQUIREMENT

9.132 The Eleventh Five Year Plan envisages total investment in physical infrastructure (electricity, railways, roads, ports, airports, irrigation, urban and rural water supply and sanitation) to increase from around 5 per cent of GDP in 2006-07 to 9 per cent of GDP by the end of the plan period if the targeted rate of growth of 9 per cent for the Eleventh Five Year Plan period (200712) is to be achieved.

9.133 Consistent with the above projection, the investment in physical infrastructure alone during the Eleventh Five Year Plan has been estimated to be about Rs. 2,002 thousand crore (at 2006-07 prices which is equivalent to about US\$ 500 billion: @ Rs. 40/\$). Alternative estimates based on a bottoms-up approach have also arrived at figure of Rs. 2,060 thousand crore (about US\$ 515.05 billion), at 2006-07 prices. Of this amount, the share of the Central Government, the State Governments and the private sector is projected at 37.16, 32.76 and 30.07 per cent, respectively.

## **Financing of Infrastructure**

9.134 Such a large magnitude of investment during the Eleventh Five Year Plan period would need to be financed through non-debt and debt resources of the order of Rs. 1,064 thousand crore and Rs. 996 thousand crore, respectively. During 2008-09 alone, the projected investment in infrastructure is expected to be more than Rs. 322 thousand crore (comprising non-debt and debt resources at 2006-07 prices). The substantial requirement of debt resources would have to be financed through various sources including domestic bank credit, non-bank finance, pension and insurance funds and through the ECB route.

9.135 Keeping in view the need for financing infrastructure, the Ministry of Finance in December 2006 constituted a Committee under the Chairmanship of Shri Deepak Parekh to identify the constraints and suggest measures for financing infrastructure. The Committee in its report submitted in May 2007 has stated that there are macroeconomic and institutional constraints in financing infrastructure.

9.136 Under macroeconomic constraints, the report observes that while the overall financial savings may be large, a shortage of long-term savings may persist in the medium term. Within the FRBM laws, there is limited scope for Central and State Governments to increase budgetary support and guarantees. Moreover, there is a lack of availability of risk capital to support debt, coupled with inadequate flow of equity capital into infrastructure. The financing of infrastructure is also constrained by the increasing concentration of risk due to single asset and single industry exposure norms. Furthermore, the economy's capacity to absorb capital inflows seems to be limited.

9.137 Under institutional constraints, the committee observes that commercial banks may be bound by exposure norms and difficulties arising from a maturity mismatch inherent in financing the infrastructure projects. Further, there is an absence of an efficient credit risk transfer mechanism which is compounded by insurance companies preferring to invest in the public sector. The NBFCs are also constrained due to lack of access to low-cost financing options and exposure norms. The main observations/recommendations to ameliorate some of these constraints are summarized in Box 9.8

## **Public-Private Partnerships**

9.138 To initiate policies that ensure time bound creation of world class infrastructure and delivery of services matching international standards and at the same time develop structures that maximize the role of public-private partnerships (PPPs), a Committee on Infrastructure (COI), headed by the Prime Minister, was set up in August 2004. The COI is serviced by the Planning Commission. To provide greater focus to mainstreaming PPPs both in the Central and State sectors, a PPP Cell has been constituted in the Department of Economic Affairs (DEA). The DEA has taken several major initiatives in the matters concerning PPPs including policy, schemes, programmes and capacity building. While encouraging PPPs, six constraints have been identified:

- (i) Policy and regulatory gaps, specially relating to specific sector policies and regulations.
- (ii) Inadequate availability of long-term finance (10-year-plus tenor) – both equity and debt.

## Box 9.8 Major observations and recommendations of the Deepak Parekh Committee Report

On the basis of the observations made on the constraints, the report makes, among other things, the following recommendations and suggestions for financing rapid development of infrastructure:

- Improving intermediation of domestic financial savings so that they are channelled to meet the specific requirements of infrastructure investment such as those relating to risk, tenor and scale.
- Facilitating targeted access to foreign financial savings.
- Distributing financial risk more widely and efficiently across the domestic financial system and abroad, to avoid excessive concentration.
- Making infrastructure financing—especially in sectors where it has not been traditionally forthcoming—relatively more attractive for a wide spectrum of investor/financier classes by providing more liberal regulatory regimes for infrastructure vis-à-vis non-infrastructure sectors and in some cases, offering well-designed fiscal incentives.
- Achieving all the above through a facilitating (rather than directive) framework for each class of financing
  institution, while ensuring that accelerated investment in infrastructure does not jeopardize fiscal discipline,
  financial stability and external viability.

To advance these objectives, the Committee proposes several initiatives which are broadly classified as under:

- (i) Development of domestic debt capital market
- (ii) Tapping the potential of insurance sector
- (iii) Rationalizing banks' and NBFCs' participation in infrastructure financing
- (iv) Fiscal measures
- (v) Facilitating equity flows into infrastructure
- (vi) Inducing foreign investments into infrastructure
- (vii) Utilizing foreign exchange reserves.

Source: Extracts from the Report of the Committee on Infrastructure Financing; Full report is available at http://www.pppinindia.com/policy.asp

- (iii) Inadequate capacity in public institutions and public officials to manage PPP processes.
- (iv) Inadequate capacity in the private sector both in the form of developer/investor and technical manpower.
- (v) Inadequate shelf of bankable infrastructure projects that can be bid out to the private sector.
- (vi) Inadequate advocacy to create greater acceptance of PPPs by the public.

9.139 To address these constraints, several initiatives have been taken by the Government of India to create an enabling framework for PPPs by addressing issues relating to policy and regulatory environment. Progressively, additional sectors have been opened to private and foreign investment, levy of user charges is being promoted, regulatory institutions are being set up and strengthened, and fiscal incentives are given to infrastructure projects. Standardized contractual documents such as sector-specific Model

Concession Agreements, which will lay down the standard terms relating to allocation of risks, contingent liabilities and guarantees as well as service quality and performance standards, and standardized bidding documents such as Model Request for Qualifications and Model Request for Proposals are being prepared and notified. Approval mechanism for PPPs in the Central sector has been streamlined through setting up of the Public-Private Partnership Appraisal Committee (PPPAC). www.pppinindia.com, a website exclusively devoted to PPPs, has been launched to serve as a virtual market place for PPP projects. An online database on PPP projects in the country is being developed to provide comprehensive information on the status of infrastructure sector PPPs.

9.140 To address the financing needs of these projects, various steps have been taken such as the setting up of the India Infrastructure Finance Company Limited (IIFCL) to provide long tenor debt to infrastructure projects and launching of a Scheme for Financial support to PPPs in Infrastructure to provide Viability Gap Funding

(VGF) to PPP projects. Multilateral agencies such as the Asian Development Bank have been permitted to raise rupee bonds and carry out currency swaps to provide long-term debt to PPP projects. Setting up of dedicated infrastructure funds is also being encouraged to increase the flow of equity investments. The "India Infrastructure Finance Initiative," facilitated by Ministry of Finance, is one such collaborative effort to deploy approximately US\$ 5 billion in capital for infrastructure projects in India. The fund is structured as a venture capital fund, with about US\$ 2 billion in equity capital and US\$ 3 billion in long-term debt financing with maturities exceeding 10 years.

9.141 Initial steps have been taken to use foreign exchange reserves for building infrastructure. IIFCL is setting up an offshore SPV to utilize part of forex reserves for infrastructure development. The RBI has given "in principle" approval to invest up to US\$ 5 billion in the securities of the SPV and these would be fully guaranteed by the Government of India. The opportunities for private investment in infrastructure projects are immense. The Government of India now allows FDI in most

infrastructure sectors to the extent of 100 per cent. The time is ripe for the foreign strategic investors to begin to taking greater interest in project development and management activity in India.

9.142 To meet the capacity building requirements of the public institutions and officials for preparing a pipeline of credible, bankable projects that can be offered to the private sector through competitive bidding process as well as to manage the PPP process, State Governments and Central Ministries are being provided with technical assistance in the form of in-house PPP experts, financial/risk experts, MIS experts and access to a panel of legal firms. Other measures include assisting the State Governments and Central Ministries in hiring consultants through a panel of transaction advisers (TAs), preparation of a manual on PPPs to guide the users and undertake training programmes for public officials on PPPs, risk assessment, and exposure to pre-bid grading of projects. To intensify and deepen the capacity building of public functionaries at the State and municipal level, a curriculum for training at State

 Table 9.19
 Public-Private Partnerships in India

Sector	Total Number of Projects	Total Number of Projects based on value of contracts  Less than Between Between More than  100 Crore 100and 251and 500  250 Crore 500 Crore Crore				Value of Contacts (Rs. crore)
Airport	5	-	-	1	4	19,111
Ports	38	3	5	6	24	60,487
Railways	3	-	1	2	-	1,007
Roads	170	74	20	51	25	47,091
Urban Development	5	3	-	1	1	1,879
Total	221	80	26	61	54	129,575

Sector	Total Number of Projects	Total Number of F Domestic Competitive Bidding	Projects based on International Competitive Bidding	contract award Method Negotiated MOU	Value of (Rs. crore)
MOU					
Airport	4	-	4	-	18,808
Ports	28	4	12	12	57,433
Railways	3	1	-	2	1,007
Roads	164	123	36	5	45,737
Urban Development	2	1	1	-	525
Total	201	129	53	19	123,510

Source: 1. "Infrastructure Public-Private Partnership Financing in India," a study undertaken by PWC at the instance of DEA in collaboration with World Bank.

2. Online database on PPPs.

Administrative Institutes and a "Training of Trainers" programme are being developed. As the reach of PPP increases across the sectors, the capacity of the private sector to manage these projects over their entire life cycle of 20 to 30 years would also have to be enhanced. These initiatives are being supported by TAs from the Asian Development Bank and the World Bank.

9.143 While quality advisory services are fundamental to procuring affordable, value-formoney PPPs, the costs of procuring PPPs, and particularly the costs of transaction advisers, are significant. For providing financial support for quality project development activities to the States and the Central Ministries, the Guidelines for India Infrastructure Project Development Fund (IIPDF) Scheme have been notified. The IIPDF with an initial budgetary outlay of Rs. 100 crore would be a revolving fund that would get replenished through success fee earned from successful bid projects, and, if need be, would be supplemented in subsequent years through budget support. The IIPDF would assist ordinarily up to 75 per cent of the project development expenses. The assistance from IIPDF would ordinarily be in the form of interest free loan. On successful completion of the bidding process, the project development expenditure would be recovered from the successful bidder.

9.144 India has witnessed a rapid increase in private investment in infrastructure over the last five years. In 2006, commitments to Indian infrastructure projects with private participation were around double that of Brazil and China, making India the leader amongst the middle and low-income countries.

9.145 A survey of the 221 PPP projects was undertaken at the instance of DEA for preparation of an online database on PPPs. This survey included PPPs - where a contract has been awarded and projects are under way (i.e., they are either operational, have reached construction stage, or at least construction/implementation is imminent). The survey covered projects totaling an estimated cost of Rs. 1,29,575 crore. The road projects account for 78 per cent of the total number of projects (36 per cent by total value) because of the small average size of projects. Ports, with a much larger average size of project, account for 17 per cent of the total number of projects (47 per cent by total value). Most of the contracts have been of the BOT/BOOT type (either toll or annuity payment models) or close variants. Almost all the projects in the sample (limited to the data available for 201 projects) were competitively bid (either national or international competitive bidding) with the negotiated ones (through MoUs) primarily accounted for by railways and ports sector.