CHAPTER 6

CONCLUSION

In the previous chapters, an analysis was made on the development and financing of infrastructure sector in India since 1991. The purpose of this chapter is to conclude the findings of the present work and to present the main observations, drawn main inferences and conclusions for the study. This chapter would also suggest measures and remedies so as to eliminate the disturbing factors associated with the financing of infrastructural development in India.

It is universally recognized that infrastructure development plays a critical role in initiating and accelerating the process of economic development that is, infrastructure is the ‘wheel’ of economic activity and is essential for economic development. Moreover, it is a powerful instrument for realization of the objective of balanced regional development beside others. Because of its vital role and characteristics, development of infrastructure cannot be left to the mechanism of market forces, particularly in an underdeveloped country characterized by gross inadequacy of various types of infrastructure facilities. The state has to assume the responsibility of providing these facilities for creating conditions for self-sustained economic growth. The infrastructure services including power, roads, transport, communication, water supply and urban development are the responsibility of the government. Almost all of infrastructure investment was earlier made by the public sector in India. Government budgetary resources including plan funds have been the main source of financing such services. Government funds were
allocated to different levels of government and infrastructure entities essentially through the plan process. These funds were allocated in the form of grants to different levels of government or as equity or debt contributions to public sector entities such as public sector corporations including specialized financial institutions, State electricity Boards, IDFC, departmental undertakings, various authorities and the like.

With the increase in the pressure on expansion of such services, in particular, with the resource crunch and lower budgetary allocation, additional investments required have to be supplemented from private sources including capital market. There is a need to run these services on commercial principles; charge as per their use, as is the practise in other countries; and as individuals also pay for the services availed from the private agencies. Slippage in implementing such major infrastructure projects costing over Rs. 100 crore each has resulted in 10.4% cost escalation involving an additional expense of Rs. 18,644 crore over and above earlier estimate of Rs. 1,79,395 crore. Such cost escalation emphasizes the importance of project management for infrastructure projects.23

Since investment requirements for infrastructure are bound to increase as per the estimates of the Expert Committee the government investment will therefore have to increase at a rate slightly higher than that of GDP growth. Thus almost all the incremental growth in infrastructure investment will have to come from the private sector. Consequently, huge demands will be made on the capital markets for raising resources by the government and private sector alike. It is expected that a third of net foreign capital inflow to come into infrastructure. The rest will have to be mobilized from the domestic
capital market and hence there is a need for capital market reforms, which can go a long way in helping to a great extent in improving the infrastructure in India.

Opportunities for private sector financing in areas previously in the exclusive domain of the government have expanded not only through the sale of equity in State enterprises but also through inviting private parties for undertaking power projects. The power sector was the first among the infrastructure sectors to be opened to the private sector. Foreign equity up to 100% was allowed in power projects in 1993-94. The recently approved Electricity Bill, 2003 is likely to encourage private sector financing for electricity generation as it envisages delicensing of generation of power, free permission of captive power generation and ensures transparent policies regarding subsidies. Foreign Direct Investment (FDI) up to 49% has been permitted in telecommunication services. To further encourage private financing, the telecom policy of 1999 announced a package for migration from fixed license fee to revenue sharing for existing cellular and basic service providers. The road transport sector has been granted industry status to facilitate borrowing on easy terms and to permit floating of bonds. Foreign equity participation up to 100% is allowed in construction and maintenance of roads and bridges. MRTP provisions have been relaxed to encourage private sector financing by large firms in the highway sector.

The goal of PPP is to bring together public and private interest to meet the demands of future projects, plans and policies. The success of an initiative and projects, which are generated, is contingent upon local conditions and local governments’ ability to provide necessary services at a reasonable cost24.
To quote from the Indian Infrastructure Project Report, “The fact that infrastructure services do not pay for themselves and the government does not have the financial capability to continue to subsidise the beneficiaries, has resulted in low availability of funds. With increasing requirements, this has meant deficiency in volumes as well as quality of service. A parallel unorganized sector had developed for the provision of many of these services, at high prices and often of low quality. From a societal point of view, these are expensive solutions; it is high time that a commercial approach is adopted.”

In this regard, The Economist: A Survey of India’s Economy writes, “loss makers such as electricity, irrigation, railways and universities should not be shut down. On the contrary, they should be revived by allowing them to charge realistic prices and selling off those operations better managed by the private sector, such as electricity distribution. Even schools, and health centres can be privately run, as long as the state ensures that they are of acceptable quality and affordable for the poor.”

Moreover, the Reserve Bank has also liberalized term loan financing by banks for infrastructure with recourse to finance through funds raised by way of subordinated debt, take out financing, direct financing, investment in infrastructure bonds and guarantees. Banks have been allowed to contribute to the equity capital in infrastructure projects and lend to special purpose vehicles (SPVs) in the private sector for directly undertaking infrastructure projects. The Securities & Exchange Board of India (SEBI) has extended relaxations for public issues by infrastructure companies regarding size, pricing, mode and minimum subscription of issues.
Despite all these efforts and the setting up of a specialized Infrastructure Development Finance Company (IDFC) in 1997, private sector participation in infrastructure financing has been grossly inadequate. There is a lack of commercialization due to inadequate reforms in the area of user charges, cross subsidization, lack of structured financing options to mitigate the risks involved, lack of clarity in policy guidelines and underdeveloped financial and capital markets. It is necessary to improve the access of urban local bodies to the capital market to raise resources at competitive rates. Private conglomerate businesses should be preferred for undertaking infrastructure projects. By having a diversified portfolio of activities, such companies can cross subsidise the various risks.

The experience since the late 1990s suggests that a key prerequisite for the evolution of institutional arrangements for infrastructure financing is the development of the capital market. The central issue is not the adequacy of funds but the convergence of investment possibilities of ultimate savers and borrowers in the economy. This demands reforms in insurance and pension funds which provide a natural hedge for the risks prevail in the financing of infrastructure.

Infrastructure projects are complex, capital intensive, long gestation projects that involve multiple and often unique risks to project financiers. Infrastructure projects are characterized by non-recourse or limited recourse financing, i.e., lenders can only be repaid from the revenues generated by the project. This limited recourse characteristic, and the scale and complexity of an infrastructure project makes financing a tough challenge. This challenge is further compounded by two factors. First, a combination of high capital costs
and low operating costs implies that initial financing costs are a very large proportion of the total costs. Second, infrastructure project financing calls for a complex and varied mix of financial and contractual arrangements amongst multiple parties like the project sponsors, commercial banks, domestic and international financial institutions (FIs), and government agencies.

From the analysis, we found that following factors hamper infrastructure financing in the country:

1. **Restrictions on ECBs:** External financial resources (ECBs, mezzanine, equity, etc.) can potentially play an important role in meeting funding gaps in the area of infrastructure financing. Of late, there has been a growth of ECB (through the approvals route) for infrastructure, from $270 million in 2001-02 to nearly $1.9 billion in 2003-04. Despite the increase in ECB for infrastructure, external funds are inadequate compared to the needs. It has been argued that, while interest rate caps may be adequate for ‘normal’ industrial projects, they are too low to attract funds for riskier infrastructure projects. They limit the compensation which lenders can receive for longer tenors or higher credit risk and reduce the availability of long term loan funds for infrastructure.

2. **An underdeveloped corporate bond market and the lack of longer term financing:** Most infrastructure projects generate profits after 10 to 15 years of the initial investment and hence require longer term financing to ensure financial viability of the project. The availability of a developed bond market is an important backbone to project financing for infrastructure. Moreover, functional bond markets are important for funding
existing infrastructure utilities/companies. Unfortunately, India still lacks a wide corporate bond market for such projects.

3. **Regulatory and institutional issues constraining higher participation of FIs and commercial banks:** It is widely accepted that insurance companies and pension funds are ideal candidates for supplying long term financing. But with a few exceptions, in recent times, most insurance companies and pension funds have not focused on funding infrastructure. Moreover, commercial banks also have little appetite for infrastructure financing. Restrictive government policies and regulatory guidelines have further constrained the ability of insurance companies and pension funds to participate in infrastructure financing.

4. **Insufficient knowledge of the Financial Institutions:** Insufficient knowledge and appraisal skills related to infrastructure projects is another constraint for the development of these projects. The banking sector also lacks the specialization and experience to appraise the risks and returns associated with large and complex infrastructure projects having long gestation periods.

5. **Lack of reliable and generally accepted interest rate benchmark:** The absence of reliable and generally accepted interest rate benchmark (e.g. LIBOR) would limit flexibility and would reduce the incentive for financial institutions and banks to participate for infrastructure finance.

6. **High customs duties on infrastructure equipment:** While there are import duty concessions available to imports used for infrastructure development, such as in the case of mega power
projects, certain telecom equipment etc., these are largely selective in nature. For instance, while equipment for mega-power projects can be imported against zero or low duties, the same facility is not available for capital goods used in roads.

7. **Inadequate estimates of costs and benefits:** Formulation of projects is often based on adequate and detailed planning and the estimates of costs and benefits are not based on adequate realistic assumptions. Thus, it is often found that the actual cost turns out to be several times more than the original estimates while, the returns are not according to the expectations.

8. **Lack of integration in planning:** There is also lack of integration in planning the infrastructure development. Often a service or facility is created without ensuring the necessary linkages as well as other complementary services. Sometimes the infrastructure facility may not get utilized because simultaneous efforts have not been made to promote directly productive activities or productive activities might suffer because infrastructure development is not planned.

9. **Lacks balanced regional development:** The development of infrastructure facilities has also not been in keeping with the objective of balanced regional development. There are considerable inter-state and inter-regional disparities in the infrastructure facilities.

10. **Inadequate provisions for maintenance:** The maintenance aspect of the problem has also been neglected. Now facilities are created without adequate provisions for the maintenance of existing facilities. This results in poor quality, frequent breakdowns, under utilization of capacity, higher running costs, etc.
11. **Uncertainty over government policy:** It took the government, for instance almost one year to announce the New Telecom Policy (1999) after the report was received from group on telecom. As a result no lender was willing to look at a telecom projects. There were only a few loan and contract deals in the cellular segment. Of late, FDI in telecom has sharply come down.  

12. **Multiple clearances:** Infrastructure projects require multiple clearances at centre, state and local levels. This is a time consuming process not only due to the number of approvals but also because clearances are sequential, and not concurrent. According to most of the developers and financiers, the time taken to obtain all the required approvals for an infrastructure project can vary from 18 months to 4-5 years. Delays like these in getting government approvals, places India very unfavorably compared to China and South-East Asia.  

13. **Lack of coordination between government ministries /departments:** Most infrastructure projects involve dealing with multiple ministries. One of the key reasons for projects not taking off at the pre-financing stage is that the actions and policies of different ministries are not coordinated and are often varies with each other. This is particularly true for the power sector, where even if the developer obtains the required permission for setting-up of a generation facility, he finds it difficult to start operations because of lack of clearance for fuel supply, which involves about two other ministries.  

14. **Limited capacity within government to execute PPPs in infrastructure:** The capacity to effectively conceive, obtain and
manage these PPPs is very limited within the public sector – both organizationally and at the individual level. Internationally, governments entering on PPP programs have often developed new policy, legal and institutional frameworks, individual training and technical support to provide the required organizational and individual capacities. A similar comprehensive effort at building capacity to facilitate PPPs is needed by the central and state governments.

In view of the fact that infrastructure development is a critical element in the process of economic development and that more than half of the plan outlay is being devoted to this sector, it is imperative that the above mentioned inadequacies in infrastructure planning are removed. A number of financial sector related constraints need to be addressed to facilitate greater private financing of infrastructure, it is not sufficient to reform the financial sector alone without paying adequate attention to other aspects of infrastructure. Therefore, while the recommendations outlined below address the financial sector and financing instruments, they also focus on other key issues which have a direct bearing on infrastructure investments.

1. **Removal caps on ECBs:** Removing interest rate caps on ECBs could encourage foreign investors to use instruments like mezzanine and take out financing for infrastructure investment. In addition, tools for reduce the risks involved for international lenders should be developed — for example, Partial Risk Guarantees (PRGs) to hedge against political risk, and developing the swap market to reduce foreign exchange risk.
2. **Rationalization of stamp duties** would facilitate the use of takeout financing and securitization in states where these duties remain high. While it is desirable to waive stamp duties for transactions relating to infrastructure projects, this may not be possible because these duties often form a sizable part of a state’s revenues. An alternative is to: (i) reduce the duties to a uniform low rate across all states, and (ii) charge a lump-sum specific duty for transactions beyond a certain limit. Inadequate takeout financing can affect annuity and BOT projects in roads, in power as well as in ports.

3. **Developing a longer term corporate bond market**: A well developed government bond market is a critical prerequisite to the development of the corporate bond market. Hence, there is an urgent need to increase the depth and the breadth of the government bond market.

4. **Encouraging participation by FIs in infrastructure financing**: Investment policies and regulatory guidelines for insurance companies, pension funds, mutual funds, banks and other FIs need to be sufficiently flexible for these entities to choose an appropriate risk-return profile within fiduciary constraints. This will also help professionalize fund management. There is a need to deregulate these sources of long-term finance and formulate prudential norms for infrastructure related projects. The authorities should look at the existing investment norms prescribed for insurance so that these institutions can commit significantly larger amounts of long-term funds for infrastructure.

5. **Financing institutions need to participate in the project**: There exists an urgent need for specialized infrastructure
financing institutions such as IL&FS and IDFC to participate at the design stage of a project. The support of such institutions at an early stage would have two advantages. First, it would make it easier for project developers to obtain finance from other sources. Second, it would provide the developer with the opportunity to use the expertise of such institutions in project designing and financial structuring.

6. **Need for incentives from RBI:** In order to provide an active incentive for banks to scale-up infrastructure financing, the RBI could consider classifying infrastructure as one of the priority sectors. Moreover, as far as banks are concerned, liabilities created by the sale of long term infrastructure bonds may be kept outside the purview of SLR and CRR.

7. **Reduction of duties:** The Ministry of Finance could consider reducing the customs duty on capital goods and machinery that are critical for roads, ports, airports, power, railways, telecommunication, oil and gas pipelines and supply and distribution of water. This fiscal incentive would significantly reduce the cost of many infrastructure projects.

8. **Clear policy frameworks by the Government:** Governments need to assure potential investors that there is an intention to lay out clear policy frameworks for each sector and reduce uncertainties arising out of policy implementations and arbitrary actions in contractual commitments of the governments.

9. **Setting up ministerial groups:** All infrastructure projects involve multiple clearances from different Ministries and Departments — which contribute to significant delays. In order to reduce this problem, the Government of India needs to set up
ministerial groups for roads, power, telecom, ports and airports. There should be different ministries in each of these groups according to the sector. It would be useful for these groups to meet once every 45 or 60 days to discuss and resolve all outstanding inter-ministerial issues.

10. Need of detailed social cost-benefit analysis of the project:
For deciding the allocations of various items of infrastructure, scientific criteria should be evolved which would require detailed social cost-benefit analysis of different types of infrastructure.

In nutshell, the investment needs for infrastructure are enormous. India faces a very large financing gap which needs to be bridged by domestic as well as foreign private sector investments. Success in attracting private funding to infrastructure will depend partly on India's ability to develop a more sophisticated financial sector, requiring reforms that facilitate the use of diverse financial instruments by investors, and address the current barriers to increased participation by both sponsors and financial institutions. In the foreseeable future, Government will remain the key investor in critical infrastructure sectors, although PPPs could help reduce some of the funding pressure on Government. The Government's ability to finance infrastructure will depend on the success with which it is able to progressively reduce the fiscal deficit to make available public funds for infrastructure investment.