## INFRASTRUCTURE FINANCE

### An Indian Prespective

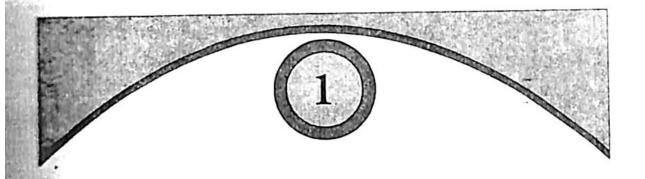
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## Infrastructure Finance: An Introduction

### In this chapter you will find

- 1. Definition of infrastructure and its financing
- 2. Key Issues in infrastructure financing

Infrastructure in respect of this book consists of a plethora of activities, which are available in public utility services and public works. To be more precise, the gamut of infrastructure deals with:

- 1. Roads and Bridges
- Railways
- Airways including port activity
- 4. Sea Port and yards
- Telecommunication, and
- Power sector, including generation and distribution.

  Rakesh Mohan in the Indian Infrastructure report defines

"Infrastructure is generally defined as the physical framework of facilities through which goods and services are provided to public."

The recognition of infrastructure as a basis of creating a niche in management of fund arises out of two reasons.

- The increase burden on the exchequer had left the governments with no option but to seek private participation in the funding of these projects like roads, railways, airport maintenance and seaport creation and maintenance.
- The economic reforms agenda, which seek professional mangement of the state, hold asset to increase economic and financial returns.

In fact, the World Bank in its agenda paper proposes that in relation to infrastructure, the various states should mange infrastructure more like a business and introduce competition wherever it is possible.

It strongly urges that the idea behind such a change is to promote public – private partnership in financing such projects of infrastructure and increase the stake of the user, the ultimate decider of the public property.

It is, however, envisaged that the government should continue in its functioning relating to infrastructure but with a changed role.

### The Key Issues in Infrastructure

The key or primary issues in infrastructure relates to,

#### a. Fund Raising

The crucial area of fund raising is very critical in case of infrastructure. The issues relating to fund raising are actually interwoven with the other key issues of infrastructure.

The basic issues are generally to:

- Decide upon the asset allocation and therefore sources of funding
- ii. Decide the mechanism of fund flow
- iii. Create a mechanism through which the fund flows

iv. Post privatization issues including tariff and price fixation and sourcing of working capital.

# b. Modality of transfer of ownership of assets from government to private partners

The modality of transfer of ownership includes amongst many,

- i. The process of transfer and its mechanics like divestment, leasing, management buy-outs, asset transfer without title etc.
- ii. The modality of finance and transfers like, Build Operate and Transfer (BOT), Build Own Operate and Transfer (BOOT), Build Own Lease and Transfer (BOLT) and Build Own Actualize and Transfer (BOAT).

# c. Portfolio reconstruction of projects or public utilities for which privatization is sought

Generally a public utility or project has various activities, which are broken down into smaller activities depending upon the economic and financial realities. These are then transferred to private parties. The process serves two purposes:

- It creates a sound basis for the transfer of public property to private hands and,
- h. It creates a sense of economic reality in terms of easing the burden on exchequer as a result of such divestment of public property in whole or in part.

#### d. Project appraisal

Besides the financial realities, the project appraisal helps in ascertaining the means through which the projects are being financed and the legitimacy of such projects. The objections that are raised from various social platforms are also to be considered. An approach of UNEDED to bridge the gap between the social need and the economic need is a must.

Appendix 1.1
COMPOSITE TABLE OF INFRASTRUCTURE IN INDIA

| Infrastructure .               | 96-2661 | 1996-997 | 86-2661 | 66-8661 | 1999-2000 | 2000-2001 |
|--------------------------------|---------|----------|---------|---------|-----------|-----------|
| ELECTRICITY                    |         |          |         |         |           |           |
| a. Installed electricity       |         |          |         |         |           |           |
| Generation Capacity            |         |          |         |         |           |           |
| (Utility) (MW)                 | 83294   | 85795    | 89102   | 93249   | 97837     |           |
| b. Consumption of Electricity  |         |          |         |         |           |           |
| (utilities and Non Utilities)  |         |          |         |         |           |           |
| (million KWH)                  | 341905  | 350382   | 371633  |         |           |           |
| c. Availability of electricity |         |          |         |         |           |           |
| (million KWH)                  |         |          |         |         |           |           |
| i. Gross Generation            | 379877  | 395889   | 421747  |         |           |           |
| ii. Net Generation             | 352657  | 367085   | 391063  |         |           |           |
| iii. T&D Losses                | 79363   | 91105    | 61626   | 1       |           | 1         |
| Road                           |         |          |         |         |           |           |
| a. Surfaced (Km)               | 1294256 | 1394061  | .       |         |           |           |
| b. Unsurfaced (Km)             | 1072806 | 1071816  |         |         |           |           |
|                                |         |          |         |         |           |           |

| ā    | Dort  |        |        |        |        |        |        |
|------|---|--------|--------|--------|--------|--------|--------|
| • (  |   |        |        | 9      |        |        |        |
| )    | Overseas and costal                                   |        |        |        |        |        |        |
| ţ    | traffic of some major ports.                          |        |        |        |        |        |        |
| T    | Total Overseas cargo ('000tones)                      |        |        |        |        |        |        |
| ત્વં | a. Kolkata  | 3322   | 3275   | 5609   | 6805   | 7905   |        |
| Þ.   | b. Chennai  | 23534  | 23995  | 22509  | 17215  | 22776  |        |
| ن    | c. Mumbai   | 23266  | 24650  | 23508  | 22618  | 21434  |        |
| Ġ.   | d. Paradip  | 6335   | 5551   | . 5509 | 5282   | 6170   |        |
| ە:   | e. Visakhapatnam                                      | 21547  | 23049  | 22682  | 22513  | 22833  |        |
| f.   | f. Kandala  | 25981  | 28690  | 33438  | 35649  | 38102  |        |
| Z.   | Railways  |        |        |        |        |        |        |
| ä    | <ul> <li>a. Passenger Kms(millions)</li> </ul>        | 342359 | 35754  | 380528 | 404605 | 428735 | 449138 |
| Ъ.   | <ul><li>b. Passenger earning (Rs. In Crore)</li></ul> | 84     | 85     | 98     | 88     | 98     | 06     |
| ن    | c. Revenue earning in freight                         | 284711 | 277567 | 284249 | 81511  |        |        |
|      | traff Rs. In. Cr.)                                    |        |        |        |        |        |        |
| Ġ.   | d. Route Length (Km. Running)                         | 80441  | 80754  | 80608  | 81511  |        |        |
|      |   |        |        |        |        |        |        |

Contd. Table]

Table Contd.

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|-----------------------------------|-------|-------|-------|-------|-------|-----|
| Air Transport                     |       |       |       |       |       |     |
| i. Fleet Owned and Utilized by IA | 59    | 53    | 52    | 99    |       |     |
| AI                                | 26    | 24    | 26    | 26    | 26    |     |
| ii. Traffic on Revenue passege    |       |       |       |       |       |     |
| (million) AI                      | 11784 | 11589 | 11422 | 11704 | 11587 |     |
| IA                                | 7324  | 7053  | 7015  | 8262  | 9628  |     |
| Telecom                           |       |       |       |       |       | ļē. |
| Telephone Exchanges               | 146   | 177   | 213   | 260   | 288   | 1   |
|                                   |       |       |       |       |       |     |

Source: India Infrastructure Report, 2002, Oxford.

### Implementation of projects

The implementation of the projects in infrastructure finance brings thack to a full cycle. The process's acid test stands in the lementation and the smooth function of the project thereafter.

### Regulatory Authorities

As ther essential aspect of financing the infrastructure, especially asse of public utility and projects relating to it, is the method which the post project phases are regulated. Though a cal, these generally fall in the realm of the law making and cover decisions.

The financing of infrastructure therefore revolves around the modalities of transfer of public property, arranging for their finding, creating a regulatory framework in which they function monitor the aftermaths of the projects.

#### **Questions to Answer**

- What are the key issues that are faced by the country in infrastructure industry?
- In what way is the Infrastructure industry helpful in development of the country?