



## CHAPTER 15

### CONCLUSIONS AND RECOMMENDATIONS

- 15.1** Pune has witnessed enormous industrial growth during the last 10 years. Rapid urbanization in the recent past has put the city's travel infrastructure to stress. With a large number of units have come up both in small scale as well as in heavy & medium scale industry, etc., traffic in the city is expected to shoot up. Being thickly populated area, Pune's traffic needs cannot be met by only road-based system.

The existing urban transport system of Pune City which is road-based has already come under stress leading to longer travel time, increased air pollution and rise in number of road accidents. With projected increase in the population of the city strengthening and augmenting of transport infrastructure has assumed urgency. For this purpose provision of rail-based Metro system in the city has been considered.

Studies have brought out that a Light Metro with carrying capacity of about 25,000 phpdt will be adequate to meet not only the traffic needs for the present but for the future 30 to 40 years also. A Light Metro System consisting of two Corridors namely (i) PCMC – Swargate Corridor (16.59 km) and Vanaz - Ramvadi Corridor (14.93 km) at an estimated completion cost of Rs. 7128 crores (without taxes & duties) to be made operational has accordingly been recommended

- 15.2** A detailed Environmental Impact Assessment Study has been carried out for the project. As a part of this Study, comprehensive environmental baseline data was collected, and both positive and negative impacts of the project were assessed in detail. The project has many positive environmental impacts like reduction in traffic congestion, saving in travel time, reduction in air and noise pollution, lesser fuel consumption, lesser road accidents etc, with a few negative impacts

(especially during implementation phase of the project) for which Environmental Management Plan has been suggested.

- 15.3** After examining the various options for execution of Pune Metro Project, it has been recommended that the project should be got executed through a SPV on DMRC funding pattern
- 15.4** The fare structure has been estimated based on Delhi Metro fares duly escalating the same for year 2014. Subsequently, for the purpose of assessing returns from the project, the fares have been revised every second year with an escalation of 5% every two years with an addition of Rs 2.00 at every distance zone.
- 15.5** As in the case of Delhi Metro, the State Government should exempt/reimburse the Pune Value Added Tax (VAT) to Pune Metro. It should also exempt the following: -
- Tax on electricity required for operation and maintenance of the metro system.
  - Municipal Taxes.
- 15.6** As per the present policy 80% of the Central Taxes will be paid by GOI as subordinate Debt and balance 20% will be paid by the concerned State Government. Pune State Government may pursue the Central government to extend the same benefit to Pune Metro.
- 15.7** While the Financial Internal Rate of Return (FIRR) for the project has been assessed as 3.25 % without and 1.95 % with central taxes and the Economic Internal Rate of Return (EIRR) works out to 18.04 %.
- 15.8** To avoid delays in processing the clearance for the Project, It is suggested that immediately on receipt of the DPR, the State Government should approve it 'in principle' and forward the DPR to the Secretary, Ministry of Urban Development, Government of India, advising the GOI of the State Government's intention to take up the Project on DMRC pattern requesting for the latter's "in principle" clearance to go ahead with the Project.
- 15.9** An SPV should be set up for Pune Metro and registered under the Companies Act, 1956. This SPV should be a PSU of the State Government and may be named as 'Pune Metro Rail Corporation Ltd.' (PMRC).

- 15.10** Since sanction of Pune Metro may take some time, It is recommended that the State Government should urgently post an Officer on Special Duty (OSD) with adequate powers to process and persue sanction for this project and to initiate preliminary steps required for its implementation.
- 15.11** Meanwhile the State Government should freeze all future developments along the proposed route of Pune Metro to avoid infructuous expenditure.
- 15.12** Since the SPV to be set up to get the project implemented and initially the SPV may lack in expertise, it will be necessary to engage Interim Consultants for the first one year who will do this job on behalf of the SPV in preparation of land plans, transferring the alignment from drawing to the ground, fixing the contracts for some of the selected elevated packages and depots. Interim consultant will also help in finalization of General Consultants.
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- 15.13** To keep a check on the work of General Consultants and to ensure that the Metro is being constructed to meet the appropriate specifications and safety standards, the SPV will also need to engage the services of Prime Consultants who will keep over-all watch over the execution of the project.