

Conclusions & Recommendations

8.1 Public Private Partnership in Highways

(a) International Scenario:

The various studies suggest that infrastructure development should rank at the top of the poverty reduction agenda for any government keen on poverty reduction. Adequate transportation infrastructure is an essential ingredient for economic development and growth. Beyond simply facilitating cheaper and more efficient movements of goods, people, and ideas across places, transportation infrastructure impacts the distribution of economic activity and development across regions, the extent to which agglomeration economies and efficient sorting can be realized, the levels of competition among industries and concomitant reallocation of inputs towards productive enterprises, and much more. Rapidly expanding countries like India and China often face severe constraints on their transportation infrastructure. Many business leaders, policy makers, and academics describe infrastructure as a critical hurdle for sustained growth that must be met with public funding, but to date we have a very limited understanding of the economic impact of those projects.

The need for investment in roadways for increasing competitiveness and sustaining economic growth has been well established. Various studies have pointed the socio-economic benefits of investing in roads. According to World Bank (2002)¹¹¹, every rupee spent on roads creates seven rupees in economic benefits. An ESCAP study (2007)¹¹¹ also reached similar

¹¹¹ Quoted in Mukherjee, Saian and Harish Venkateswaran (2009), *India: Roads, The road ahead*, Mumbai: Nomura Financial Advisory and Securities (India) Private Limited.

conclusion; a rupee spent on roads, leads to seven times greater poverty reduction than a rupee spent on anti poverty programmes.

The various studies found that PPPs in the highway sector have scored well in terms of delivering projects on time and within budget. One can thus argue that transferring construction risks to private partners has resulted in appropriate incentives. The PPP mode of procurement seems to be economically efficient.

(c) Indian Perspective:

We can see from the literature surveyed that the PPP projects on transport sector and Highways have been very intensively studied and analysed. It comes out clearly from the broader studies about the highways sector in India is that the country has been able to avoid most of the problems which have been faced by East Asian; Central and East European; and Latin American countries while implementing PPP projects in Highways sector. One reason for the same may be that large scale systematic privatisation in highways sector in India started much later in early 21st century, and learning from experience of others, the country has been able to avoid the pitfalls to a large extent.

India has been able to manage large quantum of private investment in highway sector in the previous decades, but there is a need to examine whether the stated gains from privatisation like operational efficiency of private sector, completion of projects in time and within estimates have been achieved, or it has just been used to fill the space vacated by government due to paucity of finances. What is the level of disputes in the contracts leading to renegotiation of contracts if any? The study of these aspects to a extent has

been done based on the available data from NHAI and its analysis.

In spite of all the problems encountered with PPP projects in highways in both developed and developing countries, the performance of India has been really commendable. Another World Bank study found that the GDP benefit derived from the Golden Quadrilateral (GQ), which cost INR 303 bn, was INR80 bn per annum, a return per annum of more than 25 per cent.

The palpable benefits accrued from BOT (toll) projects like reduction in time and cost overrun, reduced litigations, increased interest of bidders at RFQ and RFP stages, may be attributed to the contribution of MCA in bringing out the best aspects and practices of BOT (Toll) mode. As a result, the number of PPP projects awarded and their lengths has also increased substantially.

8.2 Evaluation of National Highway Development Programme:

A paradigm shift in favour of BOT (Toll) is evident since 2005. This is mainly due to strong framework developed in the form of MCA. The key contribution of MCA in various aspects of BOT (Toll) projects is summarised as follows.

- MCA ensured that the concession agreement is well balanced for both the parties.
- The road projects implemented under BOT (Toll) have become the perennial source of revenue for the government with the introduction of revenue sharing model in lieu of upfront negative grant. This also ensured that the windfall profit is shared among the concessionaire and government and the reduced revenue for unexpected reasons did not affect the concessionaire much.
- The delay in projects is mainly due to delayed availability of site for

construction. By insisting 80% availability of project site on the appointed date, the MCA has assured there was no delay in projects due to site handover.

- The MCA envisaged various possibilities of change of scope that could occur in a project and accordingly included detailed clauses on various aspects of change of scope.
- The lenders' risk associated with financing BOT (Toll) projects was mitigated substantially by including substitution agreement in the MCA.
- The repetitive process of signing SSA(State Support Agreement) with state governments and the delay associated with it became extinct, with OBSSA (Omnibus State Support Agreement).
- The standardisation of framework was completed by making specifications and standards as a standard document along with MCA, and made accessible to the competing concessionaires.
- The comprehensive clauses for the appointment, duties and functions, period of tenure, remuneration and termination of supervisor ensured fair and independent monitoring of the project.
- The change in ownerships due to the fact that the parties associated with development and OMT of roads has different expertise and hence the developers should be partly allowed to disinvest from the projects any time after COD in order for them reinvest in development of projects.
- The MCA ensured that the maintenance of road during the concession period is taken with all the seriousness it deserves, by introducing penalty for breach of maintenance obligations.
- By financially validating the relationship between increase/decrease

in the concession period for the shortfall/excess with respect to target traffic, the MCA ensured that the agreement is well balanced and attractive for both the concessionaire and authority.

- By comprehensively including clauses on termination process, concessionaire's default, authority's default, termination payment for authority's default and concessionaire's default and making them equally poised for the concessionaire and authority, the MCA encouraged unleashing the entrepreneurial energy of private players in taking up road projects on BOT (Toll) mode of delivery.

BOT (toll) projects create no economic distortion as the users and not the tax payers pay for the improved infrastructure. This coupled with strong framework in the form MCA provided by PC facilitated policy makers to prescribe BOT (Toll) as the first choice of mode of delivery, followed by BOT (Annuity) in a water fall model.

The main reasons of delay in Highways projects are delays in Land acquisition, Forest clearances, Railway clearances for ROB/RUB, Utility shifting and defaults of agency / concessionaire. It has been gathered that in case of EPC contracts, some of the agencies play a passive and some-time negative role in land acquisition, Forest clearances, Railway clearances for ROB/RUB & utility shifting etc., to enhance their case for claim of delay in DRB/Arbitration/Courts. On the other hand, the concessionaires play proactive role in land acquisition, Forest clearances, Railway clearances for ROB/RUB & utility shifting for achieving early Commercial Operation Day (COD). The inherent structure of BOT (Toll) agreement that provided incentive for the

concessionaire to complete projects fast so as to collect tolls from COD appeared to be the reason for the reduced construction time for BOT (Toll) projects. Similarly, BOT(Annuity) agreement provides incentive to the concessionaire to complete the project early as half yearly annuity payments starts from COD. Moreover, from January, 2009 the Government policy is to acquire at least 80% of the project land before agreement. Most of the EPC projects were accepted before January, 2009 and the delay of most of these projects is mainly due to land acquisition & various approvals.

The anticipated average time overrun for the projects awarded after Jan 2009 is lesser than the projects awarded before Jan, 2009. Adoption of 80% site handover before the appointed date for BOT (Toll) and BOT (Annuity) projects from Jan 2009 could be the reason for reduction in the time overrun given that delay in land acquisitions has been identified as one of the most crucial reason for the delay in the execution of the road projects.

Thus, a consistent and comprehensive framework, which evolved in the form of MCA since 1998, facilitated the effective implementation of policy prescriptions of Gol. The process of involving multiple stakeholders in the evolution of the MCA has led to an acceptable document building confidence in the road sector development. The MCA covers all the essential details and in the very of act of structuring it, a contestable framework has been provided for continuous improvement. In the process of developing the MCA, a fine balancing act was performed in a manner that gave comfort and commercial return to the concessionaire (thus attracting many players to this sector with aggressive bidding), while at the same time generated maximum value for the Gol.