Challenges in Road Sector Development in India

Development of Roads and Highways infrastructure in India and improvement in road connectivity is critical to India’s economic growth and prosperity. This sector has witnessed a lot of interest in the past decade with focused Government interventions and an increased interest of the private sector, particularly in the PPP (Public-Private-Partnership) route. While the road sector has witnessed significant development in the last decade, the speed of implementation has been hampered by execution delays and issues in economic viability. The challenges hindering the growth and execution of road projects in India need to be tackled to ensure that the momentum of growth in this sector is sustained.

Roads as a Catalyst for Growth

The total road network in India is around 3.3 Mn km where the major share is accounted for by District, Rural and Urban roads. National Highways which is only 2% of the road network, accounts for approximately 40% of the overall traffic. This highlights the immense potential for development of this sector and opportunities for large investment. Roads Development Plan – “Vision 2021” envisages substantial increase as well as improvement in road networks across all categories.

Flagship projects like NHDP (Phase 3 onwards), Port Connectivity and Bharat Nirman are the key vehicles of growth in this sector in the coming years. This sector has been one of the most attractive from the perspective of private sector participation with a large number of projects awarded under BOT-Toll (or Annuity) model. The Government has also come with schemes like Viability Gap Funding to enhance viability and attractiveness of projects. The projects under National Highways are expected to be financed by debt or equity from financial institutions and developers while State and other roads are dependent on central / state government expenditure. The road sector has been opened up to foreign players with 100% FDI possible for development of roads / highways. A number of private equity players have made investments in road projects.

Source: Ministry of Road Transport and Highways, NHDP, Planning Commission Documents

**Roads – Segment wise**

- National Highways: 2%
- State Highways: 4%
- District Roads: 15%
- Other Roads: 79%
- Total Length 3.3 million km

**Investment in road sector (in USD Bn)**

- Xth Plan: Planned 79, Actual 70
- XIth Plan: 125

*Source: Ministry of Road Transport and Highways, NHDP, Planning Commission Documents*
**Challenges to the Roads & Highways Sector**

While road development has been identified as a priority sector, execution of projects in this sector has been tardy with a large number of projects witnessing delays. Even country’s some of the most prestigious projects have faced the same fate. For example, Yamuna Expressway connecting Greater Noida with Agra has witnessed almost four fold cost increase (to INR 10,000 Crores) since its inception owing to series of farmers' protests for enhanced compensation. Also Bandra-Worli sea link has witnessed almost five years of delay raising the initial cost of the project from INR 434 Crore to INR 1634 Crore. The delay was on account of a host of reasons, key being the slew of public interest litigations and protests from environmentalists and fishermen.

As of December 2011, 83 out of 131 road projects with investment above INR 150 Crore are facing time overrun issues with respect to original schedule. These time overruns lead to cost overruns thus reducing the economic viability of these projects.

**Key Reasons for delays:**

1) Land acquisition has emerged as the single biggest bottleneck for delay in execution of highway projects. The environment and forest clearances also have slowed down the process significantly.

2) Huge amount of time taken by NHAI to plan and award projects

3) Poor quality of DPRs and traffic forecasts has also led to implementation delays

4) Shifting of utilities like electrical lines or water pipelines requires coordination with various concerned utilities leading to time overruns

5) Shortage of manpower and equipment in large number of projects in various infrastructure projects including roads has impacted the pace road infrastructure development.

6) Funding risk, i.e. the tying up of funds by the developers, is proving difficult in the current economic scenario. Private equity players are also reducing exposure to this sector due to low returns on these projects, thus reducing funding avenues.

**Way Ahead for the Sector**

The bottlenecks mentioned above can be a source of discouragement for private players to participate in road development projects. In several cases, EPC contractors who had ventured into developer route are now trying to sell their stake in PPP projects. Most of the existing players in this sector have now reduced acquisition of new projects and are instead focusing on execution responsibilities for their current order book.

Probably the most crucial step in the right direction is the focus on obtaining land requirements and other clearances with ministries and utilities right at the start of the project to prevent delays at later stages. Single window clearance for obtaining all necessary permits is crucial. Private companies need to relook at their pricing strategies and traffic forecasting techniques while bidding for new projects. There is a need for setting up a quick dispute resolution mechanism to ensure that the progress of road development work moves smoothly. Lastly the projects specifically the flagship projects such as NHDP need to be monitored closely to ensure that they are implemented in a time-bound manner. Creating a shelf of successful PPP projects will result in greater private participation and investment in this sector going forward.
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