



PPP model, States Role in Highways Construction

What is the issue?

- Contrary to general perception, State highways are of better quality, less cost and are built faster than national highways.
- In understanding this, here is a look on different modes of road construction and the advantages that State Highways have.

What are the different modes of road construction?

- **Public-private-partnerships (PPPs)** - PPPs involve collaboration between a government agency and a private-sector company.
- PPP road projects broadly fall in one of the two categories of 'toll' or 'annuity' that varies mainly in the way developers recover their investment.
- In the toll projects, NHAI passes on the toll collection rights and operation and maintenance obligations for 30 years to the private developer.
- This is done against payment of upfront, one-time, lump sum to the government.
- In the annuity model, a developer builds the highway, operates it for a specified duration and transfers it back to the government.
- The developer receives predefined annuity payments from the government after the launch of commercial operation of the project.
- Besides, many recent projects are being implemented under a hybrid annuity model (HAM).
- In HAM, payment is made in a fixed amount for a considerable period and then in a variable amount in the remaining period.
- With bidders showing less interest in the traditional toll or annuity PPP models, the government introduced the hybrid-annuity-model
- **Engineering-procurement-construction (EPC)** - The EPC contractors will carry out the detailed engineering design of the project, procure all the materials necessary and then construct.
- They finally deliver a functioning facility or asset to their clients.

How effective have PPPs been?

- In recent times, PPPs have emerged as the preferred approach of the Central government to develop roads in India.
- A comparison shows that roads built using the PPP model are on average longer compared to EPC roads.
- However, the unit cost (per lane-kilometer) did not show much variation across the two approaches.
- This indicates an apparent absence of economies of scale benefit in the longer PPP stretches.
- In terms of speed of construction, PPPs have scored.
- Private developers have cut down construction time by 63% compared to what the government takes.
- In terms of construction performance, while PPPs exhibit lower time overruns, EPC projects have lower cost overruns.
- Overall, the use of PPP helps in faster capacity creation.
- A major drawback of the PPP approach is its restricted applicability.
- Road projects that suffer from low traffic or revenue estimates are unlikely to generate the interest of private developers.

How effective are State highways?

- In recent years, the National Highways Authority of India (NHAI) has played a major role in developing the country's road network.
- These, in particular, include the North-South and East-West corridor and the Golden Quadrilateral.
- However, a detailed comparison shows that State highways (SH) have superior construction characteristics than national highways.
- This is in contrast to the common perception that NHAI is more capable and more professionally managed than States' highway departments.
- Amongst PPP roads, State highway projects cost 42% less and are completed 33% faster than NH projects.
- In the case of EPC roads, SH projects take as long as NH projects, but at 33% lower cost.

What are the possible reasons?

- The development of roads needs several issues to be addressed at a local level, which include -
 - i. land acquisition
 - ii. replacement of project-affected people
 - iii. availability of supporting facilities during project development
 - iv. public hearings and discussion with the local community, etc
- The State governments are better placed to resolve these issues than Central government agencies.

- Many of the clearances that need to be obtained for highway projects fall within the purview of the State government.
- So, co-ordination across different departments of the State government is easier than co-ordination between Central and State governments.
- Also, with limited budgets, the State highway departments are inclined to use them more efficiently.

What is the road ahead?

- The strengths of the State highway departments, which seem to have been overlooked in recent years, should be recognised.
- Whether PPP or EPC, it appears that more projects could be brought under the domain of State highway departments.

Source: Business Line

Quick Fact

National Highways Authority of India (NHAI)

- The NHAI was set up by the NHAI Act, 1988.
- It is an autonomous agency of the government.
- NHAI is mandated to implement the National Highways Development Project (NHDP).
- It is responsible for the development, maintenance and management of national highways, totaling almost 100,000 km in length.



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