



# IJRASET

International Journal For Research in  
Applied Science and Engineering Technology



---

# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

---

**Volume: 6      Issue: VII      Month of publication: July 2018**

**DOI: <http://doi.org/10.22214/ijraset.2018.7043>**

**[www.ijraset.com](http://www.ijraset.com)**

**Call:  08813907089**

**E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)**

# Privatisation and Road Development

Abhitesh Sachdeva<sup>1</sup>, Dr. R.R. Singh<sup>2</sup>

<sup>1</sup>P.G. Student, Department of Civil Engineering, Punjab Engineering College (DU), Chandigarh

<sup>2</sup>Professor Civil Engineering, Punjab Engineering College (DU), Chandigarh

**Abstract:** *It is universally recognized that transport is crucial for sustained growth and modernization. Adequacy of this vital infrastructure is an important determinant of the success of a nation's effort in diversifying its production base, expanding trade and linking together resources and markets into an integrated economy. It is also necessary for connecting villages with towns, market centres and in bringing together remote and developing regions closer to one another. The provision of transport infrastructure and services helps in reducing poverty. It needs no emphasis that various public actions aimed at reducing poverty cannot be successful without adequate transport infrastructure and services. It is difficult to visualize meeting the targets of universal education and healthcare for all without first providing adequate transport facilities. So In our general our paper is focused on the detailed role about the privatisation of road development.*

## I. INTRODUCTION

India is facing a growing number of critical mobility dilemmas. Traffic on the India's roads is increasing several times faster than available capacity. The resulting congestion costs billions of dollars annually in lost productivity. This traffic congestion is also contributing to ever worsening air quality, especially in urban areas. In addition, the nation's transportation infrastructure, some of it more than fifty years old, is in desperate need of overhaul. From the car-sized potholes of cities to dangerously corroded bridges in various parts of the country, billions of dollars are required to prepare the India's transportation network for the future.

All sectors, including transport, operate within the socio-economic framework provided by the country. Specific policies are designed within the framework for each sector in order to meet national goals and objectives. Currently, the main objective of development planning in India is higher growth in gross domestic product (GDP). The aim is to achieve a target of 8 per cent average GDP growth in the next 10 years. The higher rate of growth must also be accompanied by wider dispersal of economic activity and has to go together with the objectives of reduction in poverty, provision of gainful and high quality employment, improvement in literacy rates, reduction in the growth of population, reduction in gender inequality in illiteracy and wage rate, reduction in infant mortality, etc. As a service industry, transport does not exist for its own sake. It serves as a means to achieve other objectives. In formulating policy for the development of the transport sector, various macro objectives mentioned above therefore have to be taken into account. Some of these are economic in character while others are of a socio-political nature. Economic and non-economic objectives are not always consistent. However, their mix is one of the important factors which determines the pattern of investment and its funding in various sectors of economy.

## II. ROAD NETWORK IN INDIA

India has a road network of over 5,603,293 kilometres as on March 2016, the second largest in the world. At 1.70 km of roads per square kilometre of land, the quantitative density of India's road network is higher than that of Japan (0.91) and the United States (0.67), China (0.46), Brazil (0.18) and Russia (0.08). In order to accommodate its large population, India has approximately 4.63 km of roads per 1000 people. However, qualitatively the Indian road network is a mixture of modern highways and narrow, unpaved roads, and are being improved on regular basis. As of March 2016, 62.5% of Indian roads were paved.

In May 2017, India had completed and placed in use over 28,900 kms of recently built 4 or 6-lane highways connecting its major states and cities. According to Ministry of Road Transport and Highways, India had about 1,01,011 kms of national highways and expressways, plus another 1,76,166 kilometers of state highways as of March 2016. Many projects are being implemented under the initiative taken by the government named National Highways Development Project. Private builders and highway operators are also implementing major projects - for example, the KMP Expressway started in 2006 is far behind schedule, overbudget and incomplete whereas the Yamuna Expressway between Delhi and Agra was completed ahead of schedule and within budget.

The Government of India is attempting to promote foreign investment in road projects. Foreign participation in Indian road network construction has attracted many international contractors ; design and engineering consultants, with Malaysia, South Korea, United Kingdom and United States being the biggest players.

### III. PRIVATISATION IN INDIA

In order to raise resources and complete the projects at a faster pace, the National Highway Act, 1956 was first amended in 1995 and latest in 2017 to encourage private sector participation in the development, maintenance and operation of national highways. The private sector can now invest in national highway projects, levy, collect and retain fees from user charges and is also empowered to regulate traffic on such highways in line with the provisions of the Motor Vehicle Act. A number of incentives are given to the private sector for the development of road projects. These are listed below: (a) The Government bears the costs for: (i) Project feasibility studies; (ii) Shifting of utilities/services; (iii) Environmental clearance, cutting of trees, etc.; (iv) Land for the right of way and way side amenities; (v) The land required for wayside amenities is treated as land required for the project. (b) The National Highways Authority of India (NHAI) is authorized to provide a capital grant up to 40 per cent of the project cost to make the project viable. However, the quantum of the grant is to be decided on a case-by-case basis; (c) Toll rates are indexed to the wholesale price index; (d) A 10-year corporate tax holiday may be availed of within the 20 years after commissioning of the project; (e) External commercial borrowing of up to 35 per cent of the project cost is permitted; (f) Import duties on modern and high-capacity road construction equipment have been removed; 65 Transport and Communications Bulletin for Asia and the Pacific No. 73, 2003 (g) Foreign direct investment up to 100 per cent is allowed; (h) The operator can develop and operate wayside amenities such as restaurants, motels/hotels, rest/parking areas, petrol pumps and workshops; (i) Infrastructure as defined in Section 80-1A (12) of the Income Tax Act now includes roads; (j) Investment in NHAI bonds is exempted from the capital gains tax.

### IV. THE PROMISES AND CHALLENGES OF PRIVATE SECTOR PARTICIPATION

The promise of the private sector lies in (a) improved management and higher efficiency and (b) increased access to private capital for maintenance and expansion. The two are related since greater efficiency results in cost savings and greater availability of funds for investment; improved management results in easier access to private capital; and investment of private capital constitutes an added incentive for operational efficiency. While the potential benefits from private sector participation are clear, the obstacles are often formidable.

Infrastructure investments tend to be capital intensive and lumpy, and have long gestation and even longer payback periods. For example, in water and sanitation, the ratio of investment in fixed assets to annual tariff revenues is 10 to 1. This means that private financing is contingent upon the existence of long-term capital market and guarantees and rewards offered for high perceived risks. The private sector risks are many and varied: demand for the services provided may turn out to be lower than expected; tariffs may be too low and not permitted to adjust to reflect costs; the condition of infrastructure may turn out to be worse, delays of construction longer, and costs higher than anticipated. Other risks include the financial risk of currency devaluation, legal risks in dispute resolution, and the political risk of asset appropriation. As a result of one or more of these risks, the private contractor may be unable to recover costs and earn a reasonable profit. Indeed, how these risks are quantified and mitigated turns out to be the key to private sector participation in infrastructure projects. The principle is that whoever controls a particular risk best should assume it and be compensated for it. The public sector that invites private sector participation in areas that have been traditionally reserved for the state also faces risks: procured services may be sub-standard or costs may turn out to be higher than those charged by the public utility. There are also political risks, arising from public opposition, especially by labour unions. Water supply, sanitation, and power (as well as other utilities) are natural monopolies; it is uneconomic to duplicate the water and sewage pipes or the power lines in city streets, and, therefore, competition is difficult to achieve. Moreover, regulation is necessary to protect against the promise of the private sector lies in improved management with higher efficiency and increased access to private capital for maintenance and expansion. While the potential benefits are clear, the obstacles to private sector participation are often formidable. Regulation is also necessary to control externalities related to public health and the environment; as the social benefits exceed private benefits, investments must be promoted above what is privately profitable. At the same time, the obstacles to private sector participation may appear formidable. Lack of adequate legislation for private sector involvement and non-enforcement of property rights and contracts are common obstacles, as are bureaucratic inertia and lack of confidence in the private sector among policy makers. Other constraints include unfavourable public opinion, fear of foreign operations, and reluctance to deal with labour problems. The constraints may also be on the supply side, with the private sector showing too little interest to ensure competitive bidding.

### V. SUCCESS FACTORS FOR PRIVATIZATION

Privatization of road projects require an effective exercise, vigilant control and efficient management by both the Government and the entrepreneur. It is a complex task and, therefore requires patience and co-ordination in its approach. The success factors for privatized projects are:

- A. The project must be financially sound, efficient and affordable.
- B. There must be strong Government and potential will to see the same is through.
- C. The administrative and accounting frameworks must be efficient.
- D. The bidding process should be fair and transparent.
- E. Sponsors must have experience and sufficient financial strength.
- F. Contractor must have sufficient expertise and should be able to afford the required resources.
- G. Project Management should be experienced enough to contain the time cost overrun.
- H. Risks that may occur during the project implementation, must be distributed proportionally among the various parties.
- I. The Financial structure of the project must provide lenders sufficient security.
- J. Disputes should be solved and should not affect the project.

## VI. RISK FACTORS

The main theme of this concept itself is funding and all the construction time cost overrun and associated risks be taken care of by the Entrepreneur. It is therefore necessary that the Entrepreneur and his associated builder or consultant has to account for different risks as under, some can be and some cannot be foreseen and effectively accounted for. Various types of risks are:

- 1) Land availability with respect to various legal departmental.
- 2) Removal or realignment of utilities by various agencies such as electricity, telephone, sewers, water supply, drainage etc.
- 3) Permission from forest department for removal of tress and environmental clearance.
- 4) Permission from the department of Railways
- 5) Permission for quarrying from Mining department.
- 6) Permission from Pollution Control Board.
- 7) Delays which occur in different stages of project implementation with regard to various approvals.
- 8) Availability or shortage of manpower
- 9) Periodical cost hype of labour or material.
- 10) Increase in project cost due to additional taxes during the process of execution, by various tax imposing authorities
- 11) Variation in soil profile and foundation characteristics.
- 12) Extended construction period.
- 13) Time over run cause cost over run for the work, overheads and plants/machinery.
- 14) Construction/time over run may invite damages/penalty from employer besides lessening of revenue recovery period.
- 15) Inaccurate projection of traffic
- 16) Usage of alternate but longer routes by traffic
- 17) Mind set of people not to pay toll or periodical increase in toll.
- 18) Increase in cost making the project unviable midway, financiers getting scared to fund the project.
- 19) Backing of financiers to support the project.
- 20) Various political risks.
- 21) Delays in dispute solving
- 22) Improper co- ordination and co- operation between various operators such as Employers, Entrepreneur, Consultant, Financier.

The above mentioned risk factors highlight the need of careful analysis of the project scope in detail and assessing the risk of time and cost in the project pragmatically.

## VII. MEASURES TAKEN BY THE GOVERNMENT

- A. NH ACT amended to permit private sector to construct, maintain, manage, collect toll revenue and retain it.
- B. Declaring road as an industry to enable raising loans on easy terms.
- C. Declaring highway as part of infrastructure sector to permit floating highway Bonds.
- D. Declaration of MRTP- Monopolist and Restrictive Trade Practices to attract large business firms towards this sector.
- E. Reduction of custom duties on materials and equipment for such projects.
- F. Tax holidays and concession.
- G. Permitting estate development to facilitate viability of projects.

- H. Financial participation with Entrepreneur.
- I. Preparation of model contract agreement, which was modified several times after deliberation with the prospective Entrepreneurs.

### VIII. CONCLUSION

Privatisation is widely promoted as a means of improving economic performance in developing countries. India being a developing country has long suffered from transport bottlenecks, mainly because of financial constraints and managerial inefficiencies. To overcome this problem, conscious efforts are being made to improve road infrastructure in the country. The importance of private sector participation in filling the resource gap and improving the operational and managerial efficiency has also been recognized. Learning lessons from experiences in the past, the Government is formulating new policies, offering more attractive packages and developing mechanisms to ensure greater participation of the private sector in road development. On behalf of these new initiatives, it is hoped that the involvement of the private sector will increase in the future as the sector gains more confidence in undertaking transport projects especially highway development projects through partnership arrangements with the public sector and the overall environment becomes more conducive to private participation through conscious efforts of government.

### REFERENCES

- [1] R. Rama Krishnan "Insights on Road Development through Privatisation", International Conference on Construction Industry, The Institution of Engineers (India), vol. 1, pp. 259-265, 2000.
- [2] Ministry of Road Transport and Highways, Transport Research Wing ,Government Of India, New Delhi, "Basic Road Statistics Of India", 2012.
- [3] <http://www.indiatropes.com>, "Road Transport plays a pivotal role in the economic development of India."
- [4] [https://en.wikipedia.org/wiki/Indian\\_Road\\_Network](https://en.wikipedia.org/wiki/Indian_Road_Network)."
- [5] Banerjee, "On the Road: Access to Transportation Infrastructure and Economic Growth", NBER Working Paper, 2012.
- [6] Abu Shair, O. J. A. R., "Privatisation and Development", Mac Millan Press Ltd., London, 1997
- [7] V. Agarwal, "RFID Tolling Impacts and Challenges", Traffic Infra Tech, Vol. 4, No. 5, pp. 31-31, 2014
- [8] M.Chandrasehkar, " Policy reforms towards increasing private sector participation", Indian Infrastructure. Vol. 13, No. 2, pp. 42-44, 2010
- [9] B.Ghosh, and P. De, "Role of Infrastructure in Regional Development: A Study over the Plan Period", Economic and Political Weekly, 33(47/48) pp. 3039-48, 1998



10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)