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# Impact of Tolls on Transportation and Indian Economy

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**Abstract:** Transport has a very vital role in any country's economic development and growth. Without transportation we cannot even think about the transfer of goods from one place to another. Hence transportation is the backbone of any country's economy.

This study is about the toll charges and increasing number of toll plazas day by day in India which is badly impacting the transportation industry which leads to the damage to the backbone of India's economy. Due to high toll charges and number of toll plazas the transport cost has increased up to a great extent where transporters are finding very difficult to run and survive. So many toll plazas are still available and collecting tolls even after there cost have been recovered.

This study is done with the help of primary and secondary data collected from various specialized sources to draw the attention of the government to pay attention on transport industry, transport owners, drivers, and others who are directly indirectly employed. The study concludes that tolls are essential for any country's revenue which leads to economic development and growth but at same time it cannot overlook the problems created on transport industry and the employed people.

Keywords: Introduction, Aims, Literature of Review, Research Method, Data Analysis, Results, Conclusion, References.

## 1. INTRODUCTION

The government receives revenue in the form of taxes and from non tax sources to enable it to undertake its expenditures. Government revenue as well as government expenditures are the components of the government budget and it is also one of the important tools of the government fiscal policy. One of the major expenditure of the government is the infrastructure development which leads to the economic development of the country. The primary objective of Road Infrastructure development project is to generate benefits to the users such as convenience cost saving, reduced travel time and thereby accelerating economic development in the infrastructure area of the road project. No infrastructure project should be undertaken unless the economic benefits criteria and economic viability. Traditionally highways in India have been viewed as a public convenience that was financed and operated by the public sector but the government failed funding constraints. In later stage the sector witnessed the emergence of public private partnership (PPP) model in highway developments in early 1990 and subsequently the National Highway development. There after since then the number of projects have been implemented on PPP model consequently it has been accepted that highways should be buil, financed and operated by private firms and that road users should pay tolls for using them to recover cost of projects and maintenance.

Therefore the private firm operates and maintains the structures created assuring the road users of adequate quality services, safety and security standards. The system of toll road has been operating for quite some time in India and has been benefited all passengers travelling on toll roads. It is often observed that once the project gets ready for operations, toll collection starts and service performance parameters are forgotten. It continues to collect tolls from the ever-increasing traffic and neglects the quality services to the commuters and deviates from the service delivery is as promised in the concession agreement.

Now it has become a tradition to make the roads through PPP model and continue to start collecting the tolls even after the recovery of cost, expiry of the concession agreement which has become a major income of the government. There is no proper mechanism behind the toll collection, accountability, period of agreement etc.

### Aims and objectives

The study aims to draw the attention of the government and people towards such additional expenses borne by the Transporter and users of roads It is increasing the cost of the transportation which leads to the increase in the price of number of goods and services as well. The main objective is to make government aware of the benefits and the dark side of such tolls which force the government to take the following steps:

1. To provide us toll free roads.

2. To develop a proper mechanism to look after the agreement with the private contractors in collection of funds, use of funds, the removal of the tolls Plaza and making the roads toll free after expiry of the concession agreement period.

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3. To waive off the tolls on the goods carrying vehicles which can reduce the cost of the goods and services.

4. To reduce the toll charges which is much higher at the toll plazas.

5. To reduce road tax charges taken by the government on registration and insurance premium yearly and other charges taken on goods carrier vehicles like tempos, trucks, trailers etc.

6. To provide subsidy to the transport owners and the insurance cover to the drivers involved in the transport sector of goods and services

7. To give concessions to the truck owners in the form of taxes and other different charges.

8. To supervise and prevent the police officials from illegally collecting the money from the truck drivers at the different state borders.

#### 2. LITERATURE OF REVIEW

DeCorla-Souza compared various pricing alternatives, or toll options, with traditional free highway alternatives. His research employed the Spreadsheet Model for Induced Travel Estimation (SMITE) from the Federal Highway Administration (FHWA). The results from his research indicated that pricing alternatives are much efficient and effective than conventional alternatives that do not use tolls.

Nagarjuna Pilaka has focused on the different services offered by toll authority and suggested the performance appraisal of the same. Transportation effects include effects on travel time benefits, safety, vehicle operating cost etc.

Kalmanje and Kockelman studied the effect of the toll road on socio-economic and traffic characteristics. They have conducted a before-after toll road comparison of volume to capacity ratio (v/c), vehicle miles traveled (VMT), vehicle hours traveled (VHT), and the average speed in the study area. The findings from their study indicate that congestion reduction was concentrated within a mile neighborhood of the toll road.

#### **3. RESEARCH METHOD**

Primary as well as secondary sources has been used to collect the database from transport companies, banks,etc.

#### 4. DATA ANALYSIS

Toll roads are the kinds of roads which have occasional stops whereby individuals have to pay some money to use the streets. These roads can sometimes be referred to as turnpike, tollway, or express toll route. This paper discusses the purpose of imposing toll roads despite the presence of free roads, its advantages, and disadvantages to the drivers, the economic implications of the toll roads, and the reason why an individual should prefer paying a toll than using a free road. On other way it is responsible for increasing operational cost leading to rise in the prices of all goods and services. The data has been collected and analysis is made through the following points.

#### Advantages of Tolls

#### 1. Development of Roads::

As per the Ministry of Road Transport and Highways during the financial year 2020-21 a total of 8169 kilometres (target 11000 km) of national highway have been constructed till 15<sup>th</sup> January 2021 as compared to 7573 kilometres in previous financial year. In January second week 2021, 534 kilometres of highways constructed establishing a record construction of 76.285 kilometres per day against 26-28 kilometres per day in previous years.

#### 2. Speedy Transfer of goods and services:

Due to well-maintained toll roads it has been possible to transfer the goods and services in the quickly and speedy manner from one place to another resulting into increase in daily turnover and much beneficial for perishable items.

#### 3. Low fuel consumption:

Low fuel consumption is one of the major advantages is expected by the vehicle owners. An economical fuel efficient speed can be maintained on such roads resulting into savings in carriage expenses.

#### 4. Low maintenance of vehicles

It is the responsibility of the toll collecting authorities to look after the maintenance of roads and road safety measures, Otherwise rough and poor quality roads having numerous potholes not only increasing the maintenance costs of the trucks but also makes the drivers tired and invites accidents.

#### 5. Various services offered:

Toll charges are being taken by the toll authorities to make them responsible for the various services like patrolling services of police at regular intervals, maintenance of roads, Ambulance services, fire brigade services, toe away cranes, public toilets, drinking water facilities, mechanics etc. Such facilities are being provided which motivate the commuters to use toll roads.



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#### 6. Employment opportunities

Nowadays toll roads are being constructed on Public private partnership (PPP) model where it provides different employment opportunities while constructing the roads and in collection of tolls. It generates various direct and indirect employment opportunities.

#### 7. Huge revenue for the government

Tolls are being imposed to recover the cost of construction of roads, maintenance cost and various services offered by toll plazas. Toll charges are revenues collection from the commuters which are different for different roads depending on the services, cost, length, type of vehicle like cars, tempos, truck (on basis of axles). Lacs of rupees from tolls being collected everyday which provides the income to the government and theses fund will be used for the various infrastructure development of the country resulting into economic development of the nation. As per the report of the ministry of road transport and highway till February 2021, toll collection was 65 crores per day amounts to around 1500 crores per month.

#### 8. FASTag e-collection:

The fast tag is an electronic toll collection system. It employs Radio Frequency Identification (RFID) Technology. The sensors at the toll plazas read a unique FASTag strip which is attached to the windshield of a vehicle where it automatically deducts a definite amount from a prepaid wallet or a linked saving account of the commuters without requiring the vehicle to stop. It aims to save time and fuel, reduce traffic and pollution at the toll junctions and promotes digital transactions. As per the report of the ministry of road transport and highway in February 2021, FASTag collection touches record of 104 crores per day amounts to around 2500 crores per month. The income in next five years will be Rs.1.34 trillion.

#### 9. Economic development:

As we can notice the different benefits of toll roads such as development and maintenance of roads under PPP model basis, speedy transfer of goods and services, low fuel consumption, low maintenance of vehicles, huge employment opportunities directly and indirectly, collection of huge funds through tolls manually and through FASTag collection etc . will result in economic development of the nation.

#### **Disadvantages/ Dark side of tolls**

#### 1. Increase in the variable costs of transportation

Toll has become the second largest expense of the transport community only after fuel over the past decade. There are around one crore trucks and buses are registered in India. Of these, trucks with a national permit on an average pays around 4 to 5 lakh per year in tolls alone. Assumption was that the money goes into building national infrastructure however this is not reflected in state and Central budget instead Toll Plaza only end up slowing down traffic despite better roads. The average usage of truck has remained the same while costs have increased and margins are at an all-time low says the Transporter and now it has become challenge for the transporters to survive because of the so many expenses imposed by the government on the Transporters including tolls.

A data has been collected from Shriram Transport giving details earnings and expenses of a truck of 14 tyres taking 2 trips from Mumbai to Nagpur via Dhulia assuming average waiting period of 7 days order.

Mumbai to Nagpur via Dhulia distance 1000 km.

01	
Earnings	( figures in ₹)
30 tons $\times$ 3000 per ton	90000
30 tons ×1500 per ton( return tri	ip) 45000
Total earnings per trip	135000
Less: Expenses	
6% commission to agents	8100
Diesel (380 liters $\times$ 96/liter $\times$ 2)	) 72960
Toll ( $7000 \times 2$ )	14000
Police expenses $(1000 \times 2)$	2000
Loading and uploading charges	2000
Driver expenses and allowance	10000
Total running expenses	1,09,060
Total savings per trip	25940
Savings per month 25940× 2 tri	ips in a month = $51880 = 52000$ approx. per month.
Fixed charges (80000 km/ y	year)
Insurance	60000
Road Tax	40000
National permit	20000
Maintenance (normal)	50000
Tyres (7sets×45000/set)	315000
Driver salary (10000×12)	120000



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Depreciation 10% of 400000 400000

Passing expenses 15000

Total fixed charges (80000 km/per year) 1020000÷12month = ₹ 85000 per month.

Truck EMI at 90% of cost 4000000 @ 9.5% p.a. for 4 years = ₹ 90000 per month.

It means a truck is not able to earn revenue (₹ 52000) to pay its EMI (₹ 90000). Therefore transporters are forced to surrender their vehicle to the bank and banks NPA is increasing. There are lots of truck standing in the banks premises for auction. This point is to be noted by the government and should take suitable steps to save the transport industry otherwise in coming years there would be shortage of vehicles and drivers in the country. Transporter are paying 20% of its fuel consumption as toll charges resulting into the increase in the expenses.

#### 2. Extra load other than different taxes:

Transporters are forced to bear tolls other than insurance, road tax, national permit. There is no proper explanation and suitable criteria from the government for what they are taking various taxes and charges.

#### 3. Lack in services offered

Though promise is made in the concession agreement by the toll collecting authorities to provide services like ambulance, drinking water, patrolling services, maintenance of roads etc. but it is lacking everywhere and there is no such mechanism to enquire the performance appraisal of such services.

#### 4. Collection of tolls even after the expiry of the period

It is observed that there are lots of toll plazas are collecting tolls even after the cost of construction is recovered or the period is expired. There is no mechanism body to keep a watch on such period, utilization of tolls collected, Though it was assumed at the time of agreement that tolls will be decided and collected assuming the number of vehicles will increase 5% to 10% per year. Even after 10 to 15 years of collection of tolls there is no increment in number of vehicles using toll roads.

#### 5. Deficiency in FASTag collection technology:

The sensors at the toll plazas are not able to scan FASTags pasted on the windshield of a vehicle in motion. For successful tagging, the vehicles are required to slow down and align the tags with the scanner at the toll plaza. An attendant examines if the tag has been scanned successfully and then allows the vehicle to move ahead. In case the system malfunctions the attendant resorts to a handheld scanner and manually scans the tag resulting in slower traffic and long queues at the toll plazas. Commuters are complaining about technical glitches in the system they say end up paying the toll fee twice from their account and have to spend more time in long queues and wonder if their bank accounts linked with FASTag will be safe.

#### 6. Toll roads are bad idea- National Motorists Association:

Despite of electronic system introduction in the collection of tolls it doesn't mean toll roads are good public policy. Toll roads are an inefficient backwards approach to providing public highways worse they foster corruption, political patronage and discourage needed improvements on the rest of the Highway System. Toll roads are literally a monopoly that is sanctioned and protected by the state. The states citizen and other highway users have no channel to influence toll roads management and pricing decision.

#### 5. **RESULTS**

As a result a question which has been raised by many Transporter that the government is already collecting registration charges at the time of purchase of vehicles, number of taxes, charges, fines and penalties legally or illegally then why there is no accountability of the funds collected and use of the funds. 90% of the Transporter and public using cars, other vehicles are demanding a toll free and well maintained roads with necessary safety measures. Tolls are no doubt increasing the cost of transportation resulting into increase in the price of all goods and services leads to inflation.

#### 6. CONCLUSION

In the conclusion I would suggest that the government to provide toll free roads for which different types of taxes are being paid such as road tax, national permit, etc. A proper mechanism body should be established to supervise the use of different funds collected from traffic departments by the way of fines and penalties for rules broken. It should immediately take actions against the police and traffic department officials collecting illegally from goods carrier vehicles at the state border at the time of entry and exit.

#### 7. REFERENCE

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<sup>4.</sup> Shriram Transport

<sup>5.</sup> ICICI bank Malad west branch, Mumbai.