

# REVIEW THE ALLOCATION PROCEDURE FOR THE EFFICIENT ROAD TRANSPORT MANAGEMENT IN INDIA

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## ABSTRACT

Efficient Road Transport is a complex subject and needs critical examination in order to have a fair idea of the subject. The efficient transportation is a necessary in an economic cycle of production, distribution and consumption, because the road transport helps optimal utilization of country resources.

The characteristics of goods to be transported determine the way and means of transport. Economics road transport are depending the following factors mainly: Speedy movement; Road Condition; Fuel Prices; Heavy taxation; Costly Finance; Detention at check post, etc.

Economic globalization means, increasing integration with the world economy and opening our doors and windows to goods, services and investment from other countries of the world, while trying to export our own goods and services to the outside world.

Now a Day, everybody talks to resource mobilization in India due to the globalization impact. Therefore, in terms of infrastructure development by road transport management is providing satisfactory to the people and wining public confidence.

Infrastructure is consists by two important aspects:

- Soft infrastructure,
- Hard infrastructure, etc

Soft infrastructure true is also known as social infrastructure and it implies the human resource. Hard infrastructure also referred to as capital infrastructure and it means development of Roads, Railway lines, Electricity supply, banking facilities etc.

**KEYWORD:** Efficient Management, Soft And Hard Infrastructure, Resource Mobilization.

## INTRODUCTION

Thomas H. Macdonald-Father of the American Highways has rightly mentioned, "we were not a wealthy nation when we began improving our highways, but the road themselves helped us

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create a new wealth in business, industry and land values so that it was not our wealth that made our highways possible rather it was our highways that made our wealth possible”.

Efficient transpiration results in substantial, economy which is the back-bone of the entire Material Management system.



However, when we consider all modes of transportation, their impact on the economy and other factors governing day-to-day life of our people. The latest theory perhaps will be the multi-mix model systems i.e. combining more than one mode transportations together for transportation of a single consignment. It may be that in the combined road, rail, air or even water ways, it may gives us the best result compared to when only mode of transportation is adopted.

The size and organization of a transport company naturally depends upon the volume of traffic and the scale of its operations, such as the network of its branches and its fleet strength. Many transport companies start on a small scale and grow into large public limited company over a period of time. Because, the entrepreneur of road and transport business that he is a person who keeps is his eyes and ears open, see opportunities in his environment and is capable of organizing required resources of man by taking risks and by putting necessary time, effort and money. In this process not only, he benefits but the society of large is also benefited.

## **LITERACY REVIEW**

A developing economy of the Third World, particularly as vast India-where distances and immobility can prove to be a major deterrent to economic growth-the pace of all-round progress hinges largely upon the rate of planned proliferation of the National network of roads, of which national highways form an important constituent.

Historically, in accordance with the decision taken at the conference of Chief Engineers convened at Nagpur, India , the Government of India assumed in April 1947 complete finical responsibility for the development provisionally approved by them for inclusion in a system of national highways.

The main object behind this step was to develop the major trunk roads of the country and to give relief to states so that they could concentrate more on the development of other categories of roads. After independence, national highways became a central subject. The Government enacted the National Highway Act in 1956 and statutorily took over the roads classified by them as national highways.



Progress in efficient road transport in India, however been slow, the mainly five reasons-

1. First, taxation is rather heavy on the motor transport industry as a whole. Not only are taxes levied at various levels, but also their quantum is exorbitant. In an automobile undertaking, taxation starts from the beginning of the manufacturing process and continues even beyond the point of sale. The cumulative burden is very heavy. According to a study made by the NCAER, of the final price paid by the operator purchaser, 50 to 50 percent represents taxes alone.
2. The second factor behind the relatively slow growth of road transport has been mounting operating costs. Successive resource raiding exercise made by the Ex-Finance Minister at the centre, in almost all the States have made the road transport industry the proverbial milk cow. The tax elements in the operation and maintained of a commercial vehicle is, according to the NCAER and the Keskar committee set up by the Govt. of India, well over 50 percent. In NE India, more than 85 percent of the Truck operators own just one vehicle each, it is not, therefore, possible for them to distribute costs and risks in the manner and
- to the extent that an operator owing, say a dozen trucks could.
3. The third factor is the unsatisfactory condition of many roads and road links (mostly bridge) over which trucks have to operate. Here again, Governments step-motherly attitude towards the road transport industry has been most conspicuous. Of the total revenue derived from the industry, hardly 40 % is spent on road development (including road maintenance). In order words 60%, which belongs to the Road development Fund, is diverted to other uses while the road systems continuous to suffer from weak culverts, missing bridge, single lands infirm surfaces and poor geometries. In fact, the percentage of revenue spent has been going down staidly since 1958-59. By controls, all the revenue derived by the Railways, whether from passengers or goods traffic is pumped back into the state owned railways system. Not only that, if there is any deficit in any particular year, it is made goods from the general revenue.
4. The development of road transport has been handicapped by various restrictions on the movement of goods by road. The Motor Vehicles Act of 1939, which regulates road transport through a system

of permits and licenses, has been use by various Regional Authorities, more to obstruct the movement of traffic than to facilities it. Until lately, permits would have to pay an additional tax, but the time and delay involved in securing this other permits could be most frustrating.

5. Finally, there is the obnoxious levy of octroi or entry tax in a majority of the state. The detention of trucks at various check post for hours together and the corrupt practices. Such detention involves, is an additional burden on the operator the keskar committee said in 1969 that 30% of the total running time was lost because, of the these stoppages. Successive committee set up by Govt. of India has pleaded for the abolition of Octroi or entry- tax, but their recommendations have been ignored.

## **METHODOLOGY**

Research has been completed in various study in the transport undertaking in India and which have revealed that if proper attention is given to following key results;

- Speedy movement,
- Cheaper/ lighter/ No packing,
- Lesser loss or damage in transit.
- Lesser transit insurance cost,
- Availability of more space due
- Cost of end transportation, to lighter or no packing.
- Deterioration in transit,
- Costly Finance.
- Illegal gratification at various points,
- Road Condition.
- Heavy taxation,
- Fuel prices.
- Mechanization and Computerization.
- Lack of training for drivers/ mechanics and availability on modern repairing workshop. Etc.

Therefore, a good and efficient road transport system is one, which has the entire characteristic and the performance of truck drivers, which is depending the following condition-

### **WORKING HOURS OF DRIVERS**

The Longer the working hours, the less vigilant and efficient the driver would be. Because he would be tired and this result in an accident or damage to the vehicle or the cargo carried in it.

### **RUSH DRIVING**

Some drivers tend to drive very fast, a fact, which increase the consumption of fuel and the possibility of an accident or damage to the vehicle.

### **OVERLOAD**

Trucks are often loaded beyond their capacity with a view to making a bigger profit, and however, is more apparent than real for overloading affects the efficiency of a vehicle in the end. Overloading is also impairs the efficiency of the engine, which may fail during the journeys, this is turn, would:

### **CAUSE DELAYS**

Impair the condition of the vehicle, Raise the cost of the repairs and maintenance.

### **FITTING AND ASSEMBLY**

While this is being done, there are chances of genuine spares being replaced by spurious ones. Care must be taken to send the vehicle to reputed service stations.

### **SPARES**

The cost of the parts that need to be replaced is an Uncontrollable item. The only thing possible is to limit the rate of replacement of spares by careful driving and proper maintenance.

### **TYRE & TUBE**

Misuse of tyre is likely through under or over inflation and non-rotation of tyre.

### **OIL CONSUMPTION**

Defective engines consume more oil consumption is an indicator of the condition of the engine.

### **IDLE TIME**

Idle days are caused by:

- Want of load,
- Holidays,
- Unloading/ loading/ door Delivery,
- Breakdown,
- Delayed repairs,
- Weather,
- Deliberate idleness of staff, etc.

### **DISTANCE**

The distance that a truck can travel depends on-

- The Driver,
- The condition of vehicle,
- The condition of the road,
- The time taken for Loading/unloading,
- Detention at check posts,
- Weather,
- Other allied factors, etc.

### **TYRE**

The quality of tyre,

- The maintenance of the tyres,
- The condition of the truck and road, and

the load and other factors, etc.

### **RECORDS**

For a proper management of vehicles, certain basic information is necessary.

### **TRIP OPERATIONAL SHEET (TOS)**

The silent features of the TOS are that-

- The dispatching and destination points,
- The distance between stations,
- The number of days taken for the journey,
- The number of idle days,
- Govt and municipalities charges and salary,
- Lubricants consumption,
- Loading & Unloading, etc.

### **LOG BOOK**

Each vehicle is given a logbook, which contains details about the running time for a trip and allied factors. At the end of each trip, the driver produces the logbook, together with **others** documents.

### **VEHICLE LEDGER**

The data that are available from the TOS are posted in a ledger called the vehicle ledger. The trip is indicating by means of the number, which is the TOS number.

### **TYRE RECORDS**

The cost of tyres has increased enormously in recent years and has a major cost factor. It is therefore, essential to maintain records of the tyres that are fitted to a vehicle. The format of the tyre records that-



### **TRUCK HISTORY CARD**

The performance of a truck during a period needs evaluation so that the management may be able to decide whether to keep or scrap a vehicle. Over and above the general information on mileage /month, tax paid and documents required. Truck History Card gives detailed information on the repairs that have been carried out to the vehicle and the amount involved in the major repairs are posted in the vehicle ledger.

The above discussion has already indicated that the following module would be that how the Efficient Transport System as related to Hard infrastructure development.

### **RESULT AND DISCUSSION**

As per experimental study, in the transport undertakings and which have revealed that if proper attention is given to following key results areas of better driving habits and better maintenance practices .

#### **SPEED**

Perishable foodstuffs, goods the value of which increase with the passage of time and livestock are to be transported within the shortest possible time. But this can be done only when

transporters operate at sufficient speed. The other advantages of speed in transport are:

- The financial cost is reduced for goods in transit.
- The investment in transport a facility is put to greater use.
- The loss owing to price fluctuations is reduced.
- The need for storage facilities is avoided or reduced to some extent.

#### **SAFETY**

The safety of the goods in his custody is the transporter's first responsibility. Any damage to them is a waste of his wealth. Physical damage to goods must be prevented by careful handling in the loading and unloading.

#### **CAPACITY**

An efficient transport service must have an adequate capacity for all reasonable demands to carry.

#### **FREQUENCY**

The frequency of a service is related to speed and capacity. However, if frequency is treated in isolation, it renders the following advantages:

- It avoids/reduces the necessity to accumulate goods in storage before or after transport.
- The shorter the interval between movement, the smaller the quantity of goods to be stored.
- If transport is in storage, the frequency of service reduces the delay in transit. Emergency dispatched can be better done in advance.

## **RESPONSIBILITY**

The transporter's first responsibility is the safety of the goods in his custody. He is responsibility for their safe carriage. The alternative for him is to compensate the consignor of the loss of or damage to, good while in his custody.

## **SIMPLE TIPS FOR BETTER DRIVING**

### **USE PROPER GEAR**

Driving in wrong gear can increase diesel consumption by 12%. Use the same gear for coming down as for going up the same gradient. The proper gear by Tata Diesel Vehicle, which is depending the following ways-

Engine Speed (TDV): 8kms into 1<sup>st</sup> Gear, 9-15 Kms into 2<sup>nd</sup> gear, 16-27 Kms into 3rd Gear, 28-40 Kms into 4<sup>th</sup> Gear, 40 to above into 5<sup>th</sup> Gear, etc.

### **SPEED CONTROL**

The idle speed is 40-60 km/h for fuel economy. Extra diesel is burnt in overcoming the increased air resistance at higher speed.

### **AVOID IDLING**

As per Telco recommendation the idling of Engine Wastes 2 liters per hour. Switch off the engine for stops over a minute. Idling can be avoided by keeping the Battery, starter and

Dynamo etc. in good condition. 12 volts Battery is required for Tata diesel Vehicle i.e. 1612, 1510, 2312 etc respectively.

## **ANTICIPATION OF STOPS**

A good driver should always anticipate obstacles and use the brakes sparingly. By slamming the brakes, the power developed by the engine is wasted. Tests prove that a vehicle driver at 60 km/hour can travel a distance at 650 meters by a gradual halts without additional consumption. In this regard, the air brake system has capacity to store unto 30 liters of air, and Dual Air Assisted over Brake (DAOH) system has 20 liters of Air, which is more powerful brake system.

## **AVOID CLUTCH RIDING**

Avoid using clutch pedal as footrest, this cause rapid wear and power of clutch components. Do not keep the vehicle on stop by using clutch pedal and acceleration, use the hand brake instead. Generally, Telco used two types of clutch used, i.e. four fingers clutch, and Diaphragm Clutch. Diaphragm Clutch has less maintenance cost.

An economy is as resilient as its infrastructure. Road transport is an essential part of this infrastructure. Roads commercialize agricultural. Road transport widens the market jurisdiction for perishables. Roads create demand for road building machinery like bitumen, cement et. Road transport rests and develops on dynamic automobile and auto ancillary industries. Through forward and backward linkages, this sector generates employment, creates markets, widens the tax base, popularizes technological application in backward areas of society and disperses incomes and employment.

However, we have not exploited the potential of road transport fully, because the following reasons:

- We have to tone up the road System so that it a facility smooth operation of road transport and fulfils other economic as well as social objectives.
- Whatever constraints that Prevent road transport from making its due contribution to the national economy must be removed.
- Overall policy must ensure that both roads and road transport emerge as buoyant sectors of the economy. Etc.

Basically, the approach to road development has been unsatisfactory. The general thinking is that it is an item of heavy expenditure which if avoided would benefit the society. This is not correct. Adequate traffic based modernization and maintenance of the roads is a pre-condition to sustain production and hold the price line. The governments, at the centre and states ought to recognize this.

A well maintained road system reduces fuel consumption, wear and tear of tyres and spares while increases the life of the engine. Breakdowns are fewer. Schedules are uninterrupted. Vehicle utilization is the highest that is feasible.

This scales down the cost of operation, which is reflected in passenger fares and freight rates charged. As road transport operates in a competitive set-up. Thus improvement in road system leads to overall improvement in transport efficiency.

### **TYPE OF DATA**

Computer application in Road Transport Industries: (Common computer application areas are that following:

### **STATEMENT OF CONSIGNMENT NOTES (SALES)**

This gives the statement would ready information about each sale giving details such as customer name, value of business and shows the originating as well as terminating city.

### **STATEMENT OF LORRY WISE CHALLAN (PURCHASE)**

This gives the details of Lorries hired with amount to be paid out to the Lorry owners. It lists out all the consignment notes that have gone in the lorry and shows the originating and terminating city.

### **COSTING STATEMENT**

This Statement is prepared lorry wise to find out profit from each trip. All sales and rebates are picked from consignment notes and expenses from challan.

This statement could be prepared in following additional sequences:

### **CUSTOMER WISE**

#### **CITY WISE**

To highlight profitable routes,

#### **LORRY OWNER WISE**

To highlight Source of Lorries, which assurance more reliable and profitable.

### **PARTY WISE BUSINESS STATEMENT**

This help to bring to management's attention any party where the business has started falling. Business in current month, year- to-date and business in previous year could be printed and only that customer highlighted where business has fallen by a given percentage or increased by a given percentage. Profit from each customer could be compared.

### **OUTSTANDING STATEMENT**

This shows all outstanding invoices and ages them. With management's attention focusing on large outstanding and old outstanding, it is possible to reduce the same substantially. In organization outstanding was reduced by 10% within one year of implementation of the



system, thereby saving interest and giving an opportunity to expand the business due to availability of funds.

### **OTHER MIS AND MISC REPORTS**

Some of the other information that can be available to the management to take corrective operations and profitability's are-

- Missing serial number of consignment notes and challan,
- Destination wise pending Lorry hire challan,
- Destination wise outstanding list of consignment notes.
- Station to station costs for a full load the time of the journey etc.

### **CONCLUSIONS**

In order to secure revival and the rapid growth of Road Transport and Economic Development of the India, the following aspects are required:

- To reduce cumulative duty and taxes on commercial vehicle at least by 40%,
- Exempting ancillaries,
- Components and original equipment from any excise duty,
- To reduce excise duty/taxes, at least by 50% on tyre,
- To reduce excise duty/taxes at least by 50% on fuel,
- Normal and uniform excise duty on Automobile spares used as replacement of Parts to be levied,
- Bank credit to road transport sector to ensure extension of loans at concessional rates for all operators etc.

The over and above discussion, team work the key to success of an efficient transport systems. An effective teamwork is viable when an uninterrupted communication exists both ways in the organizational ladder of the management. From a sales representative to the Branch Manager, from the Sales Executive

to the Operation executive, a smooth and healthy communication flow, how should exist whereby any interruption in the basic system characteristics be tapped or the spot and removed.

All the essential characteristics of a transport systems like safety, Frequency, regularity etc can be handled effectively if a common code of teamwork exists throughout the organization.

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