INDIA'S INFRASTRUCTURAL FACILITIES STATUS OF MULTI-MODAL TRANSPORT SECTOR - AN INVESTIGATIVE STUDY

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Abstract

Shipping industry is one of the most globalized industries operating in a highly competitive business environment that is far more liberalized than Most of the other industries and is, thus, intricately linked to the world Economy and trade. The container traffic has been recording impressive growth particularly since 1992-93, with fast increasing use of containers for all types of cargo in international trade. The induction of container technology and introduction of multimodal have made the development of a network ICDs and CFSs at important hinterland centre's inevitable for providing various services and facilities to the exporters and importers in among the Asian countries. The present study recommend to Government of India for developing the integrated multi modal transport sector for operating the road, rail, air and sea transport sectors without any disturbance to each other for moving the cargo from production point to consumption point without any transport traffic and other delaying factors with the help of ministry of transport and shipping for overcome the hurdle of multimodal transport infrastructural facilities to improve the high status of multi modal transport sector in near future for compete with world market.

Keywords: *ICD, Multi Modal Transport System, Container Freight Station, Rail, Road, Airport, sea Port, Twenty Equivalent Units (TEUs), and Container traffic ,Terminal.*

PREAMBLE OF THE STUDY

Shipping industry is one of the most globalized industries operating in a highly competitive business environment that is far more liberalized than Most of the other industries and is, thus, intricately linked to the world Economy and trade. This peculiar structure of the industry throws both Opportunity as well as challenges as it opens the global markets for Indian Shipping companies, while at the same time exposing them to global Competition even on their home turf. In Indian shipping industry has lot of procedure in multimodal transport and containerization we will going to see about regarding that in very general terms combined or multimodal transport means the linking of two or more transport modes under a contractual arrangement which either envisages or permits such a link.

In the past the linking of modes in order to provide a through service for customers not wishing to create the link themselves, might commonly require the services of an agent such as a shipping or forwarding agent. Alternatively modal carriers or their agents might sometimes be prepared to take on such a role. Less usually and commonly linkage to the needs of a specific trade as dedicated service might link modes often on the basis of a joint operation between operators of different modes. Since the Second World War transport services were transformed by the development of unit load devices to ease the handling of goods and facilitate transfer between modes, most notably the development of the maritime container.

This development, in particular, enabled the link between sea and land modes of carriage to be made with ease and facilitated the ability of various kinds of operators to market through transport services. The container traffic has been recording impressive growth particularly since 1992-93, with fast increasing use of containers for all types of cargo in international trade. The induction of container technology and introduction of multimodal have made the development of a network ICDs and CFSs at important hinterland centre's inevitable for providing various services and facilities to the exporters and importers in among the Asian countries.

Current Scenario of Infrastructural Facilities of Multi Modal transport sector in India

There are three most important criterions for success in International Trade is Price, Quality and In Time delivery. It is not possible to meet these criterions without having a proper logistics and multimodal system. Containerization and multimodal transport form an integral part of any logistics and supply chain. Everyday new and innovative methods are discovered and

improvisations made in improving the quality of products while simultaneously lowering the costs. One of the important methods of lowering the costs is by lowering inventory levels and introducing just in time concepts. Thus Indian merchandise cannot become competitive without containerization and multimodal transport. Indians are facing the two major constraints namely, in ability develop the necessary Infrastructure due to lack of financial resources and inadequate institutional and legal environment which does not encourage growth. In this regard International organizations like IMO, UNCTAD and WTO have a major role to play in disseminating information and sharing experience and knowledge. By developing multimodal transport in line with global level India can transport its goods cheaply and efficiently and dovetail itself with the global supply chain.

India also needs to develop a suitable logistic system for economical and efficient transportation of goods from the manufacturing centers to the distribution points. It has been estimated that logistics costs including inventory, insurance and documentation aggregate to about 20% of the final costs of the products and any inefficiencies and inadequacies have a negative impact on export competitiveness. India exports about 21 million ton of general cargo of which 9 million is containerized thus leaving scope for further containerization. The main benefits of containerization can accrue with the setting up of Inland Container Depots (ICDs) and Container Freight Stations (CFSs) which will come into existence only if there is sufficient cargo being generated in the specific area. The ICD will in turn act as a catalyst and promote trade growth in and around the region as cargo will reach the market in a fast, safe and economically cheap mode. It is also necessary to develop roads and rail network connecting the ICD to the gateway port. The port will become a hub only when the ports are connected with the ICDs. However it should be realized that the infrastructure has to be properly priced to enable it to sustain itself on one hand and also to generate reasonable profit on the capital deployed in constructing it. At the same time the infrastructure pricing should also be affordable to the end user. Hence the investments in such projects can only be long term basis and the cost of capital will have to be well below the market rate. It should also be acknowledged that the needs and requirements of such infrastructure will vary greatly in different regions of the country.

Scope of the study

Unless the consignor, the person sending the goods, or the consignee, the person receiving the goods, wants to attend to any procedural and documentary formalities himself, it is usually, the freight forwarder who undertakes on his behalf to process the movement of goods through the various stages involved. The freight forwarder may provide these services directly or through sub-contractors or other agencies employed by him. He is also expected to utilize, in this connection, the services of his overseas agents.

Objectives of the study

The researcher has framed objectives of this present study is connected with an analysis of infrastructure facilities of multi modal transportation status in international trade as a study.

Need for the study

This present study is concentrated towards find out the factors influencing the multi modal transportation namely road and rail in Indian perspectives. Meanwhile, the role of private sectors for improving the existing infrastructure and infrastructural facilities of Indians sea ports for overcome challenges in the global shipping industry with rendering effective, efficient and quality services towards sea port users for export and import their goods and services for improving the Indian economy as well as increase the Indians foreign exchange reserve position through offering best services towards the business community those who are involving with domestic and international business. Therefore, this present study will show case the present scenario of India's multi modal transportation position for understanding and improving the infrastructure facilities of India's multi modal sectors.

Research Methodology

The researcher has applied desk research approach for framework the current study with the help of published data sources like shipping magazines, books, journal, articles and dailies related to infrastructure facilities of multi modal transport sector in Indian perspectives.

Statement of the Problem

The study focuses on the International trade growth of India in the past decade and the contribution of containerization to this growth. It is one of the objectives of this study to analyze the reasons behind the growth of container throughput.

Short comings of the study

The researcher has carefully constructed the study for meet out the objectives of the study with appropriate methodology and statistical instruments. Even though, the present studies has following short comings like Identify and analyze the critical role of containerization in the growth of international Trade of India is a wide approaching factors. This study not Identify and analyze the obstacles to the development of multimodal transport. This study is not forecasting the Ascertain the role of multimodal transport in the future growth of international trade as well as the entire study is desk research oriented only, if there is any bias in the review and secondary data, which will affect the accuracy of the study.

Overview of Multi Modal transport sectors in India

The basic feature of multimodal transport is that at least two modes of transport are used. The definition jointly given by the United Nations Economic Commission for Europe (ECE), the European Conference of Ministers of Transport (ECMT) and the European Commission (EC) is "Multimodal transport: carriage of goods by two or more modes of transport. "Multimodal transport is connected to the international transport of containers and the need for transport facilitation. It derives its name from the United Nations Convention on International Multimodal Transport of Goods of 1980. The definition of the term "international multimodal transport" is provided in article 1 of the Convention, which reads as follows:

"International multimodal transport" means the carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from a place in one country at which the goods are taken in charge by the multimodal transport operator to a place designated for delivery situated in a different country. It has evolved, however, to have various meanings closely related to multimodal transport, and these various definitions will be reviewed in turn.

Intermodal Transport

The movement of goods in one and the same loading unit or road vehicle, which uses successively two or more modes of transport without handling the goods themselves in changing modes. By extension, the term inter-modality has been used to describe a system of transport whereby two or more modes of transport are used to transport the same loading unit or truck in an integrated manner, without loading or unloading, in a [door to door] transport chain.

Intermodal transport is also defined as the use of at least two different modes of transport in an integrated manner in a door-to-door transport chain. A related term is combined transport.

"Combined transport" is defined as intermodal transport where the major part of the European journey is by rail, inland waterways or sea and any initial or final legs carried out by road are as short as possible. This term is used by ECE, ECMT and the EC to cover environment-friendly intermodal transport, involving as little road transport as possible, and supported by financial incentives.

Definition of European Union

'combined transport' means the transport of goods between Member States where the lorry, trailer, semi-trailer, with or without tractor unit, swap body or container of 20 feet or more uses the road on the initial or final leg of the journey and, on the other leg, rail or inland waterway or maritime services where this section exceeds 100 km as the crow flies and make the initial or final road transport leg of the journey between the point where the goods are loaded and the nearest suitable rail loading station for the initial leg, and between the nearest suitable rail unloading station and the point where the goods are unloaded for the final leg, or; within a radius not exceeding 150 km as the crow flies from the inland waterway port or seaport of loading or unloading. At the root, however, the multimodal/intermodal concept is all encompassing to the point that it applies to passenger transport as well.

Connections

The convenient, rapid, efficient, and safe transfer of people or goods from one mode to another (including end-point pick-up and delivery) during a single journey to provide the highest quality and most comprehensive transportation service for its cost is called connection.

Choices

The provision of transportation options through the fair and healthy competition for transportation business between different modes, independently or in combination.

Coordination and Cooperation

Collaboration among transportation organizations for the purpose of improving transportation services, quality, safety, and economy for all modes or combinations of modes in an environmentally sound manner. Multi modal transport must connect nearest air and sea ports, freight villages, hubs, interfaces, etc for moving the cargo in two ways that is export and import.

Growth of Sea Trade and Multimodal Transport sector in India

Multi Modal Transportation System (MMTS) explores the co-ordinated use of two or more modes of transport for speedy, safe, pleasant and comfortable movement of passengers in

urban areas. It provides convenient and economical connection of various modes to make complete journey from origin to destination. Generally, MMTS has been characterized by increased capacity, efficient access and better location of both integration and nodes. Public transport is an important constituent of multi–modal transportation system and hence local and regional public transportation system must be as integral part of the same.

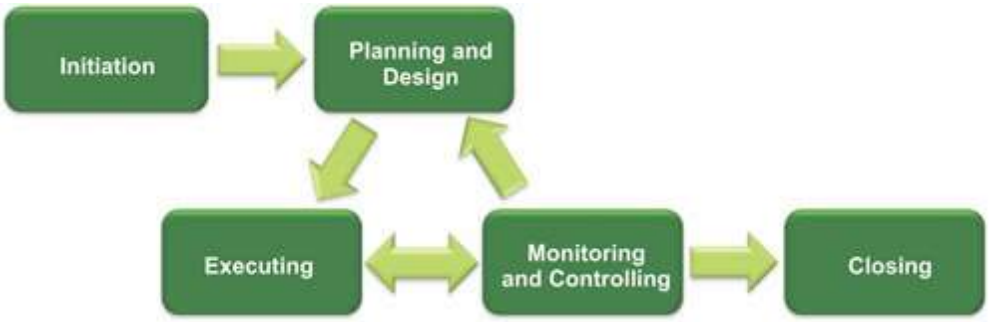


Figure 1: Various Stages in Project Development

Multi–modal transportation framework includes the mass transport modes of travel primarily classified as follows:

Rail based Modes

Metro Rail Corridor----------Ring Rail----------Light Rail Transit---------Mono Rail----------Integrated Rail cum Bus Transit, etc.

Road based Modes

Regular Buses--------Mini Buses------Double Decker Buses-------Articulated Buses----------Express Buses------Trolley Buses--------Guided Buses and Battery Operated Buses.

Air based Modes-------Passenger Flight and Cargo Flight

Sea based Modes--------streamer------passenger ship--------commercial ship

The planning and building of Multi–modal Transport System can be illustrated as follows:

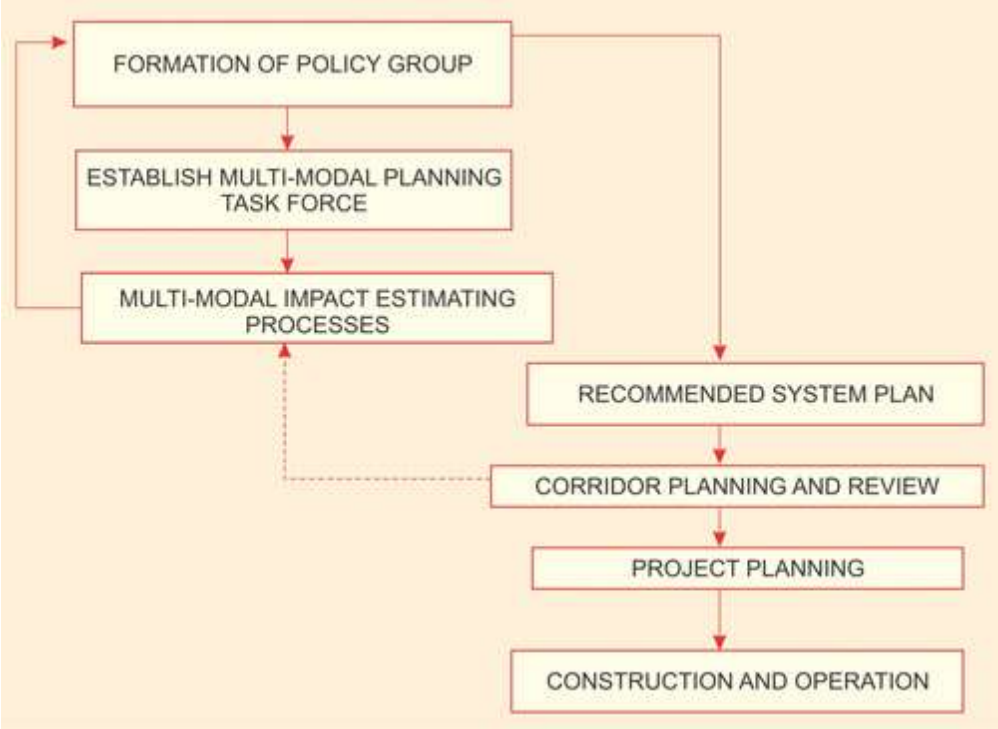


Figure 2: Process of Planning and Building of Multi–modal Transport System

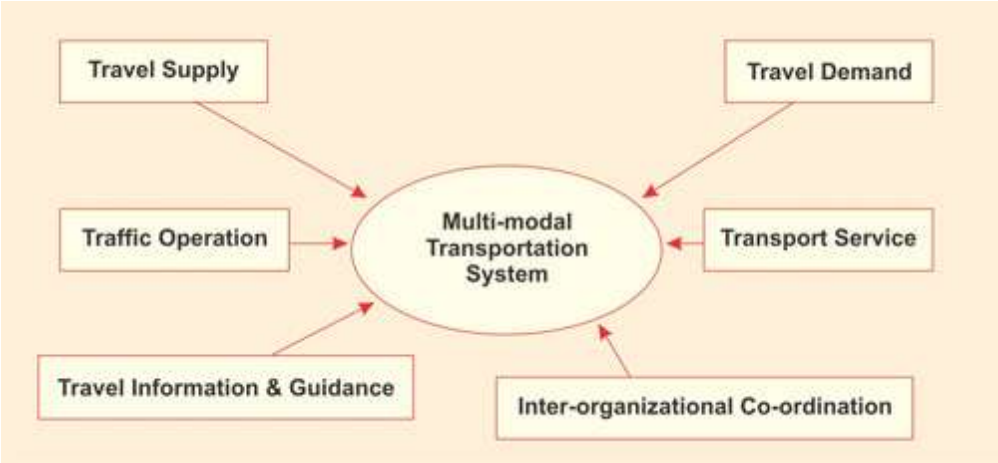


Figure 3: Components of Multi Modal Transportation System

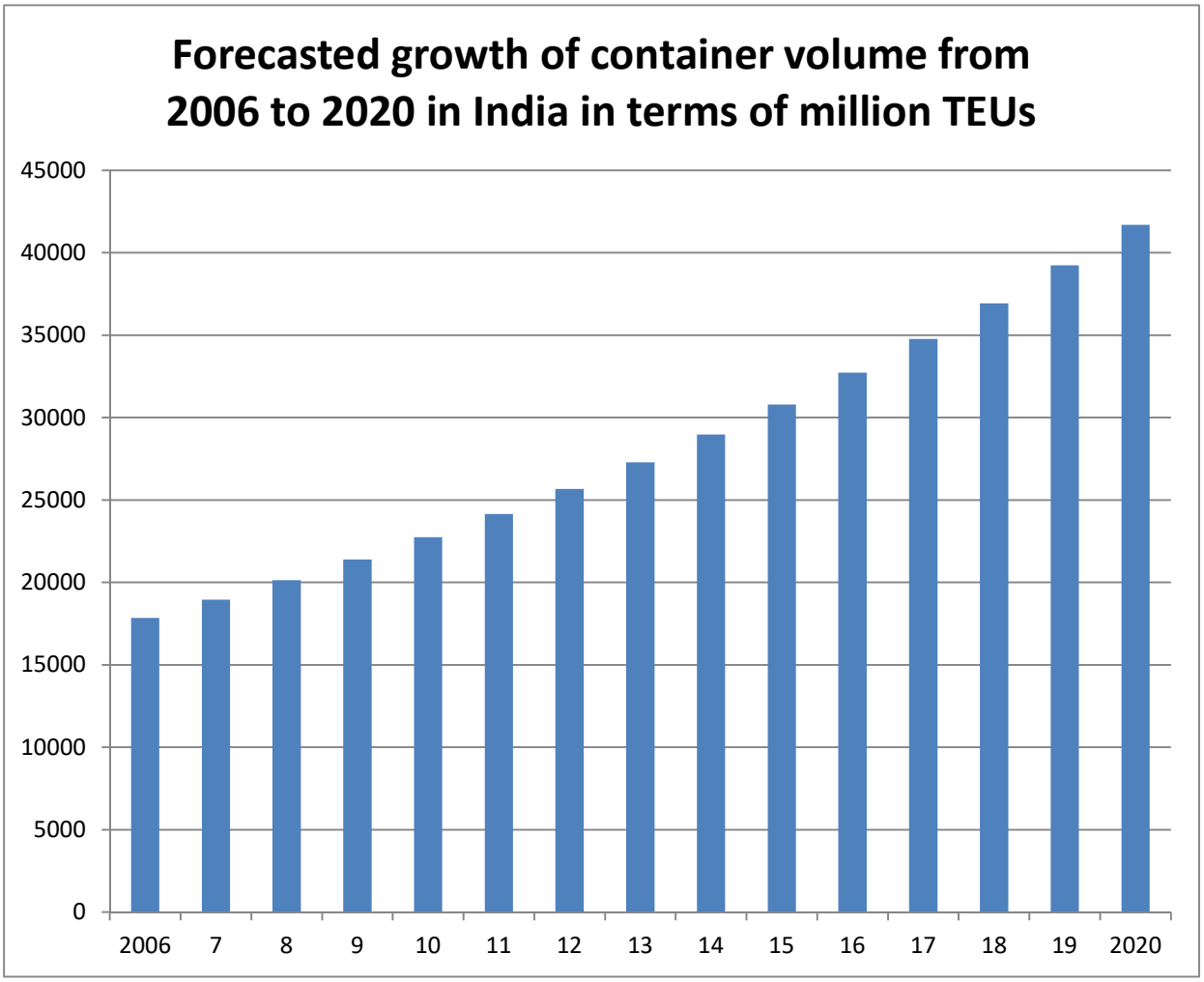
Factors influencing the growth of containerization

The following factors are influencing the growth of containerization namely, Economic activity, Container penetration, Trade intensity, Shipping systems and Port competition.

Role of customs in multimodal transport sectors

Indian customs became an important entity in the transportation chain. New systems and procedures had to be put in place and constantly tuned fine to adapt with the frequently changing scenario. As customs duties on export/import goods are a major source of revenue for the Government of India the procedures instituted had to prevent revenue leakage on one hand and not becoming cumbersome to hinder trade growth on the other hand. At this point one can say that the custom authorities have succeeded to a great extent in achieving these objectives. The custom procedures can be broadly divided in to three areas: a) Export cargo procedures, b) Import cargo procedures, c) Trans-shipment cargo procedures.

Forecasting growth of containerization and role of global multimodal operators



Findings of the study

- According to the various reports from different sources like World Bank, International Monetary Fund, Asian Development Bank and the Ministry of Finance the GDP of India is projected to grow at a rate of 6-8% in the next ten years.
- Other factors like container penetration, trade intensity, foreign direct investment, rising income levels will also have a strong impact on the growth of container transportation in sear trade.
- Taking into consideration all these factors it will be reasonable to forecast that the throughput

will grow at a rate of 13-14% in the next 3-4 years and will then stagnate around 12% for another 3-4 years and then gradually reduce and stabilize at 9-10%. Thus the container throughput will grow from the current 4-5 Million TEUs to 20 Million TEUs by 2020.

- Taking into consideration the expected growth of throughput in the coming years, it is imperative for the country to develop the necessary infrastructure on war footing. The capacity of the Ports, Roads and Railways needs to be augmented immediately least they become congested and become bottlenecks which will lead to losing out to competition.
- However the Government of India does not have the necessary resources required to invest in the development of infrastructure. According to the estimates of the Ministry of Economic Affairs at least USD 150 Billion are required in the next ten years to develop world class infrastructure. This is well beyond the means of the Government of India.
- As India is a large democracy, with the Governments of the past few years being formed by a myriad collection of political parties, the reform process has been progressing in fits and starts. It is as if the Government will not undertake the necessary reforms unless there is a complete breakdown and it is left with no alternative. Several reforms have been undertaken in this manner. Yet far more reforms are necessary in the fields of Infrastructure development, Customs tariffs and procedures, Foreign Direct Investment, labor and power generation.
- Furthermore attention has also to be paid to new problems cropping up like issues of national border transport security, environment degradation, ever changing technology and globalization process with the help of updating infrastructural facilities related to multi model transport sector for meet out the global completion as a positive manner for earning more foreign exchange through domestic as well as international trade in near future.

Recommendations of the study

- In India multimodal transport and containerization is increasing rapidly but it is not satisfactory when compared with foreign countries. International multimodal transport includes water, road, rail and air modes of transport in which 85% to 90% of the goods transport is done by sea, so the sea dominates international multimodal transport.
- In India multimodal transport lacks infrastructure facilities. It has only few ICD’s near the cargo rail station. Its needs to establish more hinterland container depots well connected with rail tracks.

- Taking into consideration the expected growth in the coming years, it is imperative for the country to develop the necessary infrastructure .The capacity of the Ports, Roads and Railways need to be augmented immediately
- Road transport is improving, the Golden Quadrilateral highway network connecting India's four largest metropolises: Delhi, Mumbai, Chennai and Kolkata, another network connecting Bangalore, Pune, Ahmedabad, and Surat, is also served. All the road lines must connect well the trade centers and ports.
- Improving the accuracy and timeliness of shipping documents will help to ship sooner and clear customs much more quickly. Accuracy of shipping documents decrease processing time and ease border clearance.
- The technology improvements viz Internet, e-mail to move documents, Radio-frequency identification (RFID) a technology that uses communication through the use of radio waves to exchange data -serve customers better, faster, requiring less manpower to follow up.
- Despite the continued expansion of international multimodal transport, there is no international uniform liability regime in force to date. The present regime comprises a complex mix of international conventions designed to regulate unimodal carriage - diverse and often conflicting regional, sub-regional and national laws and regulations, and standard-term contracts.
- Indian railways is not developed enough the government must put in more effort to make railways more freight-friendly, more dedicated freight corridors have to be set up .
- Infrastructure development requires huge investments. There is no alternative but to invite the private sector to invest in the development . But the private sector will do only if there are guaranteed assured returns on capital invested.
- Proper pricing of infrastructure is imperative, for attracting private investments, which the Government is unwilling to do due to lack of political will.
- There is also a need to develop a suitable logistic system for economical and efficient transportation of goods from the manufacturing centers to the distribution points.
- Infrastructure has to be properly priced to enable it to sustain itself on one hand and also generate reasonable profit on the capital deployed in constructing it. At the same time it should also be affordable to the end user.
- Awareness must be created on the importance of developing seamless infrastructure for multimodal transport, otherwise the potential of Indian foreign trade cannot be realized.

- The Government of India has to accelerate the pace of reforms which should be progressive, facilitative and encourage investment. This will result in transformation of markets which will result in growth and availability of clusters of private participation.
- Technical knowhow needs to be imported from developed countries who have the necessary experience of running such a complex industry whose performance are considerable one.

CONCLUSION

Multi–modal Transport System (MMTS) explores the use of multiple modes of transport for safe, convenient and efficient movement of passengers. Generally, MMTS has been characterized by increased capacity, efficient access and better location of both interchange and integration nodes. Additionally, presence of MMTS in metro region enhances accessibility, economic growth, public health, environmental protection, security & safety, social cohesion, etc. In this connection, it is desirable to establish a single authority for planning, development, implementation and enforcement of the policies. The present study recommend to Government of India for developing the integrated multi modal transport sector for operating the road, rail, air and sea transport sectors without any disturbance to each other for moving the cargo from production point to consumption point without any transport traffic and other delaying factors with the help of ministry of transport and shipping for overcome the hurdle of multimodal transport infrastructural facilities to improve the high status of multi modal transport sector in near future for compete with world market.

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