

A Contemporary on Recent Development Activities and Challenges in Logistics Sector in India



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Abstract: Due to the emergence of the internet and wireless technology, all sectors in the world are developed in a rapid manner. Hence, the Logistics sector in India is also developed in a great phase. In recent years, the Government of India has spent more investments to develop the logistics sector, which gained more important and better contribution to the Indian economy in global. Logistics sector in India plays an important role by contributing nearly 8% of GDP to the Indian economy. Supply chain management is the process of sending the goods from the point of origin to the point of destination i.e., customer. Logistics plays an important role and an integral part of the supply chain management in handling the movement of goods. In this paper, we are trying to highlight the Government initiative and investment made in the logistics sector in India during recent years. And also, we are trying to outline some of the challenges are faced in the logistics sector in India. The entire paper is studied from the secondary source of data and we are tried to highlight the key issues, job opportunities, GDP growth and ranking among the world which is happened in logistics sector in recent years. Recently, the Government of India initiatives like Make in India, Skill India, Digital India, etc., will help to fillip the growth of logistics sector in India. Since, India is having the advantage of enormous population and thereby creating a new buddy entrepreneur among the youngsters.

Keywords: Logistics, SAMPADA, Expressway, SAGARMALA and Bharatmala Project

I. INTRODUCTION:

According to the Council of Logistics Management has defined Logistics as “Logistics is the process of planning, implementing and controlling the efficient, effective flow and storage of goods, services and related information from point of origin to the point of consumption to customer requirements.”¹ Over the last six decades, the Indian Logistics sector has come a long way from distribution management to integrated logistics management to supply chain management to e – logistics. Similarly, business logistics sector in India have advanced from the warehouse operation and transportation sector due to emerge of internet and wireless communication changes to big enterprises. Normally, logistics will deal with the movement of products or information from one plane to another or vice versa, and between the members of a supply chain. But the supply chain management deals with the framework for business and their suppliers that will bring goods, services and information effectively and efficiently to the customer.

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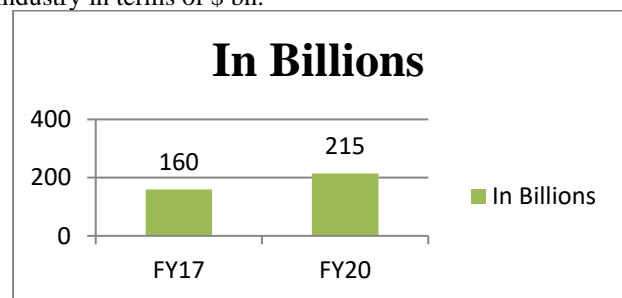
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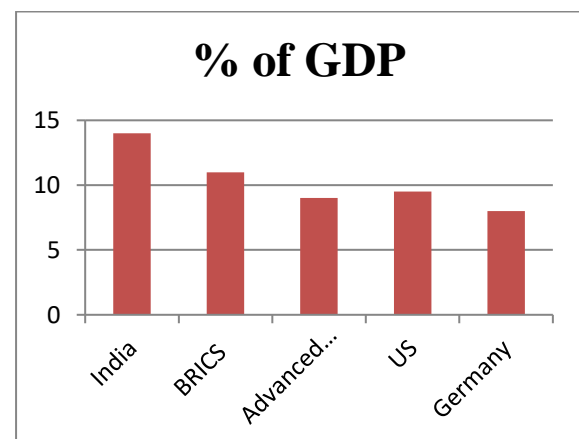
In last decade, particularly in developing nations like India, Logistics is considered as the backbone of the economy as it ensures efficient and cost effective flow of goods. In the era of e-commerce and global competition across the globe, logistics industry in India is evolving rapidly during recent stages. The logistics sector in India is worth around USD 160 billion is likely to touch USD 215 billion in 2020 and the Indian logistics industry which provides employment more than 22 million people in last five years and grown at a CAGR of 7.8 percent during last five years². Figure 1 shows the growth in Indian Logistics Industry in terms of \$ bn.



Source: Industry, IBEF

Figure 1 Growth in Indian Logistics Industry

As per the Ministry of Road Transport and Highways, Government of India has spends logistics cost approximately 14% of the GDP when compared to other developed countries. This higher cost is due to the inefficient of intermodal and multimodal transportation system in India when compared to other developed countries. Figure 2 shows the logistics cost as a % of GDP in different countries.

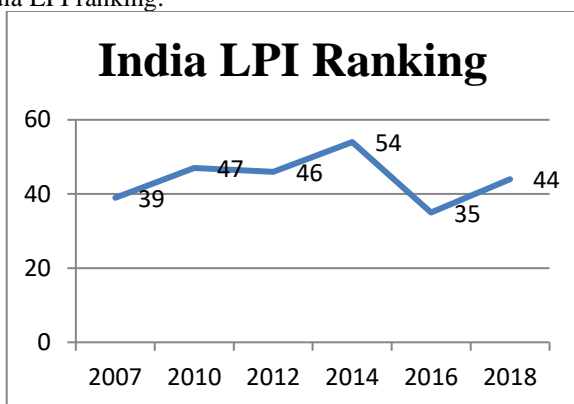


Source: Ministry of Road Transport and Highways
Figure 2 Logistics cost as a % of GDP

² Donald J. Bowersox, David J. Closs and M. Bixby Cooper, Supply Chain Logistics Management
² Economic Survey 2018

In World Bank's Logistics Performance Index (LPI) 2018, India ranking was slipped to 44th from 35th out of 167 countries. Logistics Performance Index (LPI) is released every two years by the World Bank based on the weighted average of the six key dimensions. i.e., Customs, Infrastructure, International shipments, Logistics competence, Tracking & Tracing and Timeliness.

During 2016, India stood at 35th from 54th ranking in LPI. This was the remarkable achievement by India in logistics sector. This is due to the initiative and efforts taken by the Government of India such as Make in India programme and improvement in infrastructure in transportation and emergence of skilled labour through Skill India programme. But, after the introduction of GST bill on July 1, 2017, India was slipped to 44th ranking in LPI 2018. Since, most of the logistics industries in India are unorganized and highly fragmented. Figure 3 shows the India LPI ranking.



Source: World Bank; Edelweiss research

Figure 3 India LPI Ranking

II. OBJECTIVES

1. To study about the initiatives and efforts taken by the Government of India to impetus the logistics sector in India.
2. To know the importance of infrastructure facilities in logistics sector.
3. To know the various challenges faced by the logistics sector in India.

III. METHODOLOGY

This study is based on secondary sources of data and information. Different books, journals, newspaper, magazines, NITI AAYOG, PIB, IBEF, CARE ratings and websites have been consulted and identified in order to make the study in an effective manner. The study attempts to scrutinize the integration of logistics sector in Indian economy.

IV. INITIATIVES TAKEN BY THE GOVERNMENT OF INDIA

In Union Budget 2019, the Government of India is allocating US\$63.20 billion towards infrastructure development. The key segment of infrastructure development includes road, rail, warehousing, coastal, cold chain, container freight services and inland container depots,

etc., hence, logistics sector has been granted the infrastructure status.

There are many initiatives taken by the government of India to push the logistics sector globally such as Make in India, Digital India, Skill India and GST. These programs will help the logistics sector by providing abundant opportunities in both organized and unorganized sector. This will give India witness a tremendous growth not only in the domestic front but also on the export front.

Some of the initiatives and efforts taken by the Government of India are:

1. GST: The major tax reform introduced on July 1, 2017 by the Government of India has pushed the logistics sector in different scale. At the initial stage, there is a great impact on many logistics sector. Since most of the logistics sectors are unorganized. Now, the trend has changed and makes an easy for the logistics service provider. The simplified structure will benefit the logistics sector by reducing logistics cost to 2.5% and thereby helps the logistics sector by creating a better environment for doing business in India and it would create a platform for higher economic growth.
2. Indian Customs Single Window Project: Central Board of Excise and Customs has framed a plan for the traders called as 'Indian Customs Single Window Project' to facilitate trade. Both importers and exporters can lodge their customs clearance document at a single point. For traders, they can fill online application to fill all documents electronically in e-Sanchit. E- Sanchit is useful for paperless processing, uploading the documents and necessity to facilitate trade across borders.
3. Multi – Modal Logistics Park: Ministry of Transport, India has planned 35 Multi-modal logistics park under the Logistics Efficiency Enhancement Program (LEEP). It will help the logistics sector by lowering the logistics cost, traffic congestion, reducing pollution and cutting warehouse costs.
4. FDI: Government of India allows 100% FDI in logistics sector. It will boost the Indian economy by achieving the required investment to accelerate logistics sector and development.
5. DFC: Government of India, Under the Ministry of Railways is starting an initiative called Dedicated Freight Corridor (DFC). This DFC is function under Dedicated Freight Corridor Corporation of India Limited (DFCC) is building two world class freight corridors in Western Dedicated Freight Corridor and Eastern Dedicated Freight Corridor. This will helps to reduce the Green House Gas (GHG) emissions associated with road transport, reduction of cost and allow faster transportation.
6. Sagarmala Project: The Government of India has launched an initiative called Sagarmala project is to reduce the logistics cost for EXIM and port development. Sagarmala project will boost India's merchandise exports to \$110 million by 2025 and will give an approximate of 10 million new jobs.

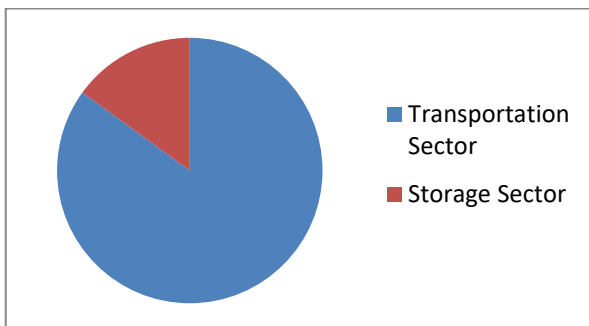
7. Bharatmala Project: Under the Ministry of Road transport, Government of India is launched an ambitious project called Bharatmala. This project is mainly focus on the construction of highways in the country. This will create an opportunity of nearly 100 million man days of jobs during the road construction.

These are some of the initiatives taken by the Government of India in recent years for the enhancement of logistics industry. In coming years, Government of India will soon launch a separate Ministry for the Logistics. As the draft National Logistics Policy has been prepared in consultation with the Ministry of Transportation, Ministry of Railways and Ministry of Shipping and Civil Aviation which is prepared under the Ministry of Commerce and Industry.

V. INFRASTRUCTURE FACILITIES IN INDIA:

The logistics sector in India is mostly dominated by the transportation which is nearly accounted for 85%. Remaining 15% is done by the storage department like warehousing. In transportation department alone provides employment more than 22 million people. Figure 4 shows the logistics industry in India: Transportation Vs Storage.

Of the various modes of transportation, roadways and railways are most preferred for cargo handling which accounts for nearly 60% and 30% respectively. Remaining 10% the cargo handling is handled by shipping, airlines and pipelines. Most of the cargo handling is preferred in roadways, still total logistics cost is higher due to poor road infrastructure, old fleet vehicles, higher tax toll rate on highways, shortage of warehousing facilities and not upgrading technology.



Source: Industry, IBEF

Figure 4 Logistics Industry in India: Transportation Vs Storage

Recently, the Government of India took various measures to upgrade the logistics sector by investing a tremendous amount on infrastructure development. Particularly, roadways infrastructure are increased in recent years. According to the Ministry of Road Transport and Highways, the year 2018-19 was declared as the ‘Year of Construction’. Due to the construction of road during the first nine months of the year 2018-19 was 5,759KM was completed against 4942KM up to same period in the last year. This period also witnessed with focus on reducing carbon footprints, number of road accident is decreased and effective convenience for the road user.

Another program was initiated under Ministry of Road Transport and Highways called Bharathmala Project. This project was started in the year 2017 and the main aim of this project is to optimize the efficiency of road transport movement across the country. And also, 35 locations are identified for Multimodal Logistics Parks.

In phase I project, a total of 34,800KM are to be constructed during the period of 2017-18 to 2021-22 at an estimated cost of Rs. 5,35,000 Crore. This Phase I project includes:

1. 5,000KMs of the National Corridors
2. 9,000KMs of the Economic Corridors
3. 6,000KMs of the Feeder Corridors
4. 2,000KMs of Border Roads
5. 2,000KMs of Coastal Roads and Port Connectivity Roads and
6. 800KMs of Green-field Expressways.

A scheme for the replacement of level crossings on National Highways by ROB /RUB is called SetuBharatam. Under this scheme, 174ROB/RUB is to be constructed.

Some of the expressways are constructed completely and some of the expressways are to be constructed in upcoming years. The following highways are listed during this period are:

1. Eastern Peripheral Expressway – Western Peripheral Expressway
2. Delhi – Meerut Expressway
3. Vadodara – Mumbai Expressway
4. Delhi – Mumbai Expressway
5. Bangalore – Chennai Expressway
6. Delhi – Amritsar – Katra Expressway
7. Nagpur – Hyderabad – Bangalore Expressway
8. Kanpur Lucknow Expressway
9. Varanasi Airport Road and Ring Road
10. ByetDwarka – Okha Bridge
11. Zojila Tunnel
12. Silkyara – Bend – Barkot Tunnel
13. Highways Project in North East

In that, Zojila Tunnel would be India’s longest road tunnel and the longest bi-directional tunnel in Asia. The beauty of this tunnel is adopting all weather conditions connecting between Srinagar, Kargil and Leh. The above mentioned expressways are constructed with IT enabled services, electronic toll plaza and electronic charge battery station (BS-VI vehicle – Electric Vehicle), controlling traffic congestion and more importantly reducing carbon footprints. This expressway will create more industries across the path. And hence, it is easy to transport the product in a doorstep delivery effectively.

During this period, a lot of MOUs are signed by the Ministry of Road Transport and Highways. They are:

1. MOU between NHA and SBI: Rs. 25,000 Crore sanctioned by SBI for the development of road in expressways.
2. MOU with Transport for London: To revamp the public transport architecture in India.

3. Bus trial run across Bangladesh, India and Nepal
4. India-Nepal cross border
5. MOU between India and Uganda: Establishment of a Regional Materials Testing Laboratory for Highways in Uganda.
6. MOU between India and Russia: Bilateral cooperation in the road transport and road industry sector.
7. India and Japan Working group meeting for the latest technological developments in operation and maintenance of expressway.

Apart from road transportation, railway transportation is also getting an enormous fund to modernize the railway sector. Among them, Ministry of Railways is planned for Dedicated Freight Corridor. These freight trains will run 100KM/Hr with advanced wireless technology. Indian railway is among the world's 3rd largest rail network. The Indian Railway will have 7,421 freight trains each day with approximate 3 Million tonnes of freight daily. An Indian railway is targeting to increase the freight traffic to 3 billion tonnes by 2030. Some of the major plans are made in the railway sectors are:

1. High speed corridor project between Mumbai and Nagpur
2. Setting a plan to come out with a new export policy for railways
3. Government of India is come up an idea of National Rail Plan. It will help to integrate with other modes of transportation and develop a multimodal transport sector model.

Understanding the importance of air cargo logistics not only in global but also for the regional connectivity, the Government of India under the Ministry of Aviation is planned for setting up of 56 new airports across India in next five years.

In waterways transportation, Government of India introduced an ambitious project called SAGARMALA project. The main aim of SAGARMALA project is to reduce the logistics cost for EXIM and domestic trade with minimal infrastructure investment. The main components of SAGARMALA projects are:

1. Port Modernization and Port Development
2. Port Connectivity Enhancement
3. Port- Linked Industrialization
4. Coastal Community Development

RO – RO (Roll On / Roll Off) ships which is used to carry wheeled cargo in vessels. The Government of India is working on development along the coastlines with the help from SAGARMALA project across the country. Recently, Inland Waterways Authority of India in collaboration with Assam Government has launched the RO-RO facility connecting Neamati to Majuli Island in Assam. Similarly, in Gujarat, Ghogha Dahej RO-RO facility

is implemented. In Kerala, solar powered RO-RO service will be launched soon in upcoming years. The Government of India has planned to start seven or eight such ferry services across the state.

As on 30 September 2018, a total of 522 projects were under various stages of implementation, development and completion. Table 2 shows the project status of SAGARMALA project as on 30 September 2018.

Table 1 shows the project status of SAGARMALA project as in 30 September 2018

Sr. No.	Project Status	Status As on 30 September 2018			
		Total Projects		Project by Mos	
		#	Cost (Rs. Cr)	#	Cost (Rs. Cr)
1.	Completed	93	14,997	76	9,802
2.	Under Implementation	161	237,980	101	67,175
3.	Under Development	268	179,517	128	86,479
Total Completed / Under Implementation / Under Development		522	432,494	307	163,456

Source: Sagarmala, Ministry of Shipping, Government of India

In storage department i.e., remaining 15%, Government of India is setup a plan called SAMPADA scheme. Under this SAMPADA scheme, the following plans will be implemented in different states. They are

1. Mega Food Parks
2. Integrated Cold Chain and Value Addition Infrastructure
3. Creation / Expansion of Food Processing and Preservation Capacities
4. Infrastructure for Agro – Processing Clusters
5. Creation of Backward and Forward Linkages
6. Food Safety and Quality Assurance Infrastructure
7. Human Resources and Institution

VI. CHALLENGES FACED BY THE LOGISTICS SECTOR IN INDIA

Logistics sector in India is fast evolving and hence the Government of India makes an effort, initiative and investment on various projects to enhance the economic growth in all aspects. Despite an effort, initiative and investment, the progress will be made in phased manner which does not come without challenges. Table 2 shows the various problems faced in logistics sector in transportation and storage department.

Table 2 Problems Faced in Logistics Sector in India

S. No	Sector	Mode of Operations	Challenges Faced in Logistics Sector in India
1.	Transportation	1. Roadways	<ol style="list-style-type: none"> 1. Pathetic road condition in rural areas 2. Traffic congestion in all toll gates during festival season. 3. Average speed of fleet vehicle is 40KM/Hr and the average distance covered by the driver is about 250-300KMs/ day. 4. Variation of fuel prices. 5. Shortage of skilled drivers. 6. Lack of wireless and GPS technology. 7. Minimum number of refrigerated fleet vehicles.
		2. Railways	<ol style="list-style-type: none"> 1. No fixed schedule for arrival and departure in rail fleet vehicles. 2. Average speed of train carrying cargo travels at the rate of 25KM/Hr.
		3. Airways	<ol style="list-style-type: none"> 1. Only major airports are having the air cargo material handling infrastructure facilities. 2. Poor warehouse storage facilities in airport. 3. Inefficiency in allocation of goods 4. Time delay in transit time. 5. Container handling equipment is not sufficient in air cargo. 6. Minimum number of intermodal and multimodal transportation services in India.
		4. Seaways	<ol style="list-style-type: none"> 1. Heavy traffic congestion at all major sea ports. 2. In many ports in India, lack of port capacities and number of berths allocation.
2.	Storage	1. Warehouse	<ol style="list-style-type: none"> 1. Lack of stores available in major cities. 2. Less number of cold storage facilities in India. 3. Under-developed material handling infrastructure. 4. Most of the warehouse industries are fragmented and unorganized. 5. Lack of movement of seamless goods across the mode of transportation. 6. Technology adoption in warehouse industry is less.
		2. Packaging	<ol style="list-style-type: none"> 1. Outdated equipment and technology used in packing the products. 2. Lack of automation results in damaging the products. 3. Inefficient inspection personnel.

The above mentioned details are the investments are planned to develop the infrastructure in both transportation and storage department for the enhancement of logistics sector growth in upcoming years.

VII. CONCLUSION

In this paper, we are tried to highlight the importance, initiative and investment taken by the Government of India and the challenges faced in the logistics sector in India. The entire study is based on the secondary source of data and information. This paper is not taken any analysed part in an initiative taken by the Government of India and challenges faced in the logistics sector. Hence, there is enough scope of the potential researcher on this topic. Due to the emergence of e-commerce, technology is updated at a furious pace. Therefore, in logistics sector manager must have to

update knowledge on present technology. Due to the implementation of GST on July 1, 2017, the entire sector in India is suffered a lot in during the initial phase but after the fully understand of GST principles, all the sectors are started growing in a phased manner. Recently, during the Union Budget, 2019, the Government of India is planned, focused and achieve the target of 5trillion economy by 2024 and also India will rank third in World Economic Index. We hope that the Indian Logistics sector will get better results on upcoming rankings on Logistics Performance Index (LPI), 2020 due to an enormous initiative taken by the Government of India.

VIII. ACKNOWLEDGEMENT

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