

Operations in Logistics Firms

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Abstract

Operations within logistics firms play a pivotal role in the efficient movement of goods and services across intricate supply chains. This study provides a comprehensive overview of the multifaceted operations within logistics firms, emphasizing their significance in modern business environments. By delving into the core activities of transportation, warehousing, inventory management, and order fulfillment, this research sheds light on the strategies and technologies employed to streamline operations and enhance customer satisfaction. Through a blend of case studies and analytical insights, the study highlights the challenges logistics firms face, including optimizing resource allocation, minimizing lead times, and adapting to dynamic market demands. The abstract underscores the integration of information technology and data analytics in modern logistics operations, facilitating real-time monitoring, decision-making, and predictive analysis. Ultimately, this study offers insights that are valuable to professionals, researchers, and policymakers seeking to understand the intricacies of operations within logistics firms and their role in shaping the global supply chain landscape.

Keywords: Operations, Logistics Firms, Supply Chains, Efficiency, Goods and Services, Transportation, Warehousing

Introduction

Overview of Logistics

Logistics is:

- Process of moving and handling goods and materials, from the start to the end of the production, sale process and waste disposal, to satisfy customers and add business competitiveness.
- Describing the entire process of materials and products moving into, through, and out of the firm. Inbound logistics involves the movement of material received from suppliers. Materials management describes the movement of materials and components within a firm. Physical distribution refers to the movement of goods outward from the end of the production to the customer. Finally, supply-chain management is a bigger concept than logistics, and it links logistics more directly with the users' total communications network and with the firm's engineering staff.
- Process of anticipating customer needs, acquiring the capital, materials, people, technologies, and information necessary to meet those needs and wants; optimizing the goods- or service-producing network to fulfill customer requests.
- Customer-oriented operation management.

Components of Logistics System

The closely linked components of the logistics system are:

- **Logistics services** support the movement of materials and products from inputs through production to consumers, as well as associated waste disposal and reverse flows. They include activities undertaken internally by the users of the services (e.g. storage or inventory control at a manufacturer's plant) and the operations of external service providers. They involve physical and non-physical activities (e.g. Transport, storage and supply chain design, selection of contractors, freightage negotiations respectively). Most activities of logistics services are bi-directional.

- **Information systems** include modelling and management of decision making practices, and more important issues are tracking and tracing. It provides essential data and consultation in each step of the interaction between logistics services and the target stations.
- **Infrastructure comprises** human resources, financial resources, packaging materials, warehouses, transport and communications. Most fixed and initial capital is for building those infrastructures. They are concrete foundations and basements of logistics systems.

1.3 Objective and Scope of the Report

Objectives:

- The main objective of the study is to learn the various aspects of logistics along with the functioning of a logistics firm.
- To study the impact of logistics industry on performance of other industries.
- To study the logistics cost associated in different industries.
- To know about the policies and procedure followed by the firm while transporting the goods and services.
- To know about the need and importance of a logistics in today's scenario.
- To study the transportation cost associated with different modes of transport.
- To study the role of global 3PL service providers in India.
- To study the current scenario of Indian logistics industry.
- Study the development of logistics, interrelationships of transportation and logistics, benefits of transportation to logistics activities and vice versa
 - Do a comprehensive study of logistics activities in Blue Dart

Scope:

To study the various facets of a logistics system, various enterprises operating in this space in the Indian market with specific focus on Blue Dart as a leading player on the scene. This study also focusses on the current logistics market scenario and practices of the firms operating in this sector.

Scenario of Logistics in India

Today logistics management in India has become complicated with about ten million related outlets to cater to the needs of 1000 million people. The logistics market in India is estimated to be Rs.260,000 crores and constitutes 13 per cent of the GDP. It is much higher than for the U.S. but lower when compared to countries like China and Korea. A reduction in logistics costs by one percentage point will mean a saving of \$4.8 billion or Rs. 21,600 crores annually. Besides significant benefits can be obtained through the multiplier effect of better logistics on all economic sectors.

Healthy economic growth in India is increasingly supported by strong industrial growth. One of the lesser known but significant sectors that support almost all industrial activity - the logistics sector - is also witnessing this growth as a follow through. However, notwithstanding its importance and size (INR 4 trillion), it has traditionally not been given the attention it deserves as a separate sector in itself.

The degree of inefficiency in logistics activities in the country has been very high across all modes. With the developing business environment creating a strong demand pull for quality and efficient logistics services, core issues around enabling infrastructure, regulatory environment and the fragmented nature of the industry are being overcome gradually.

The necessary pace of efficiency and quality improvement will demand rapid development of capabilities of logistics service providers. And with logistics being a service oriented sector, skill development will emerge as a vital capability while skill issues exist in varying degrees in all segments of logistics; those

segments where the gaps are not only wide but also widening at a relatively fast pace. The most critical and immediate requirement for skill development is found to be in the road freight and warehousing segments.

India's spend on logistics activities which is equivalent to 13 percent of its GDP is higher than that of the developed nations. The main reason for this is the relatively higher level of inefficiencies in the system, with lower average trucking speeds, higher turnaround time at ports and high cost of administrative delays being just a few of the examples.

These inefficiencies have arisen over the years from a combination of a non-conducive policy environment, expansive industry fragmentation and lack of good basic infrastructure. India's indirect tax regime also discouraged large centralized warehouses and led, over time, to fragmentation in the warehousing sector. At the same time, the lack of a single logistics 'champion' (whether in form of a ministry or otherwise) in the government (or industry) led to a disintegrated approach to development of the sector. Extensive fragmentation meant the incapacity of industry players to develop the industry as a whole and poor support infrastructure, such as roads, ports and telecom, led to a situation where the opportunity to create value is less.

However, much of this is changing with the government now showing a strong commitment towards providing an enabling infrastructure and creating conducive regulations. There is significant current and planned investment in infrastructure to the tune of (INR 15 trillion) over the next few years and an increasing emphasis on public-private partnership. At the same time, regulations revolving round the rationalization of tax structures and prevention of overloading for example are creating an environment of positive change. Players now have the opportunity to leverage economies of scale, complemented with better infrastructure, to provide integrated logistics solutions which are cost efficient.

In addition, the evolving business landscape and increasing competition across industries, is creating the need for more efficient and reliable logistics services than what exists today. For example, rapid growth of organized retail and the necessity to reach out to the large untapped rural markets in India are necessitating development of strong back end and front end supply networks.

Fundamentally, a distributed industry with low average scale - and consequent limited investment and market development capability - is worst placed to serve these needs. It is not surprising therefore that there is an urgent pace of consolidation and organic growth that the industry is witnessing. While logistics service providers are struggling to keep pace with the growth, logistics service users with limited or no outsourcing are finding it increasingly difficult and / or undesirable to manage this non-critical activity in-house. The result is a wide service gap that is seemingly widening much faster than it is being filled.

It is in this context that capability development of logistics service providers garners critical importance. While rapid development across all dimensions of organizational capability will be necessary to achieve and sustain demand growth, logistics being a service industry, manpower capabilities assume utmost importance. The sector currently employs about 40 million people, and that will rise rapidly with exponential growth expectations in the sector. A look at the financials of a set of 80 logistics companies in India across sectors reveals that manpower spends constitute 8-10 percent of overall sales of the sector.

This translates to about an INR 500 billion spend on logistics manpower in the country annually. Only about 13 -14 percent of the overall manpower costs are spent on non-salary, manpower development items (welfare, training etc.). This share for unorganized companies would expectedly be much less.

As against this, leading global logistics companies spend about 20 percent of their employee expenditure on non-salary items. This lack of focus on developing manpower and skills for the logistics sector has resulted in a widened gap in the numbers and quality of manpower in the sector. This gap, unless addressed urgently, is likely to be a critical impediment in the growth of the logistics sector in India, and in consequence, could impact growth in industry and manufacturing sectors as well.

Size of the logistics market in India:

Indian Supply Chain and Logistics Industry is more than USD 100 Billion in size and is the backbone of Indian Economy. The industry is growing at a rate of 8-10% annually and has been a crucial contributor in the growth and development of the Indian economy. In the near future, Traditional Logistics services like Transportation and Warehousing will continue to grow at a good rate. However, the big ticket growth will be coming from the Value Added Logistics services in the near future.

At present, Outsourced Logistics accounts for only one-third of the total Logistics market in India, which is a significantly lower proportion in comparison to the developed markets. Growth in this industry is currently being driven in India by over USD 300 billion worth of infrastructure investments, the introduction of GST, the development of organized Retail and Agro-processing industries, along with a strong manufacturing growth. In addition, strong Foreign Direct Investment inflows in the Indian markets would lead to increased market opportunities for providers of Third-Party Logistics in India.

Competitive conditions and other issues

The following problems existing in the Indian logistics industry make it unattractive for investments and also create entry barriers:

- Logistics is a high-cost, low-margin business. The problem of organized players is compounded by unfair competition with unorganized players, who can get away without paying taxes and following operating rules stipulated in the Motor Vehicles Act such as quality of drivers and vehicles, volume and weight restrictions, etc.
- Economies of scale are absent in the Indian logistics industry. Even the organized sector that contributes more than 1% of the logistics cost, is highly fragmented. Existence of the differential sales tax structure also brought in diseconomies of scale.
- There is lack of trust and awareness among Indian shippers with regard to outsourcing logistics. The volume of outsourcing by Indian shippers is presently very low (~ 10%) compared to the same for the developed countries (> 50%, sometimes as high as 80%). The unwillingness to outsource logistics on part of Indian shippers can be attributed to skepticism about the possible benefits, perceived risk, and losing control, of sensitive organizational information, and vested interests in keeping logistics activities in-house.
- Indian shippers expect LSPs to own quality assets, provide more value-added services and act as an integrated service provider, and institute world-class information systems for more visibility and real-time tracking of shipments. However, they are unwilling to match the same with increased costs; even pay little attention to timely payments that leave LSPs short of adequate working capital.
- Indian freight forwarders face tough competition from multi-national freight forwarders for international freight movement. MNCs, because of their size and operations in many countries, are able to offer low freight rates and provide credit for long periods. Indian freight forwarders, on the other hand, because of their smaller size and lack of access to cheap capital, are not able to match the same. Moreover, clients of MNCs often want to deal with a single service provider and especially for FOB (Free on Board) shipments specify the freight forwarders, which mostly happen

to be the multi-national freight forwarders. This is sort of a non-tariff barrier imposed on Indian freight forwarders.

- Poor physical and communications infrastructure is another deterrent to attracting investments in the logistics sector. Road transportation accounts for more than 60% of inland transportation of goods, and highways that constitute 1.4% of the total road network, carry 40% of the freight movement by roadways. Slow movement of cargo due to bad road conditions, multiple check posts and documentation requirements, congestion at seaports due to inadequate infrastructure, bureaucracy, red-tapeism and delay in government clearances, coupled with unreliable power supply and slow banking transactions, make it hard for exporters to meet the deadlines for their international customers. To expedite shipments, they have to book as airfreight, rather than seafreight, which adds to the costs of shipments making them unsustainable in international markets. Moreover, many large shipping liners avoid Indian ports for long turn-around times due to delays in loading/unloading and hence Indian exporters have to resort to transshipments at ports such as Singapore, Dubai and Colombo, which adds to the costs of shipments and also delays delivery.
- Low penetration of IT and lack of proper communications infrastructure also result in delays, and lack of visibility and real-time tracking ability. Unavailability and absence of a seamless flow of information among the constituents of LSPs creates a lot of uncertainty, unnecessary paperwork and delays, and lack of transparency in terms of costs and service delivery. For example, a shipper has to pay a higher freight rate if it cannot ensure return load. At present, there is no real time process by which a shipper may know about the availability of trucks and going rates at the destination market. Therefore, it has to pay more. Had the market information been available to both the shipper and the service provider, the service provider's cost structure would have been transparent to the shipper and it would have ended paying the actual market rate. Another example would be that LTL (Less than Truckload) shipments cost more than FTL (Full Truckload) shipments. Now, when a shipper books a LTL shipment, it has no idea about the status of its shipment after it leaves the warehouse at the origin and before it reaches the warehouse at the destination. The service provider may still convert this LTL shipment into a FTL shipment at its own warehouse before delivering at the destination. So, the shipper ends up paying LTL rates for a FTL shipment. Had there been visibility during delivery, this problem would not have occurred.
- Since most of the LSPs are of relatively small, they cannot provide the entire range of services. However, shippers would like service providers to offer more value-added services and a one-stop solution to all their logistical problems. The inability of service providers to go beyond basic services and provide value-added services such as small repair work, kitting/dekitting, packaging/labeling, order processing, distribution, customer support, etc. has not been able to encourage shippers to go for outsourcing in a big way.
- There is lack of skilled and knowledgeable manpower in the logistics sector. Management graduates do not consider logistics as a prime job. To improve the status of the industry, service providers have to move beyond the level of brokers and truckers to attract and retain talent.

Technology Offerings from Bluedart

Blue Dart has been the only complete courier service Indian company that has invested widely in technology infrastructure to enable services like differentiated delivery capabilities, quality Services and customised solutions for the customer.

Blue Dart has been instrumental in encouraging Innovation and Technology for building high speed, high efficiency services which enables it to function more judiciously method resources while at the same time giving the maximum output time.

Some of the technology based innovations which are adopted at Blue Dart are:

1. TrackDart

TrackDart customer track the position of the shipment by using the track box which is available on the upper left panel of every page on the Blue Dart website. The customer can keep record of shipments between India, Bangladesh, Bhutan and Nepal. Shipments under single or various labels may be tracked using either the way bill number or the reference number given at the time of shipping.

2. Newline

The customer may either use the way bill number or the reference number to track the status of his shipments. This feature for customer is to track a single or multiple shipments and track the status of your shipments by using the way pin number. The customer has to enter the waybill number either in the subject or in the text of the mail. Each way bill number is separated by comma period and mail.

To track the position of your shipments by the reference or order number the customer is required to enter the reference for order number in the subject of the mail, each reference for order number should be separated by comma.

3. Location finder

Customer can find the service positions of Blue Dart and Blue Dart counter or franchise located closest to him or her. The customer may search by city, street name or pin code to find out one of the over 35000 locations, and in more than 220 countries and territories worldwide.

4. Transit time finder:

This tool enables the customer to check the transit times for his or her domestic and international shipments, and for the various services driven by Blue dart to help him or her identify the services that meet their needs.

5. Waybill generation:

The online waybill generation tool developed by BlueDart makes easier to the customer to generate E waybill for their consignment. The user has to enter the details of the consignment and the way bill which is generated in a PDF format and it will be given as a download to the customer.

6. Address book

This is another powerful attribute in waybill generation. It is a part and parcel of the online waybill generation module. This address book can be seen by all credit customers of Blue Dart. You can make a new address list and change or delete the addresses at any point in time which facilitates you too quickly to select the predefined addresses or add new ones.

7. ImageDart:

It enables the users of blue dart's premium services like surface line and apex that is a package Express services to download proof of delivery and delivery challans online from the Blue Dart website sitting at the leisure of their home. This image which is downloaded has all delivery details consisting of the consignee's signature and comments that will be made available on your website 48 hours after the delivery of the shipment. With this tool the customers using Blue Dart services will now be able to collect their collections from their own customers much faster saving them interest costs and making their billing and recovery cycle and supply chain much more productive.

Some of the standalone tools employed by Bluedart for increasing efficiency in the internal back and processes are defined as follows:

- **COSMAT II**

It is a computerized online system for management accounting and tracking. It is a complete ERP system which has been indigenously developed by Bluedart. This system interfaces with the human resources management, Purchases, Sales, Financial management, executive information and customer relationship management systems.

The system was constructed by segregating it in four major models to cover all the complex processes of the entire organisation. Different kinds of media like leased lines, microwave links or the very widely used WAN were used to set up this large application. Scanner and barcode systems were setup for speedy operations. The system enables easy access to the database over a wide Area Network, and ensures reliable information and feedback even in areas that are affected by poor telecom services. All the powerful web based tools, including TrackDart interface with COSMAT II to provide real time response to customer requirements. It is a developing system which is being continuously upgraded to deliver more value to the customer and make the operations of the firm more easier, better, secure and manageable.

- **SMART:**

SMART stands for Space Management Allocation Reservation and Tracking. It is a state of the art Technology system which has been developed in house by Bluedart and which allows real time space and revenue management of the Blue Dart aviation network. It sees to it that the aircraft is filled profitably and that all the customers with space confirmed on the aircraft have the assurance that their packages would travel.

The system follows COSMAT II leveraging on the infrastructure and strength of the system which ensures that package booked on the system are picked, moved on the network and tracked until delivery.

- **SHIELD:**

This is a security module developed by BlueDart which works as a strong online process that simplifies the tracking of any security incident across the country. It also allows the closure of cases and derives pattern as a better management tool to find patterns among the events and reduces the further occurrence of such events.

- **SHIPDART:**

It is a proprietary solution which was especially created for the convenience of regular customers. It allows the user to control the entire shipping and tracking processes. This software needs to be installed at the customer's side in order to connect with the Blue Dart back end Systems which thereby facilitates the managing of activities for pre-shipping and post tracking, thereby playing a major role in bridging the existing gap in any package movement. A set of Master files are present on the system which controls the system.

- **Customised Solutions:**

Blue Dart has provided customised logistics solutions among the different industry segments such as finance, Pharmaceutical, Information Technology, consumer durables, among others. These solutions are integrated closely with the Legacy systems of the businesses which helps them to accelerate the processes and provide them with effective management information systems.

- **CARESS:**

It stands for complaint appreciation, resolution and evaluation to satisfactory system. It is the latest in-house introduction and a very strong one at that point it is a very efficient online customer complaint redressal system. It helps intelligence on every single customer complaint to enhance service excellence.

E-Business tools

These tools properly integrated with the customer systems to provide them with a convenient efficient and economical solution to the sea shipping requirements.

1. Internet Dart:

Track online status of your shipment sent over the last 45 days. You may search by a range of dates origin, destination, delivered or undelivered shipment or service used, online. You may create a series of reports, at predetermined frequency, and sort the results online.

For online questions and reports, on giving the input of range of pick up dates, origin destination and services used, the customer can check any of the following, online:

- Way bill details and status of all shipments sent during a given period
- Information of all delivered shipments
- Record of all undelivered shipment
- Details of all RTO (Return to of origin) shipments
- Information of all the redirected shipments

This tool is made keeping in mind the management and tracking processes of medium to large businesses and integrating them with their back end systems. The system can only be used by registered customers of Blue Dart.

2. ShopTrack

It is an API i.e. application program interface made specifically to support and make better the services provided by a portal or any e-business. Research indicated that while E-Commerce websites provided a lot of products and services and promised to deliver them to the customer's doorstep after the purchase, the customer had to leave the E-commerce website and login to the logistics partner website for tracking the delivery of their purchase to the doorstep. This is where API comes in picture. It enables the tracking device of the logistics website to be integrated in the E-commerce website itself so that the customer can track the location of their products on the Purchase site directly.

This tool provides a very customised and easy solution to the customers. Customers need not leave the portal and go elsewhere to track their purchases anymore. They just need to enter the order number of their purchase on the Purchase website itself and the shipping and delivery details as well as the tracking information is displayed on the same page. The portal has the flexibility to decide the way in which the information is to be displayed. It is another device designed to give Blue Dart's customers a competitive edge.

3. PayTrack

It is another API for handling the logistics distribution and inventory control for the client side. Streamlining and bringing together the shipping processes is its main objective. This API is integrated into the client systems and thus it enables the client to keep record of the entire distribution status of all its customers. It is Java based platform which is simple and easy to use and can be properly integrated with any Windows based application or a java-compliant machine. Blue Dart database is seamlessly integrated with this tool which helps in fetching any queries immediately from the database and bringing the entire chain of

knowledge within the client's domain. The client can also store this information in his own database providing him with an effective customer relationship management tool.

These e-business tools, the first of the type in the country have brought about increased efficiency levels to most b2c, B2B and c2c transactions.

- Both shop track and pay track offer the following services:
- Online, real-time status information of the way bill number
- Online real time status information of all the Rebel linked to an order number
- Details in either XML, text or HTML format
- Supports JSP and ASP format

4. Mobile Dart:

Mobile Dart supports two platforms: WAP and SMS. Using the first device, the customer can check the current status of a shipment on the internet by entering his or her waybill number. The customer can choose to have the delivery information by email or SMS for an undelivered shipment. The customer also has the option to use the location finder which provides all information about the services provided by Blue Dart and the locations serviceable. This helps the customer to make a shipment decision on the Run.

Mobile Dart SMS runs on any mobile phone or device which supports sending short messaging services. This service provides tracking attributes - current status of shipments forwarded, and automated intimation of the delivery of the shipment.

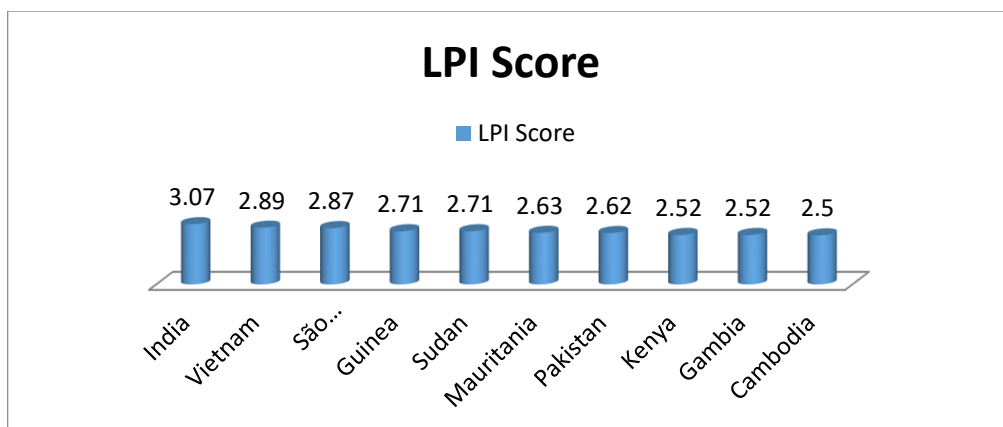
Statistical Information

1.1 Logistics performance of Index of India with other countries:

Country	LPI Score
USA	3.85
UK	3.84
Singapore	4.19
India	3.07
China	3.64
Mexico	2.64

Interpretation: The Logistics Performance Index (LPI) and its indicators provide the first in-depth cross-country evaluation of the logistics gap among countries. As the above graph shows that LPI score of USA, UK, Singapore, India and Mexico, shows the performance of logistics in global transport and logistics hubs. Also as the performance of developed countries in logistics are better as compared to the developing nation.

1.2 LPI top 10 countries of low income group :



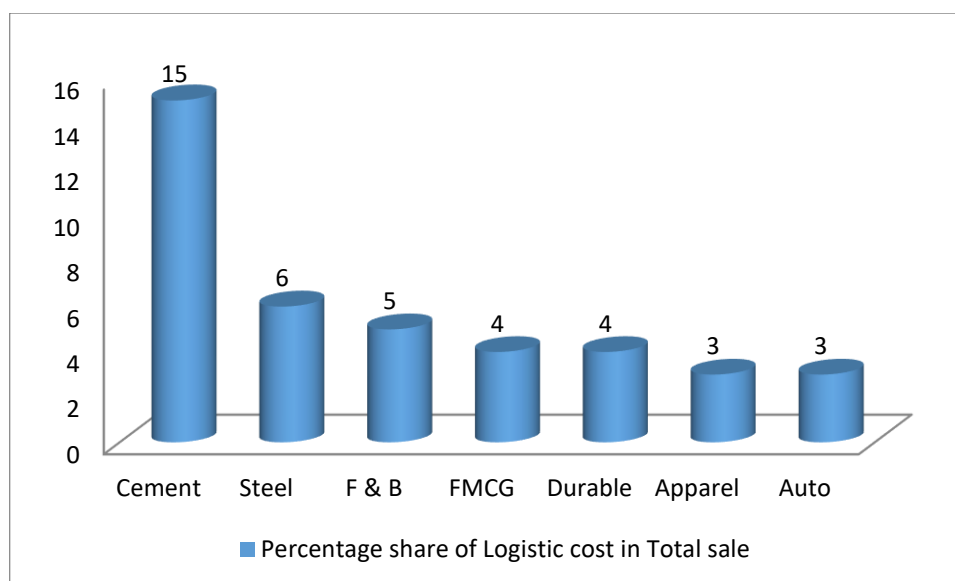
Interpretation: This graph shows that India has shown better performance among all the low-income countries. This shows the among the low income countries India's performance in global transportation and logistics hubs is much better.

1.3 Logistics cost contributed from GDP in different countries :

Country	Logistics Cost/GDP
India	13%
U.S.	9.9%
Europe	10%
Japan	11.4%

Interpretation: Above graph show that in India, logistics cost higher than developed countries and its contribution to GDP is 13 %.

1.4 Share of Logistics cost in total sale for various industries:



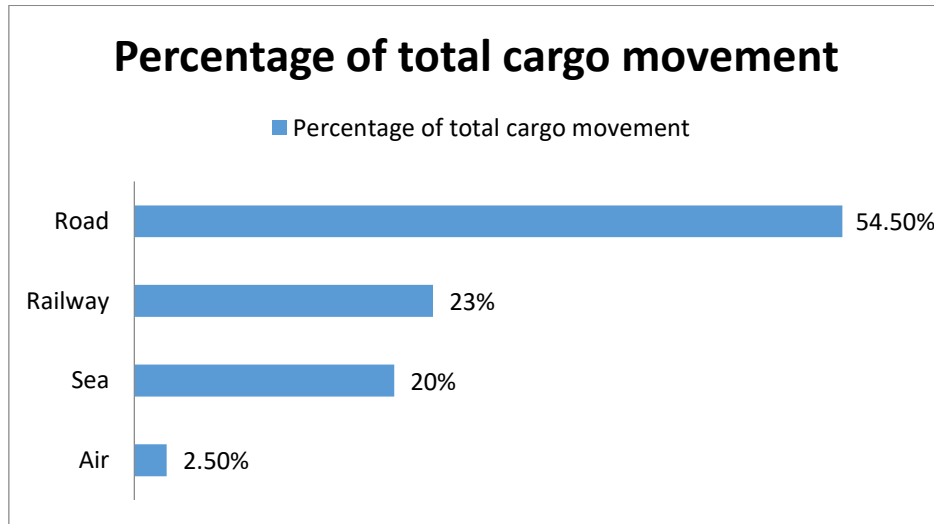
Interpretation: Above graph shows logistics cost contribution to sale of different industries. Maximum share in Cement industry (15%) and Steel industry (6%) sale as compared to the other industries like Food & Beverage, FMCG, Consumer Durable, Apparel and Auto.

1.5 Transportation Growth with different modes in India (in million tonnes):

Year	Road	Railway	Sea	Air
2002	1075	0.9	364	478
2006	1560	1.4	578	667

Interpretation: The above graph shows the increase in the modes of transportation annually and the maximum growth shown by the railway and sea as compared to other two modes of transportation.

1.6 Preferred mode of cargo movement:



Interpretation: Graph shows that the preferred mode of cargo movement in India is Road as compared to Rail, Air and Sea.

Conclusion

Indian Logistics industry is continuously improving its performance in the global logistics industry by development of customs, trade-related infrastructure, inland transit, logistics services, information systems, and port efficiency help to provide trade goods and services on time and at low cost. The World Bank's 2007th Global Logistics Report ranks India 39 amongst 150 countries in consideration of logistics performance during the year as well as its future potential.

Indian Logistics industry has low performance than developed countries like USA, UK and Singapore in global logistics sectors due performance gaps in logistics services and highest among the low-income group countries. India spend in Logistics activities is equal to 13 % of its GDP is higher than that of developed countries. The main reason is the relatively high level of inefficiency in the system with lower average trucking speeds, higher turnaround time at ports and high cost of administrative delays.

3PL service provider share is less in logistics sector in India as compare to developed countries and still at the amateur stage. Multinational companies in all industries have been predominant users of this service as one of prime for lesser share 3PL in India. Also in India organised sector is not well established as compared to developed nation.

In Indian logistics sector, major sector investors are Aviation, Metal & Mining and Consumer Durables. Also logistics industry in India improves the performance of other industries year to year and share of logistics cost in sale also increasing which is maximum in cement sector.

Suggestions & Recommendations

- Scheduling of service time schedules of arrival and departure of rails, ships and plane has great scope for improvement. They never run on time and require national discipline and proper guidelines.
- Legal system is not in touch with the modern outlook of life and business. The laws are outdated and require comprehensive amendments. The laws are remnants of British Rule and provisions contained in them do not meet the requirements of modern and complex international trade.
- It bids well observing development of national and selected state highways for faster movement of traffic. It is response to free trade regime being rapidly established under the compulsive auspicious of WTO in the interest of humanity. It is hoped that the implementation of the new infrastructure projects would be on schedule or at least without much time cost overrun.
- In this connection the UPA-1 government initiated the greatest ever emphasis on infrastructure development, general and specific. UPA-2 has given first priority and invited convergence of all ministries agenda to bear upon this infrastructure subject of international standard to help movement of foreign capital with promise of high profitability as the country cannot mobilize resources of the required dimension.
- The system and procedure obtaining in government department are inconsistent, time consuming and not at all business centric. The officers are trained as ever in manage development. There should be time-bound programme to simplify procedure and format.
- Logistics development is absolutely essential. In the absence of flow less and updated logistics, the MNCs shy away from doing business in India. There is need to increase FDI in logistics sphere and relaxing of norms linked to entry, taxation, import of material handling and movement of equipment etc.

Currently agriculture contributes nearly 25 % to Indian economy (GDP) and also requires development of warehouse sector. This service sector has good prospects of equipping top place in services of different types.

References

1. Vinod V. Sople (2007) "Logistics Management" Pearson Publication; pp 2 to 13.
2. Donald J. Bowersox & David J. Closs (2007) "Logistics Management" Tata McGraw-Hill Publication; pp 3 to 20
3. "Skill Gap in Indian Logistics Sector" (2007) published by CII and KPMG
4. "Trade Logistics In Global Economy" (2007) report by World Bank.
5. "Indian Logistics Industry" (2008) published by Cushman & Wakefield

Websites:

1. www.thehindu.com
2. www.financialexpress.com
3. www.worldbank.org.com
4. www.cushmanwakefield.com

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