CHAPTER – III

AN OVERVIEW OF CUSTOMS HOUSE AGENTS

3.1 ROLE OF CLEARING & FORWARDING AGENTS

Export-import procedures are very complex and time consuming. Therefore, every exporter should avail the services of clearing and forwarding agents who are expert and well versed with the custom and shipment procedures. For smooth and timely shipment of goods, the exporter must appoint a competent C&F agent who is able to, inter alia, provide the following services:

Essential Services

- Transportation of goods to docks and arrangements of warehousing at port
- Warehousing facilities before the goods are transported to docks
- Booking of shipping space or air freighting and advice on relative cost sending goods by sea and air
- Arrangements for loading of goods on board
- Equipped with information on shipping lines and freight to different destinations, and various charges payable by exporters
- Obtaining marine insurance policies
- Preparation and processing of shipping documents, bill of lading, dock receipt, export declarations, consular invoice, certificate of origin, etc.
- Forwarding of banking collection papers.

Desirable Services

- Storage facilities abroad, at least in major international markets, to warehouse the goods in case importer refuses to take delivery on any account.
- Can trace the goods, if shipment goes astray, through his international connections.
- Arrangement for assessing the damage to shipment enroute.

At Present, CHA render the following Services

- Traditional services like product classification, export and import compliance, trade documentation, landed cost calculations, record keeping on clients behalf, etc;
- Logistics services like warehouse management and distribution, arranging international transportation and managing reverse logistics;
- Consulting services that include trade consulting, free zone consulting, legal services, etc;
- Intermediary services like intermediary in financial products, intermediary in insurance products and services on behalf of other CHAs;
- Inspection services like product valuation services and physical inspection services; and
- Other services like trade automation services and managing supply chain security.
3.2 ROLE OF INTERMEDIARIES IN SHIPPING

Following are the role played by the intermediaries:

NVOCC (Non Vessel Owning Common Carriers)

The multi modal transportation has widened the scope of operations of intermediaries. After the promulgation of multimodal transport legislations, Indian companies including ship agents can operate as MTO’s after obtaining a license from the Directorate General of Shipping. These MTO’s need not be ship owners or operators i.e., vessel owning common carriers (VOCCs) many ship agents have obtained the requisite license and are thus operate as Non Vessel Owning Carriers.

Freight Brokers

Freight broker is an intermediary between the shipper and the shipping company. He makes known about the details of the cargo available to the shipping company. To the shipper he provides details of shipping space opportunities and assists in booking shipping space.

Freight Forwarders

Forwarder was to act as a buffer between the manufacturer and the sea carriers, to assist in the efficient flow of goods down the international transport chain. The forwarder help in booking space with the carrier, helping in movement of goods down the dock, ensuring safe loading, arranging custom clearance and producing the documentation to or from the sea carrier.
**Stevedores**

Stevedores are appointed by the shipping company to receive cargo and to load or to discharge from the ship. The term stevedoring means loading and unloading of cargo onto or from a ship with the help of cranes and derricks installed in the ship as well as on the wharf containers are handled by huge gantry cranes.

**Customs House Agent**

Customs House Agent (CHA) is a person who is licensed to act as an agent for transaction of any business relating to the entry or departure of conveyances or the import or export of goods at any Customs station.

**CHA’s and Exporter**

A domestic company can sell its products to foreign buyers directly, for that it is established direct contact with foreign customers and ships the goods as per the customer’s order’s and requirements. In this regard the exporting firm has the following responsibilities concerning packing, documentation, shipment and credit exchange. The CHA’s as per the instructions of the exporter can carry out these activities.

In the field of export, there are several constraints risks, which come along with its advantages for instance dispensability of the buyer, quality control, credit facilities, international standards of production, product facilities special needs of the countries, buyer nations etc, the transporters play a very vital role in clearing and delivering the goods at buyer country. The export process itself is time bound subject to regent’s schedules of production, transportation and delivering. Even the smallest mistake in the chain of distribution will result jolting the exporters business.
The multi various contacts of CHA’s

After getting the proper approval from the exporter / client, CHA’s begins to carry out his work. To remit a quality and efficient service to their clients CHA’s has to maintain a good and regular relationship with shipping companies, airlines, container operators, custom home, inland container depots (ICD), feeder vessel and mother vessel operators, imported and latest amendments on custom formalities, quota system all over the world.

When the CHA’s gets the order confirmation from the exporter, he contacts the shipping companies which have sailing for the part to which goods have to be sent and the look the required shipping space. The CHA’s is a specialist in this booking of space, which is with the available time period in the shortest mode; with minimum cost safely he books the space.

CHA’s and Custom

Shipping bill is to be filled by the CHA’s. The following details are required from the exporter by the CHA’s

✓ I.E and R.B.I code of Exporter
✓ Invoice
✓ Packing list
✓ Order confirmation
✓ G.R form in duplicate
✓ Draw back claim
✓ A.R.4 form
A.E.P.C Endorsement

The above mentioned documents are to accompany the shipping bill, when it is filed in the export department of the custom house in triplicate. The shipping bill, after registration is passed on to the approaching unit for scrutiny and assessment.

As for quote products are concern, like garments the scrutiny convey AEPC Endorsement, value declared in shipping bill as well as the GR form. After scrutiny the shipping bill is passed and the goods covered are allowed to be exported. After that customs house retains the original copy of the shipping bill and GR form and the duplicate copy of shipping bill is returned to the CHA’s.

Then the goods are presented for examination along with the shipping bills and other documents to the docks where the vessel which is to carry the goods. If the goods are found confirm to the details and specification declared in the shipping bill, the appraiser gives the “Let Export Order”, on the basis of which the goods are loaded under custom preventive supervision. After loading, the shipping company issues the Mate’s Receipt” in the spot and later the negotiable document known as “Bill of Lading”.

CHA’s and Containerization

Containerization is a method of distributing merchandise in a unitized from there by permitted an inter model transport system to be evolved providing possible combination of rail, roads, canal and main time transport.

More than 50 per cent of the general cargo containers are transported by sea. Containerization has its advantages such as security against pilferage and customization, speeding up of transport, quick clearance in the docks and shorter stage of vessel at the parts with resultants solving and so on.
The container have a capacity upon 30tones and most have built to ISO standard with an 8ft module (8ft wide * 8ft height) and a length of 10ft, 20ft, 30ft or 40ft, also there are open top, refrigerated insulated containers.

Government of India has appointed the ICD’s for unloading of export goods. In Tirupur there is an ICD in Avinashi road, the purpose of this is to make available the export / import facilities as near industrial establishment as possible with a view to cut down the cost of transport from the gateway ports and also quick movement of goods.

The import general manifest filled by the vessel exporter will indicate separately the details of container meant of ICD’s. On the basis the agents make free shipments application an on obtaining the permission they are sent to ICD where a operate manifest is to be filled. At the ICD the vessel operator fills the copy of the sub-manifest against which bill of entry for the import of goods is filled by CHA’s on behalf of the importer and the goods cleared.

As far exports, on behalf of exporters, CHA’s fills the shipping bill at the ICD with an extra copy. The goods are examined against the shipping bills, passed and stuffed in containers. The original copy of the shipping bill is retained in the ICD and the duplicates with the transference copy are forwarded to the seaport. These documents are required to the ICD after shipment and with endorsement of the export.

3.3 MULTI MODAL TRANSPORT OPERATORS (MTOs) AS CHAs

MTOs are appointed under Multimodal Goods Transportation Act, 1993 by the Ministry of Surface Transport. Their work involves carriage of goods by more than one mode of transport between India and any place abroad. They handle export cargo stuffing
and destuffing. This does not automatically confer any right on them to obtain appointment as steamer agents or CHAs unless they are otherwise qualified for such appointment. Their role is different from that of a CHA or a steamer agent.

**Temporary Licence**

After scrutinizing and accepting the application, a temporary licence for a period of one year is granted under Regulation 8 under Form B.

Before receiving the temporary or regular licence, the applicant has to go through another important step. He is required to execute a bond and give a surety or bank guarantee in Forms D and E. For major ports, the surety amount is Rs.25000/-. For other ports, it is Rs.10000/-. Surety may also be given in the form of National Savings Certificates of postal security. In the last two forms of surety, these should be pledged in the name of the Commissioner. It is important to note that since a regular licence holder is allowed to work in more than one Customs station, separate bond and surety have to be given in respect of each Customs station.

**Regular Licence**

An application for a regular licence can be made by a person who has passed the examinations. Applications for regular licence is made in Form C. Form A and Form C are almost identical except that while the first form is issued under Regulation 5, the latter form is issued under Regulation 10. Licence fee is Rs.5000/-. Regular licence is granted in Form D. The applicant for regular licence has to satisfy the following conditions:
1. The applicant must satisfy the norms regarding quantity or value of cargo cleared from the Customs House. This is determined by the Commissioner.

2. The conduct of the applicant during the period of holding temporary licence must be business-like. There should be no delay in clearance of goods or in payment of duty on account of conduct of the applicant. There should be no complaint of misconduct of the applicant. There also should not be any complaint of non-compliance of provision of Regulation 14, which casts some important obligations on the CHAs.

**Disqualifications for regular licence**

Regulation 10(1) specifies that only a person who qualifies in the examination can apply for a regular licence. Nevertheless, sub-regulation (3) provides that the Commissioner may reject the application of a person who fails to qualify in the examination. It further provides that if performance criteria is not satisfied (regarding quantity and value of clearances or conduct), the application may be rejected. A representation can be made against an order of rejection within 30 days to the Chief Commissioner. The Chief Commissioner is also empowered to review the procedure of grant of regular licence within one year.

Regular licence granted to a person cannot be transferred [Regulation 13].

**Validity of licence**

Under Regulation 12 (1), the validity of licence is for a period of five years.
Records to be maintained by the CHA

CHAs have to maintain detailed, itemized and up to date books of accounts. The accounts should reflect all financial transactions entered into as a CHA. A copy of all documents such as shipping bill, bill of entry, transshipment application etc. filed must be maintained by CHA for at least five years. These records should be made available for inspection by the officers of the department.

3.4 DUTIES AND OBLIGATIONS OF A CHA

Clearances against authorization

A CHA is required to clear goods for import or export only against specific authorization from the principal and must produce it whenever required by the Deputy / Assistant Commissioner.

Method of Transacting Business

The CHA has to either personally clear the goods or clear it through an employee who is approved by the Deputy / Assistant Commissioner who is designated for this purpose by the Commissioner. All the documents prepared by him should prominently bear the CHAs name at the top of the document. The CHA should not attempt to influence the conduct of Customs officers in matters pending before him or his subordinates. There should be no threats, false accusations or duress against such officers. No promise of advantage or benefit or gift should be made or bestowed on such officers. Duty of CHA should be discharged with utmost speed and avoid delays. He cannot charge for his services in excess of rates approved by the Commissioner.
**Personal interests of CHA**

If the CHA is a former officer of the department, he cannot represent any matter before a Customs officer, which he had personally considered as such officer. He cannot also use facts which came to his knowledge when he was an officer.

**Duty to tender correct advice**

The CHA is duty-bound to advise the client to comply with the provisions of the Act and the regulations. If there is non-compliance of provisions by any client, he is required to bring it to the knowledge of the Deputy/Assistant Commissioner. This regulation requires the CHAs to act as source of information to the department.

The CHA has to exercise diligence and ensure that he passes on correct information sto the client, ensure that all information relevant for clearance or cargo or baggage is passed on to the client if it is relevant for clearance of cargo or baggage.

**Accounting for money received**

The CHA has a duty to promptly pay to the Government all money received from the client for payment of duties and taxes. Similarly, any money received by him from the client or from the Government should be promptly and fully accounted to the client.

**Liability as to information**

CHA should not attempt to gather information from Government records if it is not granted by the proper officer. Access to record maintained by him should not be denied, removed or concealed when sought by the Commissioner. There is a duty to maintain records and accounts as directed by the Deputy/Assistant Commissioner and
produce them before that officer for inspection. All documents have to be prepared strictly in accordance with the rules and orders.

If the licence granted to a CHA is lost, it should be properly reported to the Commissioner. If there is failure in complying with obligations under Regulation 14, the Commissioner may prohibit a person from acting as a CHA within his jurisdiction.

3.5 THE OBLIGATIONS OF CUSTOMS HOUSE AGENTS

a. Obtain an authorization from each of the companies, firms or individuals by whom he is for the time being employed as Customs House Agent and produce such authorization whenever required by an Assistant Commissioner of Customs.

b. Transact business in the customs station either personally or through an employee duly appointed by the Assistant Commissioner of Customs, designated by the Commissioner.

c. Not represent a client before an officer of Customs in any matter to which he, as officer of the Department of Customs gave personal consideration, or as to the facts of which he gained knowledge, while in government service.

d. Advise his client to comply with the provisions of the Act and in case of non-compliance, shall bring the matter to the notice of the Assistant Commissioner of Customs.

e. Exercise due diligence, to ascertain the correctness of any information which he imparts to a client with reference to any work related to clearance of cargo or baggage.
f. Not withhold information relating to clearance of cargo or baggage issued by the Commissioner of Customs from a client who is entitled to such information.

g. Promptly pay over to the Government, when due, sums received for payment of any duty, tax or other debt or obligations owing to the government and promptly account to his client for funds received from the Government or received from him in excess of Government or other charges payable in respect of the clearance of cargo or baggage on behalf of the client.

h. Not procure or attempt to procure directly or indirectly, information from the Government records or other Government sources of any kind to which access is not granted by a proper officer.

i. Not attempt to influence the conduct of any official of the Customs Station in any matter pending before such official or his subordinates by the use of threat, false accusation, duress or the offer of any special inducement or promise of advantage or by the bestowing of any gift or favour or other of value,

j. Not refuse access to, conceal, remove or destroy the whole or any part of any book, paper of other record, relating to his transactions as a Customs House Agent, that is sought or may be sought by the Commissioner.

k. Maintain records and accounts in such form and manner as may be directed from time to time by an Assistant Commissioner of Customs and submit them for inspection to the said Assistant Commissioner of Customs or an officer authorized by him whenever required.

l. Ensure that all documents prepared or presented by him or on his behalf are strictly in accordance with orders relating thereto.
m. Ensure that all documents such as bills of entry and shipping bills delivered in the Customs station by him show the name of the importer or exporter, as the case maybe, and the name of the Customs House Agent, prominently at the top of such documents.

n. In the event of the licence granted to him being lost, immediately report the fact to the Commissioner.

o. Ensure that he discharges his duties as Customs House Agent with utmost speed and efficiency and without avoidable delay and

p. Not charge for his services as Custom House Agent in excess of the rates approved by the Commissioner from time to time under Regulation 25.

In addition to the above a licensee is required to maintain accounts under the Customs House Agents Regulations and such accounts shall be maintained:

a. In an orderly and itemized manner and kept up to date

b. Reflect all financial transactions as Customs House Agent

c. He shall keep and maintain on file a copy of each of the documents such as bills of entry, shipping bills, transshipment applications etc. and copies of all his correspondence and other papers relating to his business as Customs House Agent.

d. All records and accounts required to be maintained under Customs House Agents regulations shall be preserved for at least five years and shall be made available at any time for inspection by the officers authorized to inspect such records and accounts.
3.6 CUSTOMS HOUSE AGENTS AND INFORMATION TECHNOLOGY

NIC (National Informatic Center) developed RES for Indian Customs, a basic software for creating and filing Shipping bills (Customs Document) on Indian Customs Website-ICEGATE. The software is free to download from Indian Customs website but to use this software, one need to register at website as a registered user with ICEGATE. This software is Internet Browser dependent. One needs to install and configure Netscape Navigator and Netscape Communicator first.

There are some private sector companies, which also provide software packages for online preparing Shipping Bill and Bill of Entry and filing it to Indian Customs gateway, ICEGATE.

ICAFFE (Customs and Freight Forwarding Expert) one of the available options, shares a good market ratio of Customs House Agents and Freight Forwarding Companies. It is a complete and integrated solution to manage all activities associated with Customs Clearance and Freight Forwarding activity in India with online connectivity of various offices. The software has been developed, with the feedback from persons having years of experience in Cargo trade and an aptitude for processing of data and managing activities electronically in order to achieve smooth functioning of an agency broadly covering all the important functional areas. The software is also available in SAAS model. A user just needs to pay for the usage.

These Software packages are very much helpful in following manner:

- Minimize the data entry operations and to reduce human errors, to being almost non-existent, which occur during the entry of information in the Customs Annexure.
Increases efficiency.

- Customized MIS Reports for Top and Middle Management.
- Keep track of Shipping Bill and Bill of Entry filed with ICEGATE.
- Integrated Customer Relationship Management.
- Multi User, Multi Branch working.

**Essential Features of CHA Licensing Regulations 1984**

a) No ceiling for a number of CHA’s who can be appointed in custom house

b) Issue regular license is preceded by a period of grant of temporary license

c) Prescribing criteria of experience and financial soundness for appointment

d) Grant for regular license is subject to passing examinations, satisfying minimum volume of business and complying with obligations under regulation no:14

e) Change in constitution of partnership or firm not to affect the operation of CHA

f) Commissioners have been empowered to prescribe fees to prevent excess billing by the CHA’s.

**3.7 FUNCTIONS OF CHAs’**

Central Board of Excise and Customs (CBEC or the Board) is a part of the Department of Revenue under the Ministry of Finance, Government of India. It deals with the tasks of formulation of policy concerning levy and collection of Customs and Central Excise duties, prevention of smuggling and administration of matters relating to Customs, Central Excise and Narcotics to the extent under CBEC’s purview. The Board is the administrative authority for its subordinate organizations, including Custom
Houses, Central Excise & Customs Commissionerates and the Central Revenues Control Laboratory.

The following are the functions rendered by the Customs House Agents’.

**Clearances only against Authorization**

A CHA is required to clear goods for import or export only against specific authorization from the principal and must produce it whenever required by the Deputy/Assistant Commissioner.

**Methods of transacting business**

The CHA has to either personally clear the goods or clear it through an employee who is approved by the Deputy/Assistant Commissioner who is designated for this purpose by commissioner.

All the documents prepared by him should prominently bear the CHA’s name at the top of the document. The CHA should not attempt to influence the conduct of customs officers in matters pending before him or his subordinates. There should be no threats, false accusations or dureness against such officers. No promise of advantage or benefit or gift should be made or bestowed on such officers duty of CHA should be discharged with almost speed and avoid delays. He cannot change for his service in excess of rates approved by the commissioner.

**Personal interest of CHA**

If the CHA is a former officer of the department, he cannot represent any matter before a customs officer, which he had personally considered as such officer. He cannot also use facts which came to his knowledge when he was an officer.
**Duty to tender correct advice**

The CHA is duty-bound to advice the client to comply with the provisions of the act and the regulations. If there is non-compliance, of provision by any client, he is required to bring it to the knowledge of the Deputy/Assistant Commissioner. This regulations requires the CHA’s to act as source of information to the department.

The CHA has to exercise diligence and ensure that he passes on correct information to the client, ensure that all information relevant for clearance or cargo or baggage is passed on to the client if it is relevant for clearance of cargo or baggage.

**Accounting for money received**

The CHA has a duty to promptly pay to the government all money received from client for payment of duties and taxes. Similarly any money received by him from the client or from the government should be promptly and fully allocated to the client.

**Liability as to information**

CHA should not attempt to gather information from government records if it is not granted by the proper officer. Access to record maintained by him should not be denied, nor removed or concealed when sought by the commissioner. There is a duty to maintain records and accounts as directed by the Deputy/Assistant Commissioner and produce them before that officer for inspection. All documents have to be prepared strictly in accordance with the rules and orders.

If the license granted to CHA is lost, it should be promptly reported to the commissioner. If there is a failure in complying with obligations under regulation 14, the commissioner may prohibit a person from acting as a CHA within his jurisdiction.
Change in constitutions of firms, companies, concerns

Any change in the partners or directors should be informed to the commissioner (regulation 15). If there is any change in the constitution of the firm or company, an application for grant of temporary and regular license should be made within 30 days of such change. If there is nothing adverse against the firm or company earlier. In the meantime, the concern may be allowed to continue its business as a CHA if an application to that effect is made to the commissioner.

If the concern is not firm or company, in case of any change in the constitution of the concern, permission will be granted to continue the business as CHA by the commissioner, if the change occurs due to death of person who has licensed to act as a CHA, his legal heir who was assisting him in his work as CHA under regulation 20 may be granted license if there is nothing adverse against that person and he also passes the examination.

If there is any change of qualified person acting on behalf of the firm or company, such information should be immediately given to the Deputy/Assistant Commissioner. Figure 3.1 illustrates the complex linkages between the various components of the international trade logistics chain, and also shows the fragmented nature of the industry.
Liabilities on a CHA

Section 146 of the Customs Act is the enabling provision, which allows agents of importers and exporters to act on behalf of importers and exporters. This is necessitated by the highly involved and technical nature of the work to be done in connection with clearance of imports into and exports out of country. The importers and exporters themselves may have neither time nor the requisite knowledge on their own. Therefore,
agents are allowed to act on their behalf. The work of the agents is governed by the
Customs House Agents Licensing Regulations, 1984 framed under this Section read with
Section 1957.

There are certain liabilities fastened on the agent of the importer or exporter under
Section 147. Some of these liabilities are in the nature of extension of and exceptions to
the liability of an agent under the Indian Contracts Act, 1872.

Sub – section (1) empowers the agent to do everything that an importer or an
exporter can do. Filing a bill of entry, shipping bill, submitting supporting documents
therewith helping in examination of goods, payment of duty on behalf of the principal,
warehousing of goods, removal of goods from warehouse and the like.

The common law principle that an agent’s actions bind the principal is given the
status of a legal presumption. The consequences of all actions of a CHA will bind the
importers and exporters on whose behalf they act. An agent who is authorized to act on
behalf of the importer or exporter is treated as the owner of imported or exported goods.
In respect of that particular transaction, a notice could be given to that agent. This does
not normally extend to recovery of duty not paid or short paid by the owner, importer or
exporter of goods. As an exception, this is permissible when the Deputy / Assistant
Commissioner is of the opinion that such recovery from the owner, importer or exporter
of goods is not possible.

The efficient flow of international trade relies on a range of skilled service
providers working together effectively, including shipping lines, port terminal operators,
customs officials, operators of off-dock container yards, land transport agents, and
clearing and forwarding (C&F) agents. Clearing and forwarding agents act as
intermediaries in transactions between shippers and suppliers of logistics services, and are required by customs to represent the owner in the procedures for clearing cargo over international borders. The common practice is for C&F agents to perform not only customs clearance but also conduct freight forwarding work, and where appropriate, provide specialized logistics services. However, the license required for C&F agents, which is required for an agent to act as a customs broker, is usually granted to a firm, rather than to an individual. Currently, a logistics firm must employ at least one person who is licensed as a C&F agent in order to perform customs brokerage services. In the past, the function of the license-holder would sometimes be to provide access to individual customs officers and to facilitate informal payments. CHAs offer logistics services which can include warehousing, consolidation, packaging, goods inspection, and import/export advisory services. They can also offer multimodal services in which they consolidate loans and act as the shipper of record with a house bill of lading, in the process forming partnerships with overseas service providers.

**Contributions of the Customs House Agents’ (Chas) to the Nation**

Shipping has played a huge role in the Indian economy. Geographically, almost half of India's border is covered with sea. Talking in terms of international trade, the amount of trade done by land and air is very limited. Ninety percent of India's in terms of volume and seventy seven percent in terms of value are carried by sea. This shows the amount of India's dependence on shipping. The initial scenario where India's balance of trade mostly showed higher imports as compared to the exports is now changing. India's exports as compared to imports have increased to one hundred and eight six percent in
2012-13 as compared to seventy five percent in 1990-91. In the year 2012 according to the reports of the WTO, India achieved sixty percent growth rate in exports of merchandise goods which made it second highest in the world.

Over 90 per cent of world trade is carried by the international shipping industry. Without shipping the import and export of goods on the scale necessary for the modern world would not be possible. There are around 50,000 merchant ships trading internationally, transporting every kind of cargo. The world fleet is registered in over 150 nations, and manned by over a million seafarers of virtually every nationality. Ships are technically sophisticated, high value assets (larger hi-tech vessels can cost over US$150 million to build), and the operation of merchant ships generates an estimated annual income of over US$380 billion in freight rates, representing about 5% of the total global economy.

For a country's economy, the transportation sector is often viewed as an important barometer of growth. As more goods are consumed within a country, the transportation sector must grow accordingly in order to accommodate the transport of additional goods. And as the wheels of commerce turn with ever greater speed, so does the volume of passenger traffic. As a corollary, the location of manufacturing facilities and distribution centres can have a major impact on the growth of a country's transportation sector and transportation infrastructure. The relative location of these manufacturing facilities and distribution centres can dictate whether the country becomes a hub within a logistics network or a spoke in the wheel, serving in effect as a transit corridor. Such matters are of particular importance to emerging economies where transport and logistics infrastructure is in process of rapid development.
If we look at the main drivers of Global Trade, they are Profitability i.e. price difference amongst various markets, Risk Spread which reduces the dependencies on one market, Uneven distribution of natural resources, Difference in level of technologies wherein some countries have higher level of technology and some have low, Difference in cost of production because at various places various industrial inputs are comparatively cheaper e.g. labour, electricity, technology, etc.

If we closely look at exports, a country exports a particular thing which it may have naturally, for e.g. oil, or which it produces a lot for e.g. wheat, etc. But the more a country exports, the more foreign income it gains especially in the case of developing countries which increases its foreign reserves and ultimately resulting in the country's more buying power and thus helping it to develop. Thus exports prove to be a boon for a country.

3.8 NATIONAL LOGISTICS

CHAs offer efficient Airport-To-Airport services to all commercial airports in India and Door-To-Door services within its office network and associates. From perishables to time sensitive cargo like Just In Time (JIT) for the automobile industry, lifesaving drugs to high value bullion and foreign currency, all commodities are handled with equal ease. The Logistics Services are based on well-structured and documented systems that facilitate quality service by the efficient staff and network associates.

Road and Rail Transport

Road and rail transportation are arranged of shipments thus completing the missing links in the multi-modal transportation.
Warehousing

Warehousing is an integral link in the logistics chain. Warehouse spaces are available all over India and its hinterland, apart from transit warehouses in various locations in India. All warehouses are equipped with the latest communication and automation facilities.

Project / Heavy Lift Forwarding

Heavy Lift Forwarding is a specialized field of freight and shipping business. It requires immense expertise, experience and knowledge. The Customs House Agents’ are fully geared to handle all types of heavy lift and over-dimensional cargo from site to world-wide destinations. Irrespective of port of origin and final destination, their mission is to find an efficient solution. Their global network of partners shares the same passion and expertise to provide the high standard of service and competitiveness. Thus they can undertake projects involving relocation of entire plant along with machinery and equipment at the supplier’s site and forwarding the same to India as break-bulk cargo. They have the capability to deliver any kind of machinery and heavy lift equipment using road, rail, air or sea transportation. With their vast experience in global logistics, they can charter vessels and freighter aircrafts for project cargo and also provide specialized shipping solutions to expedite international movements of Heavy Lift / Over-dimensional and Project cargo. We offer tailor made solutions on heavy lift vessels, freighter aircrafts, breakbulk shipments, gearless ships and even semi-submersible vessels from carefully selected ship owners.
Global Network

Navigating the ever changing frontiers of global or local commerce requires a robust network of Global and National alliances. The intermediaries have been building business relationships, both national and international, for over decades.

Other than being an IATA agent, the service providers are members of FIATA (International Federation of Freight Forwarders Associations), IMC (Indian Merchant Chamber) and other prominent Chambers of Commerce & Industry in India and local Custom House Agents Association in India.

Automotive Logistics Solutions

The intermediaries take efforts to understand their customers’ requirements and to offer them customized solutions. They provide Export, Import and National logistics services which are specially geared to meet the needs of the automotive industry. Their Global & National network ensures that our customers get excellent coverage of their entire supply chain.

With the flexibility to adapt their services and resources to the customers’ unique needs, the intermediaries give customers a competitive edge over competitors. Due to their extensive experience and expertise, they can provide time defined shipping services which are cost effective.

To offer customized solutions, they help their customers to race ahead of competition, Provide Export, Import and National Logistics services by air, ocean, rail and Road, Ensure flexible and rapid implementation of specialized automotive services,
Ensure customers get excellent coverage of the entire supply chain and provide Third Country exports and imports.

**Custom Brokerage (CHA)**

They offer efficient and expeditious custom clearance and delivery for both Import and Export shipments. The service providers support the initiatives of Indian Customs on its automation program. All the offices transmit documents to the Customs computer server through Electronic Data Interchange (EDI).

**Marine Insurance**

The service providers offer Marine Insurance to its customers for both Export and Import through any of the Insurance Companies operating from India. Through such value added services, they offer all solutions under one roof to their customers, thus completing the missing links in the International logistics chain.

Besides regular customers, their services are engaged by foreign consulates, trade missions, International Exhibitors and Event organizers for import and re-export of materials. They also arrange for bonding, storage and ex-bonding of cargo.

**National Network**

India is one of the fastest growing economies of the world. This growth has resulted in establishment of various industrial clusters at various locations in the interiors of the country actively supported by Government policies. This also led to setting up of Special Export Zones and ICDs. To offer international freight forwarding and logistics services, the service providers has established offices at various locations in the country.
The intermediaries have also established working alliances with like-minded service providers to offer international logistics solutions.

**EXIM Consultancy Services**

The Customs House Agents’ offers specialized EXIM (Export and Import) consultancy services like pre and post shipment documentation, including banking formalities, liaisoning with government agencies for various export benefits and cargo insurance, thus offering a variety of services under one roof.

**3.9 TRENDS IN EXPORTS, IMPORTS AND BALANCE OF PAYMENTS OF INDIA**

Both the exports and imports have shown a significant positive increase during the period under 2010-11. The growth in exports which stood at $1540 million in the year 1951-52 has increased to reach a level of $251105 million in the year 2010-11. In case of imports, the value of imports which stood at $1540 million increased to reach $369769 million during the 2010-11. However, in terms of average, the average exports than imports calculated for the the volume of imports ($22845.95 million) is far higher volume of exports ($17337.95). The instability index workout also indicate that the volatility in imports (110.77 per cent). A bifurcation of the periods into pre liberalization and post liberalization periods indicates that the exports during the pre liberalization have grown. The average level of imports ($7131.35 million) during the pre-liberalization period stood is also almost twice as the level of exports ($4973.53 million)\(^1\).

\(^1\)Yojana, February 2012.
During the Post liberalization period, a higher growth in imports (14.01%) could be observed when compared to the exports growth (12.13%). The instability is also found to be more during the Pre-liberalization period in case of imports with 41.99 per cent when compared to exports with 30.50 per cent. As found in the case of Pre-liberalization period, the average level of imports ($62132.61 million) was found higher than exports ($48248.86 million).

The comparison of exports and imports is that the volume and rate of growth of exports and imports are higher during the post liberalization period. Similarly, the volume and growth in imports are higher than the exports in pre as well as Post liberalization period. This has affected the net inflow considerably to have an adverse balance of payments with an exception found in the years 1972-73 and 1976-77 (a positive balance of payment of $137 million and $76 million respectively has been created.)

Thus, this analysis indicates that the Post liberalization period has experienced a higher more stable export and import growth when compared to the Pre-liberalization period.

The probable explanations that can be given for higher imports experienced during the pre and post liberalization periods is that during the Pre-liberalization period there was a continuous increase in the price of petroleum which affected worst the poor oil consuming countries among which India is one. Its direct impact was a massive escalation in the import bill of oil which in turn imposed a severe pressure on the balance of payments. Apart from this, the import bill on fertilizer and oil based chemicals also role by substantial amount. On the export side, apart from the escalation in import bill, higher increase in the whole sale price and consumer price index reduced the relative
profitability of exports visa a visa the sales in the domestic market which in turn reduced the competitiveness of the Indian industries to export. The pegged exchange rate followed during the Pre liberalization period has resulted in the value of Indian currency vis a vis most currencies.

During the Post liberalization period, the Indian economy has experienced transformation from the regime of regulated economic development to competitive regime since the liberalization of 1991. The main thrust of these liberalizations has been on industrial delicensing and openness, that is, import liberalization and removing barriers to exports for accelerating growth.

The output growth in manufacturing industry has been mainly driven by domestic demand expansion followed by the contribution of export expansion during. But after liberalization the contribution of both domestic demand expansion and export expansion has increased. Further, contribution of both import substitution and intermediate demand expansion to output growth has become negative.

The growth in exports was marginally higher than the imports, through the average level of exports stood for lower than the imports. The volatility in imports is also found to be slightly higher than the exports. During the pre-liberalization period, the growth in imports stood slightly higher than the growth in exports with a higher volatility experienced again in the case of imports. However, the average level of exports stood gain lower than the imports, and during the post liberalization period the growth in exports and imports stood almost on par with a higher volatility experienced in case of imports than exports and the average level of exports also stood lower than the imports leading to an adverse balance of payments.
Export, Import Intensity and Trade Openness

The intensity of exports and imports is calculated as a ratio of the country’s GDP. The intensity of exports and imports indicates the country’s ability to export and import. An increasing intensity indicates the country’s increasing ability to increase to level of exports and imports and vice versa.

The intensity of exports which stood at 6.91 per cent in 1951-52 experienced a wide fluctuation to reach eventually to 11.59 per cent in 2010-11, indicating a moderate improvement in the intensity of exports.

Similarly, the import intensity which constituted 8.88 per cent in 1951-52 has escalated to reach 14.91 per cent in 2010-11. An analysis on the trade openness provides the inference that during the past 56 year period it has increased just by around 10.71 per cent from 15.79 per cent in 1951-52 to 26.50 per cent in 2010-11.

A bifurcation of this time series data into pre-liberalization and post liberalization period indicates that both the export intensity and import intensity have experienced a net decline during the pre-liberalization period from 6.91 per cent to 5.72 per cent and from 8.88 per cent to 7.40 per cent respectively.

While during the post liberalization period, they have increased slightly from 6.74 per cent to from 7.32 per cent to 14.91 per cent respectively, indicating a slightly higher intensity in imports than exports. This is an indicative of higher response to the liberalization and the reform process. The intensity of imports and the increase in imports stood higher than their respective exports ratio.
Business Opportunities to Indian Market

India’s strategic location, between Middle and South East Asia, presents itself as a country with immense business opportunities. Its neighbors include Pakistan, China, Nepal, Sri Lanka and Bangladesh. The country’s labor advantage adds to this. India has vast reserves of technical and scientific manpower, backed by engineering and management institutes of excellence. India’s skilled labor is in great demand in the world’s premier organizations. Both skilled and unskilled labor is easy to find and wage rate is highly competitive. The professional work force is conversant in English and the main transactions and procedures are done in the same language.

The government also provides a number of incentives and facilities for exporters. India’s rich resource and production base provides significant opportunities for investors to establish export units. The engineering industry is the largest segment of the Indian industrial sector. It accounts for 3 percent of India’s GDP with a 30.5 percent weight in the index of industrial production (IIP), 29.9 percent share of total investment, and 62.8 percent in foreign collaborations. Current low share of world engineering exports and the significant scope for improvement in competitiveness show that there is potential for achieving higher growth in this major sector of world trade.

Challenges to Indian Market

India’s foreign trade is in tough times, indicates the economic survey that has cited the global slowdown in 2008 as a crucial hindrance for exports and imports in the coming months. Referring to the downward revision of the US growth to just about 1.5 percent and that of the advanced economies to 1.8 percent, the survey says “this
slowdown will impact the demand for India’s exports and the value of imports”. We need to make our presence in African countries and other emerging market economies where there are opportunities for real growth. The dawn of the 21st century was heralded with rapid globalization and unprecedented global integration. Integral to this trade expansion has been the rise and a rapid expansion in trade among developing countries. Among developing countries, Indian has today emerged as a vibrant economy fuelled by robust growth in the international trade and investments.

3.10 INDIA’S MARITIME TRADE

Over the last ten years, since the onset of economic liberalization, there has been a significant spurt in handling of value-added goods mainly in the form of containerized cargo movement, in several Indian ports. This has given rise to many new dimensions in the development of the port sector in the country. Containerization of cargo has brought about a significant redefinition of port services and demands for highly sophisticated handling equipment and logistics service efficiencies. The shift away from commodity nature of India’s export trade is particularly, noticed due to marked shift towards increasing value added exports and drive for global competitiveness. The shift in the pattern of trading is however, yet to find adequate support in terms of a maritime infrastructure.

Interestingly, in the past ten years while overall cargo growth (reckoned at about 9-10 per cent) has been quite impressive, new demands have been generated on the port sector for adding on more cargo handling capacity and creation of new-dedicated berths and cargo terminals. Consequently, the port sector is agog with considerable business
optimism with respect to generation of increasing cargo traffic volumes and of trade in
general in the coming years. Considerable future business potential is also seen with
respect to generating enhanced earnings from port sector operations through improving
efficiencies and other value-added activities contributing also thereby to making
country’s external trade competitive in the global market.

Though India’s export trade growth is 11.49 per cent and import trade growth is
15.58 per cent (according to a press release by Ministry of Commerce and Industry dated
12th November 2012), in value terms is still less than one per cent of the total world trade,
the physical cargo volumes handled at the seaports have however been quite sizeable.

**Ports and Globalisation**

Globalisation of the world economy has brought about tremendous increase in
trading of merchandise goods across the world, leading to what has been called the
borderless society coupled with pursuit of competitive manufacturing practices, which is
leading to worldwide relocation of industrial manufacturing. The production centres of
nearly all industries have been rapidly shifting their bases beyond their conventional
national boundaries. This has brought about important shifts in the global trade flows and
led to several international ports getting interlocked in a common market for oceanic
cargoes. As globalisation further unfolds its impact, the world trade and in particular, sea
borne trade is certain not only to continue to grow but bring in several new players, who
will most certainly rewrite the rules of the game in maritime trade. Against this backdrop,
ports in many countries, including in India are increasingly confronted with a pressing
need for expanding their facilities and cargo handling productivity. Continued growth of
sea borne trade, particularly rapid growth of container traffic, is forcing port authorities to develop their facilities and capacities without further delay. Secondly, the need for port expansion and modernization is driven by increasing deployment of large oil tankers (ULCCs & VLCCs) and other mega-container ships (up to a capacity of 8,000 and more), which require deep draft facilities and sophisticated cargo equipment for handling containers. The port authorities are also under pressure to improve productivity of port services, and reduce handling charges, from vessel operators and shippers, who are themselves operating in a highly competitive market.

3.11 MAJOR AND MINOR PORTS IN INDIA

There are 13 major ports in India. They are Kandla (Gujarat), Mumbai (Maharashtra), Jawaharlal Nehru (Maharashtra), Marmugao (Goa), New Mangalore (Karnataka), Cochin (Kerala), Tuticorin (Tamil Nadu), Chennai (Tamil Nadu), Ennore (Tamil Nadu), Visakhapatnam (Andhra Pradesh), Paradip (Orissa), Kolkata, Haldia (West Bengal) and Port Blair (Andaman & Nicobar).

There are 187 minor ports in India. They are as follows:
In the last 50 years, ports have evolved from being cargo loading/unloading locations to being crucial hubs in value-driven logistic-chain systems. They now are international logistic platforms acting as interfaces between production and consumption centers. The port and shipping sectors deal with the volatile world market and are thus much more affected by political factors, international trade, and overall world economic conditions than other sectors.

**Types of Ports**

The terms "port" and "seaport" are used for different types of port facilities that handle ocean-going vessels, and river port is used for river traffic, such as barges and other shallow-draft vessels. Some ports on a lake, river, or canal have access to a sea or

### TABLE: 3.1

**MINOR PORTS IN INDIA**

<table>
<thead>
<tr>
<th>States/Union Territories</th>
<th>No of Minor Ports</th>
<th>States/Union Territories</th>
<th>No of Minor Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andaman &amp; Nicobar Islands</td>
<td>23</td>
<td>Lakshadweep Islands</td>
<td>10</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>12</td>
<td>Maharashtra</td>
<td>53</td>
</tr>
<tr>
<td>Diu &amp; Daman</td>
<td>2</td>
<td>Orissa</td>
<td>2</td>
</tr>
<tr>
<td>Goa</td>
<td>5</td>
<td>Pondicherry</td>
<td>1</td>
</tr>
<tr>
<td>Gujarat</td>
<td>40</td>
<td>Tamil Nadu</td>
<td>15</td>
</tr>
<tr>
<td>Karnataka</td>
<td>10</td>
<td>West Bengal</td>
<td>1</td>
</tr>
<tr>
<td>Kerala</td>
<td>13</td>
<td>Total</td>
<td>187</td>
</tr>
</tbody>
</table>

Source: www.marinebuzz.com/minorports
ocean, and are sometimes called "inland ports". A fishing port is a port or harbour for landing and distributing fish. A fishing port is the only port that depends on an ocean product, and depletion of fish may cause a fishing port to be uneconomical. A "dry port" is a term sometimes used to describe a yard used to place containers or conventional bulk cargo, usually connected to a seaport by rail or road. A warm water port is one where the water does not freeze in winter time. Because they are available year-round, warm water ports can be of great geopolitical or economic interest. A seaport is further categorized as a "cruise port" or a "cargo port". Additionally, "cruise ports" are also known as a "home port" or a "port of call". The "cargo port" is also further categorized into a "bulk" or "break bulk port" or as a "container port". A cruise home port is the port where cruise-ship passengers board (or embark) to start their cruise and disembark the cruise ship at the end of their cruise. It is also a port where the cruise ship's supplies are loaded for the cruise, which includes everything from fresh water and fuel to fruits, vegetable, champagne, and any other supplies needed for the cruise. A port of call is an intermediate stop for a ship on its sailing itinerary, which may include up to half a dozen ports. At these ports, a cargo ship may take on supplies or fuel, as well as unloading and loading cargo. But for a cruise ship, it is their premier stop where the cruise lines take on passengers to enjoy their vacation.²

TABLE: 3.2
FORECAST OF CONTAINER PORT DEMAND BY REGION TO 2015

(in million TEUs)

<table>
<thead>
<tr>
<th>Region</th>
<th>2004</th>
<th>2010</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>159.1</td>
<td>240.5</td>
<td>303.4</td>
</tr>
<tr>
<td>Americas</td>
<td>62.2</td>
<td>90.7</td>
<td>118.8</td>
</tr>
<tr>
<td>North America</td>
<td>41.1</td>
<td>56.9</td>
<td>71.6</td>
</tr>
<tr>
<td>Europe / Mediterranean</td>
<td>74.1</td>
<td>105.8</td>
<td>139.5</td>
</tr>
<tr>
<td>Others</td>
<td>36.8</td>
<td>58.2</td>
<td>85.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>332.2</strong></td>
<td><strong>495.1</strong></td>
<td><strong>647.3</strong></td>
</tr>
</tbody>
</table>


Challenges for the Indian Port Sector

India’s vast natural peninsular coastline, stretched across 7,517 km, plays host to the country’s 12 major ports and about 187 non-major ports that are studded along the west and east coasts. Although the number of non-major ports is comparatively quite large, only about a third engage in regular commercial operations. These ports are mainly located in Gujarat, Goa and Maharashtra on the west and Andhra Pradesh on the east coast.

India’s port sector has witnessed growth – operational, capacity enhancement and investment related – at an accelerating pace in the past two decades. However, there are still certain challenges that threaten the growth of the industry and must be countered to ensure smooth operations and attract investment into the sector. The various challenges
faced in the sector can be classified into the three broad categories, which, in order of importance, are regulatory, infrastructure and operational.

Regulatory challenges include long gestation period, environment policy and new regulatory policy. Infrastructure challenges include capacity limitation, poor road network within ports, inadequate cargo handling equipment / machinery, poor hinterland connectivity and the operational challenges include inadequate navigational aids and facilities, inadequate IT implementation, labor related challenges and insufficient dredging capacity.

Over the years, the port sector in India has witnessed certain structural changes, with state monopoly gradually giving way to greater private sector participation in port investment activity. The change can be attributed to the volumes of investment required to augment port capacity, and also the need to improve levels of service and efficiency. Of late, private participation has been taken to another level through an open policy regime which facilitates 100 per cent FDI towards port projects. Further, port sector investors receive taxation benefits apart from prospective robust returns on investments. The government, giving due importance to the sector and towards mobilizing orderly development, has introduced some regulatory and policy initiatives; the most noteworthy being the National Maritime Agenda 2010 – 20 and the Draft Port Regulatory Authority Bill, 2011. While such policy measures would undoubtedly boost development of the Indian port sector, at the ground level the gap between planning and implementation would remain significant unless procedural and systematic issues are addressed.
3.12 INDIA - THE GLOBAL MANUFACTURING HUB

Manufacturing hubs emerge due to a process of agglomeration. Because of agglomeration, a disproportionate surge of manufacturing is attracted to locations with a lower wage cost or higher market access or both. Thus when textiles manufacturing shifted from the US North East to the US South, then to Japan and Korea and now finally to China and India, it fits a predictable pattern.

The same is true when auto industry shifted from Detroit to Mexico across the order and Brazil, then again to South East Asia. The shift from west to east is evident in industry after industry. Nearly two-third of world fibre production comes from Asia today, nearly one-fourth of the world fuel demand now originates in non-Japan Asia, compared to just one-tenth in mid-seventies. To take a more recent example China, Thailand and India have contributed to 36% of the vehicle production between 2001 and 2004. After IT boom, a manufacturing revolution has been well underway in the Indian economy, spurred on by the increasing presence of multinationals, scaling up their operations with domestic companies and expanding the market. The sector has been averaging 9 per cent in the last four years (2004-08), with a record 12.3 per cent in 2006-07.

India's manufacturing base, which is the fourth-largest among emerging economies, is among the fastest growing and has seen more investments as a proportion of gross domestic product than any country except China.

Consequently, manufacturers across the world are transforming India which has all the required skills in process, product, and capital engineering. "Every major company has India on its radar screen," And the number of companies, spanning diverse industries,
planning to make India their global hub for host of operations has only been increasing by the day.

**TABLE: 3.3**

**TRAFFIC HANDLED AT MAJOR PORTS**

( in ‘000 tones)

<table>
<thead>
<tr>
<th>Ports</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolkata</td>
<td>46423</td>
<td>47545</td>
<td>43245</td>
</tr>
<tr>
<td>Paradip</td>
<td>57011</td>
<td>56030</td>
<td>54254</td>
</tr>
<tr>
<td>Vishakapatnam</td>
<td>65501</td>
<td>68041</td>
<td>67420</td>
</tr>
<tr>
<td>Ennore</td>
<td>10703</td>
<td>11009</td>
<td>14956</td>
</tr>
<tr>
<td>Chennai</td>
<td>61057</td>
<td>61460</td>
<td>55707</td>
</tr>
<tr>
<td>Tuticorin</td>
<td>23787</td>
<td>25727</td>
<td>28105</td>
</tr>
<tr>
<td>Cochin</td>
<td>17429</td>
<td>17873</td>
<td>20091</td>
</tr>
<tr>
<td>New Mangalore</td>
<td>35528</td>
<td>31550</td>
<td>32941</td>
</tr>
<tr>
<td>Mormugao</td>
<td>48847</td>
<td>50022</td>
<td>39001</td>
</tr>
<tr>
<td>Mumbai</td>
<td>54541</td>
<td>54586</td>
<td>56186</td>
</tr>
<tr>
<td>JNPT</td>
<td>60763</td>
<td>64309</td>
<td>65746</td>
</tr>
<tr>
<td>Kandla</td>
<td>79500</td>
<td>81880</td>
<td>82501</td>
</tr>
</tbody>
</table>

Source: www.concorindia.com/traffichandledatmajorports
TABLE: 3.4

COMPARISON OF INDIAN LOGISTICS INDUSTRY WITH OTHER COUNTRIES

<table>
<thead>
<tr>
<th>Particulars</th>
<th>USA</th>
<th>Europe</th>
<th>Japan</th>
<th>China</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPI Score</td>
<td>3.85</td>
<td>3.84</td>
<td>4.02</td>
<td>3.64</td>
<td>3.07</td>
</tr>
<tr>
<td>LPI Rank</td>
<td>14</td>
<td>9</td>
<td>6</td>
<td>21</td>
<td>39</td>
</tr>
<tr>
<td>Logistics contribution from GDP</td>
<td>9.9%</td>
<td>10%</td>
<td>11.4%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>Share of 3PL in overall industries</td>
<td>57%</td>
<td>30%</td>
<td>80%</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Logistics activity by organized sector</td>
<td>57%</td>
<td>40%</td>
<td>80%</td>
<td>10%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: worldbank.org/INTTTTLF/Resources/lpireport.pdf

Factors Driving Growth in the Indian Logistics Sector

Foreign Trade has been growing at 25 per cent over the past 5 years (i.e. between 2007 & 2012), Reforms in Government Policy, Increased Government spending in Infrastructure, Rise in domestic consumption and retail environment, Containerization is a growing trend in India due to increasing demand for intermodal transport and Large investment flow are the factors driving growth in the Indian Logistics Sector.³

Emerging Best Practice Platforms And Development Needs

In modern, fast changing environment, the companies’ survival depends on agility, adaptability, and alignment (AAA). Increasing product variety proliferation implies need for flexibility driven by uncertainty. Shortening product and technology

³Kotak Securities, Sector Report, Private Client Research.
cycles imply that logistics networks are more and more dynamic. Vertical integration to outsourcing causes that there are multiple players with differentiating interests. Agility helps to respond to uncertainties with speed and effectiveness; adaptability helps to adjust to the shifts in the supply chains and networks, and alignment helps in synchronizing multiple interests and incentives. Agility and adaptability include the aspects of preparedness and readiness in crises situations, design flexibility, supply flexibility, performance management, and tracking and tracing (and acting upon information). Alignment concerns alignment of information, identity, and incentive. Information alignment means sharing common knowledge, to achieve visibility for better planning. Identity alignment means that the roles and responsibilities of the partners are clear in order to act efficiently and with flexibility. Incentive alignment means accountability of cost, risk, and gains; all partners should share equitably, and agree on overall performance measures and targets.

New technology, long waited for and still not quite there, is RFID. The applications tend to be seen as tracking and tracing, gathering information in lots, without need to touch, of the items in warehouse, vehicle, or delivery consignment. It is obvious, that it also gives opportunities for flexible dynamic control. Also smart materials are being developed. In transportation, also new technologies are under development. For gaining insight to the future, logistics roadmaps have become widely developed. Scenario work is also gaining strength. Both used to be applied in companies internally, now more general and wider application is becoming apparent.\(^4\)

\(^4\) The Link Vol. XVII No.10, October 2012.
The general opinion is that the present day software does not respond to the needs in logistics. Customer relations management systems do not have analytical capabilities. The same view concerns forecasting methods. Much of the logistics specialized software is still not integrated, and they still analyse constrained problem areas. Traditional methods of operations research do not produced satisfactory results in the more complex and dynamic environment. New modelling techniques and solutions methods have to be developed.

Assessing the future is also increasingly important. It is seen in the need of better forecasting methods, which are able to handle more data and complexity, so that they simulate expert systems. It is also seen in the increasing popularity of scenario working and technology roadmap-applications, which are used both in company environment and in national level. Identification of weak signals, which may become trend setters, is considered to be extremely important.

Therefore, Logistics is one of the areas of the supply chain showing a tremendous growth as the Internet and E-Commerce is drastically changing the range, delivery time and the speed of information as well as ordering and payment process. Due to the big boon of information technology, greatly influencing and enhancing the effectiveness of logistics, the time is not far when 5 PLs and 6 PLs may emerge which will probably be doing part of the manufacturing and marketing for the organizations.
3.13 CONTAINERIZATION

Containerization is the technique or practice of stowing freight in reusable containers of uniform size and shape of transportation. Containerization also enables intermodal transport i.e. the total movement from the origin to the destination using different modes en-route like roadways, railways, shipping, airlines etc. It could be either a combination of several or even just just two of the modes.

With arrival of containerization, shippers started stuffing their goods into containers and deliver them to the port container yard for shipment. The vessels calling the port could unload and load containers and sail within a day to two depending on the number of boxes to be handled.
Containers

The containers, as the meaning implies is used to store and carry goods. In shipping, the term was used to refer to any type box used carry cargo. Presently also a container is known as ‘box’ or ‘Van’ in many countries, particularly in the U.S.A.

Containers come in different types and shapes. The ISO recommended lengths are 10”, 20”, 30” and 40”, but the most common containers are the 20” and 40”. But now several shipping lines have started using the 45” container. The width of a container is always 8” and the standard heights are 8’6” or 9’6”. However there is an increasing tendency to use containers of 9 ½ft (High Cube). The Inside volume of a standard 20ft x 8ft x 8 ½ ft, container is around 33 m3.

A general purpose freight or shipping container is a container of rectangular shape, weather proof for transporting and storing a number of unit loads, packages or bulk material. It confines and protects the contents from loss or damage. It can be separated from the means of transport handled as a unit and transshipped without re handling the contents.

Classification of Containers

1) By raw material:

A container can be classified in terms of its building or cladding materials i.e. it is defined by what it is made of. The maximum numbers of containers are made of steel, aluminum or GRP (Glass fiber reinforced plywood). Almost 65 per cent of the entire container fleet presently consists of steel containers.
2) **By size**

The ISO has worked a great deal on standardization of container dimensions and published recommendations. Containers are defined in multiples of 10ft, i.e., 10ft, 20ft, 30ft, 40ft. Presently 20ft and 40ft containers are used predominantly and around 65-70 per cent of world fleet consists of 20ft containers. Twenty foot containers are referred as twenty foot equivalent unit or TEU and 40 footers as forty foot equivalent unit.

3) **By use**

Containers can also be classified by their uses. Containers may be broadly classified into three types by cargo to be stowed therein:

**a) General cargo container**

General cargo container is the most representative type for general cargo (packed cargo) that does not require temperature control. This type occupies an overwhelming share of the total number of containers.

**b) Thermal container**

Thermal container is designed for cargo requiring refrigerated or insulated storage. It is covered with material of low heat transfer such as polystyrene foam. Thermal containers are classified into three types:

i. Refrigerated (or Reefer) containers for cooled foodstuffs, meat, fish vegetables etc.

ii. Insulated containers for fruits and vegetables etc. Here dry ice used as cooling medium.
iii. Ventilated container allows for the passage of air by means of apertures on side and ends. This type is used for cargo such as fruit or vegetables which requires respiration.

c) Special containers:

The third category of containers comprises of the balance types under the board head of “special containers”. Prominent types in the head are: bulk containers, tank containers, open top containers, side open containers, flats, car containers, pen containers (to carry livestock).

d) Dry cargo container

Dry cargo container is by far the maximum in use. They are of different types. A standard dry cargo container is of box type with a door at one end. Sometimes containers are provided with side doors i.e. entire side of the container can be opened for easier stuffing and destuffing. These types of containers are useful when stuffing operation is carried out while the container is mounted on a wagon or trailer. These are various dry specials like open top containers, flat tracks, bulk containers, garment containers, ventilated containers etc.

Open top container: open top container is one having no roof and usually provided with a polythene lined tarpaulin to cover the container. The advantages of the container are that heavy machineries, structural etc. can be easily hoisted by a crane and put inside the container through its open roof.

Flat container: flat rack or flat container is a container having its base only. Usually a cargo of odd size and weight is put on to this container and is lashed to it.
**Bulk container:** bulk container is container fitted with manholes to facilitate loading of bulk cargo through gravity.

**Garment containers:** garment containers are fitted with hangers to help loading a large number of garments in hangers into the containers.

**Liquid containers:** liquid containers are usually made of stainless steel and have manholes for loading and unloading liquid cargo.

**Gas container:** Gas containers are special containers with fixtures and fittings for filling and emptying liquid gas. They also have special features like thick walls of special metal for safety during transit. 

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**Stuffing of Cargo in a Container**

Stuffing of cargo in a container is concerned with packing of the cargo. The exporter or the shipper should formulate a proper stowage plan prior to packing a container. This would help the shipper to achieve optimal utilization of container capacity, simplify and increase the speed of container packing and unpacking and plan for necessary cargo securing aids well in advance.

**Concept of FCL and LCL**

FCL means “full container load”. Here the container consists of cargo meant for one party, i.e., consignee only. The cargo is usually stuffed at shipper’s warehouse and is destuffed at consignee’s warehouse. Here the responsibility of stuffing and stowing of

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cargo inside the container is that of the shipper. Stuffing charges are on account of the consignee.

LCL means “less than container load”, it consist of cargoes meant for different parties. The carrier collects cargo from various shippers and stuffs all of them into a container. At destination, the carriers agent dyestuffs the cargo from the container and delivers the cargo to the respective consignees.

**Containerization in the Present Day**

Approximately 90% of non-bulk cargo worldwide moves by containers stacked on transport ships. 26% of all containers originate from China. More than 18 million total container make over 200 million trips per year. There are ships that can carry over 14,500 twenty-foot equivalent units (TEU). Most economic studies of containerization did not predict that the process of containerization itself would have some influence on producers and the extent of trading. However, few initially foresaw the extent of the influence containerization would bring to the shipping industry.

**Multimodal Transport**

The most outstanding contribution of containerization is the suitability and capability of containers for door-to-door transportation, internationally. The consignment moves through different modes of transport—rail, road, ship, inland waterways or sometimes by air also. This is also called “multimodal transport” or “intermodal transport”.

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3.14 INLAND CONTAINER DEPOTS (ICDS) - ROLES AND FUNCTIONS

The full benefit of containerization can be obtained only if the containers permitted to move to the location of the original cargo generation points. The government of India decided to set up inland container depots (ICDs) which are also called dry ports. Shipping formalities can be completed in ICDs for containerized cargoes instead of at the exit gateway port.

Inland container Depots are interface between connecting modes of transportation. It is an organization offering a total package of activities to handle and control container and general cargo flows between road, rail, and waterways, and vice versa, resulting in maximum services for inland transportation at minimum costs.

Normally ICDs provides the following services:

**Handling of containers**: Handling of containers from road, rail and barges to a temporary storage area container yard.

**Intermediate storage**: Intermediate storage between the various transportation modes.

**Receipt and Delivery of Containers and General Cargo**: This may include activities such as weighing, inspection of seals and damages, sticker and safety plate control and container information control.

**Cargo Consolidation and Distribution**: If the container cannot be received or delivered directly at the final consignee’s door.

**Depot Functions for the Storage of Empty Containers**: Space may also be required for temporary storage of loaded containers awaiting movement out of ICD.
Indian ICDs perform many of the possible functions outlined above. These include stuffing, destuffing, locking, sealing, providing trailers, chassis, railway flats, repairs, handling equipment, storage, facilities for reefer, custom examination of export cargo are afforded at ICD. Exports however are deemed to be effected from the gateway port only.

Within 24 hours of landing, the containers consigned to the ICDs are dispatched by rail. At the ports, ICD containers and transshipment containers are moved on priority basis. Similarly stuffed containers on completion of custom formalities at the ICD are dispatched to the terminal port within 24 hours.

3.15 CONTAINER FREIGHT STATION (CFS)

CFS has been established to speed up export cargo and to specially help small exporters whose consignments are less than container (LCL) loads. The CFS has facilities of modern go down accommodation under export supervision. Facilities of banking, customs examination, clearance, safe handling, stuffing, sealing and transportation of containers are available. Both import and export consignments are handled here.

Location of ICDs and CFSs is regulated by the ministry of commerce of the Government of India. CFSs and ICDs should not be concentrated only in a particularly region; they must be spread throughout the country depending upon present and potentially of generating volume of export cargo or where distribution of import cargoes can be easily facilitated.

Further CFSs and ICDs should be complementary to each other. CFSs are cargo aggregating points, should conveniently feed the ICDs for carriage to gateways ports in
sizeable quantities and over long distances. Conversely for imports, the goods may be brought over the same route to an ICD for distributing to the various users.

**Container Corporation of India Ltd (CONCOR)**

With the increase in containerization, a separate undertaking the Indian railways to manage the ICDs and CFSs became necessary. While ICDs provide all facilities for effecting containerized shipments, CFSs are limited only for stuffing into and destuffing of cargoes from the containers. Container Corporation Of India Ltd (CONCOR) was constituted as an autonomous public sector undertaking under the ministry of railways in March 1988. The basic objective of CONCOR is to organize multi modal transport logistics with prime task of facilitating the nation’s foreign trade. Its operations are directed towards efficient, economical and expeditious handling and transit of containerized goods, relating to both international and domestic trade traffic. It works with various agencies and offers services including warehousing, road and rail transport, palletisation and packing, simplification of documentation and custom formalities. CONCOR accepts containerized cargoes, issues way bill and coordinates with railways to carry containers to gateway port and vice versa. They are the prime coordinating agencies to container traffic.

Set up with an authorized capital of 100 crores and a paid up capital of 65 crores, CONCOR started functioning from the march 1988. CONCOR now functions as a public company under the ministry of railways. It is dedicated to:

Spearhead the container revolution of India.
Build and operate infrastructure and organize rail and road linkages for accelerated inland penetration containers in the country.

Set up and manage Inland Container Depots (ICDs) and container freight stations (CFSs) all over the country.

Act as an effective liaison with all agencies involved with containerized trade in India so as to provide comprehensive services for door-to-door movement of international cargo.

Thus CONCOR operates on the following objectives:

To develop inter-modal logistics, infrastructure for the fast, efficient and economical transportation.

To establish a network of ICDs/ CFSs/ PSCTs to facilitate national and international trade. PSCT means port side container terminal.

To offer a single window service, coordinating all connected departments/sections and to functions as a multimodal transport operator (MTO).

### 3.16 CONTAINERIZATION IN INDIA

Containerization was come to India in November 1973, when APL’s president called Cochin. Indian ports put together achieved a throughput of 2.2 million TEUs in 2000 with JNPT emerging as the leader of the pack. The growth of containerization in India has not been commendable as in certain other Asian countries. But of late a major shift in focus is seen, with the government showing bigger initiative and the major ports going in for the expansion of their container handling facility. Though in the 70’s and early 80’s there were mainline vessels calling Indian ports, the later port of 80’s and 90’s
saw that stop because the ports failed to develop itself to accommodate the panama and post panama vessels. This led to Colombo, Singapore and Dubai becoming the transshipment hubs for ports in India. But in the past few years we have seen the emergence of JNPT as transshipment hub with many lines calling there. JNPT has become the first Indian port entered in the “million TEU club”. Chennai has been identified as the transshipment hub on the east coast of India, but who also on south west Asia. This proposal is awaiting final clearance from the central government.

Indian ports have to target the 15000 and 18000 TEU vessels to enter the top ports club in the future with high operating costs of the mammoth vessels, carriers will be looking at reducing the voyage time and that is where the cochin port and the proposed cloche port enjoy a relative advantage. These two ports by virtue have the best chances of becoming the transshipment hub of the future.

The concept of containerization provide to be safer, faster and cheaper that the existing methods of transporting commodities. It minimized damage and pilferage and precluded other types of perils. It cut labour and insurance cost dramatically.

Containerization changed more than the way we transport goods around the world. it is responsible for the economic success of port cities and their surrounding regions. By enabling easier access to the exchange of goods, it has opened up new markets for export and import Asia, in particular started to prosper from such a cost effective and efficient solution. In fact, it has been said that containerization has contributed to the welfare and well-being of the world.
Recent Trends in Logistics

The global logistics industry was valued at US$ 7.9 trillion in 2011, whereas US logistics industry size was around US$ 900 billion, 25% of the global logistics industry. Logistics costs in India are estimated to be around 28% of the GDP, which comes to around US$ 138 billion in 2010-11. However, India’s spending on logistics industry is much higher than the developed economies like the US 9.5% and Japan 10.5%.

Air Cargo

According to the Planning Commission, India’s air cargo movements would grow at over CAGR of 11.5% from 2007-08 to 2011-12. Riding high on export of gems and jewellery, special chemicals and high-value pharmaceuticals, international air cargo traffic at all Indian airports have been growing rapidly.

Marine

Shipping industry plays a significant role in the Indian economy. India has 12 major and 187 minor/intermediate ports along its coastline of around 7,517 km. Ports serve as the gateways to the international trade in India. Major ports in India together have handled 895.84 million tons of cargo in 2010-11, a growth of 16.51% against the same period of the previous year. The petroleum-oil-lubricants (POL) accounted for 56.89% of the total traffic at major ports during April-March 2011, while iron ore constituted 27.37%, coal 32.98%, container traffic 45.84%, fertilizer 7.04%, and others 37.49%.

According to the Planning Commission, India’s shipping fleet strength will be increased up to 15m GRT (as per the 3rd target) by the end of 2011-12, with an estimated
investment of US$17.7 billion. The port throughput will increase up to 1,008m tones, growing at a CAGR of 10.96% from 2007-08 to 2011-12.

**Rail**

The plan by the Indian Railways to develop Logistics Parks ['hubs’ in supply chain parlance] is a good one. It has the potential to streamline and optimize the supply chain and reduce the supply chain costs. The service concept, service delivery and infrastructure have to be designed very well for the Railways Logistics Parks to add value to the supply chain. For the Railways Logistics Park to add value to the supply chain, at least one part of the transportation, either the incoming or outgoing, has to be by rail.

The Indian Railways would have to introduce innovative train services, so that customers shift to rail from road and use trains for either the incoming or outgoing from the hub. Currently about 80% of the products in India move by road. One simple innovation could be to introduce time-tabled container trains, time-tabled parcel trains etc. It is essential to have a few time-tabled freight trains, because reliability in a supply chain is a big cost saver [reduces inventory levels, improves customer service.

**TABLE: 3.5**

**INDICATIVE BREAK-UP OF FREIGHT HANDLED IN THE COUNTRY**

<table>
<thead>
<tr>
<th>Mode</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Freight</td>
<td>667</td>
<td>728</td>
<td>794</td>
<td>850</td>
<td>910</td>
<td>1025</td>
</tr>
<tr>
<td>Road Freight</td>
<td>1353</td>
<td>1478</td>
<td>1612</td>
<td>1726</td>
<td>1875</td>
<td>2046</td>
</tr>
<tr>
<td>Sea Freight</td>
<td>424</td>
<td>464</td>
<td>519</td>
<td>530</td>
<td>561</td>
<td>570</td>
</tr>
<tr>
<td>Air Freight</td>
<td>1.4</td>
<td>1.55</td>
<td>1.71</td>
<td>1.7</td>
<td>1.9</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Source: Industry Sources, 2010
Third Party Logistics (3pl) in India

In this era of globalization, India is witnessing an increasing demand for third party logistics (3PL) business, with companies now concentrating on managing their supply-chain mechanisms in a better way to deepen their market penetration. Companies are shifting their focus from transaction strategies to relationship-based alliances, such as partnership. All types and sizes of companies ranging from small firms to multinationals are becoming increasingly aware of the fact that they can gain a competitive and economic advantage by outsourcing their supply chain and logistics requirements. Further, continuous improvement in logistic infrastructure has led 3PL services to be perceived as a far better mode of controlling both internal and external logistic processes.
The Logistics industry in India is undergoing a sea change to a system wherein its dedicated players handle majority of a company’s logistics operations. These players are referred to as 3PL (third-party logistics) players who typically specialize in integrated transportation and warehousing services that can be customized to meet the company’s needs. The need for controlling logistics costs and increasing need to focus on core competencies are driving more and more companies to look for such 3 PL players. The contribution of 3PL in the overall logistics market is likely to increase from 1.5 - 2.0% in 2008-09 to 3.5 – 4 % in 2013-14.

FIGURE: 3.4
SHARE OF 3PL LOGISTICS MARKET

In a line with this development, it is expected that improving infrastructure and rising focus on core business operations will lead the future growth of the Indian 3PL
market. The market is anticipated to witness a CAGR of around 27% during the forecast period (2012-2014), harvesting a total revenue of nearly US$ 5.8 Billion by 2014.

India’s logistics sector attracted investments worth Rs. 23,200 crore in the first half of 2008, according to a study by Assocham. It outclassed some of the major sectors including aviation (Rs 20,890 Crores), metals and mining (Rs 8500 Crores) and consumer durables (Rs 6000 Crores) among others.

Among the factors cited by analysts for the rapid growth of Indian logistics include the growth of organized retail industry, commodity markets, growth in manufacturing and development of SEZs.

According to a report by Cushman and Wakefield, real estate consultants, Indian logistics industry is expected to grow annually at the rate of 15 to 20%, reaching revenues of approximately $385 billion by 2015. Market share of organized logistics players is also expected to double to approximately 12% during the same period. The report said about 110 logistics parks spread over approximately 3,500 acres at an estimated cost of $1 billion are expected to be operational and an estimated 45 million sqft of warehousing space with an investment of $500 million is expected to be developed by various logistics companies by 2012.

A large number of upcoming SEZs have necessitated the development of logistics for the domestic market as well as for global trade. Mumbai, Kolkata, Chennai and Hyderabad have become preferred locations for logistics parks. These locations are characterized by excellent port, rail, and road connectivity and are witnessing significant investment in infrastructure. Eight logistics parks with an approximate investment of $200 mn in 600 acres of land around Mumbai.
According to industry analysts, almost all logistics players are in the process of setting up warehouses, container freight stations, inland container depots, logistics parks, distribution centres and other facilities to tap the trade opportunities fuelled by the revolution in retail, ports etc.

Demand for warehouses and logistics services are expected to accelerate further due to increase in foreign trade and the upcoming Maha Mumbai Special Economic Zone. Warehouse rentals in Panvel are expected to increase by 15 to 20% over the next two years. Proximity to textile and auto-component industry clusters and other manufacturing units has made Kolkata a major economic centre.

Ten SEZs in the proximity of Kolkata have received in-principal approvals. This will result in major demand for logistics in this region. There are plans for 4 logistics parks spread across approximately 400 acres. Centers like Haldia, Falta, Pargana, Dankuni, Kharagpur, Bantala and Durgapur are expected to witness substantial logistics activities in the near future.

Five logistics parks have been set up in Hyderabad, spread across 220 acres and approximately 10 million sqft of warehouse space in 2012. It scores high as a logistics destination as it provides excellent connectivity to large markets in southern and western India and has established clusters of textile and engineering firms, as well as an important centre for the pharmaceutical industry.