

Study of Logistics in India

Roads

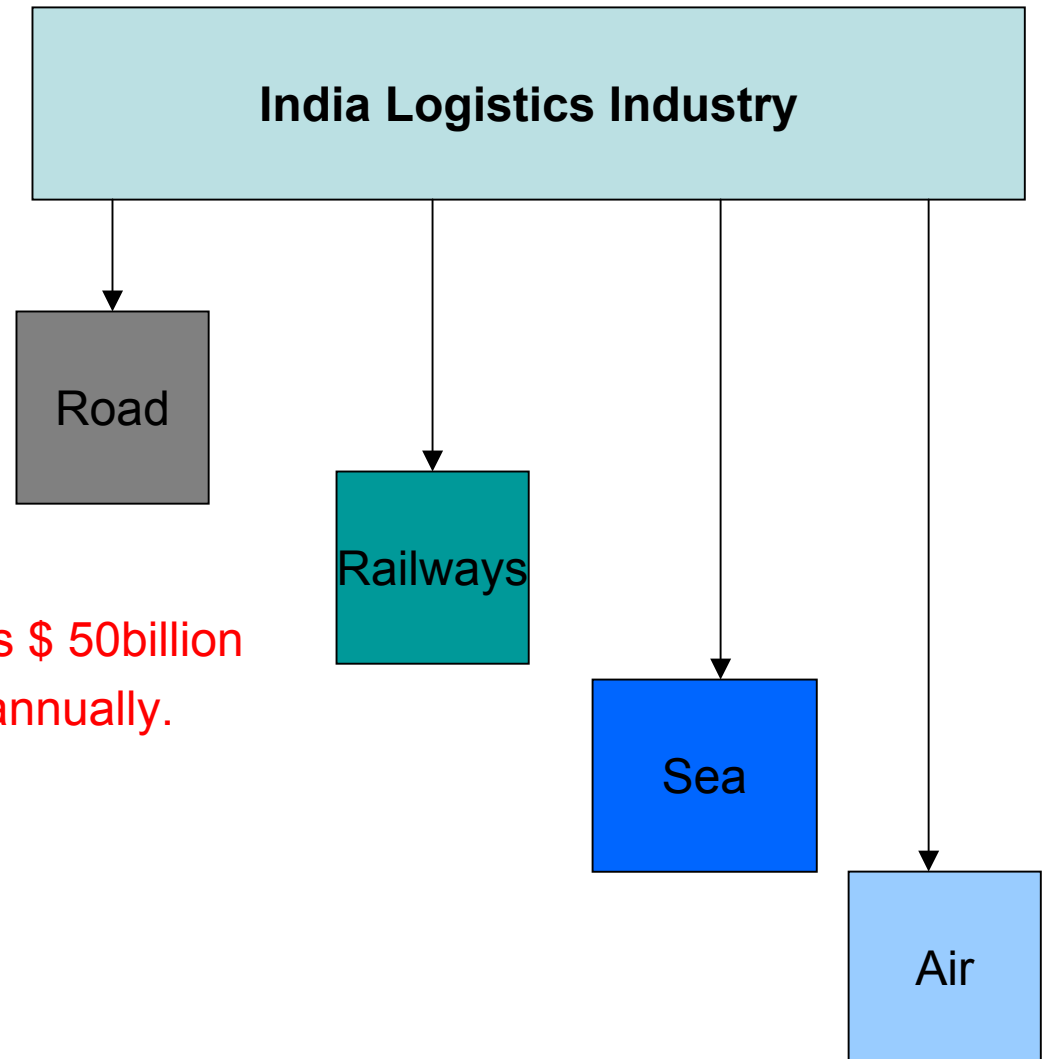
Railways

Sea

Air

Logistics Industry-India

India is being touted as the land of opportunity for logistics service providers all over the world.



The Indian logistics market represents \$ 50billion and is growing at a rate of 7 percent annually.

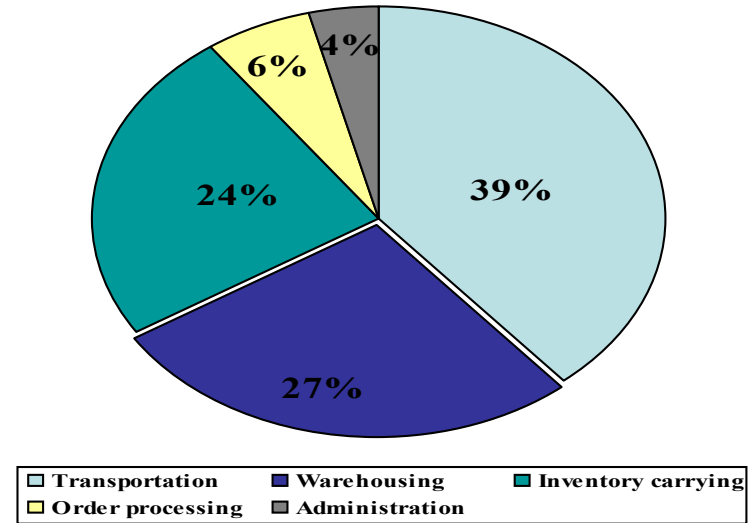
[source: Frost & Sullivan]

Environment Scan

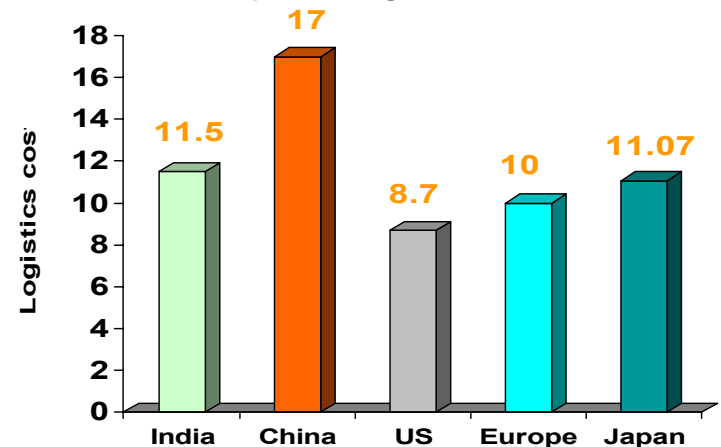
Features of Indian Logistics Industry

- A number of small-integrated players.
- Transportation costs account for nearly 40% of production costs.
- Logistics costs around 13% of GDP, compared to 8% in the US.
- Growth in Indian economy is the major driving factor for the demand in logistics industry.
- Chemicals, metals, FMCG, cement and textiles have been identified as the top five contributors to logistics revenues.

Logistics activities



Comparative logistics cost



ROADS

Indian Road Network

- India has the second highest largest road network-3.3 million km.
- US has the largest road network with 6.4 million km & China- 1.8 million km.
- National Highways- 2% of total road length.
- But carry 40% of goods traffic of India.

| <i>Types of Roads</i> | <i>Length (km)</i> | <i>% of Total</i> |
|-----------------------|--------------------|-------------------|
| National Highways | 65,569 | 2.00 |
| State Highways | 131,899 | 4.00 |
| Major District Roads | 467,763 | 14.10 |
| Village & Other Roads | 2,650,000 | 79.90 |
| Total | 3,315,231 | 100.00 |

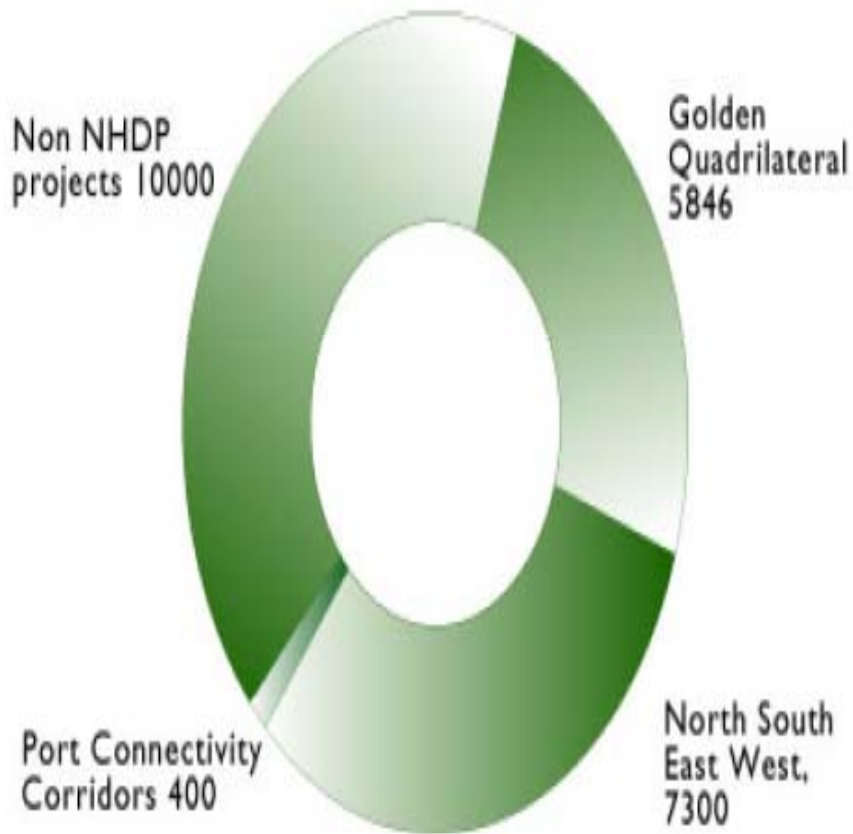
Source: National Highway Development Authority

Features of Indian Road Transport

- Road Network carry nearly 65% of freight and 85% of passenger traffic.
- Vehicle ownership is firmly in the hands of individual truck owners
- 67% of vehicle owners have fleets of less than five vehicles.
- Traffic on roads is growing at a rate of 7 to 10% per annum
- Government spends- 12 per cent of capital and 3 per cent of total expenditure on roads.

Major Roads Projects

Road Projects Under Execution (in kms)



- The Golden Quadrilateral (GQ; 5,846 km) connecting the four major cities of Delhi, Mumbai, Chennai and Kolkata.
- The North-South and East-West Corridors (NS-EW; 7,300 km) connecting Srinagar in the north to Kanyakumari in the south and Silchar in the east to Porbandar in the west.
- Port connectivity and other projects.

Future Road Projects

| Scheme | Period 2001-2011 | | Period 2011-2021 | |
|---|------------------|-------------------------|------------------|-------------------------|
| | Length | Amount (Rs. million) | Length | Amount (Rs. million) |
| A. Expressways | 3000 | 300,000 | 7000 | 700,000 |
| B. National Highways | | | | |
| i) Four laning/six laning | 16,000 | 640,000 | 19,000 | 760,000 |
| ii) Two laning with hard shoulders | 15,000 | 187,500 | 7,000 | 87,500 |
| iii) Strengthening weak pavements | 20,000 | 150,000 | 24,000 | 180,000 |
| iv) Bypasses, bridges, over bridges, safety and drainage measures | Lumpsum | 72,500 | Lumpsum | 92,500 |
| v) Expansion of NH System | 10,000 | 150,000 | 12,000 | 180,000 |
| Total for National Highways | | 1,200,000 | | 1,300,000 |
| C. State highways | | | | |
| i) Four laning/six laning | 3,000 | 100,000 | 7000 | 250,000 |
| ii) Two laning with hard shoulders | 35,000 | 280,000 | 60,000 | 500,000 |
| iii) Strengthening weak pavements | 30,000 | 220,000 | 40,000 | 300,000 |
| iv) Bypasses, bridges, over bridges, safety and drainage measures | Lumpsum | 100,000 | Lumpsum | 100,000 |
| v) Expansion of SH System | 10,000 | 50,000 | 20,000 | 100,000 |
| Total for State Highways | | 750,000 | | 1,250,000 |

Source: World Bank

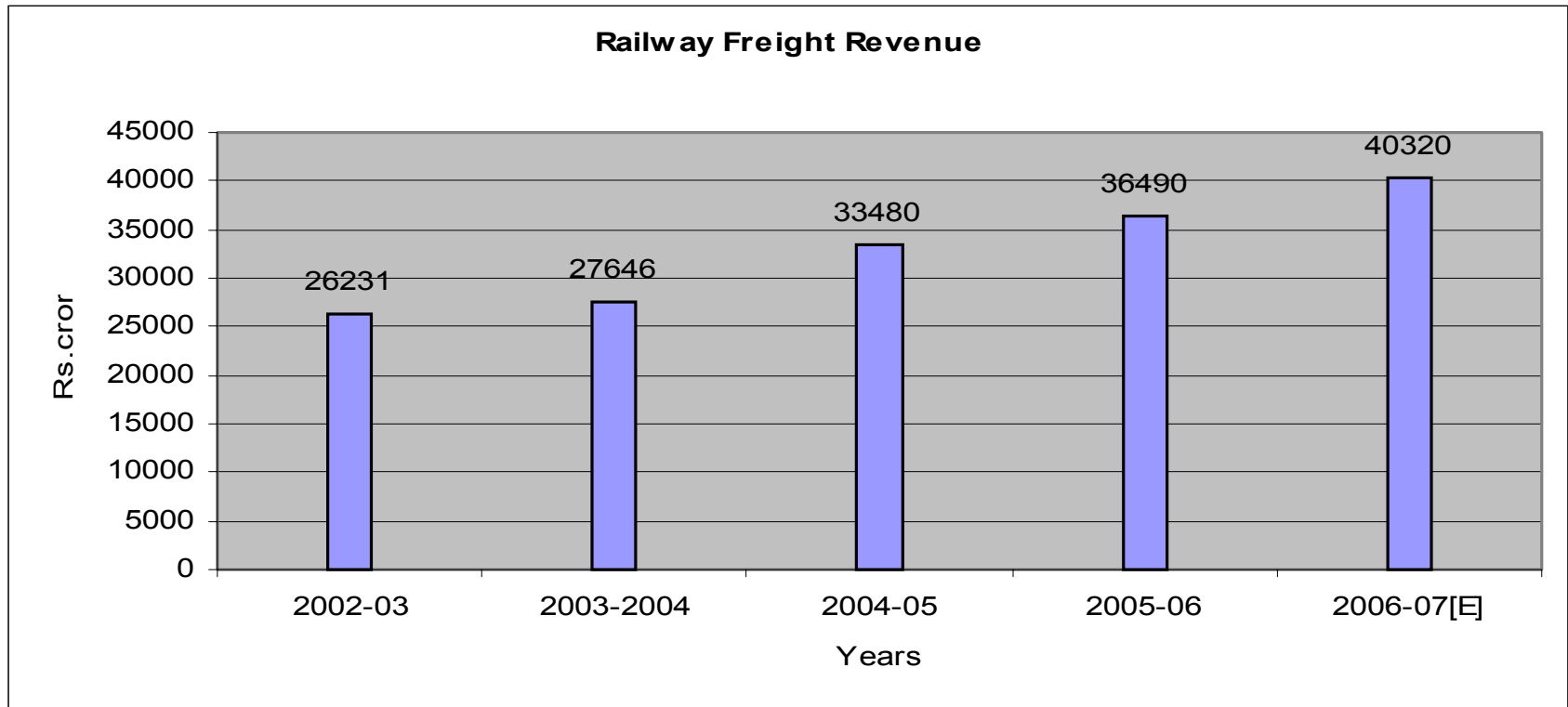
The Golden Quadrilateral



RAILWAYS

Indian Rail Logistics

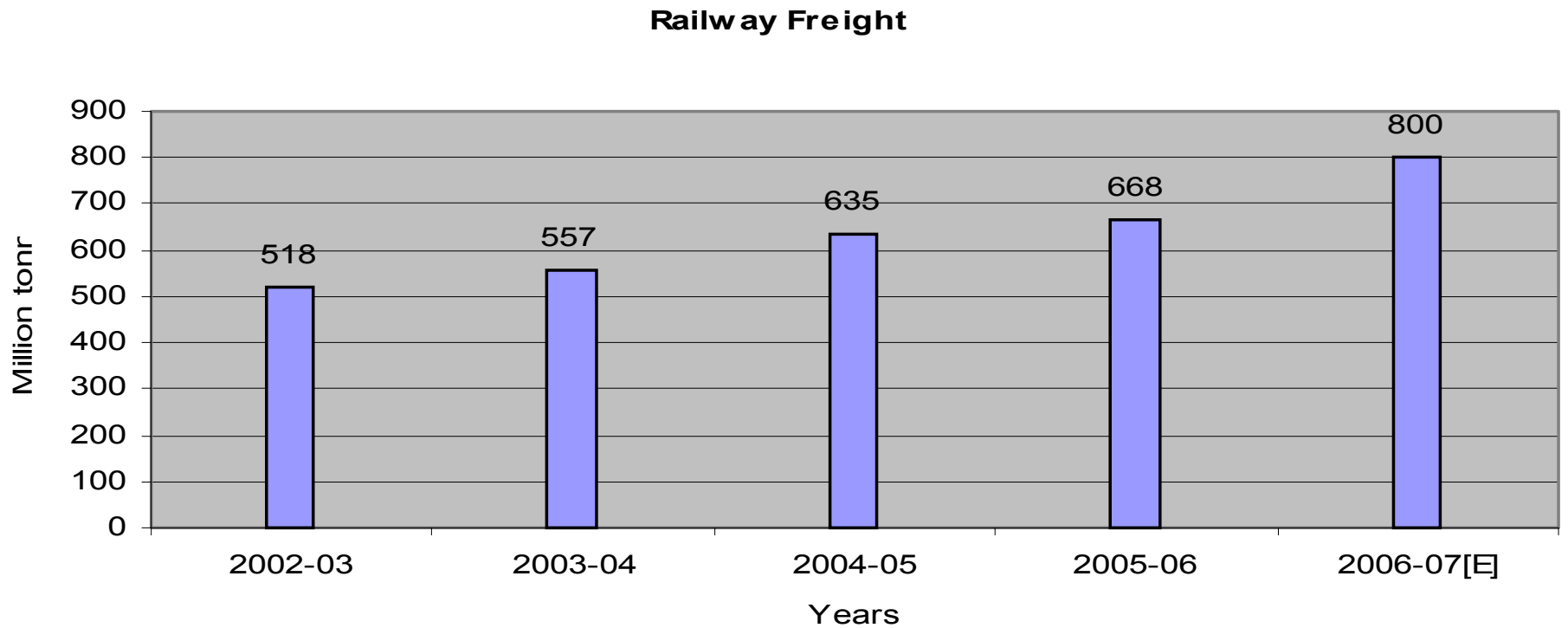
- The Indian Railways boasts of being the world's 2nd largest rail network spread over 81,511 km and covering 6896 stations.
- The freight segment accounts for roughly two thirds of railway's revenues.
- The tonne/kilometre costs for Indian rail freight at three times that of China. [Tata Iron & Steel].



Source: Ministry of Railways

Rail Freight Privatization

- Rail services have been liberalized.
- Reliance Industries, P&O ports, APL Logistics, Maersk, Central Warehousing Corporation and Adani Logistics have shown interest in this sector.

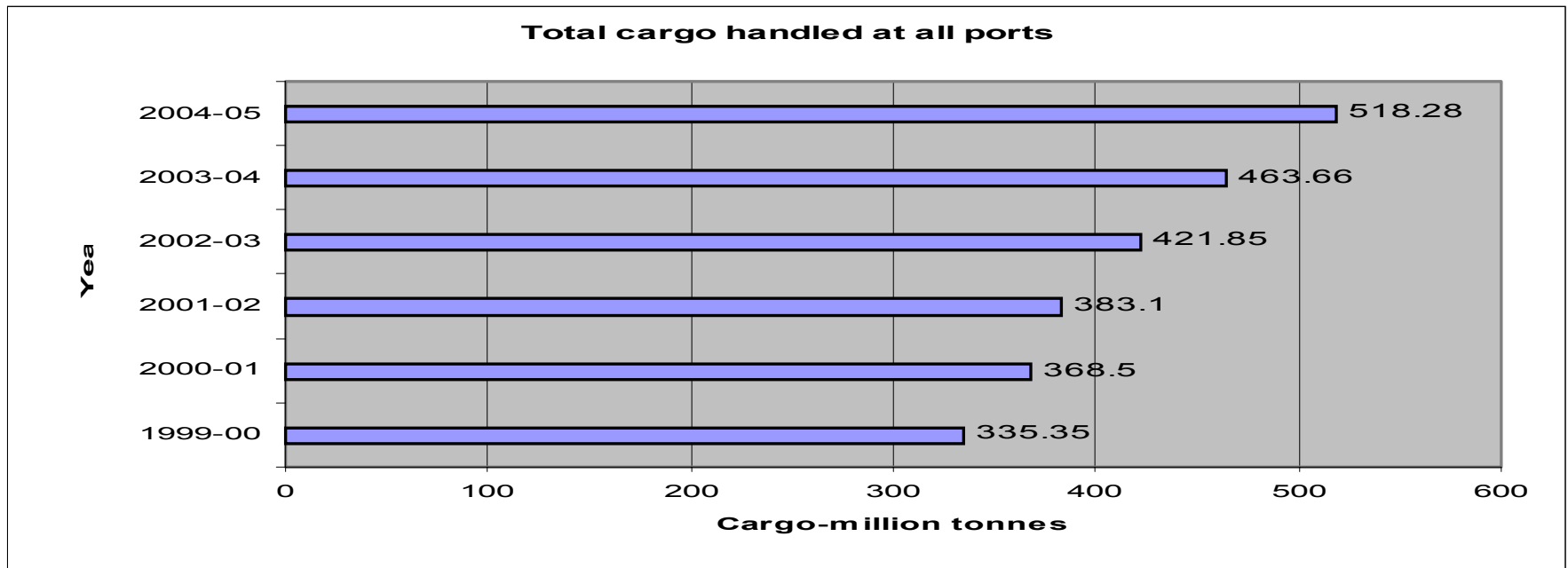


Source: Ministry of Railways

SEA

Indian Ports

- India has 12 major and 184 minor / intermediate ports spread across the vast coastline of 7517km.
- The 12 major ports handle about 76 per cent of the traffic.
- India's West Coast ports handles almost 70% of traffic.



Source: Indian Ports Association

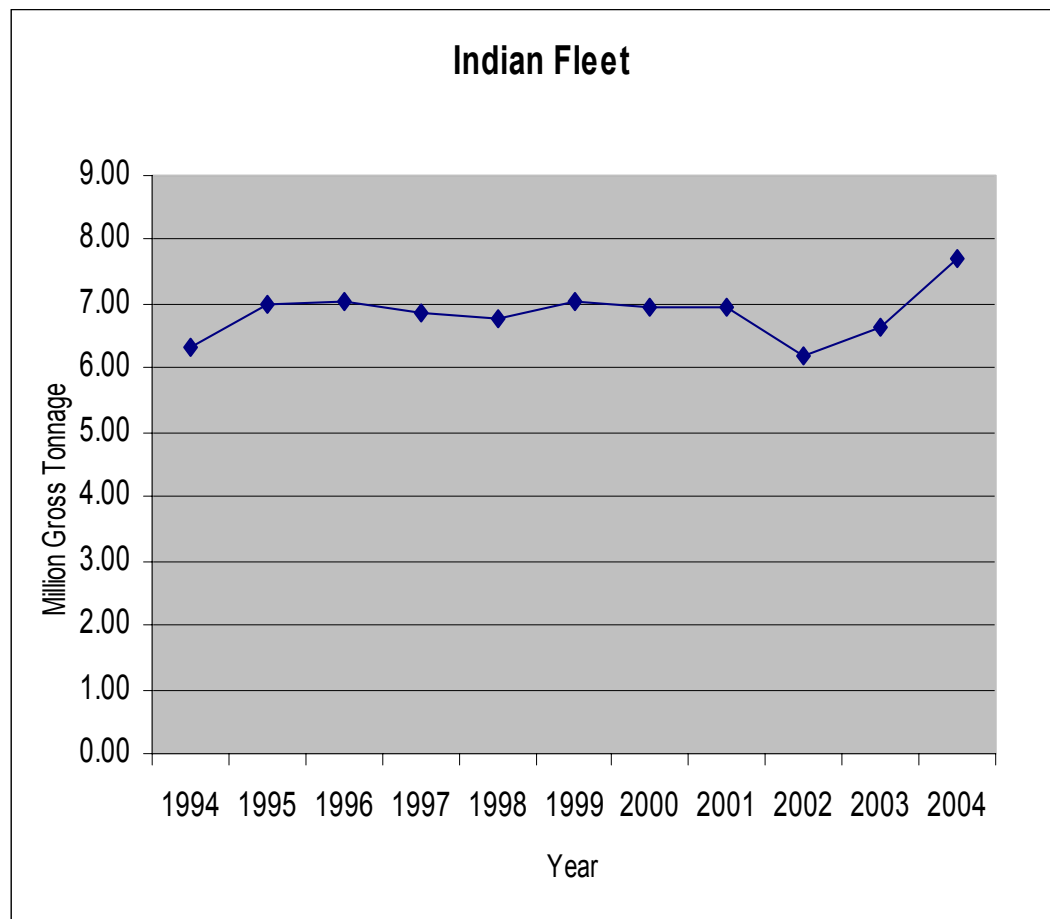
India's Sea Logistics

- India now has the largest merchant shipping fleet among the developing countries

- India ranks 17th in the world in shipping tonnage.

- Indian share of maritime transport services is 1% of world market.

- The container traffic has registered an impressive growth of 15 per cent over the last five years.

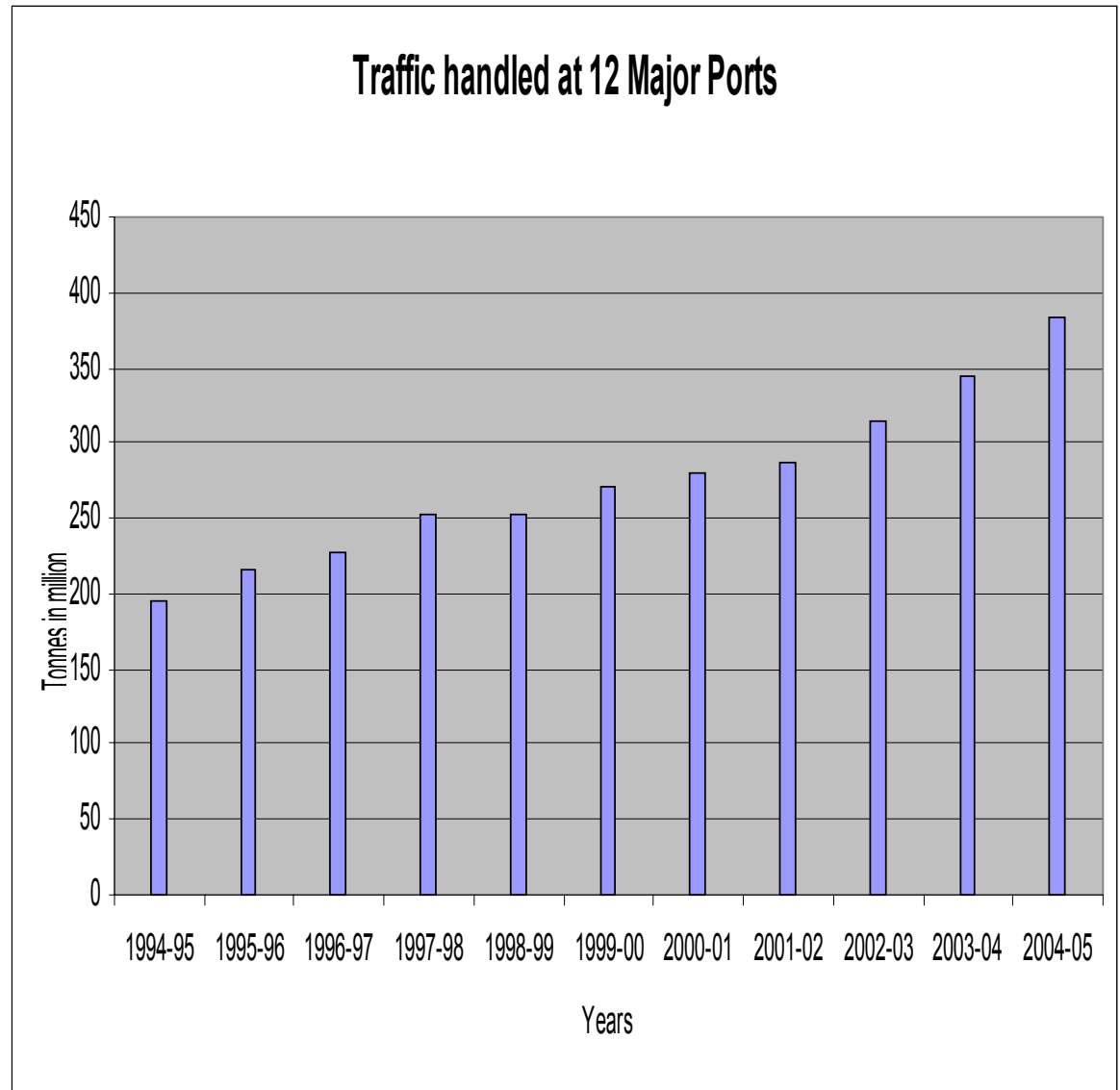


Port Privatization

- Port traffic to grow to a level of 650 Million Tonnes Per Annum by 2008- Ministry of Shipping.

- Port Privatization is picking up momentum-- USD1.39 billion worth projects approved.

- Players ---P&O, PSA, Maersk, Gammon India, CWC and the Dubai Port Authority.



Source: Indian Ports Association

Indian Ports

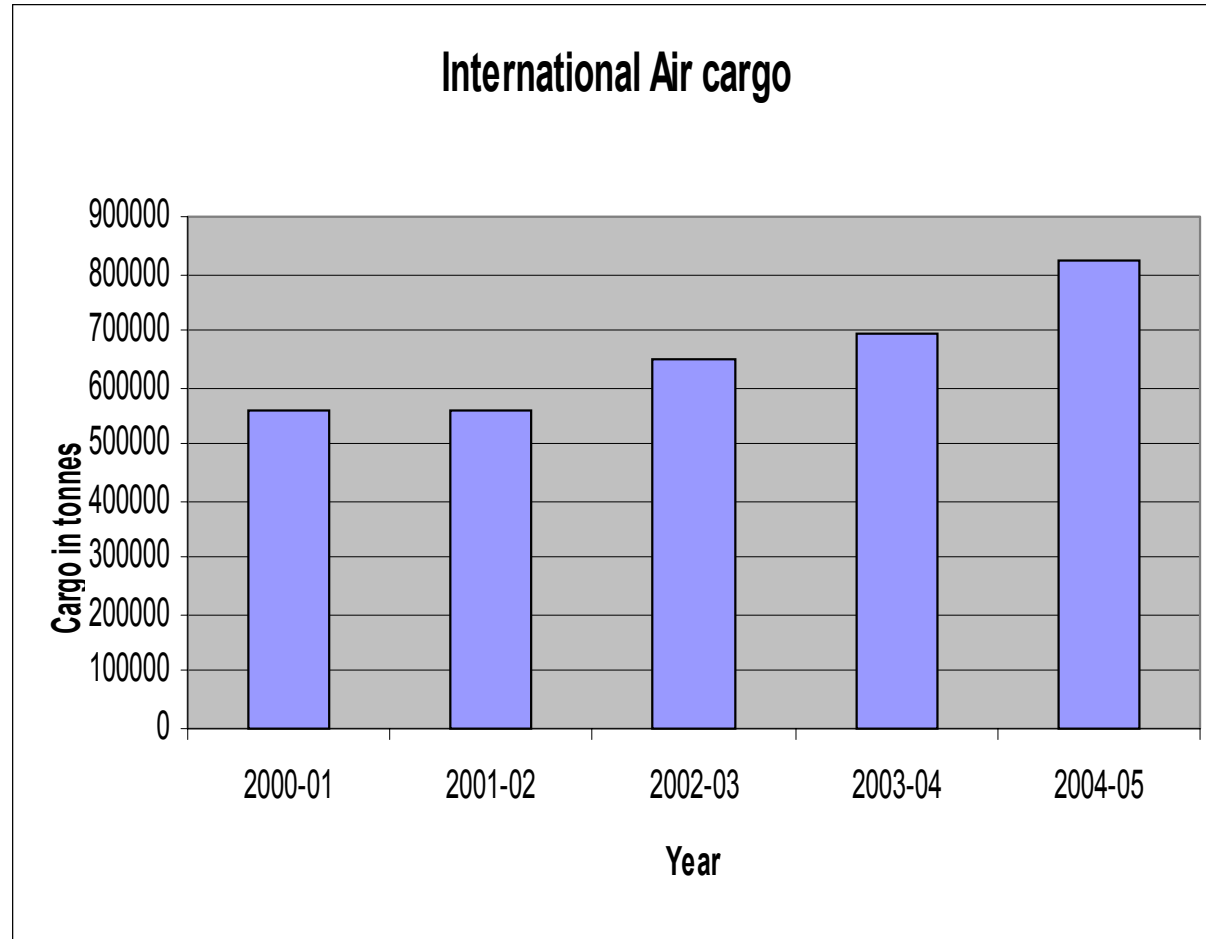


Source: Indian Ports Association

AVIATION

India's Aviation Logistics Sector

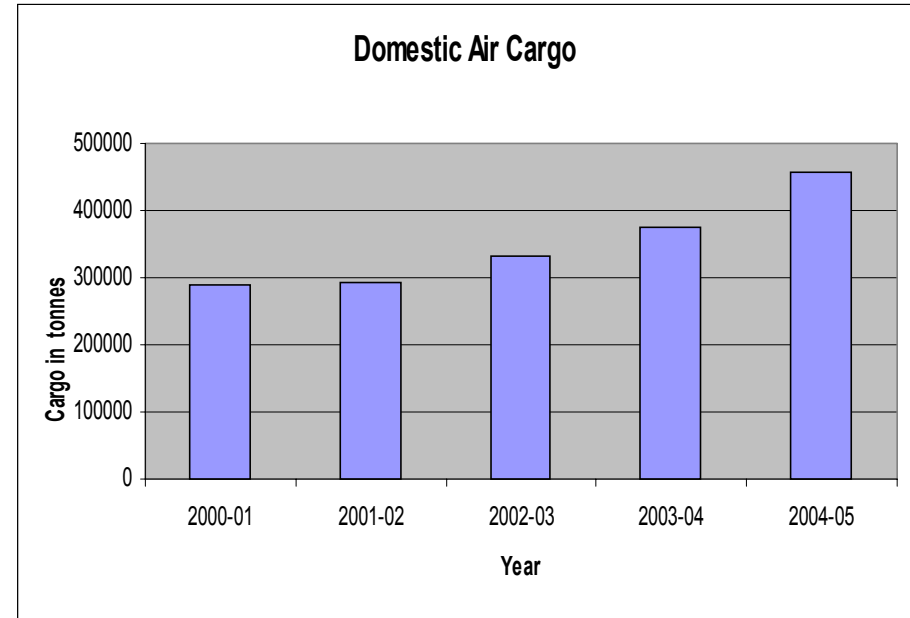
- Aviation holds a small share of India's freight market.
- Air Freight is very expensive in India in comparison to road and rail.
- The size of the world air cargo market is estimated at 27 million tonnes valued at \$200 billion.
- India accounts for meager 3% of the global air cargo market
- As per an expert estimate, Indian air cargo industry is going to be double by the year 2010.



Source: Airports Authority of India

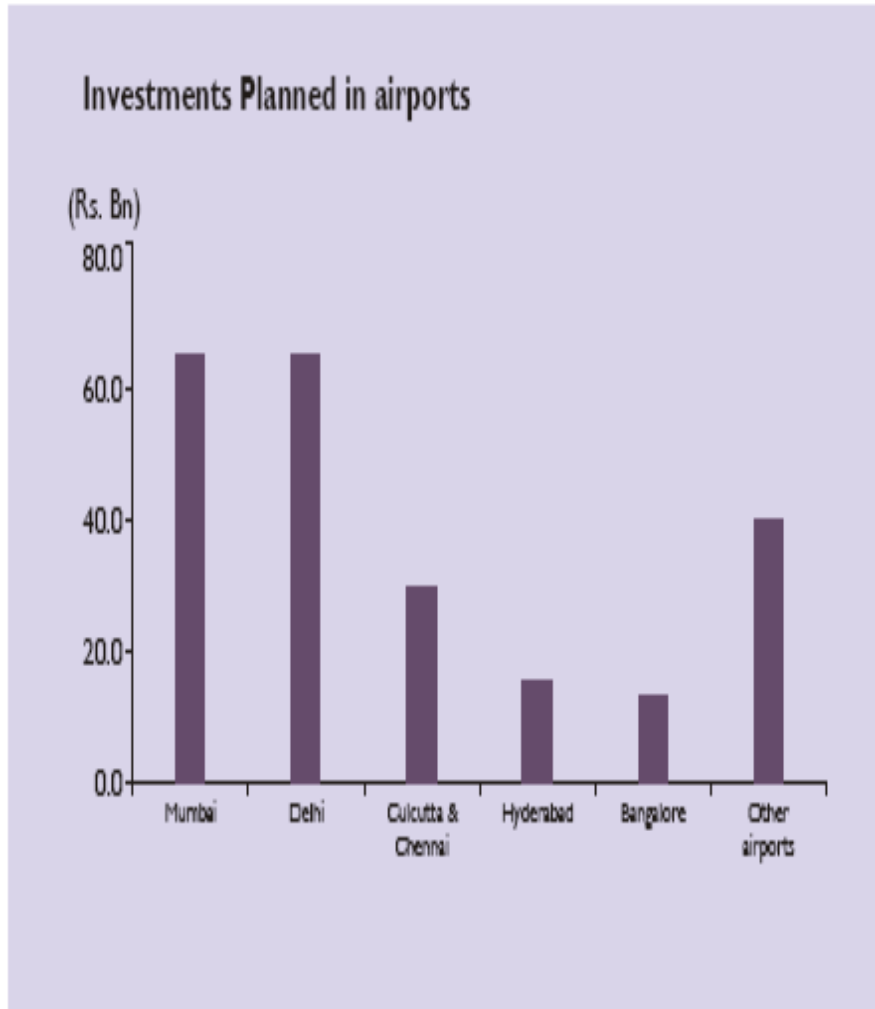
India's Aviation Logistics Sector

- Cargo- garments, machinery, components, pharmaceuticals, dyes, chemicals and perishables [fruit, vegetables, flowers, fish and meat].
- Major International cargo airports- Mumbai, Chennai, Bangalore, Trichy, Hyderabad, Delhi, Coimbatore, Cochin.
- Major domestic cargo airports – Ahmedabad, Goa, Lucknow, Visakhapatnam, Madurai in addition to the above.
- 25 non-metro airports identified by The Airports Authority of India for further development.



Source: Airports Authority of India

India's Aviation Growth Plans



Source: www.ibef.org

- Investments of USD 5.07 billion over next 5 years in Indian Airport Infrastructure.
- Blue-Dart, the only dedicated freight carrier in domestic sector.
- Air India plans to increase cargo revenue from current 10% to 15-20% in 3yrs.
- Jet Air, GoAir, Kingfisher Airlines charting out plans to play bigger role in Indian domestic air cargo.
- International Airlines- Cathay Pacific and BA increasing cargo capacity to and from India.

Third Party Logistics-3PL

3 PL

- 3rd Party Logistics imply that one company acts as an agent to look after the logistics aspect of another company or group of companies.
- 3RD party logistics entails a study of the customer's business, supply chain and distribution network, in order to formulate a comprehensive integrated logistics strategy, which will help render all supply-related services from a single window.
- **India's 3PL sector represents 3 percent of the country's total logistics spend.**
- The Indian 3PL market is expected to grow at around 20 percent per annum in the next 3-5 years
- The practice in India reveals that warehousing and outbound transportation, custom clearing and forwarding are the most frequent outsourced activities.
- Activities such as packaging, fleet management and consolidation have started gaining attention for outsourcing.

3PL Survey in India

Reasons for Logistics Outsourcing



Source: TCI & MDI Survey

A survey by the Transport Corporation of India (TCI) and the Management Development Institute (MDI) shows

- less than 55% of Indian companies subscribe to 3PL, compared to more than 75% globally.
- about 57% of the companies plan to outsource reverse logistics within the next five years.
- 54% plan to outsource inventory management
- 53% order processing.
- more than 50% of the companies have outsourced activities like transportation, warehousing & customs clearing/forwarding.

Growth Drivers for Logistics in India

- General growth of the Indian economy.
- Manufacturing boom- for exports as well as for domestic market.
- Expected rise in International trade from India.
- MNC's setting up manufacturing in India- Nokia, Flextronics.
- Government's thrust on Infrastructure -- US\$17 billion to upgrade highway networks.
- Implementation of VAT will lead to growth in warehousing business.
- Opening of organized retail sector -attracting retail chains like Wal-Mart and Carrefour in addition to Indian players like Pantaloon and Reliance.

Government Support

The Indian government is making great efforts by

- Privatizing ports and airports.
 - Increasing the number of gateway ports
 - Investing in highway projects
 - Streamlining customs and excise procedures
 - Implementing EDI systems
 - Improving the rail network.
-
- The government plans to invest \$17 billion in transport infrastructure between 2006-2010.

Some of the projects are:

- Amend in the National Highway Act to expedite land acquisition, permit private financing and allow tolling.
- Improvement in rural access by launch of the Prime Minister's Rural Roads Program.
- Reduction of congestion on rail corridors and improvement of port connectivity by launch of National Railway Development Program.
- Upgradation of infrastructure and connectivity in the country's twelve major ports by initiating the National Maritime Development Program.
- Establishment of Tariff Authority for Major Ports to regulate tariffs.

On a per-annum basis, United States invests 5 percent of its annual logistics spend on infrastructure, India is investing 23 percent or over four times as much.

Industry Growth=Logistics Growth

- “Engineering goods, chemicals and gems & jewelry are the fastest-growing sectors; manufacturing in India is expected to grow by 9.4 percent in coming years.” says Jacques Green, Managing Director FedEx-India, Middle East & Africa.

Auto

- Outsourcing in Auto sector could be worth \$375 billion by 2015 and India could capture up to \$25 billion of this amount. [source:McKinsey]

Chemicals

- India’s chemical exports could reach \$15 billion by 2015. [source : McKinsey].

Electrical and Electronic Products

- India’s export in electrical and electronic products could reach up to \$18 billion a year by 2015.[source : McKinsey].

Industry Growth=Logistics Growth

Retail

- Opening up of the organized retail sector is attracting big retail chains like Wal-Mart and Carrefour in addition to big Indian retailers like Pantaloon and Reliance.
- All this would require the presence of professional logistics players in the market to carry out supply chain activities.

Thus demand for logistics services would be largely driven by the growth of the Indian economy.

Indian & Foreign Logistics Players

- Investing to upgrade and move into 3PL arena– Gati, Safexpress, Patel Logistics, Blue Dart.
- Recent IPO- AllCargo Global Logistics.
- Container Freight stations and Inland Container depots- Container Corporation of India, Gateway Distriparks and Balmer Lawrie & Company.
- Bharti, Taco MobiApps, Patni Computers and Reliance are focusing on telematics – a technology based on telecommunications plus computing.
- Alliances & Acquisitions -DHL acquired Blue Dart, FedEx has a tieup with Prakash Airfreight, Rhenus AG has tied up with Seaways Shipping Ltd.
- Redwood City expanding its India presence by nearly 50%.
- Strong Base in India- APL Logistics, TNT Express, UPS and Maersk Logistics.
- In the port terminal business, Maersk and P&O Ports are consolidating their position by acquiring controlling stakes in private container terminals..

Challenges for Indian Logistics Companies

- Competition from Indian and Foreign logistics companies.
- Technology to keep pace with demand for real time information.
- Corporatization and lack of skill sets.
- Shedding local mindset and move to a global mindset.
- Integration of services and value added services.
- Funds to fuel expansion & growth.
- Inadequate infrastructure and complex tax laws.

Need for Strategic Alliances & Growth Funds

Indian Logistics Companies are looking for strategic alliances and funds to

- Improve their technology for value added services such as real time information.
- Corporatize and attract talent.
- To build logistics infrastructure.
- To integrate services and thus become a multi-modal player.

Future Projected Trends

- The Indian logistics market is likely to grow at a CAGR of 7% during the next five years.
- The unorganized sector may find it difficult to exist at national level due to its inability to keep pace with technology & customer demand.
- Transportation costs are bound to come down in future with improvement in infrastructure and growth in cargo movement.
- 4th Party Logistics to take root in India.
[In 4PL, logistics is controlled by a service provider that does not own assets to carry out logistics activities but outsources to sub-contractors, the 3PL].

D'Essence in Logistics Industry

D'Essence Consulting can help you to grow in line with the market potential.

D'Essence Consulting provides

- Business Plan Formulation & Review.
- Business Valuation.
- Market Entry Strategies.
- Strategic Alliances.
- Brand Building.
- Mergers & Acquisitions.
- Access to funds from Venture Capitalists, Private Equity Players, High Networth Individuals & Banks.

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