The Indian Warehousing Industry:
An Overview

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Foreword

Ernst & Young LLP and the CII Institute of Logistics are proud to release this publication on warehousing competitiveness at the conference "Building Warehousing Competitiveness" to be held in Mumbai on 22nd October 2013.The publication focuses on the value drivers for the warehousing sector in India and the opportunities that the Indian warehousing landscape offers for the profitable growth of its service providers while continuing to be of value to end users.

Until a decade ago, warehousing in India was a synonym for basic four walled structures with sub- optimal sizes, inadequate ventilation and lighting, lack of racking systems and lack of inventory management or technology solutions. Over time and with the changing role of the sector, apart from conventional storing services, warehouses are now providing value-added services like consolidation and breaking up of cargo, packaging, labelling, bar coding, reverse logistics, etc.

The growth in warehousing in India is primarily being driven by growing manufacturing activity, rising domestic consumption, increasing international trade and the emergence of organised retail in the country. Increasing private and foreign investments in infrastructure and easing of government regulations are further strengthening the growth of the warehousing sector in India.

However, the overall growth potential is limited by several key challenges such as the high price sensitivity of customers and lack of enabling infrastructure which limits a service provider's capabilities to offer world-class services. The usually underdeveloped state of industry-specific customization capabilities, asset heavy nature of the business, need for large capital and issues related to land acquisition pose additional challenges for warehousing players.

This publication aims to highlight key opportunities and challenges in the warehousing sector and attempts to provide a base for discussion amongst industry stakeholders to help them navigate through the complex structure of the warehousing industry, and the several opportunities and challenges in it.

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Introduction

Competitiveness in the warehousing industry is driven by service/infrastructure providers' ability to deliver value to their clients, along with offering returns beyond the cost of capital to their shareholders. Competitiveness is not about cost but about value — recognition of this fundamental truism is central to any meaningful discussion on building or improving competitiveness in logistics, particularly in warehousing, in India.

Significant research points to the healthy potential for warehousing in India, both in terms of the quantum of sheer warehousing space and industry revenues realizable from this space. In this backdrop, it is a matter of concern that most providers are not able to deliver a healthy return on capital employed. While some players have intentionally built infrastructure much ahead of demand to be best prepared for a demand upswing, most of the players mainly suffer due to a fundamental lack of competitiveness on account of multiple factors. Some of these include:

- Lack of alignment of capacity with cargo flows
- Lack/Absence of the appropriate scale and quality of warehousing infrastructure and services required to enable value-based pricing
- Low capital and operating efficiencies (i.e., lower utilization and poor throughput/unit space)
- Limited capacity (and ability) for handling multi-modal interfaces
- Limited value addition specific to the user industry, which stems from a weak understanding of the user's supply chain
- Inappropriate level of automation
- Inappropriate measurement of "total" logistics costs by end users, creating an illusion that value can only be driven by cutting piecemeal logistics (warehousing, transport, handling) costs

The existing provider landscape is largely compromised in its ability to address these factors and is unable to create the desired integrated scaled proposition.

Building scale and network that is relevant to customers' supply chain without over-investing in fixed assets and working capital are some of the key elements of building competitiveness in warehousing, specifically, and logistics, as a whole.

The warehousing segment has absorbed significant growth capital, and it will continue to require more funds for a reasonably long time. The key to attracting investment, delivering returns and, most importantly, making logistics efficient is to focus on developing these elements at an enterprise level.

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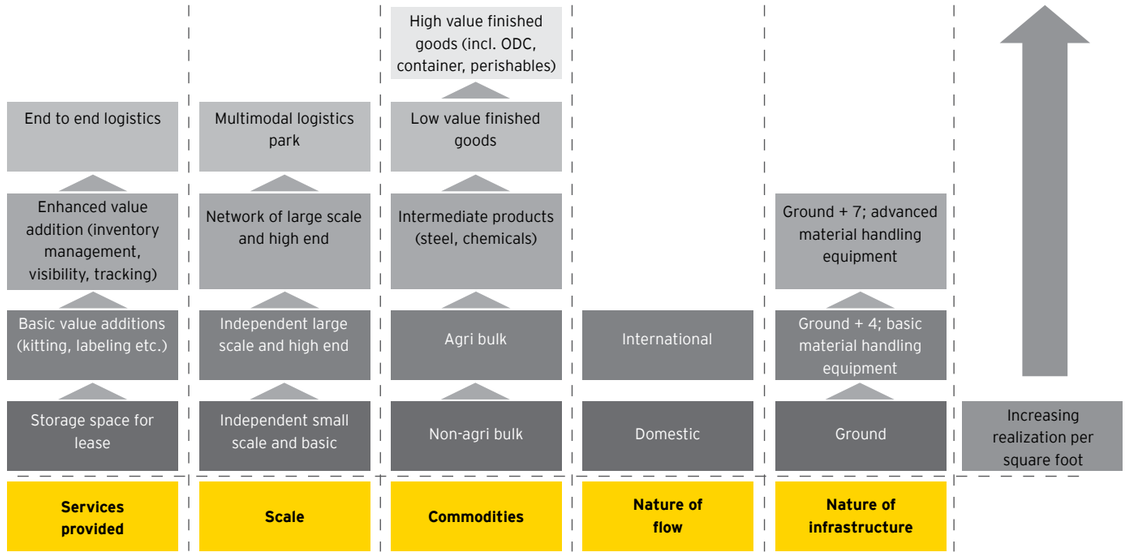
Overview of the Indian Warehousing industry

Warehousing forms a crucial link in the overall logistics value chain. It accounts for ~5% of the Indian logistics market (excluding inventory carrying costs, which amount to another ~30%). Warehousing in India has been evolving rapidly from being traditional "godowns" – a mere four-wall-and-shed with sub optimal size, inadequate ventilation and lighting, lack of racking systems, poor hygiene conditions and lack of inventory management or evolved solutions such as warehouse management systems into modern setups with storage and handling points where raw material, intermediate and manufactured goods are collected, assorted, stored and distributed to the point of consumption/sale.

As key end users are increasingly outsourcing their warehousing services, warehousing players are recognizing the need to be a part of the customer's logistics chain, as against being a landlord leasing out space.

Exhibit 1: Realizations per square foot of land in warehousing vary by multiple factors various combinations of which an be developed based upon market needs, aspirations and capabilities



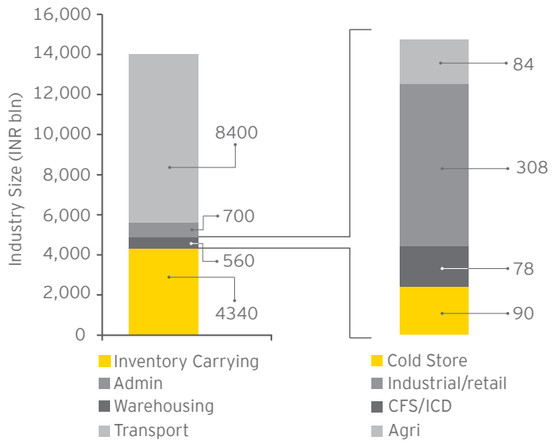
Source: EY Analysis

The size of the Indian warehousing industry (across commodities and modes) is pegged at about INR560 billion (excluding inventory carrying costs, which amount to another ~INR4,340 billion). The industry is growing at over 10% annually.

Multiple business models exist within the warehousing industry. The key segments can be represented as:

- Industrial/Retail warehousing: accounts for ~55% of the total market
- CFS/ICD: ~14% share
- Agri warehousing: 15% share
- Cold stores: ~16% share

Exhibit 2: Current warehouse industry size with sub segments in FY13



Source: EY Analysis, Crisil Report on Warehousing

Exhibit 3: Multiple business models around warehousing exist with varying levels of attractiveness

Sub segments	Demand growth	Competitive intensity	Size	Capital requirement	Entry barriers
CFS	High	Medium	High	Medium	Medium
ICD	High	Medium	High	Medium	High
Agri warehousing	Medium	Medium	Medium	Medium	Medium
Cold warehousing	High	Medium	Medium	High	High
Logistics park/MMLP	High	Low	High	Very high	High
FTWZ	High	Medium	High	Very high	High
Small scale independent warehousing	Low	High	Low	Medium	Low
Large independent high end warehouse	Medium	Medium	Medium	High	Medium
Network of large high end warehouse	High	Medium	High	High	High

Source: EY Analysis

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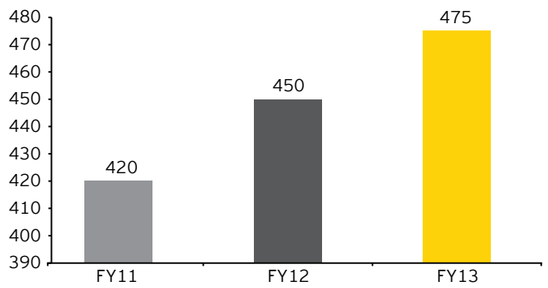
Industrial/retail warehousing

Industrial/Retail warehousing has a market size of ~INR310 billion in FY13, and it has been growing at a CAGR of 10%–12% over the last few years. Demand for industrial warehousing space is estimated to have grown from around 420 million sq. ft. in FY11 to 475 million sq. ft. in FY13, at a CAGR of 6%. Retail, food, engineering goods, chemicals, electronic and telecom, pharmaceutical and automobiles are the major industrial consumers of warehousing in India. Among these, engineering goods, and the IT, electronics and telecommunication sectors (which have been growing at a CAGR of 8%–9% during 2010–13) are expected to lead warehousing demand. The other sectors are growing at 5%–7%.

The warehousing industry is dominated by unorganized players, accounting for ~85% of the market. Modern warehousing (organized players) accounts for only 15% share; nevertheless, this segment is growing at a CAGR of 25%–30%, and it is expected to account for a 30% share by 2015. The share of organized warehousing is set to increase from 62 million sq. ft. in FY10 to 178 million sq. ft. in FY15.

Sufficient research and analysis has been carried out on sub-segments within industrial/retail warehousing. However, an emerging sub-segment – liquid warehousing (tank farms) – has not received due attention. This publication, therefore, has a dedicated sub-section for this segment.

Exhibit 4: Industrial Warehousing space in India (Mn Sq Ft)



Source: EY Industry analysis, Crisil Report on Warehousing

Growth drivers

Although currently at a nascent stage, modern warehousing in India is growing at a rapid pace. In addition, it is estimated to grow at a CAGR of 25%–30% for the next 5 years, driven by:

- Growing GDP: Growth in GDP and changing demographics are creating higher primary and secondary demand. Indian GDP has grown significantly over the last decade. Despite the downturn, it continues to grow at a significant rate. Growing GDP, increasing population and improved purchasing power parity are creating new demand for warehouse space.
- Maturing industry segments: Demand for high-end services and infrastructure, driven by the greater presence of MNCs and maturity in end-user industries (such as food, textile, pharmaceuticals, automotive and engineering goods), is creating new storage space requirements. This has, in turn, prompted the growth of more organized warehouses with better value-added services and facilities.

- Growing external trade: Rising exports (~13% CAGR between FY08 and FY13) and imports (~14% CAGR between FY08 and FY13) are supporting warehousing growth.
- Rising share of organized retail: This form of retail constitutes 8% of the total retail market, and it is growing at a CAGR of 25%–30% annually. As a result, it is expected to gain a higher share in the growing pie of the retail market in India. Increasing organized retail activity is pushing demand for modern warehousing.
- GST implementation: The Government plans to phase out Central Sales Tax (CST) and introduce GST. The move would help the logistics industry in re-arrangement of its operations and would enable manufacturers to store and distribute goods across the country without any state boundaries. This will enable higher growth and consolidation in the warehousing industry.

Customers profile and major players

In the backdrop of increasing domestic consumption and the cost effectiveness of outsourcing manufacturing activities, India is becoming a manufacturing hub for most of the industries. This growth is translating into higher demand for logistics services, including the requirement of warehousing space. As has been stated previously, food, engineering goods, chemicals, electronic and telecom, retail, pharmaceutical and automobiles are the major industrial consumers of warehousing in India. In particular, automotive, retail and pharmaceutical have reported tremendous uptake of warehousing services, as well as in terms of evolution such as technology implementation, space optimization and demand for value-added services.

Major hubs in India for industrial warehousing are Mumbai and areas in proximity, namely, NCR, Nagpur, Bangalore, Ahmedabad, Chennai, Vizag, Hyderabad, Ahmedabad and Ludhiana. These regions are supported by the presence of industrial activities, connectivity through rail/road/air and their positioning as demand centers for EXIM or domestic cargo.

DHL, Safexpress, Continental Warehousing, Indo Arya, MJ Logistics, Allcargo, Nippon Express, etc. are the major players in industrial warehousing. All of these have a pan-India presence. This segment is highly competitive, and customers are very price sensitive. The competiveness of players in modern warehousing is mainly dependent on factors such as value for money to the user industry, reducing damage to products, excellent services and the provision of value-added services. To gain a competitive edge over peers, warehouse players must position themselves as integrated solution providers.

Exhibit 5:

Recent investment in warehousing			
Date	Target	Investor	Deal Value ($ mln)
Jun – 2007	First Flight Couriers Ltd.	Dunearn Investments (Mauritius) Pte Ltd.	19.5
Apr – 2008	Greenarches Ltd	TVS Logistics Services Ltd	-
Jan – 2009	Spear Logistics Pvt. Ltd.	Ambit Pragma Ventures Pvt. Ltd.	3.5
Sep – 2010	Star Distribution Logistics	Aqua Logistics	2.8
May – 2011	National Collateral Management Services Limited (NCMSL)	Investor Group	22
Oct – 2011	Parekh Integrated	Itochu	5.2
Dec – 2011	Transmart India Pvt. Ltd.	Future Supply Chain Solutions	-
Jun – 2012	SSN Logistics	Times Internet Ltd.	-
Jan – 2013	Transpole Logistics Pvt. Ltd.	Everstone Capital	40
Jan – 2013	Magna Warehousing and Distribution	Chalet Hotels	-
Jan – 2013	Blohm + Voss Industries GmbH	SKF India	105

Source: EY Research

Trends

Changing business dynamics and the entry of global 3PLs have led to the re-modeling of the supply chain, including logistics and warehousing services, in India. From a mere combination of transportation and storage services, logistics is fast emerging as a strategic function that involves end-to-end value-added solutions to improve the efficiency of the supply chain.

The entry of international 3PLs has brought about new technology interventions, automated material handling devices and standards. This has intensified competition for domestic players. In addition, growing demand for better services at lower costs has led to the emergence of organized warehousing in the country. As a result, warehousing players are now stressing on efficient inventory management systems, with greater emphasis on value-added services such as consolidation, labeling, packaging and re-packaging, bar-coding, distribution services, custom clearance service, customer service and reverse logistics. The use of modern storage solutions, automation in warehouses for the effective utilization of space and MIS implementation are resulting in higher accuracy. The automobile and pharmaceutical segments are pioneering the automation trend.

Challenges

Despite its strategic importance in the Indian economy, scale of opportunities offered and its immense potential for growth, the Indian warehousing sector is faced with several challenges including the lack of sufficient physical infrastructure. The time lag between devising and implementing strategies, due to the lack of international warehousing standards, is another concern. High fragmentation and the dominance of unorganized players due to various applicable taxes at the state and central level are other issues plaguing the warehousing space. Indian players face challenges and bottlenecks at various stages of their operation life cycle. Some of these challenges are strategic, while others are operational and need to be managed on an ongoing basis. In such a scenario, the sustainable growth of the warehousing sector depends on how effectively industry players and the government can work together to address challenges in the long term.

Outlook

The global warehousing and storage industry has witnessed significant growth during the last five years. It is expected to offer good growth opportunities to industry players over the next five years also. The Indian warehousing industry is set to grow at a CAGR of 8%–10% and modern warehousing at 25%–30% over the next 5 years due to various factors including the anticipated increase in global demand, growth in organized retail and increasing manufacturing activities, presence of extremely affordable and desirable e-commerce options and growth in international trade.

Liquid storage

The terms liquid storage mainly refers to the storage of liquid bulk such as crude, petroleum products, chemical and edible oil. Tank farms facilitate a modal shift by providing intermediate storage facility for liquid bulk cargo before these are taken to processing plants. They enable cost-efficient logistics through larger shipping parcels to allow savings in ocean freight, facilitate trading, meet surges in seasonal demand due to the cyclicality associated with the commodity products handled and provide specialized storage requirements depending on the nature of the product.

Liquid bulk cargo handled at ports has been growing at a CAGR of 5%–6% between FY10 and FY13. Crude accounted for ~32% of the total liquid traffic in India in FY13, and it has grown at CAGR of 4% between FY10 and FY13. POL, which accounted for 64% of the total liquid bulk cargo in FY13, has grown at 5% between FY10 and FY13. Chemicals accounted for 2% of the total liquid traffic in FY12, and its share has grown at a CAGR of 10% from FY10 to FY13. The share of edible oil imports, which accounted for about 2% of the total liquid bulk traffic in FY13, has grown at a 8-9% CAGR between FY10 and FY13.

Around 80% of total POL traffic (crude and products) is stored in captive tanks farms of respective oil companies, whereas edible oil and chemicals are mostly stored in commercial tank farms. Demand for liquid storage space is increasing in India amid increasing traffic and limited existing capacities. Currently, the utilization of commercial tank farms in India is between 75% and 80% in FY13.

Growth drivers

Chemical imports have increased due to the oversupply in global markets (the Middle East and China). This has resulted in imported chemicals becoming cheaper than domestic production. Similarly, edible oil consumption is increasing in India. The area under oilseeds is continuously reducing year on year and there are no expectations of any significant addition to the area under oilseeds cultivation. In addition, consumer preferences have shifted to palm oil, which is imported. Increasing income will only drive consumption higher. With domestic production being inadequate, imports will continue to increase. In the backdrop of increasing traffic and no planned capacity addition, high utilization levels for tank farms at ports have led to increased competition for storage tanks, which, in turn, has led to increased realizations. Also, improved operational efficiencies (low spillage rate) also contribute to higher realizations from existing customers. Recently, the development of private airports has opened another avenue for tank farm operators. Airports operated by AAI used to only serve NOCs as the concessionaires. However, private airport operators are looking to maximize aeronautical revenue and are open to concessioning out tank farms to private operators.

Customer profile and major players – Liquid storage

- Customers
  - POL: oil marketing companies, industrial units
  - Chemical: industrial units across all segments such as textile, pharmaceutical, agriculture, FMCG and paper
  - Edible oil: edible oil refining companies
- Major players in the commercial segment
  - IMC Ltd.
  - Vopak India
  - Kesar Terminal
  - Ganesh Benzoplast
  - Indian Oil Tanking
  - Aegis Logistics
  - Sealord

IMC and Indian Oil Tanking (IOTL) are the largest tank farm operators in India. IOTL owns and operates tank farms at both ports and airports, whereas IMC operates tank farms only at ports. Currently, the liquid storage market is not cost competitive because customers are not price sensitive, mainly in the case of specialized chemicals, due to less availability of storage space. Tank farms in India are working at a utilization rate of 70%–80% across major hubs. No additional capacities are being envisaged, resulting in higher realization for tank farm operators.

Exhibit 6:

Recent investment in liquid storage			
Date	Target	Investor	Deal Value($ mln)
Dec – 2009	Shell Gas (LPG) India Pvt. Ltd.	Aegis Logistics	5.5
Jun – 2010	IMC Ltd.	Warburg Pincus LLC	50
Feb – 2011	Aegis Logistics	Infrastructure India Hldg Fund	15.1
July – 2011	CRL Terminal	Vopak	-
Aug – 2012	Kesar Multimodal Logistics Ltd.	Kesar Terminals	-

Source: EY Research

Outlook

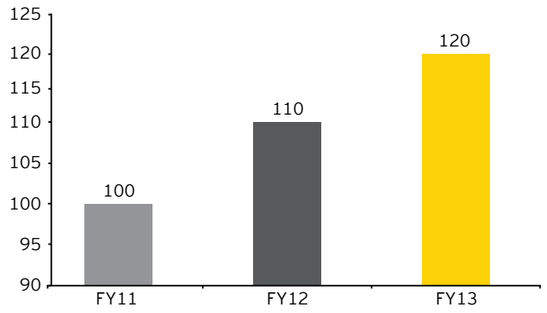
Demand for liquid storage is estimated to be on the rise over the next few years, as liquid traffic in India has grown at a CAGR of 4%–5% between FY10 and FY13. Growth is expected to continue for POL, chemicals and edible oil. This will necessitate additional capacity creation or higher utilization. Major ports in the country have now been encircled by settlements, and additional land is not available for expansion. However, greenfield tank farm projects for storage tank farms are limited to upcoming private ports such as Hazira, Krishnapatnam, Kakinada, Dighi and Pipavav.

4
Agri warehousing

Agriculture supply chain in India suffers from inefficiencies in the supply chain, leading to heavy losses of commodities throughout the country due to lack of proper storage and transportation facilities. Poor front-end infrastructure, such as storage facilities, improper warehousing facilities, redundant food processing technology and farmers' inaccessibility to value-added services, results in wastage of 40% of the fruits and vegetables.

Agri warehousing accounts for ~15% of the warehousing market in India, or ~INR80–85 billion, in FY13. It has been growing at a 10%–12% rate over the last 3 years. Agri warehousing capacity in India is 110–120 million metric ton (MT), and it has been growing at a CAGR of 8%–10% over the last 5 years. In addition, the Government has announced ~35 million MT additional capacity under the Twelfth Five-year Plan.

Exhibit 7: Agri Warehousing capacity in India (Mn MT)



Source: EY Industry analysis, Crisil Logistics Report

Growth drivers

Growing annual agriculture production is creating ongoing demand for more storage space to reduce wastage. Agri exports from India are increasing by 20%–25% annually and have emerged as the one of the largest exporters of fruit and vegetables, propelling growth in high-quality demand for warehousing. Recently, private sector participation in agri warehousing has increased, making this segment more competitive. Private players are focusing on improving the quality of agri warehouses with the use of technologies and are challenging public sector players. Besides, the Government is determined to improve agri warehousing infrastructure to reduce agricultural wastage. It has already issues various policies to drive growth in agri warehousing; some of these are:

- The Warehousing (Development & Regulation) Act, which aims to standardize warehousing operations, make warehouse receipts (WRs) negotiable and establish accreditation agencies for warehouse registration. Some of the benefiters of this Act are:
  - Farmers: availability of easy credit against the harvest collateral; avoidance of distress sale
  - Lenders: risk reduction since loans are backed by accredited collateral; reduced monitoring costs
  - Other stakeholders such as food processors, traders and brokers who need credit against their farm produce inventory

- Agri-warehousing activity covered under Priority Sector Lending by RBI
- Subsidy schemes such as
  - Grameen Bhandaran Yojana: the capital investment subsidy scheme offered by the NABARD
  - Ranges from 15% to 33% of project cost, depending on the location and operator
  - National Agricultural Renewal Fund. Govt. of India: encouraging private investment in the creation of agriculture infrastructure
- Tax incentives such as
  - Tax relief under 80(I)(B): tax holiday on warehousing income
  - Investment-linked deduction under Section 35AD: 100% upfront depreciation for tax purposes

Customers profile and major players

Farmers and traders are the key customers for agri warehouses. Recently, organized retail companies have also started using agri warehousing facilities to some extent.

The public sector accounts for around 70% of agri-warehousing capacity. Key public sector players include Food Corporation of India (FCI), Central Warehousing Corporation (CWC) and 17 State Warehousing Corporations (SWCs). The remaining 30% of the capacity is primarily held by unorganized small godown players. Warehousing capacities built over the past 10 years, especially those sanctioned by the NABARD, have an average storage capacity per warehouse of 1,261 MT. Around 75% godowns have capacity of less than 1,000 MT. The development of small- and mid-sized godowns indicates that most of them have been built by farmers or a community of farmers to ensure that distress sale is reduced and farmers are able to earn better prices on their produce.

A few large national-level players have emerged in this field over the last decade owing to the available capital subsidy. These include National Bulk Handling Corporation Ltd., National Collateral Management Services Ltd., Adani Agri Logistics, Star Agriwarehousing & Collateral Mangement Ltd., Shree Shubham Logistics Ltd., Ruchi Infrastructure Ltd., Guru Warehousing Corporation, Paras Warehousing and LTC Commercial.

Exhibit 8:

Recent investment in warehousing			
Date	Target	Investor	Deal Value($ mln)
Mar – 2011	Sohanlal commodity management	Investor Group	7
Jun – 2011	JICS Logistics	IL&FS PE	9
Feb – 2012	Staragri Warehousing and Collateral Management	IDFC PE	30
Sep – 2012	Sohanlal commodity management	Everstone Capital	24
Apr – 2013	Shree Shubham logistics	Tano Capital	14

Source: EY Research

Trends

Major private players such as Staragri, National Collateral Management Services Ltd, Shree Shubham Logistics Limited and National Bulk Handling Corporation are moving toward the owned warehousing model. They have increased focus on building state-of-the-art facilities that offer allied services, such as testing and transportation, in combination with the main warehousing services. Organized players are focusing on becoming integrated supply chain providers by offering value-added services, along with warehousing space, to various stakeholders such as farmers, traders, mill owners, banks, exporters and end industries' users.

Challenges

Even with the significant development of storage capacity sanctioned under NABARD and NCDC schemes, 20%–30% of the total food grain harvest is estimated to go waste due to inadequate storage capacity, regional imbalance in warehouses, lack of adequate scientific storage and inefficient logistic management in the country. Each grain bag is handled at least six times before it is finally opened for processing, which leads to higher storage and transportation charges, as well as increases the wastage of food grain during transit and handling. Furthermore, the storage capacity available with state agencies is primarily used for keeping central stock of food grains for buffer stock, public distribution systems and other Government schemes. This consequently leaves marginal capacity for other players to store their produce. Food grain (mainly wheat and rice) is the main commodity stored, while the other major crops storable in godowns include oilseed, spices and cotton. Although the government has started focusing on building storage capacity through various schemes, the emphasis is still largely on the storage of wheat and rice, which are considered as staple food in the country.

Outlook

Overall agri warehousing capacity is increasing by 8%–10% annually; however, 20%–30% of the total food grain harvest is wasted due to the lack of availability of storage capacity, regional imbalance in warehouses, lack of adequate scientific storage and inefficient logistic management in the country. Building additional storage capacity and upgrade of the existing state-owned warehouses would be crucial for Indian agri warehousing growth. Also, the major storage capacity of government agencies is occupied by wheat and rice, which leads to acute shortage of storage capacity for other food grains and agri commodities. The Government needs to step up focus on the storage of commodities other than rice and wheat. The entry of private players has changed the face of agri warehousing in India. These players are providing value-added services, along with the traditional warehousing space.

5
Cold stores

Cold stores are essential used for the storage and distribution of perishable goods such as fruits and vegetables, chocolates, dairy products; frozen foods such as meat and ice cream, and temperature-sensitive pharmaceutical products. Cold stores account for ~16% of the total warehousing industry and it estimated to worth a ~INR90 billion industry. The cold storage industry is expected to grow at ~15% per annum on a sustained basis over the next 5 years, with the organized market growing at a faster pace of ~20%.

In addition to cold storage, trucking and value-added services are being provided by cold store players. All these service offerings are cumulatively known as cold chain. The Indian cold chain market is highly fragmented among more than 3,500 companies in the whole value system. Organized players contribute only ~8%–10% of the cold chain industry market. Snowman Logistics, RK Foodland and Gati Kausar are the largest players in the cold chain industry.

Growth drivers

Organized cold store is growing at a very high rate due to various factors. Growth in organized retail is one of the key factors driving the growth of the organized cold chain segment. The share of the organized market in retail, which is at 10% in FY13, is expected to grow to 30%, with food being the least penetrated segments and poised for high growth. Similarly, the Indian food processing Industry, which is at a nascent stage, is expected to grow at more than 17%. With most of the processed categories requiring cold chain services, demand is expected to increase at a higher rate. Besides, the Quick Service Restaurants (QSR) segment is expected to witness 30% growth over the next 3 years on account of changing consumption habits and increasing presence of QSRs and restaurants in India. This will create huge demand for storing perishable food items. Growing GDP, increasing population and improving per capita consumption of food items are other enablers for higher cold stores space demand.

Other niche categories that require cold chain services for preservation and transport include pharmaceutical, reagents, aviation spare parts, certain chemicals and industrial products, luxury goods, flowers and spices. All of these are demonstrating healthy growth, as is illustrated below.

- Pharma and biopharma is expected to grow at 23%–30% y-o-y.
- On the back of export demand, the flower segment is expected to grow at 25% y-o-y.
- Domestic and export demand is expected to drive demand for spices, expected to grow at 21% y-o-y.
- Demand for luxury products in India is expected to grow at 25% y-o-y until FY15 on account of an increasing number of HNIs.

On its part, The Government is also providing various incentives to promote cold stores in India; some of these are:

- 100% FDI allowed through the automatic route.
- The introduction of GDPs and GRPs will necessitate the cold storage and transportation of most formulations in the pharmaceutical sector.
- The Government is emphasizing on food parks and integrated cold chain development through public private partnerships. In line with this, it has proposed financial outplay for cold chain infrastructure and food parks of

around INR16.75 billion and INR32.50 billion, respectively. Under the scheme, the Government is providing over 50%–70% capital grant on cold stores projects.

- APEDA scheme: 25% of the cost is subject to a ceiling of INR1 million per beneficiary for setting up cold storage.
- NHB – capital investment subsidy scheme: back-ended subsidy of 25% (33.33% for NE states) is provided to the maximum extent of INR5 million (INR6 million for NE states) per project.
- MOFPI – integrated cold chain, value addition and preservation scheme: financial assistance (grant-in-aid) of 50% is provided on the total cost of plant and machinery and technical civil works in general areas and 75% for the NE region and difficult areas subject to a cap of INR100 million.
- In the 2012-13 budget, the Government has taken various initiatives to promote the cold stores industry. These include providing investment-related deductions of capex up to 150%, classification of cold chain as an infrastructure project and reduction of custom duty of cold storage equipment to 2.5%.

Customers profile and major players

Key consumers of cold stores space include producers, importers, exporters, wholesalers, and retailers across various industry segments such as:

- FMCG companies – manufacturers/marketers of perishables such as chocolates and ice creams
- QSRs – chains such McDonalds which use the central kitchen model to serve franchisees
- Organized retailers
- Pharma companies
- Food processors (across fish, meat, poultry, fruit and vegetables)
- Perishable commodity (exotic/high-value fruits, vegetables, flowers) wholesalers, importers and exporters

Snowman, Gati Kausar, Cold Star, ColdEx, Kelvin cold chain, RadhaKrishna Foodland, MJ Logistics, Dev Bhumi Cold Chain, Fresh and Healthy Enterprise, etc., are the major organized players in the industry.

Exhibit 9:

Recent investment in cold stores			
Date	Target	Investor	Deal Value($ mln)
Jun-13	Snowman Logistics Ltd.	Norwest Venture Partners	10.3245
Jul-12	Mehta Frozen Foods Carriers Pvt. Ltd.	Ambit Pragma Fund II	-
Dec-10	Swastik Roadlines Pvt. Ltd.	India Equity Partners Fund I	8.79
May-10	Cold Star Logistics Pvt. Ltd.	Tuscan Ventures Fund	3.5
Aug-09	Snowman Logistics Ltd.	International Finance Corp.	5
Aug-13	Snowman Logistics Ltd.	Gateway Distriparks Ltd.	3.8
Jun-13	Snowman Logistics Ltd.	Gateway Distriparks Ltd.	3.1
Dec-10	RR Enterprises Ltd.	Kuehne + Nagel International AG	-
Dec-09	Snowman Logistics Ltd.	Gateway Distriparks Ltd.	-

Source: EY Research

Trends

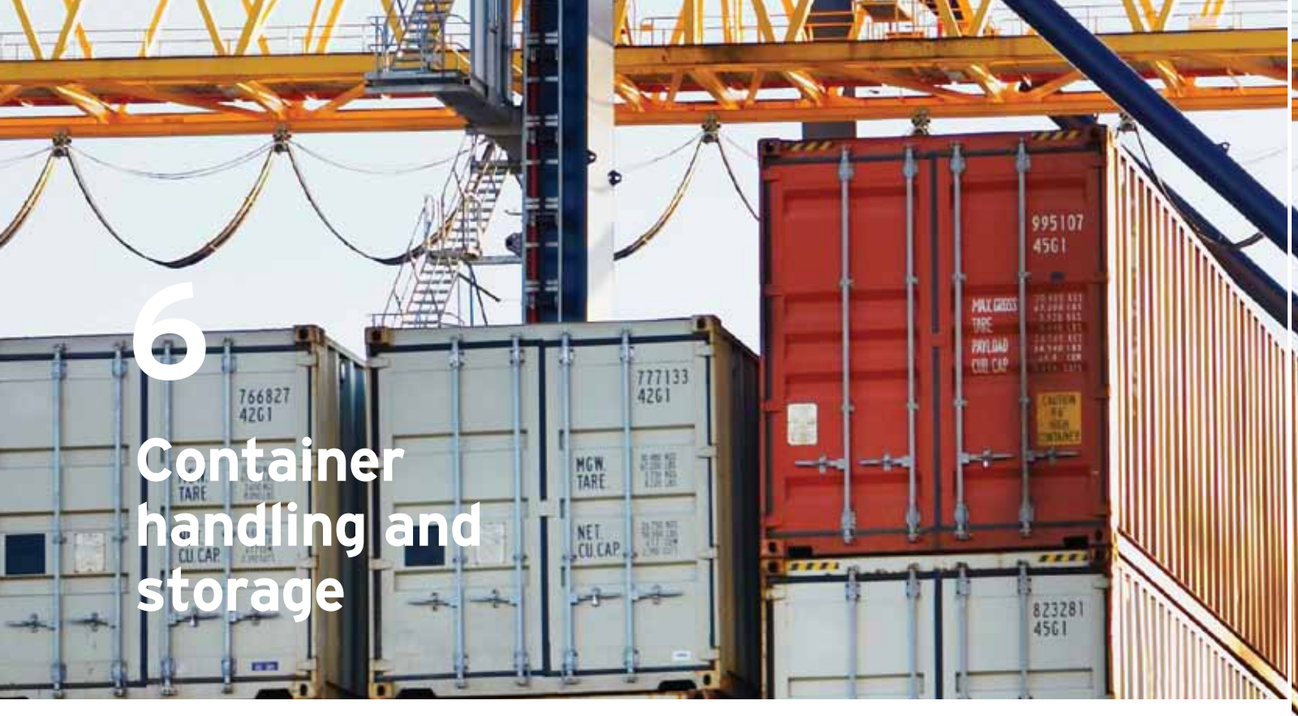
In last few years, the cold stores industry has evolved and has focused on the modernization of stores, as well as quality transportation and value-added services. The evolution of the new business model of trading in the F&V segment with in-house cold stores has enabled players such as Dev Bhumi, Suri Agro Fresh and FHEL to trade in horticultural produces, reaping the benefits of higher margins by making fruits available off season, along with driving the utilization of cold storage. Historically, cold storages are built for a particular commodity such as potatoes to reduce operational cost. Current demand necessitates the consolidation of demand across multiple customers, commodities, temperature profiles, resulting in a surge in multipurpose storage capacity.

Challenges

Healthy capacity utilization, ability to provide integrated solutions to end users, deep understanding of perishable commodities and prudent capex phasing will be the key features of successful cold chain players. Cold stores are high fixed cost businesses by nature entailing heavy initial investments in refrigerator units and land. Ensuring healthy capacity utilization through customer linkages in the form of long-term contracts or anchor customers will help secure a healthy return on investment. Cold-stored commodities require control of temperature and humidity throughout the value chain. The lapse of service, either by the storage provider or the transporter, adversely impacts the quality of perishable commodity, as well as reduces its value. Hence, integrated players providing end-to-end service will be better placed to gain customers and market share. The variety of commodities such as F&V, dairy products, frozen meat and processed food are kept in cold stores. Deep understanding of storage temperatures and humidity is required to maintain the quality of stored commodities. Also, the knowledge of the compatibility of various commodities with respect to temperature, humidity and odor becomes crucial to enjoy higher returns from cold stores with the emergence of multi-commodity storage facilities. The ability of players to forecast market demand and phase capital expenditure in line with demand trends will also help ensure a healthy return on capital invested.

Outlook

Globally, the focus has now shifted from increasing production to better cold storages and transportation of food produce. Cold chains have now become an integral part of supply chain management for the storage and transportation of temperature-sensitive goods. The utilization of cold chain logistics includes both cold storages and refrigerated transportation and is used to increase the shelf life of food produce. Growth in the organized retail and the food processing sector drives the cold chain market in India. Rising demand for cold storages in the pharmaceutical sector is also driving growth in the cold chain market.



6 Container handling and storage

The Container traffic at major ports has almost doubled in the past 5-6 years. According to estimates, the world container throughput will reach 1 billion TEUs by 2020, which is almost double of the current container traffic. The emerging Asian & African Countries are expected to be the prime movers in achieving this growth. Most of the shipyards are filled with orders for container ships of over 10,000 TEUs capacity. These container ships will form the major part of the world maritime fleet in the coming years. India is going to be the preferred destination for a global manufacturing hub. This fact presents many opportunities for the ports to change their current operation style and be ready for the foreseen surge in demand of handling and faster evacuation of containers. Many investments have been proposed and steps have been taken by various port authorities for attracting the container traffic.

CFS and ICDs form a key part of the logistics industry infrastructure. A CFS/ICD can be defined as "Common user facility with public authority status equipped with fixed installations and offering services for handling and temporary storage of import/export laden and empty containers carried under customs control. Transshipment of cargo can also take place from such stations."

CFS/ICD accounts for ~14% of total warehousing market in India and is estimated at around ~Rs.75-80 bn in FY13 in India and has grown with a CAGR of 10-15% over last 3 years. ICD/ CFS facilities have been rising due to increase in port traffic and containerization level in India. It is expected that CFS/ ICD market will continue to grow at CAGR of 10-15% over next few years and estimated to reach ~Rs.125 bn by FY15.

Growth drivers

The CFS & ICDs are amongst the most rapidly growing segments of logistics industry in India. The increasing container traffic at ports needs the support infrastructure which can accommodate the traffic volumes of the containers. Growth in containerized cargo and opening up of container rail transport boosted CFSs and ICDs. Containerized cargo traffic is growing at 12-15% CAGR in India and it has grown dynamically in recent years across all ports with JNPT topping the list. CFS/ ICD are also working at a one stop point for the shippers for custom clearance, stuffing/ de-stuffing, packaging, inspection, consolidation of cargo, etc.

Government is working on the plan to ease the movement of the containerized cargo at the port and approvals to move containers to ICD/ CFS or vice versa. Also, government is focusing towards improvement in road, rail and port infrastructure projects to provide impetus to the whole logistics industry.

Customers profile and major players

Companies who have container import and export focus use the CFS/ ICD facilities and mainly concentrated in West and South India and accounts for around 80% of total concentration. Major hubs in India are Mumbai/ JNPT, NCR, Nagpur, Mundra, Bangalore, Ahmedabad, Chennai, Vizag, Hyderabad, Ludhiana, Kanpur, Kolkata, etc.

There are as many as 247 listed container terminals in India. Most of these are CFSs located closer to the port. This demonstrates the dependency on port based facilities as the primary point for cargo containerization and clearing.

By comparison, the numbers of listed ICDs are fewer than CFS, despite the fact that a large portion of the cargo traffic is bound for inland locations. ICDs having rail connectivity the share of private operators is still lagging while the government run Container Corporation of India (CONCOR) continues to be the largest player operating 48 terminals which handle EXIM cargo, while 14 others handle domestic traffic only.

Exhibit 10:

Recent investment in container storage			
Date	Target	Investor	Deal Value($ mln)
Sep – 2009	Contrans Logistics Pvt. Ltd.	Eredene Capital PLC	1
Apr – 2011	Continental Warehousing Corp	Warburg Pincus India Pvt Ltd	100
Jan – 2012	Sattva CFS & Logistics Pvt Ltd	Sattva Business Group Ltd	2
Jun – 2012	KSH logistics Pvt Ltd	PCRD Services Pte Ltd	5
Feb – 2013	Chandra CFS & terminal operations	Gateway Distriparks(South)Pvt	5

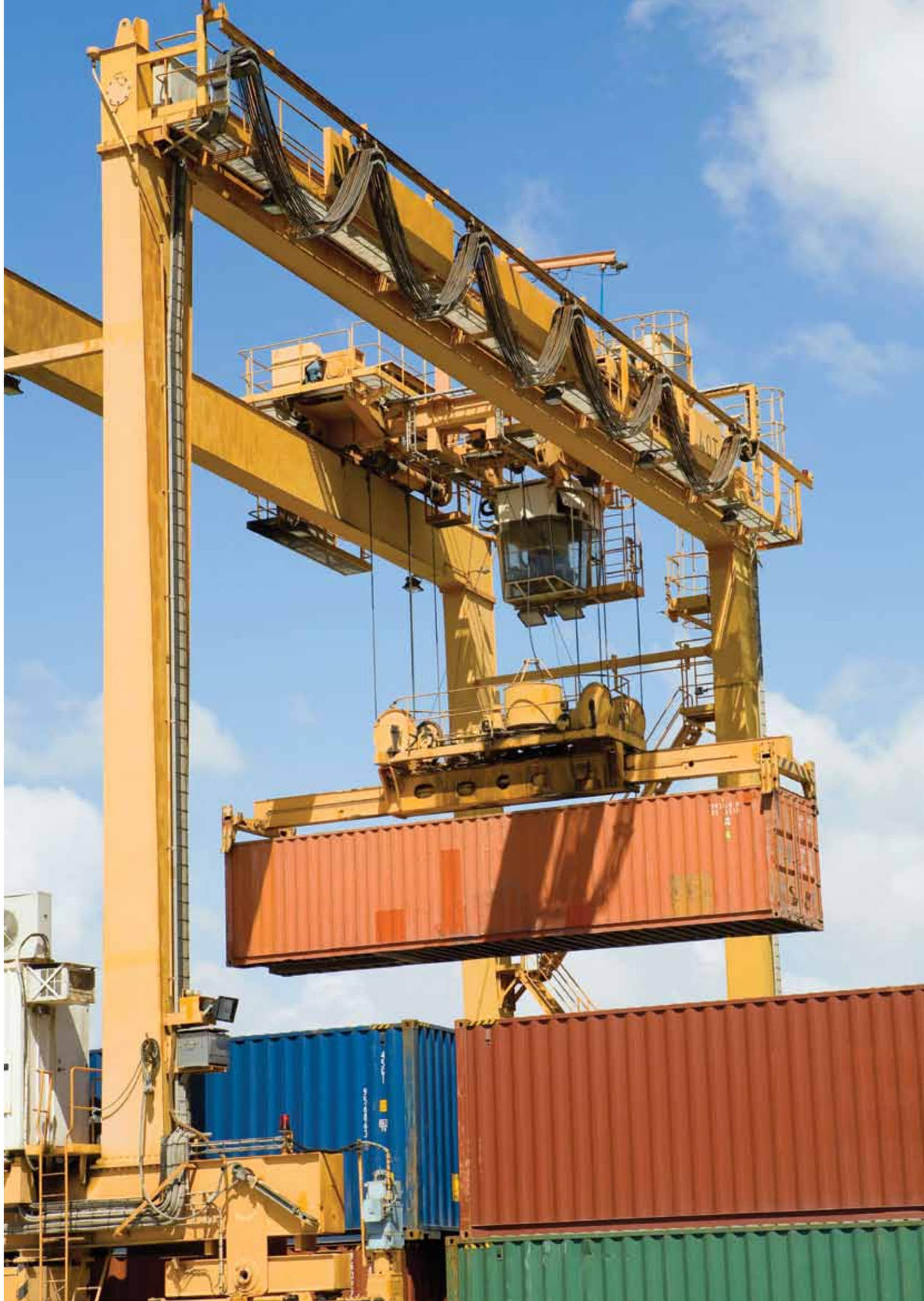
Source: EY Research

Challenges

Despite the apparent benefits of CFS/ICDs, several bottlenecks persist. Road is still a preferred mode of transport even over long distances, and the trend has been on an upswing. The share of rail transport has regressed from close to 28% of cargo movement to MERELY 22%, creating A challenge for ICD operators in offering frequent rail services and timely transports, as opposed to export cargo moving directly to a CFS near the port facility. Although there are myriad factors at play and they vary in form and magnitude for each ICD location, the two key factors encouraging direct road movement through ports are transit time and costs. Transit time refers to the frequency of rail services, which, in turn, is related to traffic/demand. Therefore, cost benefit and ease of doing business over direct road transport is paramount. Rail haulage may be uncompetitive or may provide little benefit over roads in many cases, especially where distances are not long or last mile connectivity is expensive. The single-largest cost component of rail operations from ICD are high haulage costs, which is paid to the Indian Railways. It is estimated to be worth between 70% and 75% of the total transport cost. Other issues, such as the availability of empty containers at the ICD location, difference in ocean freight rates by shipping for ICD acceptance, congested rail corridors and reluctance to movement from established setups also translate into cost competitiveness and ease of doing business.

Outlook

CFSs and ICDs are some of the fastest-growing segments of the Indian logistics industry. Their growth will gain pace in line with the increasing need to tackle the growing complexities of maritime intensive supply chain. Growing competition from private participation will also force players to provide new services and customized logistic solutions. Recent investments in developing Free Trade Warehousing Zones (FTWZs) by private players are illustrative of the growth potential and patent need of supporting infrastructure. However, to sustain high growth in container storage, few challenges need to be tackled. The modal shift from road to rail will play a key role in facilitating a smooth flow of cargo from distant hinterlands to the port, decongesting ports and National highway in a safe and environmentally sensitive manner. The much-awaited development of dedicated freight corridors on Eastern and Western ports is likely to provide the required impetus for rail services to be competitive to road transport. As per government estimates, the development of dedicated freight corridors is expected to increase rail coefficient from Western ports to 50% from the present levels of 20%. Cooperation among key stakeholders including various government agencies, ports, shipping lines and private ICD operators will be a key success factor for enhancing the role of inland container depots, as well as container freight stations.



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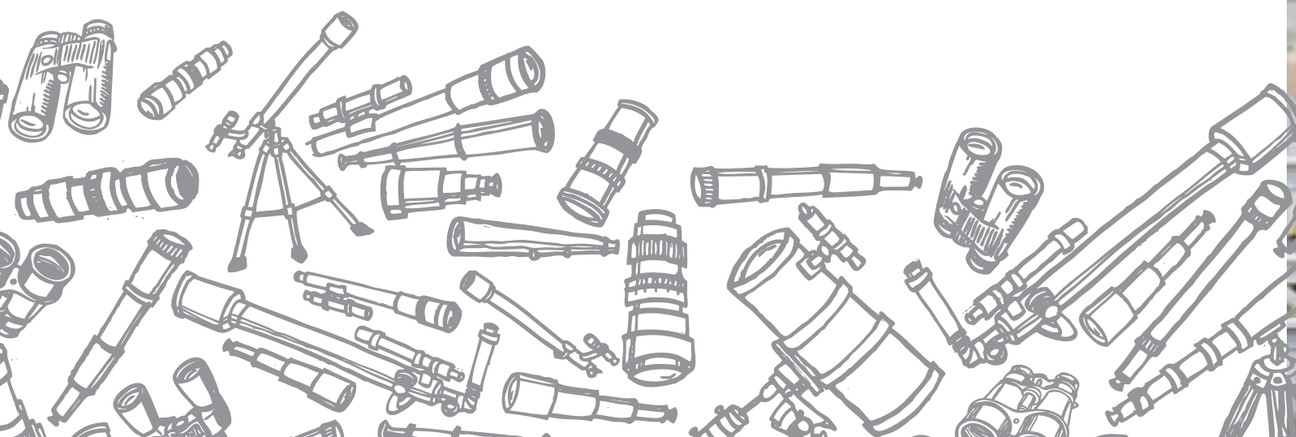
Outlook

Driven by growth in production and organized retail, warehousing is the major segment contributing to the growth of the Indian logistics industry. As customers become increasingly demanding, warehousing companies have been left with no choice but to evolve into efficient and effective supply chain partners for their customers, as against being passive entities leasing out space. Changing business dynamics and the entry of global 3PLs have led to the re-modeling of logistics and warehousing services in India. From a mere combination of transportation and storage services, logistics is fast emerging as a strategic function that involves end-to-end solutions that improve efficiencies. The growth of organized industry sectors such as retail, automotive, manufacturing, pharma and agriculture in India is expected to give rise to more integrated supply chains, requiring better services, processes and storage facilities. Furthermore, the roll out of GST by the Indian Government will play a major role in the growth of the logistics industry and its warehousing business.

Dynamic market requirements have made it imperative for Indian warehousing players to overcome challenges, as well as maintain, improve and sustain competitiveness. Various measures such as skill development, policy initiatives and government measures, IT adoption and increased investments in the sector can be effective in increasing the competitiveness of Indian warehousing players. The challenges and concerns should be addressed with collaborative efforts among all stakeholders, including the government and its agencies, policy makers, entrepreneurs, investors, logistics service providers, manufacturers, farmers and sellers. Rapid capability development by service providers to meet the ever-increasing requirements of customers, along with greater propensity from customers to outsource larger parts of their supply chain, will rewrite the success story for the logistics and warehousing industry.



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