

Cold Chain, Temperature Controlled

Supply Chain:

Cold Chain Supports the Supply Chain

(Cold Chain, Warehouse, Cold Storage and Reefers)





The cold chain refers to the management of the temperature of perishable products in order to maintain quality and safety from the point of slaughter or harvest through the distribution chain to the final consumer.

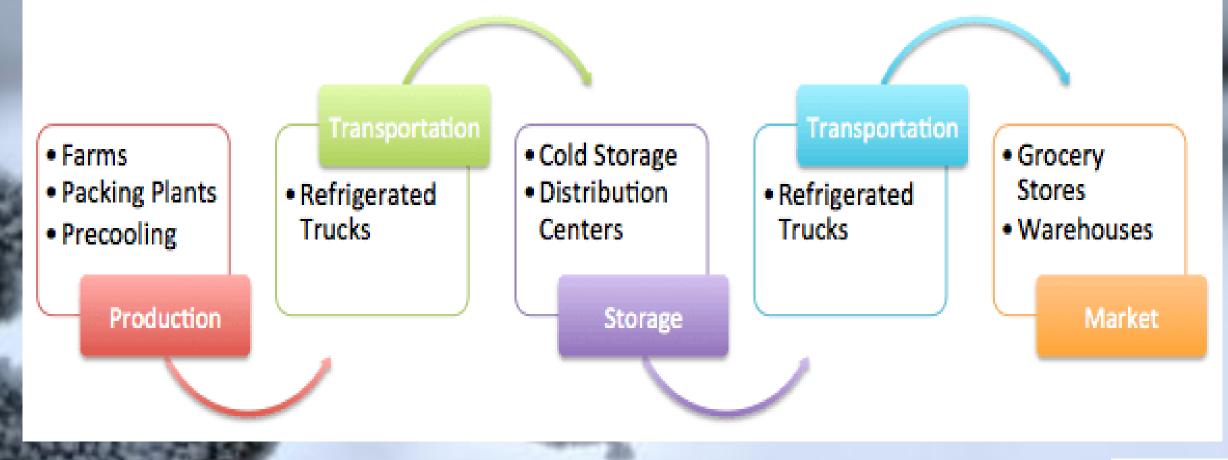


The cold chain ensures that perishable products are safe and of a high quality at the point of consumption. Failing to keep product at the correct temperatures can result in a variety of negative attributes including, among others, textural degradation, discoloring, bruising and microbial growth. Moreover, a quality product leads to a satisfied customer, greater demand, and overall protection of public health.



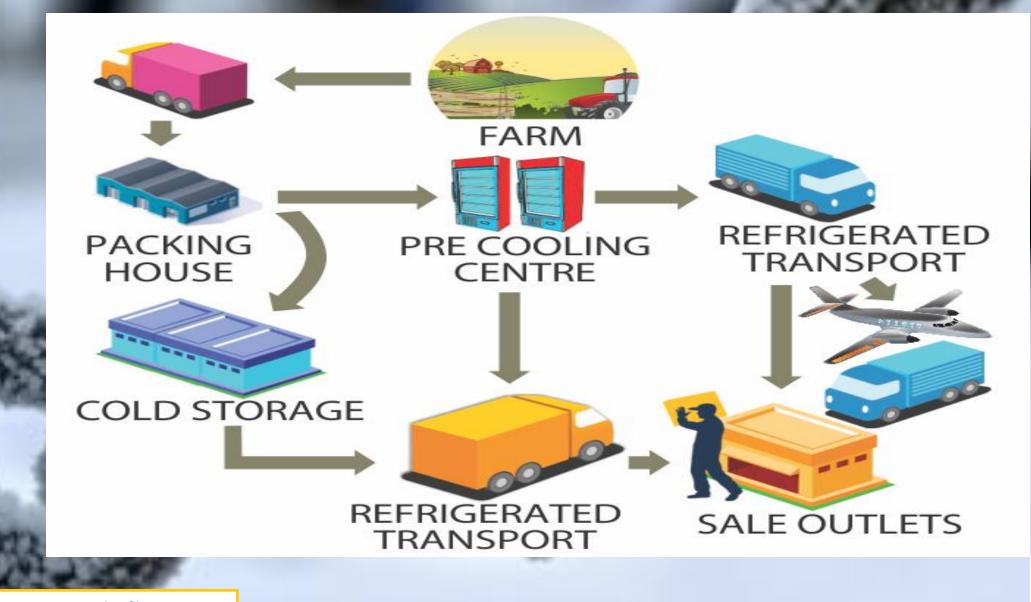


Component of the Cold Chain





Cold Chain Management



Cold chain management

Cold chain management refers to the logistical process used to maintain optimal conditions during the transport, storage and handling of products such as pharmaceuticals and chemicals.

 Cold chain is the system of transporting or storing vaccine within the safe temperature range of 2°C to 8°C (strive for 5°C – the midway point).



 Cold chain breach is the exposure of vaccines to temperatures outside the recommended range of 2°C to 8°C, excluding fluctuations up to 12°C lasting less than 15 minutes when restocking, cleaning the fridge or stock taking.

• In most cases, cold chain breaches must be reported to the department as soon as possible using the Cold Chain Breach Report form. This form is also used to report light exposure breaches for light-sensitive vaccines.



Cold chain involves the transportation of temperature-sensitive products along a supply chain through thermal and refrigerated packaging methods to protect the integrity of these shipments. There are several means in which cold chain products can be transported: Refrigerated trucks and railcars; Refrigerated cargo ships; and Air cargo.

India's cold chain sector is a combination of surface storage and refrigerated transport. The industry has been growing at a CAGR of 20% for the last three years. The cold chain market in India is anticipated to reach Rs 624 billion (US\$13 billion) by 2017, according to 2014 estimates. Cold stores are the major revenue contributors of the Indian cold chain industry.



Globally cold chains have now become an integral part of supply chain management for the storage and transportation of temperature-sensitive goods. The focus has now shifted from increasing production to better cold storages and transportation of food produce. The utilisation of cold chain logistics includes both cold storages and refrigerated transportation and is used to increase the shelf life of food produce.





The Cold Chain Industry is developing at a faster pace in India due to shift in focus from increasing the production to better storage and transportation facility of the commodity. The industry has now become an integral part of the supply chain industry comprising of refrigerated storage and refrigerated transportation. The cold storage infrastructure has the ability to maintain the shelf life of perishable goods by maintaining proper temperature of the products from the farm gate to the end-consumer.





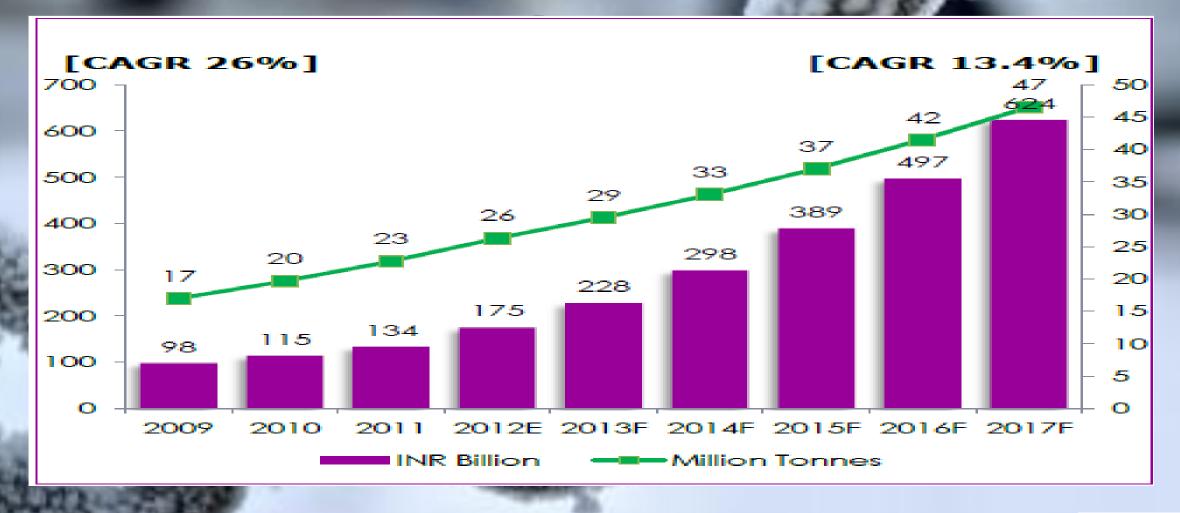
Owing to the rising need of the infrastructure to reduce wastage, the cold chain industry in India is forecasted to grow at a CAGR of 19% during the period of 2017-2022.

The cold chain industry is seen as an emerging and fast growing business sector in India.



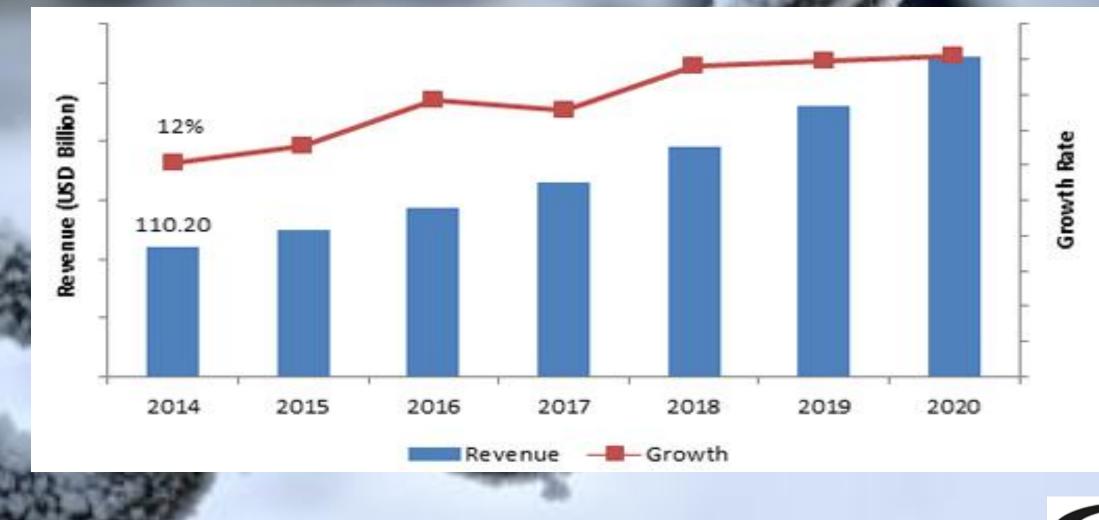


Growth of the Indian Cold Chain Industry



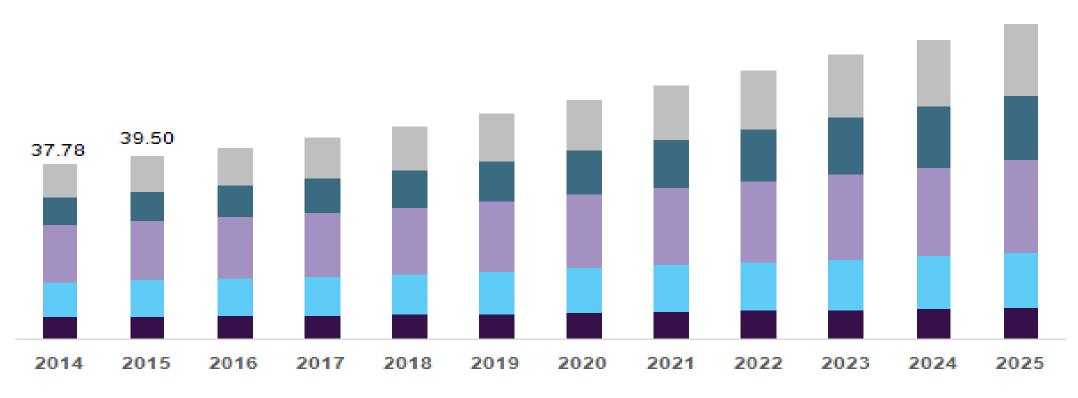


Global Cold Chain Market





U.S. Cold Chain Market, By Application, 2014 - 2025 (USD Billion)



Fruits & Vegetables Dairy Fish, Meat & Seafood Processed Food Pharmaceuticals



Niir Project Consultancy Services (NPCS) can provide Detailed Project Report on

Cold Chain, Temperature Controlled Supply Chain



Cold Chain

Cold chain is the supply and distribution of commodities that must be kept within a defined temperature range throughout the shipping and storage cycle and the management of that cycle. It is used to help extend and ensure the shelf life of products such as fresh agricultural produce, seafood, frozen food, photographic film, chemicals and pharmaceutical drugs....<u>Read more</u>



> Warehouse

We often define warehousing as the storage of goods. Broadly interpreted, this definition includes a wide spectrum of facilities and locations that provide warehousing, including the storage of iron ore in open fields; the storage of finished goods in the production facility; and the storage of raw materials, industrial goods, and finished goods while they are in transport....Read more



Market Research Report on Cold Chain Logistics in India (Cold Storage and Reefers) - Present Scenario, Future Prospects, Market Potential, Opportunities, Growth Drivers, Industry Size, Analysis & Forecasts upto 2017

Cold chain sector in India is gaining ground with greater government thrust on reducing food wastage and has a bright future ahead of itself. Gauging the market prospects of the sector, Niir Project Consultancy Services has published a new report titled Market Research Report on Cold Chain Logistics in India (Cold Storage and Reefers)-<u>Read more</u>



 India Emerging Business Opportunities: Cold Chain Sector (Why to Invest, Project Potential, Core Financials, Market Size & Industry Analysis)

Often termed as the sunrise sector, cold chain logistics hold immense growth potential in India. Rising Indian Population, mounting consumer incomes and changing preferences have led to increased focus on food security and health services. The demand for processed food has also risen sharply necessitating the support from efficient cold chain logistics of the country....<u>Read more</u>



For more details visit at:

Cold Chain, Temperature Controlled Supply Chain

<u>The Complete Book on Cold Storage, Cold Chain &</u> <u>Warehouse (with Controlled Atmosphere Storage</u> <u>& Rural Godowns)</u>



Major Queries/Questions Answered in our Report?

- How has the industry performed so far and how will it perform in the coming years?
- 2. What is the Project Feasibility of the Plant?
- 3. What are the requirements of Working Capital for setting up the plant?
- 4. What is the structure of the industry and who are the key/major players?



- **5.** What is the total project cost for setting up the plant?
- 6. What are the operating costs for setting up the plant?
- 7. What are the machinery and equipment requirements for setting up the plant?
- 8. Who are the Suppliers and Manufacturers of Plant & Machinery for setting up the plant?
- 9. What are the requirements of raw material for setting up the plant?



- 10. Who are the Suppliers and Manufacturers of Raw materials for setting up the plant?
- **11.** What is the Plant Layout for setting up the plant?
- **12.** What is the total size of land required for setting up the plant?
- **13.** What will be the income and expenditures for the plant?
- 14. What are the Projected Balance Sheets of the plant?



- 15. What are the requirement of utilities and overheads for setting up the plant?
- 16. What is the Built up Area Requirement and cost for setting up the plant?
- 17. What are the Personnel (Manpower) Requirements for setting up the plant?
- **18.** What are Statistics of Import & Export for the Industry?
- **19.** What is the time required to break-even?



- **20.** What is the Break-Even Analysis of the plant?
- **21.** What are the Project financials of the plant?
- **22.** What are the Profitability Ratios of the plant?
- 23. What is the Sensitivity Analysis-Price/Volume of the plant?
- 24. What are the Projected Pay-Back Period and IRR of the plant?
- **25.** What is the Process Flow Sheet Diagram of the plant?
- **26.** What are the Market Opportunities for setting up the plant?
- **27.** What is the Market Study and Assessment for setting up the plant?



Reasons for buying our report:

- The report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product
- The report provides vital information on the product like it's characteristics and segmentation
- The report helps you market and place the product correctly by identifying the target customer group of the product



• The report helps you understand the viability of the project by disclosing details like machinery required, project costs and snapshot of other project financials

- The report provides a glimpse of government regulations applicable on the industry
- The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions





Our Approach:

- Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years.
- The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players
- We use reliable sources of information and databases. And information from such sources is processed by us and included in the report





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Contact us

Niir Project Consultancy Services 106-E, Kamla Nagar, Opp. Spark Mall, New Delhi-110007, India. Email: <u>npcs.ei@gmail.com</u>, <u>info@entrepreneurindia.co</u> Tel: +91-11-23843955, 23845654, 23845886, 8800733955 Mobile: +91-9811043595Fax: +91-11-23841561 Website : <u>www.entrepreneurindia.co</u>, <u>www.niir.org</u> Take a look at NIIR PROJECT CONSULTANCY SERVICES on #StreetView https://goo.gl/VstWkd



NIIR PROJECT CONSULTANCY SERVICES

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- One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services
- We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad



What do we offer?

- Project Identification
- Detailed Project Reports/Pre-feasibility Reports
- O Business Plan
- Market Research Reports
- Technology Books and Directory
- Industry Trend
- Databases on CD-ROM
- Laboratory Testing Services
- Turnkey Project Consultancy/Solutions
- Entrepreneur India (An Industrial Monthly Journal)



How are we different ?

- We have two decades long experience in project consultancy and market research field
- We empower our customers with the prerequisite know-how to take sound business decisions
- We help catalyze business growth by providing distinctive and profound market analysis
- We serve a wide array of customers, from individual entrepreneurs to Corporations and Foreign Investors
- We use authentic & reliable sources to ensure business precision



Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation



Who do we serve?

- Public-sector Companies
- Corporates
- Government Undertakings
- Individual Entrepreneurs
- \circ NRI's
- Foreign Investors
- Non-profit Organizations, NBFC's

- Educational Institutions
- Embassies & Consulates
- Consultancies
- Industry / trade associations



Sectors We Cover

- Ayurvedic And Herbal Medicines, Herbal Cosmetics
- Alcoholic And Non Alcoholic Beverages, Drinks
- O Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin
- Activated Carbon & Activated Charcoal
- Aluminium And Aluminium Extrusion Profiles & Sections,
- Bio-fertilizers And Biotechnology
- O Breakfast Snacks And Cereal Food
- O Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling



- Bamboo And Cane Based Projects
- Building Materials And Construction Projects
- Biodegradable & Bioplastic Based Projects
- Chemicals (Organic And Inorganic)
- Confectionery, Bakery/Baking And Other Food
- Cereal Processing
- Coconut And Coconut Based Products
- Cold Storage For Fruits & Vegetables
- Coal & Coal Byproduct



- Copper & Copper Based Projects
- Dairy/Milk Processing
- Disinfectants, Pesticides, Insecticides, Mosquito Repellents,
- Electrical, Electronic And Computer based Projects
- Essential Oils, Oils & Fats And Allied
- Engineering Goods
- Fibre Glass & Float Glass
- Fast Moving Consumer Goods
- Food, Bakery, Agro Processing



- Fruits & Vegetables Processing
- Ferro Alloys Based Projects
- Fertilizers & Biofertilizers
- Ginger & Ginger Based Projects
- Herbs And Medicinal Cultivation And Jatropha (Biofuel)
- Hotel & Hospitability Projects
- Hospital Based Projects
- Herbal Based Projects
- Inks, Stationery And Export Industries



- Infrastructure Projects
- Jute & Jute Based Products
- Leather And Leather Based Projects
- Leisure & Entertainment Based Projects
- Livestock Farming Of Birds & Animals
- Minerals And Minerals
- Maize Processing(Wet Milling) & Maize Based Projects
- Medical Plastics, Disposables Plastic Syringe, Blood Bags
- Organic Farming, Neem Products Etc.



- Paints, Pigments, Varnish & Lacquer
- Paper And Paper Board, Paper Recycling Projects
- Printing Inks
- Packaging Based Projects
- Perfumes, Cosmetics And Flavours
- Power Generation Based Projects & Renewable Energy Based Projects
- Pharmaceuticals And Drugs
- Plantations, Farming And Cultivations
- Plastic Film, Plastic Waste And Plastic Compounds
- Plastic, PVC, PET, HDPE, LDPE Etc.



- Potato And Potato Based Projects
- Printing And Packaging
- *Real Estate, Leisure And Hospitality*
- Rubber And Rubber Products
- Soaps And Detergents
- Stationary Products
- Spices And Snacks Food
- Steel & Steel Products
- Textile Auxiliary And Chemicals





- Township & Residential Complex
- Textiles And Readymade Garments
- Waste Management & Recycling
- Wood & Wood Products
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- Wire & Cable



Contact us

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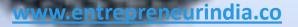


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