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SUMMER INTERNSHIP PROJECT 2023

REPORT TITLE

LOGISTIC COST ANALYSIS WITH REFERENCE TO DHAMRA PORT , ADANI PORT AND SEZ.

SUBMITTED BY

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2-year MBA Batch: 2022-24 University
Regn. No : 2206258119

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Finally, no words of gratitude can express my indebtedness to my parents and my friends for encouraging me throughout the study.

Mr. Varun Agarwal

(Internal Guide)

Bibhu Krupa Samanta

Roll No. 2206258119

CERTIFICATE OF INTERNAL GUIDE

This is to certify that Mr Bibhu Krupa Samanta., bearing university registration no 2206258119 of 2022-24 batch, has completed his/her summer internship at Dhamra Port , ADANI PORT & SEZ from September 1st to September 30th under the supervision of Mr. Sushrut Mohanty and has submitted this project report under my guidance in partial fulfilment of the requirements for award of the degree of Master of Business Administration at Biju Patnaik Institute of Information Technology and Management Studies, Bhubaneswar. To the best of my knowledge and belief, this project report has been prepared by the student and has not been submitted to any other institute or university for the award of any degree or diploma.

Date:

Place: Bhubaneswar

Signature of the Internal Guide

Name :

Designation:

adani
Ports and
Logistics

DPCL/HR/13/Training/2023-24 **Date: 3rd October 2023**

To whomsoever it may concern

This is to certify that **Mr. Bibhu Krupa Samanta** has undergone his Internship Training at **The Dhamra Port Company Limited, Dhamra**, from 1st September 2023 to 30th September 2023 in Sales & Marketing department. During this tenure, he has successfully completed his project on **"“Logistic cost analysis With reference to The DHAMRA PORT COMPANY LTD"** and submitted the report to us.

During the training we found him to be honest, sincere, and hardworking.

We wish him the very best in all his future endeavors.

Sincerely yours,

For The Dhamra Port Company Limited

THE DHAMRA PORT COMPANY LIMITED DHAMRA

Durga Prasad Pattanaik
Associate Manager– Human Resources

The Dhamra Port Company Ltd.
(A Wholly Owned Subsidiary of APSEZL)
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DECLARATION

I, Mr. Bibhu Krupa Samanta Bearing university registration no 2206258119 (2022-24 batch), hereby declare that the project report titled "Logistic cost analysis With reference to DHAMRA PORT, ADANI PORT & SEZ". is based on my internship at Dhamra Port , ADANI PORT & SEZ , during the period of September 1st to September 30th and is an original work done by me under the supervision of Mr Sushrut Mohanty and Mr Varun Agarwal . This report is being submitted to Biju Patnaik Institute of Information Technology and Management Studies, Bhubaneswar, affiliated to Biju Patnaik University of Technology, Odisha, in partial fulfilment of the requirements for the award of the degree of Master of Business Administration. This project report has not been submitted to any other institute/university for the award of any degree or diploma.

Date:

Place: Signature

PREFACE

Welcome to the world of logistics costs, a fundamental aspect of modern supply chain management and business operations. Logistics costs are the financial outlays incurred in the process of planning, executing, and controlling the efficient flow and storage of goods, services, and information from their point of origin to their destination. In today's globalized and interconnected economy, an understanding of logistics costs is paramount for organizations seeking to optimize their supply chains, reduce expenses, and enhance competitiveness.

This report provides an overview of the logistic costs associated with Dhamra Port. The report is based on data collected from a variety of sources, including port operators, shipping companies, and logistics providers.

The report finds that the logistic costs associated with Dhamra Port are generally competitive with other major ports in India. However, there are some areas where costs could be reduced. For example, the report recommends that the port operator invest in additional infrastructure and equipment to improve efficiency. The report also recommends that the port operator work with shipping companies and logistics providers to develop more competitive freight rates.

CONTENT

INTRODUCTON

In an era of globalization and expanding trade, the efficient management of logistics and supply chain operations plays a pivotal role in the success of any port company. Dhamra Port Company Ltd., situated on the eastern coast of India, has emerged as a key player in the maritime industry. As a critical gateway for the transportation of goods, Dhamra Port has witnessed remarkable growth over the years, attracting attention from industries worldwide.

This Internship Program report delves into the realm of logistic cost analysis, focusing on the operations and strategies employed by Dhamra Port Company Ltd. to optimize their logistical efficiency while maintaining cost-effectiveness. The objective of this report is to provide a comprehensive overview of the logistics landscape at Dhamra Port and to evaluate the company's initiatives for cost containment and performance enhancement.

As global trade continues to evolve and demand for efficient supply chain solutions increases, understanding the dynamics of logistics and cost management within the maritime industry becomes imperative. This report will shed light on the methodologies, tools, and practices adopted by Dhamra Port Company Ltd. to maintain its competitive edge in the market.

The following sections will offer insights into the logistical challenges faced by the company, an in-depth analysis of cost components within their operations, and an assessment of the strategies implemented to mitigate expenses while ensuring the smooth flow of goods. Furthermore, the report will explore the implications of technological advancements, environmental concerns, and market dynamics on the logistics framework of Dhamra Port Company Ltd.

In conclusion, this SIP report aims to provide a holistic view of the logistic cost analysis of Dhamra Port Company Ltd., offering recommendations and insights that can aid the company in achieving even greater operational efficiency and cost-effectiveness. Understanding the intricacies of logistics in the context of a rapidly evolving global trade environment is essential for the continued growth and success of Dhamra Port Company Ltd.

LOGISTIC COST

Logistic costs, also known as logistics costs, refer to the expenses incurred by a company or organization in the process of planning, implementing, and managing the movement and storage of goods, materials, and information throughout the supply chain. These costs are a significant component of a company's overall operational expenses and can have a substantial impact on profitability and competitiveness. Logistic costs encompass various elements, including:

Transportation Costs: These are expenses associated with the physical movement of goods from one location to another. They can include costs related to shipping, freight, fuel, vehicle maintenance, and transportation infrastructure.

Inventory Costs: Inventory holding costs, which include expenses for warehousing, storage, insurance, and security, are incurred when goods are kept in inventory before reaching their final destination.

Order Processing Costs: These costs involve order management, order entry, and order fulfilment expenses. They cover activities such as order processing, picking and packing, and order tracking.

Distribution Costs: Distribution costs encompass the expenses associated with delivering products to customers or retail locations. These costs can include the management of distribution centers, distribution

network design, and last-mile delivery expenses .Supply Chain Management Costs: These costs involve expenses related to supply chain planning, coordination, and optimization. They include the costs of technology systems, software, and personnel required to manage and optimize the supply chain.

Packaging Costs: Packaging costs include expenses for designing, producing, and using packaging materials for products. Efficient packaging can reduce transportation and storage costs.

Reverse Logistics Costs: These costs arise from the management of returns, recycling, or disposal of products and materials, as well as the handling of defective or damaged goods.

Information Technology Costs: Investments in technology systems and software to track and manage logistics operations can also contribute to logistic costs.

Efficient management of logistic costs is essential for businesses to remain competitive in today's globalized and highly competitive markets. Companies often use various strategies and technologies, such as supply chain optimization software, route optimization, inventory management systems, and lean logistics practices, to minimize these costs while ensuring timely and reliable delivery of products to customers.

Analysing and optimizing logistic costs can result in improved customer service, reduced waste, better resource utilization, and increased profitability. Additionally, businesses must adapt to changing market conditions, environmental concerns, and evolving technologies to continuously optimize their logistic costs and remain agile in a dynamic business environment.

OBJECTIVE

Logistic cost analysis of ports serves various primary and secondary objectives to optimize the efficiency and cost-effectiveness of port operations. Here are the primary and secondary objectives of logistic cost analysis for ports:

Primary Objectives:

1. Cost Reduction: The primary objective is to identify cost-saving opportunities within port logistics operations. This involves analyzing various cost components such as transportation, handling, storage, and administrative expenses to find ways to reduce expenditures.

2. Operational Efficiency: Improve the overall efficiency of port operations by identifying bottlenecks, delays, and inefficiencies in the logistics processes. Streamlining these operations can lead to cost savings and quicker turnaround times.

3. Competitive Advantage: Enhance the competitiveness of the port by offering cost-competitive services to shipping lines, importers, and exporters. This can attract more business and contribute to the port's growth.

4. Resource Optimization: Efficiently allocate resources, including labour, equipment, and infrastructure, to maximize their utilization while minimizing costs. This includes optimizing labour schedules and equipment deployment.

5. Service Quality: Ensure that cost-cutting measures do not compromise the quality of service provided by the port. The primary objective is to achieve cost savings without compromising on safety, security, and service levels.

Secondary Objectives:

1. Revenue Generation: While cost reduction is a primary goal, logistics cost analysis can also identify opportunities to generate additional revenue. This might include offering value-added services or diversifying into new cargo types.

2. Environmental Sustainability: Evaluate the environmental impact of port logistics operations and identify opportunities to reduce the carbon footprint and adopt more sustainable practices. This aligns with corporate social responsibility (CSR) goals and regulatory requirements.

3. Risk Management: Assess potential risks related to logistics operations, such as supply chain disruptions, security threats, and regulatory changes. Develop strategies to mitigate these risks while controlling costs.

4. Investment Decisions: Support informed investment decisions in infrastructure, technology, and equipment by analyzing their impact on logistics costs and operational efficiency.

5. Customer Satisfaction: Consider the impact of logistics cost analysis on customer satisfaction. Ports should aim to provide cost-effective solutions that meet customer requirements and expectations.

6. Long-Term Planning: Use the insights from logistic cost analysis to inform long-term strategic planning for the port. This includes aligning cost management strategies with the port's long-term vision and goals.

7. Regulatory Compliance: Ensure that port operations comply with relevant regulations, especially those related to safety, security, and environmental standards. Non-compliance can result in fines and disruptions.

8. Benchmarking: Compare the port's logistics costs and performance against industry benchmarks and best practices to identify areas where improvement is needed.

By addressing these primary and secondary objectives, logistic cost analysis for ports can help enhance the overall competitiveness, sustainability, and efficiency of the port's operations, benefiting both the port authority and its stakeholders.

SCOPE

The scope of a study on logistic cost analysis for ports defines the boundaries, objectives, and parameters of the research. It outlines what aspects of logistics costs will be investigated, the specific objectives to be achieved, and the limitations of the study. Here's a comprehensive scope for a study on logistic cost analysis of ports:

1. Geographic Focus: Specify the geographic area of focus, such as a specific port or a group of ports.

Consider whether the study will assess international ports, regional ports, or a combination of both.

2. Timeframe: Define the timeframe for the analysis, including historical data and projections into the future.

3. Logistic Cost Categories: Identify and categorize the different components of logistics costs that will be studied. This can include but is not limited to:

- Transportation costs (land, sea, and air).
- Handling and storage costs.
- Inventory carrying costs.
- Labor and equipment costs.

- Administrative and overhead costs.
- Energy and fuel costs.
- Environmental compliance costs.

4. Data Sources: Specify the sources of data to be used in the analysis, which may include financial records, invoices, accounting systems, and external data sources.

5. Stakeholders: Identify the key stakeholders, including the port authority, shipping lines, cargo owners, regulatory bodies, and the local community, whose interests may be affected by the study's findings.

6. Cost Allocation: Explain the methods and criteria for allocating logistics costs to specific port activities, services, or cargo types.

7. Comparative Analysis: Consider whether the study will include benchmarking against industry standards or other ports to assess cost competitiveness.

8. Environmental Impact: Evaluate the environmental impact of logistics operations, such as emissions, waste generation, and compliance with environmental regulations.

9. Risk Assessment:- Assess potential risks and vulnerabilities in logistics cost structures and supply chain operations, and recommend risk mitigation strategies.

10. Technological Integration:- Examine the role of technology and automation in optimizing logistics costs and improving efficiency.

11. Recommendations:- Provide actionable recommendations based on the analysis findings to enhance cost-effectiveness, operational efficiency, and environmental sustainability.

12. Constraints:- Identify any constraints or limitations affecting the study, such as budget constraints, data availability, or time restrictions.

13. Report Structure:- Outline the structure of the final report, including sections on methodology, findings, recommendations, and supporting data.

14. Review and Approval:- Specify the process for reviewing and obtaining approval for the study's scope from relevant stakeholders.

A well-defined scope ensures that the logistic cost analysis study is focused, relevant, and capable of achieving its objectives effectively. It also helps manage expectations and provides a clear roadmap for the research process.

METHODOLOGY

Research methodology is a way to systematically solve the research problem.. The various steps that are generally adopted by a research in studying research problem along with the logic behind them.

In this Report, Published secondary sources of data i.e posted on official Adani port and sez website and Indian Railway website.

Sources of Data:
The main sources of data are collected through Published data on various website.

Methods of Data Collection: The study is mainly based on secondary data. The secondary data are those which have already been collected by someone else and which have already been passed through the

statistical process. The methods of collecting secondary data are published data or unpublished data. It takes short time and relatively low cost.

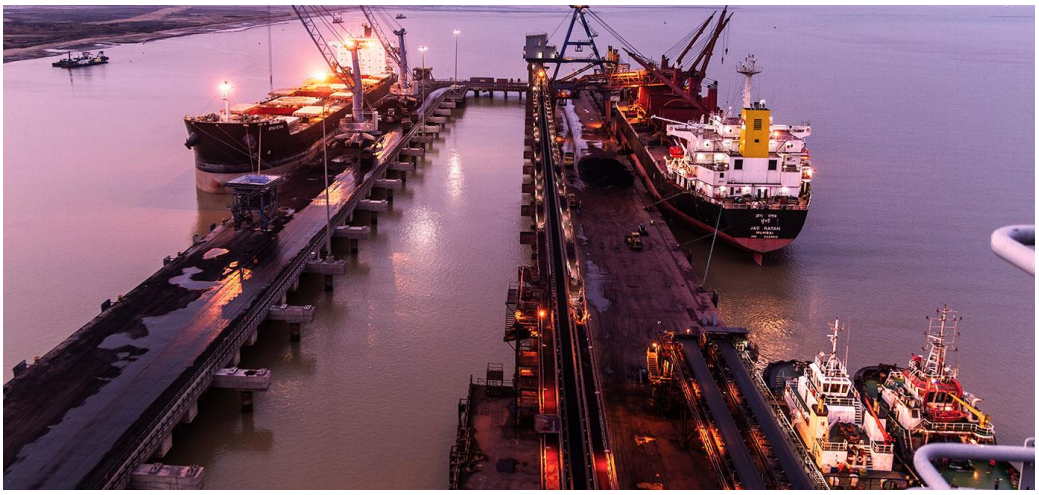
LIMITATION

- This study is conducted within a short period of time. Hence it was not possible to enter into minute aspect.
- The higher officials could not provide all the data because of its confidentiality.
- The entire report is based on the data published by the company & the Indian Railway website.
- The analysis is done only for three competitor port which are based on near location.

Logistic cost analysis is a vast topic so it is difficult to analyze each and every aspect thoroughly within a short period.

Port

A port is a place where ships can dock and load or unload cargo. It is a vital part of the global transportation system, as it allows goods to be moved efficiently between countries.



Port deals with work like,

Seaports are maritime facilities that allow ships to dock to load and discharge cargo and passengers. They play a vital role in the global economy, as they facilitate the trade of goods and services between countries.

Cargo handling: This includes all of the activities involved in loading and unloading cargo from ships, such as using cranes, forklifts, and other specialized equipment. Cargo handling is a complex and demanding task, as it requires careful planning and coordination to ensure that goods are moved safely and efficiently.

In addition to cargo handling, seaports also provide a range of other services, such as:

- Warehousing and storage: Seaports often have warehouses and storage facilities where cargo can be stored before it is shipped or transported to its final destination.
- Security and customs: Seaports have security measures in place to protect cargo and passengers from theft and other threats. They also work with customs authorities to ensure that goods are imported and exported in accordance with the law.
- Navigation and piloting: Seaports provide navigation and piloting services to guide ships safely into and out of port.
- Maintenance and repair: Seaports have facilities for the maintenance and repair of ships.

Seaports are complex and dynamic organizations that play a vital role in the global economy. They provide a range of essential services that support the movement of goods and people around the world.

Here are some examples of specific jobs that are performed in seaports:

- Cargo handlers: Responsible for loading and unloading cargo from ships.
- Crane operators: Operate cranes to move cargo on and off ships.
- Forklift operators: Operate forklifts to move cargo around the port.
- Stevedores: Load and unload cargo from ships by hand.
- Longshoremen: Load and unload cargo from ships using specialized equipment.
- Warehouse workers: Store and retrieve cargo in warehouses.
- Security guards: Protect cargo and passengers from theft and other threats.
- Customs officers: Inspect cargo and ensure that it is imported and exported in accordance with the law.
- Pilots: Guide ships safely into and out of port.
- Ship repair workers: Maintain and repair ships.

Seaports also employ a variety of other workers, such as administrative staff, engineers, and maintenance personnel.Seaports are essential to the global economy, and the work that is performed in seaports is vital to the movement of goods and people around the world.

Port Equipment

Conveyors:

These are systems that move cargo around the port. They can be used to move cargo from ships to shore, from shore to the yard, and from the yard to trucks and trains.

Grab ship unloader

Grab ship unloaders are used to unload a wide variety of bulk materials, including coal, iron ore, grain, and fertilizer. They are particularly well-suited for unloading high-density materials, as the grab bucket can exert a lot of force to scoop up the material.

Stacker Reclaimer
Stacker reclaimer Stacker reclaimers are used in a variety of industries, including power generation, steelmaking, and mining. They are essential for efficiently and safely handling large volumes of bulk materials

truck

Trucks are used in a variety of industries, including agriculture, construction, and mining. They are a versatile and efficient way to supply bulk materials.

Silos

A silo is a structure for storing bulk materials. Silos are used in agriculture to store fermented feed known as silage, not to be confused with a grain bin, which is used to store grains. Silos are commonly used for bulk storage of grain, coal, cement, carbon black, woodchips, food products and sawdust.

A track hopper is a large, elevated container with a hopper opening at the bottom that is used to unload bulk materials from railroad cars. It is typically located at a rail yard or industrial facility. The railroad cars are positioned over the hopper and the bottom doors of the cars are opened, allowing the material to fall into the hopper. The hopper then discharges the material onto a conveyor belt or into a truck.

A ship loader is a machine that is used to load bulk materials onto ships. Ship loaders are typically mounted on a gantry crane, which allows them to move along the length of a ship and load bulk materials into different hatches.

A wagon tippler (also known as a wagon dumper) is a machine that is used to unload bulk materials from train wagons. It typically consists of a platform that can be tilted to an angle of up to 180 degrees. The wagons are driven onto the platform and then clamped in place. The platform is then tilted, causing the wagons to overturn and unload their contents onto a conveyor belt or into a hopper

Port Facilities

Port facilities are the infrastructure and buildings that support the operation of a port. They include:

Docks: These are the structures that ships moor to

Quays: These are the areas alongside the docks where cargo is loaded and unloaded.

Wharfs: These are the structures that extend into the water from the shore and provide a place for ships to moor.

Berths: These are the specific locations where ships are moored.

Terminals: These are the areas where cargo is loaded and unloaded from ships.

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Cargo yard :A cargo yard is a large outdoor area where cargo is stored, loaded, and unloaded. Cargo yards are typically located near ports, airports, and rail terminals. They play an important role in the global supply chain, as they allow goods to be efficiently and safely moved between different modes of transportation

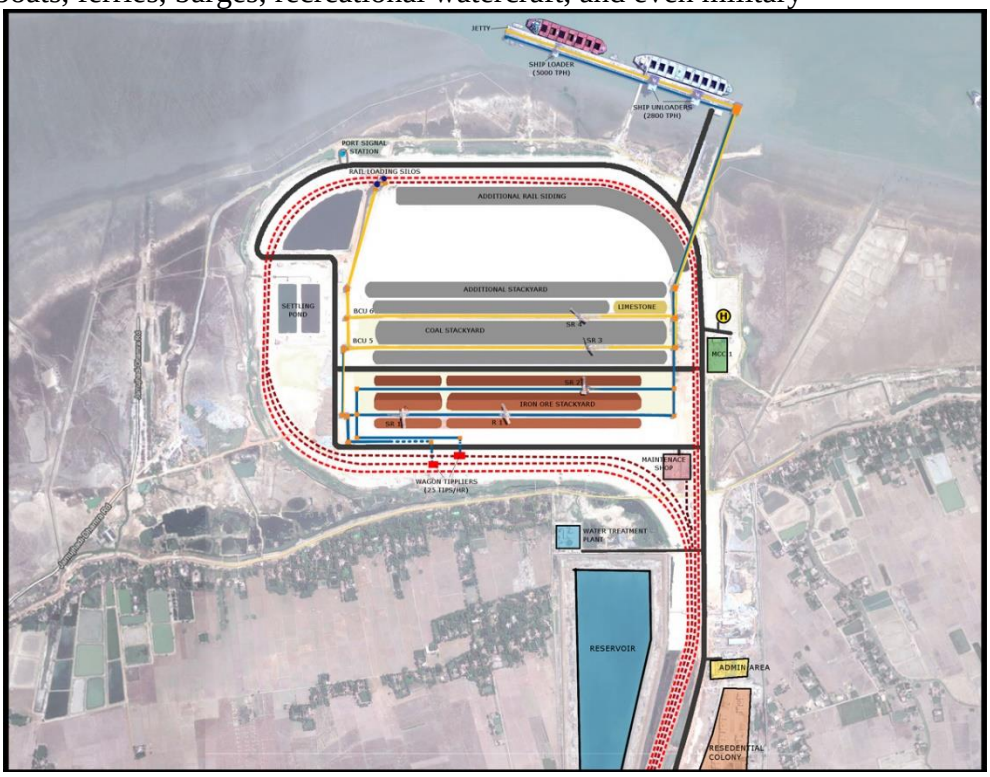
Port deals with Materials like;

The various goods transported by ocean and transiting through ports can be divided in 5 main types of cargo:

- Liquid Bulk
- Dry Bulk
- Containers
- Roll On Roll Off
- Break Bulk

How port operates ?

Seaports are strategically built at the edge of navigable water bodies, such as oceans, seas, lakes, or rivers, as well as artificial waterways like the Panama Canal or Suez Canal. Ports have been developed to accommodate a wide range of ships of all kinds: cargo vessels, cruise, and other passenger ships,

fishing boats, ferries, barges, recreational watercraft, and even military vessels. 

A seaport terminal's core activities

Multiple activities take place at the ports terminal, depending on:

- the **purpose** for which the port is being used,
- the **characteristics** of the ships (for passengers/goods only or both),
- the **types** of products (single or multiple);
- the type of **conditioning**: containerized, vehicles (automobiles, trucks) RO/RO, dry bulk cargo (sugar, coal, food grain), liquid bulk cargo (petroleum, fuels, chemicals), breakbulk cargo (steel coils, timber, pipes, large machinery).

A seaport may be divided into various terminals that are made **to handle a specific type of cargo**, for example, container terminal, bulk cargo terminal, etc. Here are the main port operations that take place in those terminals:

- cargo loading and discharging;
- arrival and departure of ships facilitation (pilotage, tugging, mooring, berthing);
- temporary cargo storage on the yard to maintain regular stocking;
- cargo staging until loading on the ship or transfer to overland means of land transportation (trucks, rail, barges for fluvial transport, pipelines, etc.).

Apart from operational tasks, ports have **administrative functions**:

- control of goods (especially dangerous, hazardous, or harmful goods), documents, and people (customs, immigration, health, trade);
- environmental and security control;
- control of the traffic flow entering and leaving the port.
- In the largest seaports, teams can also perform additional services:
- sorting and consolidating cargoes;
- packing, wrapping, labelling, weighting cargoes;
- industrial activities.

Seaports may be **connected** to dry ports via road or railway since these domestic terminals are not located near the coastline. Created for regions that cannot directly access seaports, to ease trade for remote importers or exporters, dry ports have similar functions as seaports. They play a key role in **multimodal logistics** for transporting cargo to inland destinations and help to decrease congestion at nearby seaports. They can be used as buffers in supply chains thanks to vast storage space.

What Is The Function Of Port Authorities?

The functions

Port authorities have different functions: regulatory, commercial, and community.

The way port operations are carried out can determine the safety, security, environmental compliance, and success of a recreational or cargo shipment journey. For this reason, the role of port authorities comes with great responsibilities. Every port and terminal will differ but, overall, port authorities will oversee several functions, including:

- All maritime logistics involved in the receipt, handling, and safe storing of cargo goods from the supply chain
- Navigational assistance to all marine vessels approaching the port, such as ETA for shipping vessels
- Exercising licensing and regulatory contributions for the services rendered

Other areas that are subjected to port authority regulations are marine environment monitoring and management (including but not limited to the protection of the marine environment), financial issues, and liability for damages.

Moreover, port authorities play a crucial role in promoting economic development and social responsibility in their communities. They work closely with stakeholders (cargo owners, shipping lines, local businesses, and more).

INDUSTRY ANALYSIS

Adani Ports and Special Economic Zone Limited (APSEZ)

India's largest private port and special economic zone, was incorporated as Gujarat Adani Port Limited (GAPL) in 1998 to develop a private port at Mundra, on the west coast of India. The company commenced commercial operations in October 2001. Mundra Special Economic Zone Limited (MSEZL) was incorporated in November 2003, to set up an SEZ at Mundra. MSEZL was merged with GAPL in April 2006 and the company was renamed as Mundra Port and Special Economic Zone Limited, to reflect the nature of business. The board of MPSEZL on Nov 21,2011 has approved a proposal to change the company's name to Adani Ports and Special Economic Zone Ltd. and this change in name from MPSEZL to APSEZL has come into effect from Jan.6,2012. While earlier, the company had only one operational port at Mundra, today it also operates ports at Dahej and Hazira in India and at Abbot Point in Australia. The company is also developing port infrastructure at Mormugao, Visakhapatnam and Kandla in India, Dudgeon Point in Australia and Bunyu in Indonesia. APSEZ is India's first multi-product port-based special economic zone (SEZ).The port is located in the Northern Gulf of Kutch, en route major maritime routes and well connected through railJ, road, air & pipelines. This makes it a preferred gateway for cargo bound westwards. The port has been designed to handle all types of cargo viz. containers, dry bulk, break bulk, liquid cargo and automobiles. APSEZ spearheads the group's logistics business which includes setting up world class port infrastructure, special economic zones and multi-modal logistics such as railways. APSEZ currently owns and operates three ports – Mundra and Dahej in India and Abbot Point in Australia. Mundra Port, which is the largest private port in 11 India, benefits from deep draft, first-class infrastructure and SEZ status. Adani is also developing ports at Hazira, Mormugao, Visakhapatnam and Kandla in India Adani Port & Special Economic Zone Limited was conferred with the Gateway Awards of Excellence – Ports & Shipping 2012 in the "Private Port of the Year "category.

Traded as
BSE: 532921
NSE: ADANIPORTS
NSE NIFTY 50 Constituent

ISIN	INE742F01042
Industry	Infrastructure
Founded	26 May 1998; 25 years ago
Founder	Gautam Adani
Headquarters	Adani House, Navarangpura, Ahmedabad, Gujarat, India
Key people	Gautam Adani (Chairman & MD) Karan Adani (CEO)
Products	Port operator Ports and shipping Maritime, transport Logistics Dredging
Revenue	Increase ₹22,405 crore (US$2.8 billion) (2023)
Operating income	Increase ₹5,489 crore (US$690 million) (2023)
Net income	Increase ₹4,861 crore (US$610 million) (2023)
Total assets	Increase ₹1.15 lakh crore (US$14 billion) (2023)
Total equity	Increase ₹46,922 crore (US$5.9 billion) (2023)
Number of employees	2,266 (March 2020)
Parent	Adani Group

Adani Ports and Special Economic Zone Limited (Adani Ports & SEZ; also APSEZ) is an Indian port operator and logistics company. APSEZ is India's largest private port operator with a network of 12 ports and terminals, including India's first port-based SEZ at Mundra.

Operations

As of 2017, APSEZ operated 3 inland container depots (ICD) through its subsidiary Adani Logistics Ltd In August 2022, they acquired an additional ICD from Navkar Corporation in Tumb, Gujarat.

It holds Category 1 License for the Indian Railways that helps in pan-India cargo movement. The trains owned by Adani Logistics were used to dispatch 30,000 tonnes of food grains to feed over 60 lakh citizens across the states of Tamil Nadu, Karnataka, West Bengal, and Maharashtra, during the 2020 COVID-19 lockdown.

APSEZ provides dredging and reclamation solutions, primarily for port and harbour construction .The Adani Group started investing in developing a dredging fleet in 2005.[citation needed] As of 2018, APSEZ operated a fleet of 19 dredgers, the largest capital dredging fleet in India.

APSEZ has undertaken mangrove afforestation activities totalling 2885 Ha (as of August 2018) with a survival rate of over 85%. In 2016, the company announced that all ports and townships were being prepared to run on 100% renewable energy by 2018 using a mix of solar and wind energy.

In August 2017, a Morgan Stanley analysis described APSEZ as "stacking up well compared to its global peers: On operating metrics such as revenue growth, margins, EBIDTA growth, net income growth and

return ratios (RoCE/ RoE), and based on bottom-up estimates by Morgan Stanley analysts covering global ports, APSEZ is expected to be in the top quartile across various operating metrics despite the tax holiday for Mundra port coming to an end".

Private equity firm Warburg Pincus acquired a 0.49% stake in Adani Ports for ₹800 crore (US$100 million) on 7 March 2021.

In April 2022, it was announced that APSEZ (through its subsidiary, The Adani Harbour Services Ltd.) had acquired the third-party marine services provider, Ocean Sparkle Ltd.

In July 2022, APSEZ alongside the Gadot Group won the privatisation bid for Israel's Port of Haifa for US$1.18 billion. Where Adani Ports and Gadot Group respectively hold 70%:30% of the shares.

In September 2022, Adani Ports secured a US$3.1 billion deep-sea port construction project with the West Bengal government.

Ports and terminals

The company commenced operations at Mundra Port and currently operates 15 ports across all Indian states. Its ports have 45 berths and 14 terminals.

Mundra Port

Mundra Port is a deep-water, all-weather, berthing on arrival port in the Gulf of Kutch. With 26 berths and dedicated terminals for different cargo and commodity types, it has an annual capacity to handle 231 MMT cargo. The port is connected to National Highway (NH) network through State Highways 48 via Anjar and SH-6. It has a privately developed rail network of 69 km connecting Adipur to Mundra port, which in-turn provides nationwide connectivity. It is capable of berthing fully loaded Capsize vessels, VLCC and ULCC. It handles dry bulk, break bulk, project cargo, liquid, containers, automobiles, and crude.

Since 2013, Mundra Port is India's largest private commercial port[25] and hosts the world's largest coal import terminal.[citation needed] Mundra Port was known for introducing technological advancements that led to a high level of automation to enhance the efficiency of cargo handling.

As of August 2016, approximately 20,000 ships had docked at Mundra without a single accident representing the high safety standards implemented by the port authorities.[citation needed] Mundra Port had two single-point mooring (SPM) facilities to evacuate crude oil.[10] Efforts to build a new container terminal in Mundra in partnership with French shipping giant CMA Terminals were underway as of January 2017.

Krishnapatnam Port

Krishnapatnam Port Company Limited (KPCL) is a multi-cargo facility port located near Nellore, Andhra Pradesh. KPCL was acquired by Adani Ports in October 2020 for INR 13,000 cr. from the CVR Group.[27][28][29] Originally, they had a 75% stake but by April 2021 they acquired the remaining 25% stake from Vishwasmudra Holdings.

Karaikal Port

May 2021.Adani Ports and Special Economic Zone Ltd (APSEZ) is looking to buy Karaikal port in Puducherry at a valuation of ₹1,500-2,000 crore but multiple sources said that the deal is "not easy" to consummate given the ownership structure and the debt.

Hazira Port

The Hazira Port is a deep-water port located in the Gulf of Khambat, Surat, Gujarat. The port has been operational since 2005 and is a strategic port for Shell Energy India.[32] Adani developed additional container jetties and multipurpose jetties.[32] However, in 2016, APSEZ faced setbacks to further development due to environmental complaints from the Hazira Fishermen Committee.

Dhamra Port

Dhamra Port, Bhadrak, Odisha is a deep-water, all-weather, multi-user, a multi-cargo port located between Haldia and Paradeep ports on India's eastern coast. It was acquired by Adani in 2014 for Rs 5,500 crore which was the largest port sector deal at the time. It can handle dry bulk, breakbulk, project cargo, and containers. It has an annual capacity of 40 MMT cargo which can go up to 100 MMT in the future.[citation needed] It is located near the mineral belts of Odisha, Jharkhand, and West Bengal. It is connected by a 62 km railway line to Ranital Link Cabin which connects the main Howrah-Chennai line. It features a fully integrated conveyor system for import and export, a coastal circuit for fast cargo transit, and rapid loading silos with 4000 TPH capacity. Situated between Haldia in West Bengal and Paradip in Odisha, the Port is located 215 km from Bhubaneshwar.[36] The port serves as a gateway to Nepal, Bangladesh, Myanmar and the entire geopolitical region, including the ASEAN region.

Dahej Port

The Dahej Port is a deep-water, multi-cargo port in the Gulf of Khambat, Bharuch, Gujarat. It houses two dry and breaks bulk berths and dedicated facilities for handling project cargo. It has a capacity to handle 2 crore (20 million) tonnes per year.[citation needed] It handles all kinds of dry bulk and breakbulk cargo including coal, fertiliser, Agri products, steel cargo, and minerals. Additionally, it is capable of berthing capesize and Panama vessels.[citation needed] Dahej Port has a dedicated railway line that connects to the

national railway network and it is also connected to National Highway 8.It is connected to the contiguous industrial hubs of Gujarat, Maharashtra and eastern Madhya Pradesh.

Dahej Port is equipped with India's first high speed elevated triangular gallery overload conveying system for coal transportation which reduces dust pollution.[37] It accommodates a Ro-Ro Jetty for project cargo movement of 9.8 km long fully integrated high-speed conveyor.[37]

Gangavaram Port

Adani Ports announced on 3 March 2021 that it had acquired a 31.5% stake in Gangavaram Port from Windy Lakeside Investment, an affiliate of Warburg Pincus, for ₹1,954 crore (US$240 million).

Adani Ports may acquire a 58.1% stake in Gangavaram Port from DVS Raju Group, for undisclosed amount

Vizag Terminal

APSEZ formerly owned a coal terminal in the Visakhapatnam Port.[38] In 2022, only a few years into a 30-year contract they returned it to the Visakhapatnam Port Authority.

Mormugao Terminal

Mormugao Terminal is a one-berth terminal located on the south-west coast of India. It has a capacity of 7 MMT cargo. It can handle coal cargo, Panamax and capsize vessels. Its main feature is a mechanized material handling system of conveyor systems and stacker cum reclaimers. It is connected to Maharashtra and Karnataka hinterlands via South Central Railways and Konkan Railways.

Vizhinjam Port

APSEZ won a bid with the Kerala government to construct the Vizhinjam International Seaport in 2015. While the initial completion date was projected for 2020 the construction has experienced multiple delays due to the COVID-19 pandemic and cyclones. Adani sought an extension to 2024 but this led to disputes with the Kerala government.

Kattupalli Port

Kattupalli Port lies 24 km north of Chennai Port and can handle 18 MMT cargo, including containers, breakbulk, and project cargo. It can berth fully loaded Capsize vessels and container vessels .It has a DPD warehouse within the container for movement of AEO and DPD consignments and a 45,000 sq. ft. warehouse with off-dock CFS. Kattupalli Port is connected to all CFSs/ICDs/SEZs in Chennai for imports and exports.

Kamarajar Port

Kamarajar Port(formerly known as Ennore Port) is a container terminal located in the northern suburbs of Chennai. It can handle 12 MMT cargo. It is connected to the hinterland by roads, including the upcoming EMRIP project and Northern Port Access Road.

Tuna Terminal

In 2012, the Kandla Port Trust (KPT), longtime operator of Kandla Port (20km to the northeast of Tuna Tekra) proposed to improve access for larger vessels by authorizing construction of a modern, four-berth, deep draft terminal at Tuna Tekra. Kandla Port reached an agreement with Adani Ports & SEZ for construction of a new, mechanized, four-berth terminal with direct unloading facilities for coal, iron ore, and other dry bulk goods.

Tuna Port is an all-weather, berthing on arrival port with the largest coal import terminal of 35,000 MT/Day discharge rate[citation needed] near Kandla Port.[47] It has a capacity of 2 crore (20 million) tonnes per year and can handle 1,30,00 DWT vessels at berth.[citation needed] It can handle all kinds of dry bulk and breakbulk cargo including coal, fertilizer, agri-products, steel cargo, and minerals, and it is equipped with a fully integrated high-speed conveyor system. It is connected to National Highway (NH) 8A.

Agardana Shipyard & Terminals

Agardana Terminal is an under construction 150000 MT Container terminal located in Agardana, Maharashtra which was previously built as a shipyard and container terminal under the agreement with the Maharashtra Maritime Board, State Government of Maharashtra. Adani took over the project in 2021.

Dighi Port

Dighi Port was acquired by APSEZ in February 2021, with the intention of being an alternative to the Jawaharlal Nehru Port, in Navi Mumbai.

Board of Directors of Adani Port and Sez

Visionary leadership, illustrious experience, and remarkable track record have been the signature of our legacy. Browse this section to know more about our Board of Directors.

Chairman and Managing Director :- Gautam Adani

Non-Independent and Non-Executive Director :- Rajesh Adani

Whole Time Director :- Karan Adani

Independent and Non-Executive Director :- Ganesan Raghuram

Independent and Non-Executive Director :- P. S. Jayakumar

Non-Independent and Non-Executive Director :- Malay Mahadevia

Independent and Non-Executive Director :- Gopal Krishna Pillai

Independent and Non-Executive Director :- Bharat Sheth

Independent and Non-Executive Director :- Nirupama Rao

Dhamra port

Project Type

Deep-sea port

Location

Bhadrak, Odisha, India

Area

9.44km²

Maximum Draft

18m

Maximum Vessel Size

180,000dwt

The **Dhamra Port** is a port in Bhadrak district, Odisha, India, on the shore of the Bay of Bengal about seven kilometres from the old port of Dhamra. The agreement to develop the port was signed in April 1998. The Dhamra Port Company Limited (DPCL) was formed as a result of a 50:50 joint venture between Larsen & Toubro and TATA Steel to run the port. The Port received its first vessel on 8 February 2010 and the first commercial vessel on 10 April 2011. The Port has an initial capacity of 25 million tonnes annually, eventually growing to 80 million tonnes annually. Greenpeace has opposed the project, claiming it threatens nearby protected areas and endangered species such as the olive ridley turtle.

Objective

The port was taken over by Adani Port in June 2014. Construction of a $12 billion steel plant by Posco of South Korea, and the new port of Dhamara, promise to bring jobs and development. The port will be used to export iron ore from a nearby mineral belt. The Odisha government has plans to develop related industries near the new port, including a shipbuilding yard and a petrochemical and gas-based manufacturing hub. A special investment region has been proposed for Dhamara, and a zoning plan is being prepared to cover housing, health services and other urban infrastructure. A new airport/Airstrip is

approved by government of Odisha near Dhamra port of around 500 acres. National Waterway 5 project of connecting water channels between Pardeep and Dhamra is also in the construction stage by IWAI. A proposed 4 lane NH is also in DPR stage connecting to Dhamra port from Jamujhadi NH16. Existing jamujhadi - basudebpur-Dhamra road is under construction and is been done on PPP mode. A tea processing unit is planned to have a unit in Dhamra port.

Dhamra Port Company Limited (DPCL), a joint venture between Larsen & Toubro and TATA Steel, had signed a build, own, operate, share and transfer (BOOST) agreement with the Government of Odisha for the development of Dhamra Port in April 1998.

The concession agreement covers a term of 34 years, including four years for the construction phase.

Phase one development involved the construction of a navigational channel and two 350m-long berths with fully-mechanised cargo handling. The port welcomed its first cargo vessel in September 2010.

Adani Ports and Special Economic Zone entered an agreement with L&T Infrastructure Development Projects and Tata Steel to acquire DPCL in May 2014. The acquisition was completed in June 2014.

Services offered by Dhamra Port

Dhamra Port offers year-long service and is one of the most reliable ports on the east coast of India. It is located close to the mineral belt of Odisha, Jharkhand and West Bengal, which makes it an ideal location for shipping coal, iron ore and limestone.

Deep draft and direct berthing facilities enable the port to handle super cape size bulk carriers up to 180,000 deadweight tonnes.

The port handles dry bulk, liquid bulk and break bulk cargo, as well as containerised and general cargo, in all weather conditions.

Facilities at Dhamra Port

The port features an extensive marine infrastructure and assets including trans-loading berth, barge jetty and berths for general cargo, bulk cargo, containers, steel/project cargo, edible oil and liquefied natural gas (LNG) as well as a fleet of tugs and dredgers, which ensure reliable and uninterrupted services in all-weather conditions.

Terminal handling infrastructure at the port enables the handling of multiple vessels at a time. A set of high-capacity grab ship unloaders, shore cranes, and stacker-reclaimers are used to handle dry cargo. Support equipment such as excavators, payloaders, dumpers and mobile cranes ensure uninterrupted operations in the terminal. The port also has a conveyor system for rapid transit of cargo. The cargo imports are handled by five grab ship unloaders, two mobile harbour cranes, two truck loading hoppers and four stacker-reclaimers, while exports are supported by a ship loader, two wagon tipplers, a track

hopper and three stacker-reclaimers .Storage infrastructure includes a 113,024m² mechanised coal storage area, a 184,083m² semi-mechanised storage space for limestone and coal, a 75,606m² area for thermal coal and iron ore, an 8,000m² space for steel, as well as a 33,750m² covered warehouse. The merry-go-round railway system efficiently handles the rakes, while the rake loading facility at the port features two silos with a rapid loading rate of 2,000 tonnes per hour each and two rapid loading silos with a capacity of 4,000 tonnes per hour each.

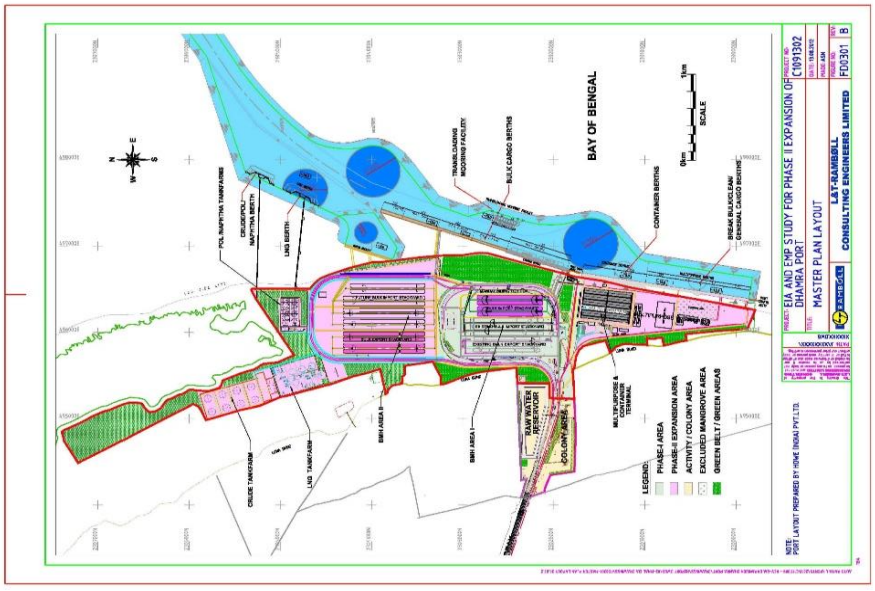
Port connectivity

Located 62km east of Bhadrak railway station, Dhamra port is well connected by a 62km-long rail line between Dhamra and Bhadrak / Ranital Link Cabin on the main Howrah-Chennai line.A two-lane road connects the port with Jamujhadih on the National Highway-16 (NH-16). The road is being upgraded to a four-lane highway by the National Highways Authority of India (NHAI).

Infrastructure

Dhamra port has vast infrastructures which handles multiple types of Cargo. With deep draft berths and multipurpose terminals, the port efficiently handles the largest bulk carriers in the world. The port has covered and open storage areas with enormous capacity. Excellent cargo evacuation and receiving infrastructure support smooth cargo movement in and out of the port.

Master layout



The storage infrastructure consists of the following storage areas:

- Coal:1,13,024 Sq. Mtr. (Mechanized)
- Coal/Limestone: 1,84,083 Sq. Mtr. (Semi-Mechanized)
- Iron ore/Thermal Coal: 75,606 Sq. Mtr. (Mechanized)
- Covered Warehousing: 33,750 Sq. Mtr.

- Storage for Container/Steel: 8,000 Sq. Mtr.

Evacuation infrastructure

The 'merry-go-round' railway system for handling of rakes helps to achieve greater efficiencies and better turnaround times for rakes. The rail cargo infrastructure at Dhamra port consists of Rake Loading Facility: 2 Rapid Loading Silos with 2000 TPH each and 2 Rapid Loading Silos with 4000 TPH each.

Port Connectivity

Dhamra port is well connected with all major cities in India via rail and road, and plays a major role in the development of port led industries

Rail

Dhamra port is connect with the state highway and railway line at Bhadrak with a 125 meter wide utilities corridor which can accommodate two rail tracks and a four lane road along with service lines viz. transmission line and pipe lines.

As part of Phase-I, the port has constructed 62 km rail line (doubling work under progress) from Dhamra to Bhadrak/Ranital Link Cabin on the main Howrah-Chennai line.

Road

DPCL plans to construct a four lane freight road along the corridor to service its upcoming container and general cargo terminal. This will be executed in Phase 2 development.

Terminal handling infrastructure

The terminal infrastructure at Dhamra port is capable of simultaneously handling multiple vessels. For dry cargo, a set of high capacity Grab Ship Unloaders (GSUs), Shore Cranes, stacker-reclaimers ensure quick discharge and also loading of export/coastal route vessels. A large fleet of support equipment such as excavators, pay loaders, dumpers, and mobile cranes ensures uninterrupted and smooth operations across the entire terminal. The port has a fully integrated conveyor system for Import and Export/Coastal Circuit for smooth and fast transit of cargo.

For Import Cargo:

Grab Ship Unloaders : 5 nos. with 2800 TPH each
Mobile Harbour Cranes: 2 nos (LHM 400 with 37 CBM Grab)
Truck Loading Hoppers: 2 nos. with 100 MT capacities each
Stacker Reclaimer: 2 nos. with 5500/3500 TPH each
Stacker Reclaimer: 2 nos. with 7500/3500 TPH each

For Export Cargo:
Ship Loader: 1 nos. with 5000 TPH
Stacker Reclaimer: 02 nos. with 5500/3500 TPH
Reclaimer: 1 no with 5000 TPH
Wagon Tippler: 2 nos. with 25 Tipps Per Hour Per Tippler
Track Hopper: 1 nos. capable of unloading 1 full rake in 90 Minut

SWOT analysis of Dhamra port Company LTD :

Strengths:

- Deep draft port with a natural depth of 18 meters, which can accommodate super cape-size vessels
- Strategically located in the mineral-rich hub of Odisha, India, with close proximity to major coal mines and steel plants
- Well-connected to the hinterland by road and rail
- Modern infrastructure and equipment
- Operated by Adani Ports and Special Economic Zone Limited (APSEZ), India's largest private port operator

Weaknesses:

- Relatively new port, which means that it has not yet had the time to establish a strong reputation
- Limited market share compared to other major ports in India
- Allegations of environmental violations

Opportunities:

- Growing demand for coal and other mineral exports from India
- Increasing trade between India and East Asia
- Development of new industries in the hinterland, such as steel and power plants
- Government initiatives to promote port development in India

Threats:

- Competition from other major ports in India
- Economic downturn
- Environmental regulations
- Changes in shipping routes

Overall, Dhamra port is a well-positioned port with a number of strengths. However, it also faces some challenges, such as its relatively new status and limited market share. The port will need to focus on expanding its capacity, improving its efficiency, and developing its reputation in order to succeed in the long term.

Here are some specific actions that Dhamra port can take to capitalize on its strengths and opportunities and mitigate its weaknesses and threats:

- Strengths: Dhamra port can leverage its deep draft port and strategic location to attract new customers and expand its cargo handling capacity.
- Weaknesses: Dhamra port can invest in marketing and branding initiatives to increase its visibility and reputation. It can also work to improve its environmental performance to address allegations of environmental violations.

- Opportunities: Dhamra port can partner with industries in the hinterland to develop new cargo streams. It can also tap into government initiatives to promote port development in India.
- Threats: Dhamra port can monitor its competitors closely and develop strategies to stay ahead of the curve. It can also work with the government to ensure that environmental regulations are fair and transparent.

  By taking these actions, Dhamra port can position itself as a leading port in India and play a key role in the country's economic growth.

COMPETITORS ANALYSIS

Haldia Port

Country	India
Location	Haldia, West Bengal
Coordinates	22.0447°N 88.0888°E
Opened	1967
Operated by	Kolkata Port Trust
Owned by	Ministry of Shipping (India)
Type of harbour	Larger river port/sea port
No. of berths	12
No. of wharfs	6
Draft	8 metres (26 ft)
Statistics	
Annual cargo tonnage	65.66 million tonnes (2022-2023)[1] [2]
Annual container volume	1,56,000 TEUs (2017-2018)[3]
Net income	₹632 crore (US$79 million) (2022–23)[4]

Transportation in Haldia Dock

Haldia Dock Complex has been built at the meeting place of the Haldi River and Hooghly river. Kolkata Port Trust has been created in this port as the port's partner. So it is not a port. It is an official dock complex.

It has a vast hinterland comprising the entire north east of India including West Bengal, Bihar, Jharkhand, Uttar Pradesh, Madhya Pradesh, Assam, North East Hill States and two landlocked neighboring countries namely, Nepal and Bhutan and also the Autonomous Region of Tibet (China).

With the turn of the century the volume of throughput has again started increasing steadily.

Cities and towns in Haldia subdivision of Purba Medinipur district
M: municipal city/ town, CT: census town, R: rural/ urban centre, S: port
Owing to space constraints in the small map, the actual locations in a larger map may vary slightly

Location

Haldia port is 8 meters above sea level and is located at 21.20 north and 88.00 east.

Dock system

It is situated at 22°02′N 88°06′E around 60 kilometers (37 mi) away from the pilotage station. The port consists of:

- Impounded dock; system with 12 berths
- 3 oil jetties in the river
- 3 barge jetties in the river for handling oil carried by barges
- Haldia anchorage for lash vessels

The docks are impounded dock systems with locks from river.

Imports and exports

The port's main imports are petroleum, chemicals, and parts. Exports include coal, iron ore, and steel. 33 million tons of cargo were in the port 2014-2015.

Paradip Port

Paradip Port is a natural, deep-water port on the East coast of India in Paradip, just 53 km (33 mi) from Jagatsinghpur city in Jagatsinghpur district of Odisha, India. It is at the confluence of the Mahanadi river and the Bay of Bengal, 210 mi (390 km; 240 mi) south of Kolkata and 260 mi (480 km; 300 mi) north of Visakhapatnam.

The port is administered by the **Paradip Port Authority** (PPA)(formerly **Paradip Port Trust**), an autonomous corporation wholly owned by the Government of India.

Port harbour

The port of Paradip has an artificial lagoon type harbour protected by two rubble mound "Break Waters" and approached by the dredged channel. The North Break Water is 538 m long on the North-Eastern side of the port and the South Break Water is 1217 m long on the South-Eastern side.

Approach channel	10.00 km (6.21 mi) long 300.00 m (984.25 ft) wide 18.70 m (61.4 ft) deep
Entrance channel	2,000.00 m (6,561.68 ft) long 240.00 m (787.40 ft) wide 17.10 m (56.1 ft) deep
Turning Basin	520.00 m (1,706.04 ft) diameter 17.10 m (56.1 ft) deep

Pilotage and towage facilities

The Pilotage is compulsory for all vessels above 200 MTs Gross Tonnage. The Pilotage service is available to all vessels during 24 hours and 365 days. The Pilot Boarding ground is about 3 miles (4.8 km) SE of Breakwaters. All the vessels have to inform their ETA prior to entering the port Limits to the port Signal Station on VHF Channel: 16 / 06. The port has 3 Nos. Tugs having BP more than 35 Tons and 2 Nos. of port Tugs having BP more than 50 Tons. All the tugs are fitted with fire fighting equipment for external general and oil fire. The port is having 3 Nos. Pilot Launches having speed more than 10 knots, 02 Nos. pilot lunches having speed of 7 knots and 02 Nos. Mooring Boats are also available for passing the Mooring Lines to the Berth / Jetty.

Fresh water services

Adequate fresh water supply services rendered to all vessels at berth through shore connection. All self-propelled fresh water barge is available to supply freshwater up to 350 MT at berth and at anchorage.

Storage facilities

Warehouse	Area sq. m (sq. ft)	Capacity (in MT)
Warehouse No. I	1,700 (18,000)	140 (1,500)
Warehouse No .II	6,000 (65,000)	14,000 (150,000)
TOTAL	7,700 (83,000)	**18000**

Container handling facilities

The port handles containers in a limited manner with cargo support from NALCO, Marine Products Exporters, TISCO, JSL and others. The port has 1000 TEU capacity container yard served with two railway sidings and 15 reefer plug points. One 75 MT and Two 20 MT mobile cranes, two spreaders (40 feet & 20 feet) are available in the port to facilitate for container handling. These equipment are duly supported by 2 (two) Reach stacker & other container handling equipment from private source.

- Berthing priority for container vessels. Hence, nil waiting.
- 50% Concession in both vessel & cargo related charges for container vessels.
- Harbour Mobile cranes at berths to handle containers.
- In-house stuffing / de-stuffing facility.
- Siding facility for Rail handling of containers.

Storage area

- 55,000 m^2 (590,000 sq. ft) of concrete paved area near the berth.
- Storage area secured & protected.
- Capacity to store about 1000 TEUs (20 ft).

Equipment available

- One Mobile crane of 75MT capacity (Port).
- Two 50 MT mobile cranes & one 20 MT forklift (private).
- Adequate trailers to handle TEUs and FEUs (private).

Dry dock / Repairing facilities

The port has a 500 Ton slipway along with workshop for repair and maintenance of Port crafts and barges. A Wet Basin for Port crafts is available close to the Slipway.

The dry dock is 75 m (246 ft) in length, 15 m (49 ft) in width, and 11 m (36 ft) in depth has been constructed at this port to facilitate repairing of crafts. Vessels of −5.5 m (−18 ft) draft can be repaired at Paradip.

Infrastructure

- Mechanised Coal Handling Plant
- Iron Ore Handling Plant
- General Cargo Berth
- Oil Jetty
- Captive Berths
- BOT Berths
- RO-RO Jetty
- Container Handling
- Cargo Handling Equipment
- Port Railways
- Storage

Difference between Dhamra Port, Haldia Port & Paradip Port

Paradip Port: It is a natural, deep- water port situated on the East coast of India present in Jagatsinghpur district of Odisha. It is located at the confluence of the Mahanadi river and the Bay of Bengal.

The rated capacity of port is 277 MMT per annum. The cargo handling capacity of the port is 164 million metric tonnes at desired berth occupancy.

The port of Paradip has an artificial lagoon type harbour protected by two rubble mound "Break Waters" and approached by the dredged channel. The North Break Water is 538 m long on the North-Eastern side of the port and the South Break Water is 1217 m long on the South-Eastern side.

At present Paradip Port is handling various cargo like Crude Oil, POL products, Iron Ore, Thermal Coal, Chrome Ore, Coking Coal, Manganese Ore, Charge Chrome, Ferro Chrome, Ferro Manganese, Limestone, Hard Coke, Ingots and Moulds, Billets, Finished Steel, Scrap, Fertilizer, Fertilizer Raw Material, Clinker, Gypsum etc.

Iron Ore is the major item of export from Paradip Port.

Haldia port: It has been built at the joining place of the Haldi River and Hooghly River. Kolkata Port Trust has been built in this port as the port's partner. It is an official dock complex also called as Haldia Dock Complex.

The present capacity of Haldia Dock complex is 50.7 Million Metric Tons .

The port's main imports are petroleum, chemicals, and parts.

Exports include coal, iron ore, and steel.

Dhamara port: The Dhamra Port is a port located in Bhadrak district within the Indian state of Orissa, on the shore of the Bay of Bengal approximately seven kilometres east of the old port of Dhamra. The agreement to develop the port was signed in April 1998. The Dhamra Port Company Limited (DPCL) was developed as a result of a fifty- fifty joint venture between Larsen & Toubro and Tata Steel to run the port.

The port handles coal, iron ore, and other minerals. Its two berths are capable of handling 12 million tonnes of imported dry bulk cargo and 13 million tonnes of cargo for exports.

Dhamra port has vast infrastructures which handles multiple types of Cargo. With deep draft berths and multipurpose terminals, the port efficiently handles the largest bulk carriers in the world. The port has covered and open storage areas with enormous capacity.

Port mainly Imports coal and limestone.

Port mainly Exports iron ore and steel.

LOGISTIC COST ANANLYSIS

LOGISTIC COST IN PORT;

Logistics costs in a port setting refer to the expenses associated with the movement, handling, and storage of goods and materials within a port facility. Ports are vital hubs in the supply chain, and efficient logistics management is crucial to ensure the smooth flow of goods and reduce overall costs. Here are some key components of logistics costs in a port environment:

1. **Berth Costs**: Charges associated with the use of a berth or dock for loading and unloading vessels. These costs typically cover the time a ship spends at the berth.
2. **Handling Costs**: Expenses related to the physical movement of cargo within the port, including loading and unloading cargo from vessels, transferring cargo to storage facilities, and arranging for onward transportation.
3. **Storage Costs**: Costs associated with the storage of cargo within the port's storage facilities, such as warehouses and container yards. This includes rental fees, security, and inventory management.
4. **Customs and Inspection Fees**: Charges for customs clearance and inspection services for imported and `` exported goods. These fees are often required for compliance with trade regulations.
5. **Transportation Costs**: Expenses incurred in transporting goods to and from the port, which can include trucking, rail, or other transport modes. Transportation costs can be a significant part of logistics costs, especially for hinterland connectivity.
6. **Equipment and Infrastructure Maintenance**: Costs associated with the maintenance and repair of equipment and port infrastructure, such as cranes, forklifts, conveyor belts, and roads within the port.
7. **Labor Costs**: Expenses related to the wages and benefits of port workers, including stevedores, customs officials, security personnel, and administrative staff.
8. **Technology and Management Systems**: Investments in technology and management systems to optimize port operations, enhance security, and improve efficiency. These may include port management software, tracking systems, and automation.
9. **Environmental Compliance**: Costs associated with environmental compliance and sustainability initiatives, including pollution control measures, waste management, and green technologies.
10. **Security Measures**: Expenses for security measures to protect the port, cargo, and personnel, such as surveillance systems, security personnel, and access control.
11. **Utilities and Services**: Costs related to utilities such as electricity, water, and sewage, as well as services like waste disposal and maintenance of common facilities.
12. **Regulatory and Administrative Costs**: Fees and expenses related to regulatory compliance, permits, licenses, and administrative overhead.

Efficient management of logistics costs in a port is essential to ensure the competitiveness and sustainability of the port facility. Port authorities and operators often seek to optimize these costs through process improvements, technology adoption, and sustainable practices. Reducing logistics costs can lead to increased cargo throughput, improved customer satisfaction, and enhanced economic benefits for the region served by the port.

			DHAMARA (DPCB)			
CUSTOMER		DISTANCE (In km)	RAILWAY FREIGHT (in Rupees)	CARGO HANDLING CHARGE (in Rupees)	VESSEL HANDLING CHARGE (in Rupees)	TOTAL LOGISTIC COST (in Rupees)
TATA STEEL						
TWS		377	972.3	350	120	1442.3
TSLJ		132	471.3	350	120	941.3
TSIM		350	837.1	350	120	1307.1
UMLS		385	972.3	350	120	1442.3
NINS		130	471.3	350	120	941.3
MBMB		264	706.1	350	120	1176.1
S.A.I.L						
BSCS		503	1290.4	350	120	1760.4
DSEY		490	1107.4	350	120	1577.4
IISD		458	1107.4	350	120	1577.4
HSPG		529	1289.4	350	120	1759.4
RASHMI STEEL						
PMRN		260	706.1	350	120	1176.1
MOMG		257	706.1	350	120	1176.1
RUNGTA STEEL						
BBN		395	972.3	350	120	1442.3
HNG		1429	2762.4	350	120	3232.4
JSPL STEEL						
JSPK		291	837.1	350	120	1307.1
JSLK		722	1507.4	350	120	1977.4

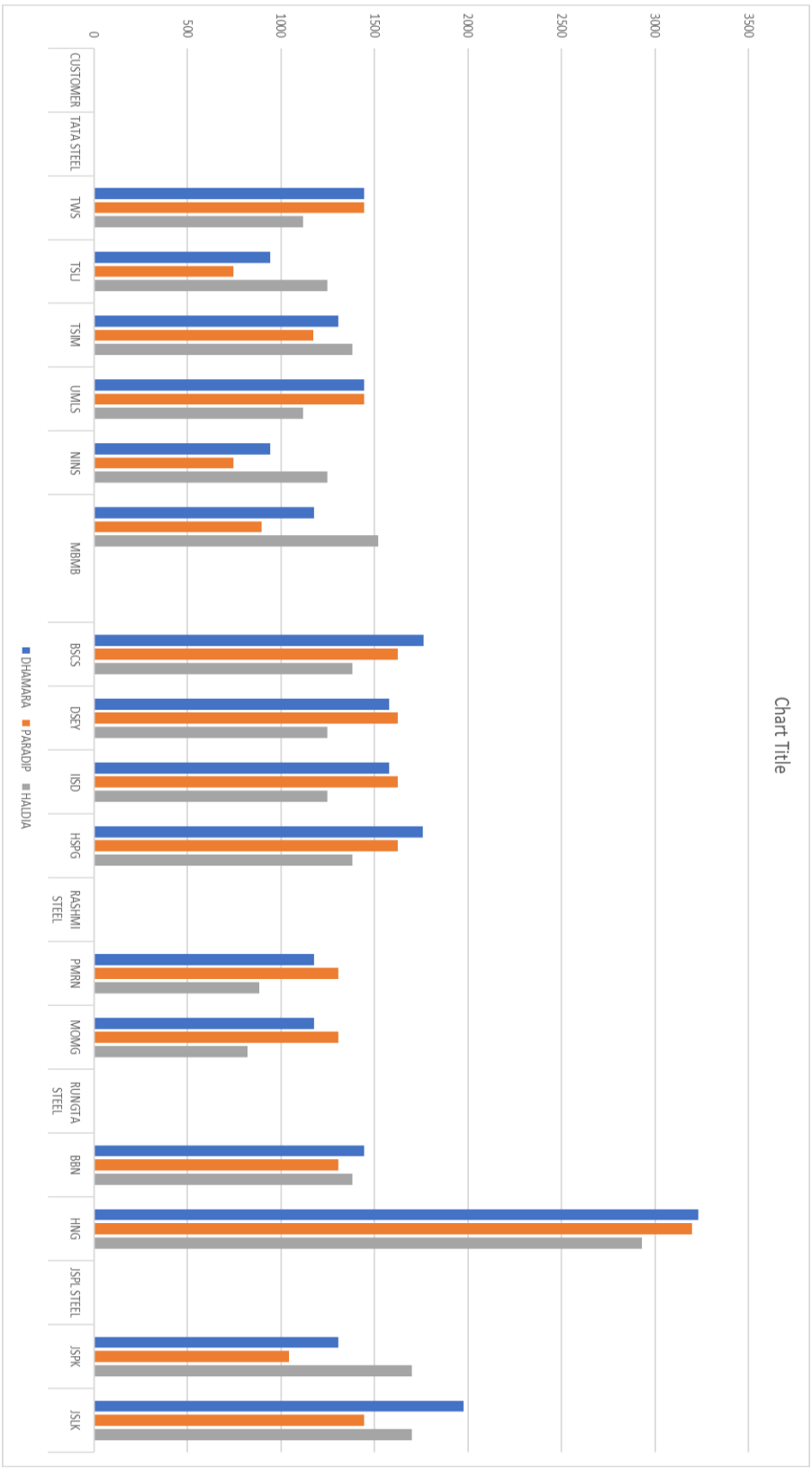
PARADIP

CUSTOMER	DISTANCE (In km)	RAILWAY FREIGHT (in rupees)	CARGO HANDLING CHARGE (in rupees)	VESSEL HANDLING CHARGE (in rupees)	TOTAL LOGISTIC COST (in rupees)
TATA STEEL					
TWS	484	1107.4	260	75	1442.4
TSLJ	119	409.1	260	75	744.1
TSIM	341	837.1	260	75	1172.1
UMLS	474	1107.4	260	75	1442.4
NINS	122	409.1	260	75	744.1
MBMB	188	559	260	75	894
S.A.I.L					
BSCS	597	1289.4	260	75	1624.4
DSEY	583	1289.4	260	75	1624.4
IISD	551	1289.4	260	75	1624.4
HSPG	504	1289.4	260	75	1624.4
RASHMI STEEL					
PMRN	354	972.3	260	75	1307.3
MOMG	351	972.3	260	75	1307.3
RUNGTA STEEL					
BBN	386	972.3	260	75	1307.3
HNG	1523	2862.5	260	75	3197.5
JSPL STEEL					
JSPK	215	706.1	260	75	1041.1
JSLK	473	1107.4	260	75	1442.4

			HALDIA(HDCG)		
CUSTOMER	DISTANCE(in km)	RAILWAY FREIGHT (in rupees)	CARGO HANDLING CHARGE (in rupees)	VESSEL HANDLING CHARGE (in rupees)	TOTAL LOGISTIC COST(in rupees)
TATA STEEL					
TWS	246	706.1	310	100	1116.1
TSLJ	349	837.1	310	100	1247.1
TSIM	383	972.3	310	100	1382.3
UMLS	254	706.1	310	100	1116.1
NINS	348	837.1	310	100	1247.1
MBMB	481	1107.4	310	100	1517.4
S.A.I.L					
BSCS	372	972.3	310	100	1382.3
DSEY	303	837.1	310	100	1247.1
IISD	326	837.1	310	100	1247.1
HSPG	397	972.3	310	100	1382.3
RASHMI STEEL					
PMRN	129	471.3	310	100	881.3
MOMG	125	409.1	310	100	819.1
RUNGTA STEEL					
BBN	389	972.3	310	100	1382.3
HNG	1298	2519.6	310	100	2929.6
JSPL STEEL					
JSPK	509	1289.4	310	100	1699.4
JSLK	587	1289.4	310	100	1699.4

The above 3 tables shows the data of cargo handling charges , vessel handling charges and Railway freight from various destinations to these ports .

This graph shows that how much cost incurred in transhipment of cargo from port to factory destination,



In the above figure, the data suggest the cost incurred in transhipment of cargo from Paradip port , Dhamara port and Haldia port to various destinations of TATA Steel , RASHMI STEEL, RUNGTA STEEL & JSPL STEEL.

CUSTOMER ANALYSIS

CUSTOMER	FULL NAME	DISTRICT	STATE
TATA STEEL			
TWS	TISCO WORKS SITE, TATANAGAR JN.- TWS	PURBI SINGHBHUM	JHARKHAND
TSLJ	M/S PRIVATE SIDING OF M/S TATA STEEL LIMITED- TSLJ	JAJPUR	ODISHA
TSIM	PRIVATE SIDING OF M/S TATA STEEL LONG PRODUCTS LTD- TSIM TATA SPONGE IRON LTD	KENDUJHAR	ODISHA
UMLS	PRIVATE SIDING OF M/S TATA STEEL LONG PRODUCTS LTD- UMLS	DHENKANAL	ODISHA
NINS	M/S NEELACHAL ISPAT NIGAM LTD- NINS	JAJPUR	ODISHA
MBMB	PRIVATE SIDING OF M/S TATA STEEL LIMITED- MBMB	ANGUL	ODISHA
S.A.I.L			
BSCS	BOKARO STEEL PLANT- BSCS	BOKARO	JHARKHAND
DSEY	DURGAPORE STEEL EXCHANGE YARD SIDING, ANDAL JN.- DSEY	PASCHIM BARDHAMAN	WEST BENGAL
IISD	M/S. SAIL (IISCO)- IISD	PASCHIM BARDHAMAN	WEST BENGAL
HSPG	HINSUDSTAN STEEL PLANT LTD- HSPG	ROURKELA	ODISHA
RASHMI STEEL			
PMRN	RASHMI METALIKS LTD AT GOKULPUR- PMRN	PASCHIM MEDINIPUR	WEST BENGAL

MOMG	GATI SHAKTI MULTI-MODAL CARGO TML.OF M/S ORISSA METALIKS P.L- MOMG	PASCHIM MEDINIPUR	WEST BENGAL
RUNGTA STEEL			
BBN	BARBIL- BBN	KENDUJHAR	ODISHA
HNG	HIRANGAON- HNG	FIROZABAD	UTTAR PRADESH
JSPL STEEL			
JSPK	PRIVATE SIDING OF M/S JINDAL STEEL AND POWER LIMITED-JSPK	ANGUL	ODISHA
JSLK	JINDAL STEEL AND POWER LTD.KIRODIMAL NAGAR- JSLK	RAIGARH	CHATTISGARH

Above table shows that name and location of the customer of Dhamra Port Company LTD.

MARKET SEGMENTATION

Market segmentation based on distance, also known as geographic segmentation, involves dividing a market into different segments based on the physical location or proximity of customers.

On the basis of distance market is divided into 3 parts ,

I. Primary market (up to 350km)s
II. Secondary Market(350km-1000km)
III. Tertiary Market(more than 1000km)

	DHAMARA	
Primary market	Secondary market	Tertiary market
NINS	TWS	HNG
TSLJ	UMLS	
MOMG	BN	
PMRN	IISD	
MBMB	DSEY	
JSPK	BSS	
TSIM	HSPG	
	JSLK	

The above chart shows that , for Dhamra port ; NINS,TSLJ,MOMG,PMRN,MBMB,JSPK&TSIM are the primary market due to the destinations are situated between 0km -350km and are near to port , TWS,UMLS,BN,IISD,DSEY,BSS,HSPG&JSLK are the secondary market due to destinations are situated between 350km –1000km & HNG is the Tertiary Market due to the destination is situated out of 1000km.

	HALDIA	
Primary market	Secondary market	Tertiary market
MOMG	BSCS	HNG
PMRN	TSIM	
TWS	BBN	
UMLS	HSPG	
DSEY	MBMB	
IISD	JSPK	
NINS	JSLK	
TSLJ		

The above chart shows that , for HALDIA port ; NINS,TSLJ,MOMG,PMRNTWS,UMLS,DSEY,IISD are the primary market due to the destinations are situated between 0km -350km and are near to port , BSCS,TSIM,BBN,HSPG,MBMB,JSPK,JSLK are the secondary market due to destinations are situated between 350km –1000km & HNG is the Tertiary Market due to the destination is situated out of 1000km.

	PARADIP	
Primary market	Secondary market	Tertiary market
TSLJ	MOMG	HNG
NINS	PMRN	
MBMB	BBN	
JSPK	JSLK	
TSIM	UMLS	
	TWS	
	HSPG	
	IISD	
	DSEY	
	BSCS	

The above chart shows that , for PARADIP port ; TSLJ.NINS,MBMB,JSPK,TSIM are the primary market due to the destinations are situated between 0km -350km and are near to port , MOMG,PMRN,BBN,JSLK,UMLS,TWS,HSPG,IISD,DSEY,BSCS are the secondary market due to destinations are situated between 350km –1000km & HNG is the Tertiary Market due to the destination is situated out of 1000km.

WHY DHAMRA PORT COMPANY LTD ?

WHY DHAMRA PORT ?

- Dhamra is poised to be the mega Port of INDIA.
- Only port in East with deep Draft for capsize and Mainline Vessel.
- Gateway for mining power and steel industry.
- Potential coastal shipping Hub in line with Sagarmala strategy.
- High spillage control due to Mechanical port.
- Gateway for inland waterways connecting Kalinganagar, Talcher& North East.

- Natural Drought of 16m capable to handle large mother vessels resulting in direct connection to key destination with lesser ocean freight compared to feeder vessels. Master plan of 35 berths phased growth to surplus 300 MTPA vibrant coastal economic zone with Industrial park & development of air strip to bolster connectivity.
- Faster vessel turnaround time of vessel results in timely berthing/departure of vessel improving the supply chain of importers exporters and resulting in high utilization levels.
- Reliable vessel Berthing at Dhamra ensures timely delivery and shipping of containers hence adding value to the supply chain.
- Dhamra port proximity to key Hinterland and industrial clusters and sea parks will result in bringing down dwell time of manufacturing to banking cycle.
- Rail connectivity will facilitate seamless movement of cargo as major industries being well connected by rail for cargo movement.
- Dhamra have sufficient dredging equipment. Which helps port economic positively because we don't have to depend on other for the operation.

LEARNING EXPERIENCE

I had the privilege of undertaking a four-week internship at DHAMRA PORT, ADANI PORT AND SEZ a renowned name in the maritime industry, as part of my professional development. This report outlines the invaluable insights and experiences gained during my internship at . Dhamra Port Company Ltd.

Internship Overview

Week 1: Orientation and Familiarization

During the initial week, I underwent a comprehensive orientation, which included an introduction to DHAMRA PORT, ADANI PORT AND SEZ 's history, values, and its significant contribution to the maritime sector. I gained insights into the company's organizational structure and got to know my mentor and guide.

Week 2: Port Operations

In the second week, I was introduced to the operational aspects of DHAMRA PORT, ADANI PORT AND SEZ . I had the opportunity to visit different areas of the port, including the docks, container yards, and logistics control centers. This hands-on experience gave me a deeper understanding of the day-to-day activities and challenges faced in port operations.

Week 3: Logistics and Supply Chain Management

During the third week, I focused on logistics and supply chain management within DHAMRA PORT, ADANI PORT AND SEZ . I shadowed professionals in this domain, learning about inventory management, transportation logistics, and supply chain optimization. The exposure to real-world logistics challenges was particularly insightful.

Week 4: Special Projects and Conclusion

In the final week, I participated in a special project related to cost optimization in logistics. This project allowed me to apply the knowledge gained during my internship and contribute to solving real business challenges. It was a rewarding experience that showcased the practical relevance of my internship.

Key Learnings

Throughout my internship at DHAMRA PORT, ADANI PORT AND SEZ , I gained several key learnings:

1. **Real-World Application**: I discovered the practical application of concepts learned in my academic studies, particularly in logistics and supply chain management.
2. **Teamwork and Collaboration**: Working alongside professionals in the maritime industry taught me the value of teamwork, effective communication, and collaboration in achieving common goals.
3. **Operational Challenges**: I gained a deeper appreciation for the complexities and challenges of port operations, logistics, and supply chain management in a real-world setting.
4. **Innovation and Technology**: DPCL's focus on innovation and technology integration underscored the importance of staying abreast of industry trends and technological advancements.
5. **Professional Growth**: My internship at DPCL has not only expanded my knowledge but has also helped me grow professionally by developing problem-solving skills and adaptability.

Challenges and Opportunities

I encountered several challenges during my internship, including adapting to a fast-paced work environment and understanding the nuances of maritime logistics. However, these challenges presented valuable learning opportunities and strengthened my determination to excel in this field.

Conclusion

In the course of my internship at Dhamra port corporation limited, I have had the invaluable opportunity to delve into the intricate world of port logistics costs. This experience has been eye-opening, providing me with a deep understanding of the multifaceted factors that influence the efficiency and economics of ports. As I conclude this internship report, I reflect on the key insights and knowledge gained during my time here.

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