





भारत सरकार (पत्तन, पोत परिवहन और जलमार्ग मंत्रालय) Govt. of India (Ministry of Ports, Shipping and Waterways) डाहा०थ्याक पणम्बूर Panambur / ठांतर्साक्र मंगलूर Mangalore - 575010

No: CE/EE(C)/EST/LUP/71/2024-25

Date: 7.10.2024

OBJECTIONS /SUGGESTIONS FROM STACKHOLDERS TO THE PROPOSED LAND USE PLAN-2025, 2030, 2035, 2047.

The New Mangalore Port Authority is in the process of finalizing the Land Use Plan (LUP). We invite all stakeholders to review the proposed Land Use plan and submit any objections or suggestions.

Submission Deadline: Please submit your objections or suggestions by 28.10.2024

The draft Land Use Plan is attached to this notice. If we do not receive any objections or suggestions by the stipulated date, it will be assumed that there are no concerns regarding the proposed Land Use Plan.

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Attachment: Draft Land Use Plan.

This notice is issued in compliance Clause 8 of the Compilation of Policy Guidelines for Land Management-2015.

-S/d-ASSISTANT ESTATE MANAGER (GR-I)

ದೂರವಾಣಿ / दूरभाष / Phone : 0824 - 2407341, 2887399 आईएसओ 9001:2015, 14001:2015 आईएसओ एवं 450011:2018 आईएसपीएस अनुपालनकर्ता पत्तन An ISO 9001:2015, 14001:2015 ISO 450011:2018 & ISPS Complaint Port







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CHAPTER - 8 LANDUSE PLAN

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8 LANDUSE PLAN

Preparation of Comprehensive Masterplan for New Mangalore Port Authority with Planning Horizon of 2047

Land use planning for the New Mangalore Port Trust (NMPT) is about strategically organizing how the land within the port area is used, keeping in mind the business plan and future growth projections. A committee has studied how the land is currently used and predicted how it will change with increased cargo traffic and ongoing projects. They've then created a plan to

- Land use planning at New Mangalore Port Trust (NMPT) involves strategically organizing port land usage based on business plans and growth projections.
- A committee studies current land use, predicts changes due to increased cargo traffic and projects, and devises a plan for efficient land and infrastructure use.
- This plan allocates space for port activities, enhances safety, separates hazardous areas, and promotes sustainability through zoning regulations.
- NMPT, as the sole Major Port in Karnataka, handles diverse exports and imports. Strategic development phases aim to enhance economic viability and operational efficiency over intervals from 2025 to 2040.

make sure the available land and infrastructure are used efficiently to handle the expected increase in traffic.

This plan is crucial for developing the port master plan because it helps allocate space for different port activities, making operations safer and more efficient. It also separates areas that are hazardous or sensitive, reduces environmental impact, and ensures that infrastructure is well-planned. Additionally, it designates areas for industries related to port activities, manages traffic effectively, and follows zoning regulations to promote sustainability.

Ultimately, port development and land use planning go hand in hand, influencing the economy, society, and environment of the region. Ports play a vital role in trade, transportation, and industry, so how the land is used within them affects many aspects of regional development.

The New Mangalore Port is a significant maritime facility, boasting deep draft capabilities and operability in all weather conditions. It holds the distinction of being the sole Major Port in Karnataka and ranks as the ninth largest Major Port across India.

The port handles a diverse range of commodities for both export and import. Among the major exports are iron ore pellets, steel products, petroleum, oil, and lubricants (POL) products, granite stones, sugar, and containerized cargo. On the import side, the port receives significant quantities of commodities such as crude and POL products, liquefied petroleum gas (LPG), coal, limestone, timber logs, finished fertilizers, liquid ammonia, phosphoric acid, other liquid chemicals, and containerized cargo.

The aim of land use planning at the New Mangalore Port is to strategically allocate land in accordance with the business plan and its execution by the NMPT. A committee has scrutinized the current land usage at NMPT and forecasted changes driven by projected increases in cargo throughput and ongoing or planned expansion projects. Utilizing this analysis, a land use plan has been devised. The primary goal of this plan is to ensure the most effective utilization of available land and associated infrastructure to accommodate the anticipated rise in traffic in the future.

The land use plan delineates various zones within the port area, including areas designated for long-term leases, short-term leases, port-led industries, commercial activities, customs bond areas, and township development.

The strategic development phases of the port encompass key enhancements aimed at bolstering its economic viability and operational efficiency. Spanning across five-year intervals, these phases are slated for 2025, 2030, 2035, and 2040, with each phase tailored to introduce critical infrastructure improvements.

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Preparation of Comprehensive Masterplan for New Mangalore Port Authority with Planning Horizon of 2047

8.1 Developmental plans for 2025

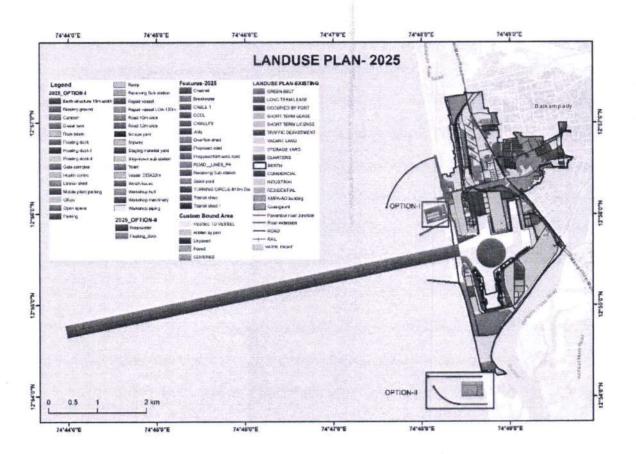


Figure 8.1 Landuse development plan for the year 2025

In the development plan, slated for 2025, several notable changes are envisioned. Firstly, to accommodate the introduction of a sea plane cruise terminal and marina, a breakwater is proposed for construction on the northern side of the entrance. Initially, this breakwater will span 1300 meters, with plans for subsequent extensions up to 1220 meters outlined in the long-term strategy. The layout and typical arrangements for this endeavor are depicted in **Figure 8.1**.

In 2025(Figure 8.1), a pivotal addition to the port's capabilities is the establishment of a ship repair facility. This specialized industrial complex, commonly known as a shipyard or dry dock, will be equipped to undertake crucial maintenance, repair, and renovation work on ships and boats. Considerations for deepening the port to accommodate this development are made with utmost attention to ensure the stability of existing infrastructure, notably the breakwater.

8.2 Developmental phase - Short term (FY 2030)

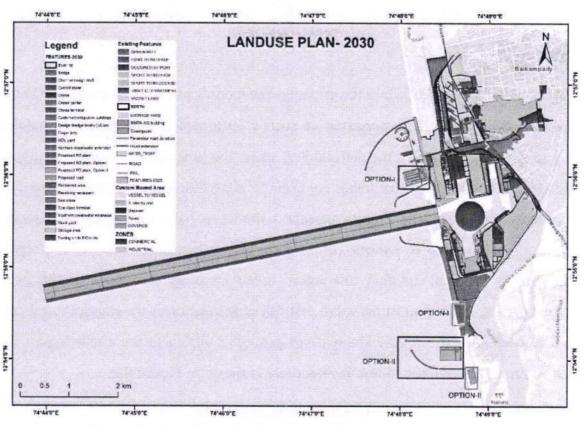


Figure 8.2 Landuse development plan for the year 2030

The development plans for 2030 includes the construction of a proposed marina in the outer harbor area. Marinas serve as designated zones within coastal or inland waterways, offering comprehensive facilities and services tailored to the needs of boat owners and enthusiasts. Additionally, plans for the development of a cruise terminal within the outer harbor area are outlined. Cruise terminals are vital hubs facilitating the embarkation and disembarkation of cruise ship passengers, enhancing the overall maritime experience and attracting tourism. The integration of seaplanes within the harbor environment underscores the port's commitment to multifaceted connectivity and emergency response readiness. A comprehensive overview of these proposed developments is provided in previous chapter, each illustrating the envisioned infrastructure enhancements in detail. The current quarters area is scheduled for dismantling to make way for a new use as a stacking area. This type of area is crucial in various industries for efficient inventory management, storage, and logistics operations. The transition of the quarters area into a future stock area is detailed in



previous chapter, illustrating the planned conversion and utilization of this space. The Landuse development plan for the year 2030 is shown in **Figure 8.2**.

8.2.1 Iconic Tower

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The construction of an iconic tower within the port is poised to transform it into a distinctive landmark. The presence of such a landmark is anticipated to catalyze economic development in the surrounding areas. The heightened visibility and appeal brought about by the iconic tower are likely to attract increased attention from both residents and tourists. As a major attraction, the tower has the potential to draw in a considerable number of visitors, contributing to the tourism industry of the region. Beyond its practical function, the iconic tower becomes a symbol of the port's development, adding an iconic value that not only transforms the physical landscape but also elevates the overall identity and economic vitality of the entire region. The lconic tower planned for NMPA development is shown in **Figure 8.3**.

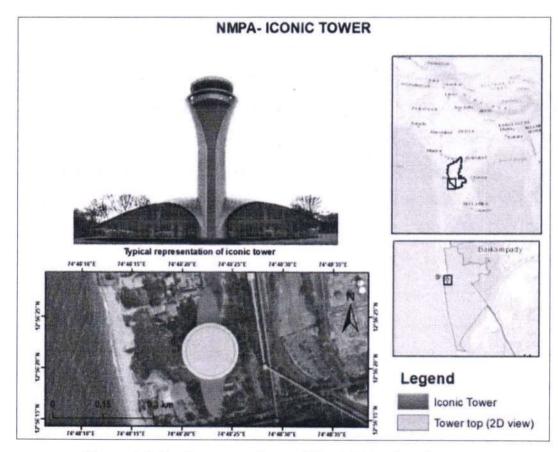


Figure 8.3 Iconic tower planned for NMPA development

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8.2.2 Marina

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Marina are purposefully designed to meet the needs of both cruise ships and their passengers. These facilities must seamlessly integrate with broader transportation, tourism, and urban planning strategies of the port city and nearby destinations. From a maritime perspective, cruise terminals must adhere to specific requirements related to draft, berthing lines, and navigation channels to accommodate cruise ships. Internally, the terminal comprises various spaces, including the apron area, terminal building, and ground transportation facilities. Implementing a revolving restaurant for the marina could transform it into a compelling tourism attraction, solidifying its status as an iconic spot within the port. Such a unique and dynamic feature has the potential to captivate visitors and enhance the overall appeal of the port area. The Marina planned for NMPA development is shown in **Figure 8.4**.

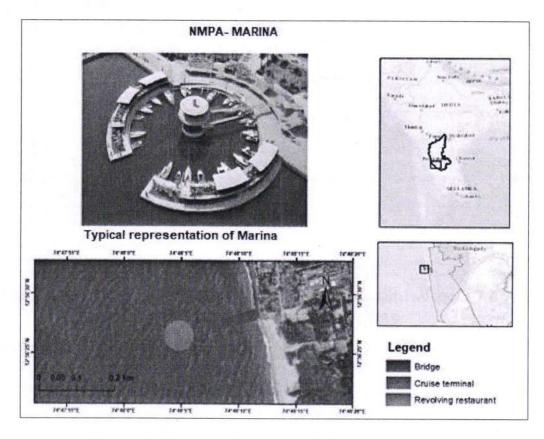


Figure 8.4 Marina planned for NMPA development

As this chapter on the port's master plan draws to a close, it's evident that the meticulous design integrating various land uses, zones, and berths sets a solid foundation for multifaceted growth. With an emphasis on blending functionality with

aesthetic allure, the inclusion of residential features, alongside the ambitious future prospects of a captivating revolving restaurant and an iconic tower, underscores a visionary approach to fostering tourism. This blueprint not only envisages a thriving port but also aspires to create an unforgettable experience, beckoning travelers from far and wide to partake in the allure of this dynamic hub. With innovation as its cornerstone, this chapter leaves a tantalizing glimpse into the promising horizons that await, inviting stakeholders to partake in shaping a vibrant future for this burgeoning destination. The spatial distribution of NMPA, smart city and multi- modal logistic park in the mangalore corporation is shown below in **Figure. 8.5**.

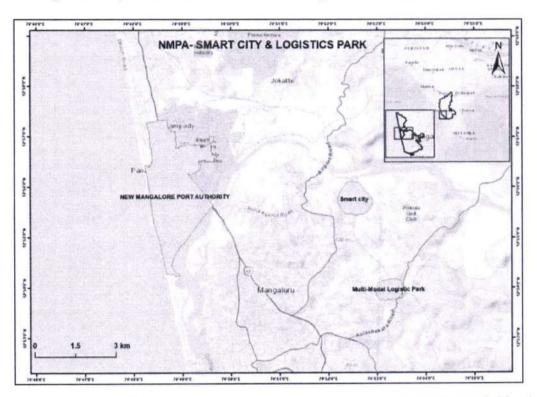


Figure 8.5 The spatial distribution of NMPA, smart city and multi-modal logistic park in the Mangalore corporation

The following points shall be considered for the NMPA master plan as smart port concept

- Rail Road connectivity work is underway. Once the traffic volume is frozen on mutual consent, the evacuation plan including, Rail Road connectivity shall be firmed up and included in the final report.
- 2. Modelling study is underway will be included in the final report.
- 3. Financial stability is under way and it will be included in the final report.

Preparation of Comprehensive Masterplan for New Mangalore Port Authority with Planning Horizon of 2047

8.2.3 Multi-modal logistic park

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Preparation of Comprehensive Masterplan for New Mangalore Port Authority

A multi-modal logistic park (MLP) is a facility designed to facilitate the efficient movement and transfer of goods using multiple modes of transportation, such as rail, road, air, and sea. These parks serve as hubs where cargo can be seamlessly transferred between different modes of transportation, optimizing logistics and supply chain operations. They will serve as centers for multi-modal freight transport, facilitating the seamless transfer of goods between different modes of transportations, the MLPs are expected to offer value-added services, contributing to the overall competitiveness of businesses utilizing these facilities. The Area for development of Multi-modal logistic park is shown in **Figure 8.6**.

8.2.4 Purpose of Multi-modal logistic park

The expanding operations at New Mangalore Port necessitate the development of additional storage facilities to efficiently manage logistics. Establishing a multimodal logistics park emerges as a lucrative and strategic initiative to streamline the movement of cargos and goods. This approach involves integrating various modes of transportation, such as road, rail, and potentially even waterways, to create a comprehensive and versatile logistics network.

 A Multi-modal Logistic Park (MLP) at New Mangalore Port serves as a hub for efficient cargo transfer between rail, road, air, and sea transport modes.

 It optimizes logistics by centralizing cargo handling, reducing transit times, and attracting diverse businesses.

 Its strategic location enhances the port's competitiveness and facilitates smoother trade operations, making it a valuable asset for regional economic growth.

By planning and developing a multi-modal logistics park, New Mangalore Port can achieve several benefits. Firstly, it enhances the port's logistical capabilities by providing a centralized and well-connected hub for cargo handling. This not only optimizes storage but also facilitates smoother and more cost-effective transportation.

The multi-modal logistics park serves as a pivotal point for seamless intermodal transitions, allowing cargo to shift between different modes of transport efficiently.

This integrated approach can significantly reduce transit times, transportation costs, and potential delays.

Furthermore, the logistics park contributes to the overall profitability of New Mangalore Port by attracting a diverse range of businesses and industries. Companies can capitalize on the convenience and connectivity offered by the park, leading to increased economic activities and trade.

The strategic placement of the multi-modal logistics park in proximity to New Mangalore Port enhances the port's competitiveness. It not only caters to the growing demand for storage but also positions the port as a well-connected gateway for businesses looking to leverage multiple transportation modes for their logistics operations.

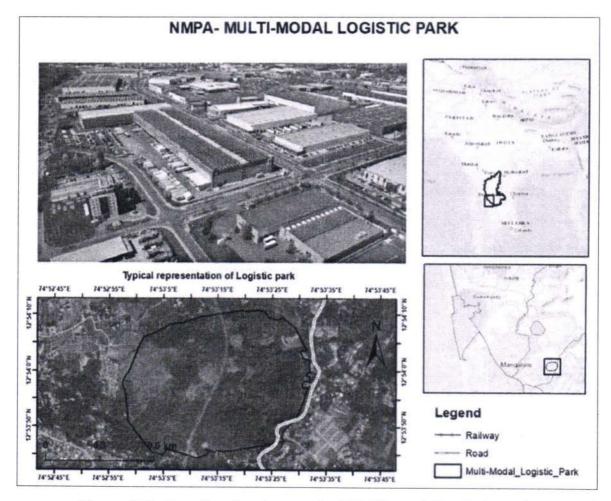


Figure 8.6 - Area for development of Multi-modal logistic park

Planning Horizon of 2047

Mangalore Port Authority with

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8.3 Developmental phase - Medium term (FY 2035)

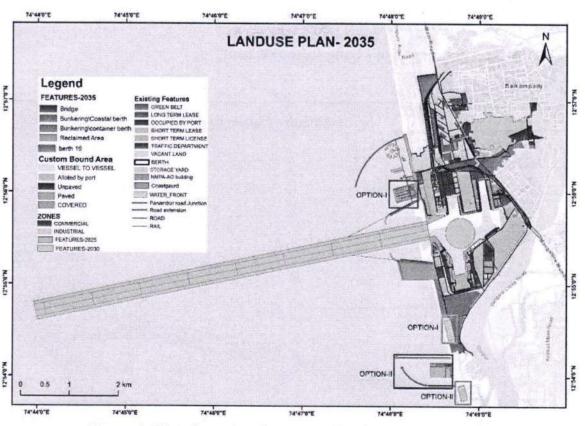


Figure 8.7 Landuse development plan for the year 2035

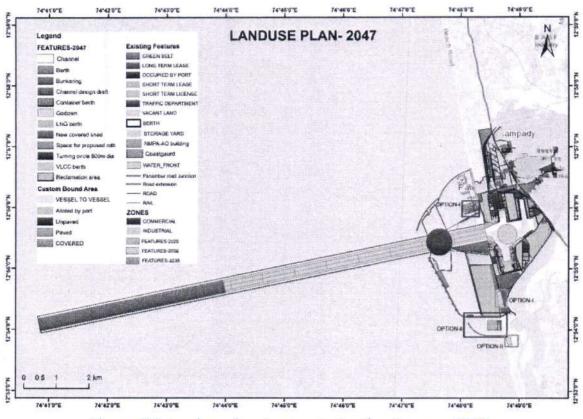
In the development phase of 2035, three bunkering/coastal berths, each measuring 220 meters by 30 meters, are slated for development on the northern side of the breakwater. Additionally, two bunkering/container berths, with dimensions of 330 meters by 30 meters, are planned for the southern side of the breakwater, as illustrated in Figure 7.30. These berths will cater to the needs of bunker barges and facilitate efficient fueling operations for vessels, as well as other ancillary services.

Another crucial aspect of the transformation plan involves the relocation of port quarters to free up land for cargo storage, port operations, and industrial facilities, as well as truck parking. The Landuse development plan for the year 2035 is shown in **Figure 8.7.**

Furthermore, the port authority is actively addressing navigational safety concerns, particularly regarding the visibility of transit lights. Recent developments, such as the installation of high mast lights and the stacking of containers, have impacted the visibility of transit lights, posing potential safety risks. To mitigate these issues, facilities

Preparation of Comprehensive Masterplan for New Mangalore Port Authority with Planning Horizon of 2047

planned under the medium-term phase (FY 2035), as depicted in previous chapter, will focus on enhancing visibility and ensuring unimpaired navigational aids.



8.4 Developmental phase - Long term (FY 2047)

Figure 8.8 Landuse development plan for the year 2047

Looking ahead to long-term plans for 2047 ambitious initiatives are proposed to further enhance the port's capabilities. These include deepening the channel and creating an outer harbor capable of accommodating vessels with a draft of up to 21 meters, including VLCCs. Additionally, plans are underway for the construction of six container berths, VLCC berths, LNG facilities, and bunkering infrastructure. The Landuse development plan for the year 2047 is shown in **Figure 8.8**.

To support these developments, extensive construction works are planned, including the construction of breakwaters and the establishment of windmills in designated areas. Moreover, a turning circle with a diameter of 700 meters is proposed to facilitate safe navigation within the harbor. These long-term plans, as outlined in previous chapter, underscore the port authority's commitment to strategic growth and continuous improvement in line with evolving industry demands.

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8.5 Land policy

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To create the land use plan for 2020, the New Mangalore Port Trust (NMPT) looked at policy guidelines from the Ministry of Shipping (MoS) issued in 2014 and subsequent clarifications. Additionally, they examined the draft of the Port Guidelines and Land Management (PGLM) 2020 to understand the government's stance. The plan takes into account both current and projected levels of traffic flow, as well as the existing use of land, including long-term leases held by various port users and available vacant land. After thorough consideration and discussion, the land use plan was finalized.

Typically, development in the vicinity of a NMPT port area includes a mix of commercial, industrial, and residential zones, as illustrated in **Figure 8.9** and **Figure 8.10**

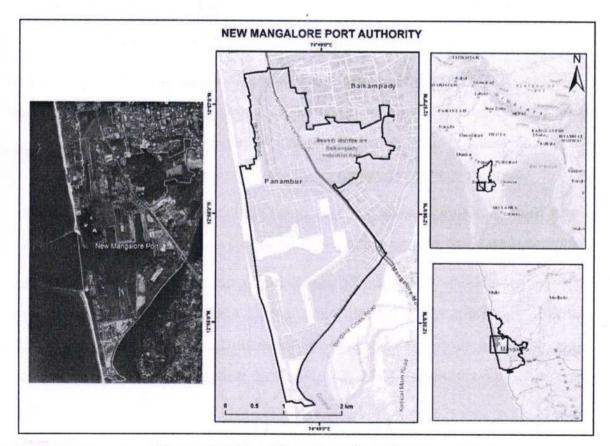


Figure 8.9 New Mangalore Port-Key map

8.6 Present Land Use of the Port.

The project is located at New Mangalore Port Authority **(Figure 8.9)**, Village Panambur, Tehsil Surathkal, Dakshina Kannada District, and Karnataka. The area occupied by the Mangalore new port is about 7.44 sq.km and lie between the latitude of 12°55'42.70"N and longitude 74°49'2.10"E.

The prime area for ship-shore loading and unloading of cargo and related Port activities is the Port area that lies within a boundary wall and is secured by CISF and Custom's control. Total area of the Port is 926.55Ha (2290.43 acres), out of which Bondel and Kudupu quarry is having 119.79Ha (296 acres) and 63.13Ha (156 acres) respectively. The Custom Bond area 228.65Ha (565 acres), Portand Port allied area 325 Ha (804acres) excluding Town ship area 60.3 Ha (149.43 acres) Bondel and Kudupu.183Ha(452 acres) and lagoon 129.13Ha (320 acres.)

The boundaries of the Customs area of New Mangalore Port are as follows:-

North Side: A security compound of the New Mangalore Port having K.K. Gate running along the concrete road connecting the NH.66 and the Panambur Beach. Panambur Railway Marshalling yard connected to Thokur Railway station to evacuate rail cargo through Konkan line/ southern railway/south western railway.

South Side: A security compound wall of KIOCL Plant continued by the Security compound wall of the New Mangalore Port having Silver Jubilee gate,

KIOCL junction NH66 – Tannirbhavi concrete road is running outside the security wall and IOCL Tank farm, MRPL Booster Pump station, AEGIS, IMC, MK Agro are having leased land and further desalination plant construction in the south side would facilitate 365 days refinery at MRPL. Gurupura River is flowing adjacent to the concrete Road.

East Side: A security compound wall of the New Mangalore Port having U.S. Mallya Gate running along NH.66.between Grupura River Bridge to Baikampady Bridge.

West Side: Along the south end, a security compound wall of the New Mangalore Port outside of which is Arabian Sea. The details of the land area inside the port security

wall is given in **Table 8.1**. **Table 8.2** explains the Land use pattern outside the Port security wall.

Land areas inside the Port security wall	Area Ha (acres)	Land use (in %)
Lagoon	129 (320)	36
Berth & Jetty	99 (245)	28
Greenary	10 (22)	2
Offices	20 (50)	6
Leased/ licensed area	100(248)	28
Vacant		
Total	358 (885)	100

Table 8.1 Land areas inside the Port security wall

Table 8.2 Land use pattern outside the Port security wall

Land areas outside the port security wall	Area Ha(acres)	Land use (in %)
Colony	60.3(149)	11
Marshalling Yard	64.75(160)	11
Greenery	253.74(452 +175# acres in	45
Offices/RCHW	63.13(156)	11
Vacant	35.61(88)	6
Leased/ licenced area	91.46(226)	16
Total	568.9 Ha (1406acres).	100



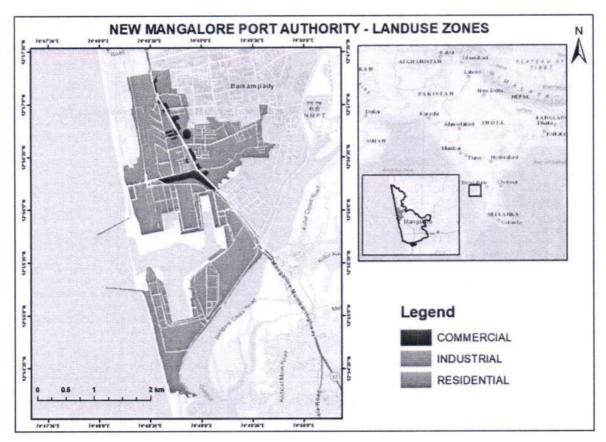


Figure 8.10 Land use zones map of NMPA

8.7 Commercial zone

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A commercial zone in a port refers to an area within the port facility or its immediate surroundings that is designated for business activities. In a commercial zone, various businesses and services related to port operations, shipping, logistics, and trade may be located. The area covered by commercial zone is 0.23sq.km (Figure 8.10). The NMPA is well equipped to handle bulk, liquid chemicals, hazardous cargoes, Crude and POL products, heavy lifts, machinery, Containers, project cargo etc. The NMPA stands as a pinnacle of commercial advantage, boasting a range of strategic benefits that set it apart.

- Deepest Inner harbour on the west coast with 14.0m draft.
- Proximity to Major International sea routes
- Road connectivity to 3 National Highways 66, 75 & 169
- Rail connectivity to 3 zonal railways Southern/South Western/Konkan

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- Air connectivity through Mangalore International Airport
- Largest LPG handling Port in India

NTCPWC, IIT Madras

- Highest coffee exporting port in India
- An ISO 9001:2015, 14001:2015 & ISPS Compliant Port
- Operations and Administration powered by POS & ERP
- Hassle-free single-window clearance and simplified documentation system
- Availability of sufficient covered and open storage area in and outside the wharf area
- Concretised road network inside the port area
- Special care for customers
- Ideal port to handle project cargo for mega industries
- Concessional Vessel related Charges

8.8 Industrial zone

Preparation of Comprehensive Masterplan for New Mangalore Port Authority with Planning Horizon of 2047

An industrial zone in a port refers to an area within or near the port facilities that is designated for heavy industrial activities related to port operations. This zone is typically where manufacturing, processing, and other industrial processes take place to support the handling and movement of cargo within the port. The area covered by industrial zone is 3.85 sq.km. (Figure 8.10). The Nmpa port has few large scale industries. The NMPA has economic hub of various industries. The port's industrial zones facilitates trade and business activities, offering facilities and infrastructure to support industries like petrochemicals, fertilizers, food processing and engineering.

8.9 Residential zone

A residential zone in a port is a designated area within or in close proximity to a port facility where housing is allowed or provided for port workers, employees, and sometimes their families. This zone is intended to accommodate the living needs of individuals who work in or around the port area, ensuring that they have convenient access to their workplace. The area covered by residential zone is 1.55sq.km. (Figure 8.10). In the NMPA colony, amenities like Auditorium, Gymkhana, Outdoor stadium, recreation club, hospital, market complex, children's park, schools, cable TV network etc., are included.

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8.10 Landuse features

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The following information highlighting the key features within the zones of NMPA as shown in **Figure 8.11**.

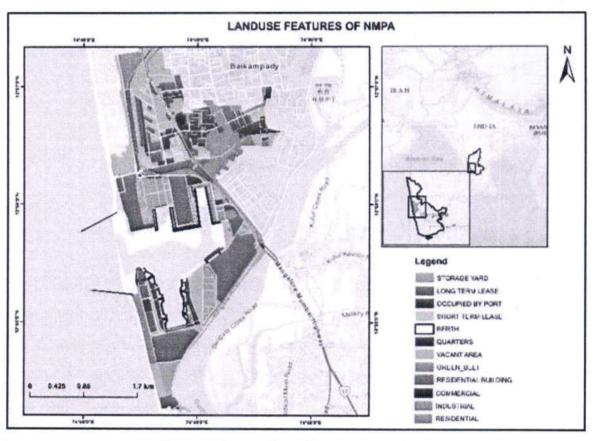


Figure 8.11 Landuse features of NMPA

8.10.1 Occupied by port (Long & Short term Lease)

Long-Term: This refers to areas within the port that are reserved for extended or permanent use. Examples include long-term storage facilities, permanent infrastructure, administrative buildings, and facilities with fixed, ongoing purposes. The area covered by the long term lease **(Figure 8.12).** The NMPA land is 1.80sq.km

Short-Term: These are areas within the port that are allocated for temporary or brief usage. This might include short-term storage, temporary cargo staging areas, or locations for activities that occur on a seasonal or intermittent basis. The area covered by the short term lease (**Figure 8.12**). The NMPA land is 0.120196 sq.km. (**Figure 8.12**).

The New Mangalore Port Authority is considering short-term and long-term leases for certain port facilities or areas. Short-term leases might involve shorter durations, perhaps a few months or a year, while long-term leases could range from several years to decades. These leases could be for various purposes, such as allowing companies to operate within the port, establish storage facilities, set up manufacturing units, or manage specific operations like cargo handling or logistics.

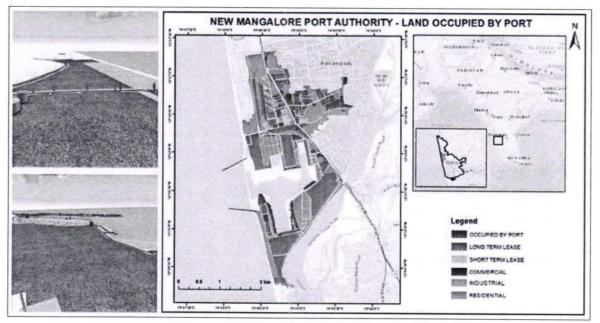


Figure 8.12 Land occupied by port

8.10.2 Green Belt

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A "green belt" (Figure 8.13) in a port area is an environmentally protected zone aimed at conserving natural resources, mitigating industrial impacts, preserving biodiversity, and promoting sustainable development. The area extends about 0.81sq.km (Figure 8.13). Port in its endeavor to develop Green belt has already provided a green cover of more than 33 % with 95% survival of plants The

port has initiative for the greenery in the

- The New Mangalore Port Authority (NMPA) has developed a green belt spanning approximately 0.81 sq.km within its port area to preserve natural resources and promote sustainable development.
- With over 33% green cover and 95% plant survival rate, the initiative aims to mitigate pollution, control dust, air, and water contamination.

• NMPA's efforts include reusing treated water to sustain the green belts, contributing to water resource conservation and zero discharge.

estate ,include the operational and non operational area within the port limits to control pollution mitigate emission of dust ,air and water contamination. The NMPA port apart from its thriving business is alos a natural heaven for the bird population.NMPA has achieved the zero discharge as NMPA reusing the entire quantity of treated water for green belts created inside the port in order to reduce the burden on water resources.

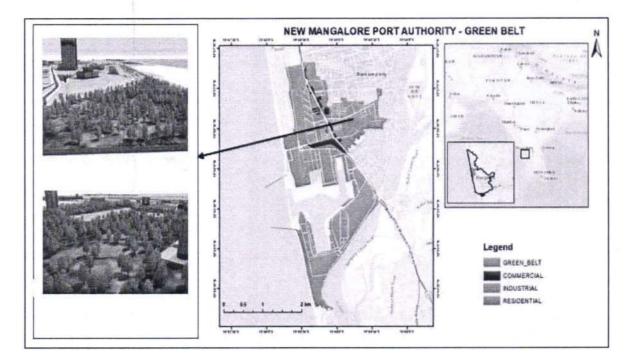


Figure 8.13 Green Belt Map

8.10.3 Quarters

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Quarters (Figure 8.14) in a port context typically refers to the housing or living accommodations provided for port personnel, such as harbor pilots, dockworkers, or other individuals who need to reside near or within the port area for their work. These residences can include dormitories, apartments, or other types of housing facilities. The area occupied by the quarters in the port region is about 0.045 sq.km. (Figure 8.14).

The buildings created for housing the Port Trust employees and affiliated organizations/institutions/establishments in the Port colony, referred to as the Port quarters are allotted under the provisions of the NIVIPTE (Allotment of Residences) Regulations 1980. The NMPA port provides quarters and housing facilities for employees, workers, and staff engaged in port operations.

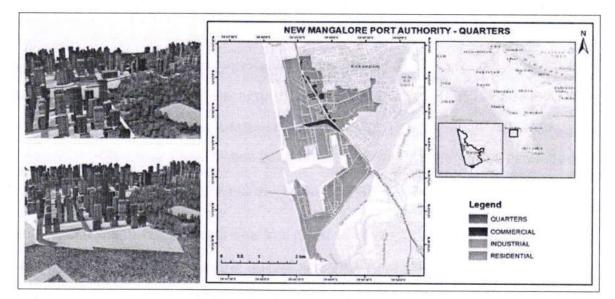


Figure 8.14 Quarters Map

8.10.4 Berths

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New Mangalore Port has 3 docks. Eastern dock arm, Western dock arm Oil dock arm. The eastern dock comprises of 7 multipurpose berths and western dock with 2 berths. A deep draft multipurpose berth exists between eastern and western dock area. The southern arm comprises of 5 jetties to handle liquid bulk and POL. **(Figure 8.15).**

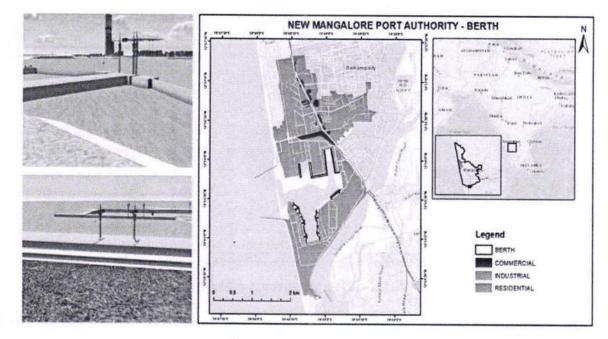


Figure 8.15 Berth Map

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8.10.5 Vacant Land

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Vacant land (Figure 8.16) in a port" refers to undeveloped or unoccupied land within the port area that is not currently in use for any specific port-related activities or infrastructure. This land may be available for future development, expansion, or other purposes as determined by the port authorities and relevant stakeholders. The area covered by the vacant land is about 3.63 sq.km (Figure 8.16).

Vacant land within an NMPA port varies in size and location, designated for diverse maritime-related functions. Details include zoning regulations, permitted usage, and leasing opportunities, often highlighting existing infrastructure and access to port facilities. Future development plans and application processes for leasing or development rights are integral to understanding the potential for interested parties. Accessing this information involves direct contact with the port authority, reviewing official announcements, or examining public documentation on port development and land usage.

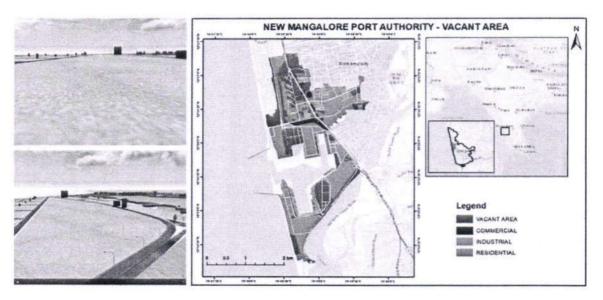


Figure 8.16 Vacant area Map

8.10.6 Residence

A "residential area (Figure 8.17) in a port" is a designated zone within a port or harbor where housing is provided for workers in the maritime and port-related industries, allowing them to live conveniently near their workplace. The total area occupied by the residence is about 0.045 sq.km (Figure 8.17). NMPT has constructed 867 residential units in the colony viz. 679 units for NMPT staff, 100 units for RCHW and 88 units for CISF Personnel. Out of 679 Quarters, 272 are occupied by NMPT employees, 89 are occupied by RCHW employees and 88 are occupied by CISF Personnel as on 31.3.2015. The overall occupancy is 66.12% (449 X 100/679). Out of these quarters, 108 units have been allotted to the staff of other Departments like Police, Resident Audit Office, Kendriya 40 Vidyalaya No.1, NMPT School, MESCOM, Coast Guard, Inspectorate of Dock Safety, KIOCL, Post Office Pvt. Firms, Contract Workers, Para-medical staff of M/s. Genial Groups Bangalore, who have been associated with the Port. Besides these family quarters, there is a Ladies Hostel building with 10 rooms.

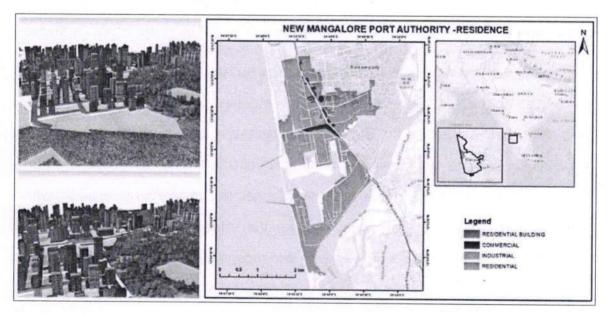


Figure 8.17 Residence Map

8.10.7 Storage Yards

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A "storage yard (Figure 8.18) in a port area" is an open space within a port where cargo, containers, and equipment are temporarily stored for efficient loading and unloading of ships, trucks, or trains. The area occupied by the storage yards is about 0.40 sq.km (Figure 8.18).

The port has storage facilities, in the form of an open storage area and closed storage area such as warehouses and silos. Storage facilities comprise of covered storage area in the form of transit sheds, warehouses and open storage area and tanks for liquid cargo area.

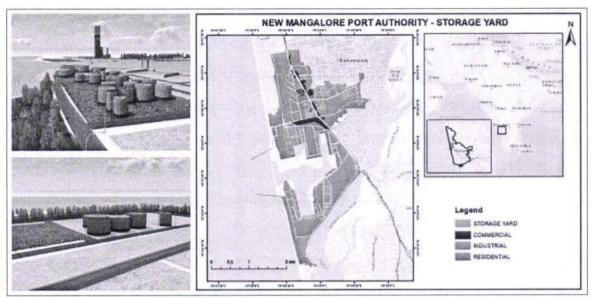


Figure 8.18 Storage yard map

8.11 NMPA –Long Term Development Plans

In the strategic vision of the New Mangalore Port Authority, the incorporation of iconic buildings into the development plans not only elevates the city's economic profile but also serves as a catalyst for increased tourism and commercial activities. These distinctive structures, with their architectural significance, have the potential to draw attention on a global scale, positioning New Mangalore port as a dynamic and forwardlooking port. This, in turn, creates a magnetic effect, enticing investments and contributing to the city's economic growth and prosperity.

8.11.1 Requirements of GMPL is considered

Land requirements can be considered based on land availability.

Land Requirements : We would prefer land on long lease for 30 years on nomination basis, as we are a central government PSU and a fully owned subsidiary of GAIL INDIA LIMITED a maharatna PSU. 10-15 Acres of land is required to develop the following:- a) 40,000 MT to 50,000 MT storage of paraxylene.

b) 4000 MT to 8000 MT storage of Acedic Acid.

c) Associated Transferring Facilities(Pumping station / Metering Stations)

d) Admin Building, switch Gears and Control Room, Fire Fighting System, Environmental Monitoring Systems, Etc.

Right of Use requirements for developing Pipelines and for Unloading Facilities at Ship Berth.

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- The land requirements for GMPL, a subsidiary of GAIL INDIA LIMITED, include 10-15 acres on a 30-year lease for developing storage facilities for paraxylene and acetic acid, associated transferring facilities, administrative buildings, and environmental monitoring systems.
- Additionally, pipelines from the berth to storage facilities and to the MSEZ pipeline corridor starting point are needed, along with unloading facilities at the berth.
- A warehouse facility to hold 10-15 days of production is also required. Expansion plans by 2030 would double these requirements.

a) Pipeline is required to be laid from Berth to Storage Facility as mentioned above.

b) Another Pipeline is also required to be laid from the above storage facility to MSEZ pipeline corridor starting point (Kulur Bridge)

c) Certain unloading facilities like unloading arms, ship-shore communications systems Etc are required to be developed at Berth.

Warehouse Facility of suitable size (to hold at least 10-15 days of production) (in addition to the storage facilities offered by Port at berth). In addition to the above,GMPL are planning for a capacity expansion by 2030. This would approximately double the above requirement from 2030.