

Dear Sir,

1. We are a collective of defence veterans and professionals with extensive expertise across diverse domains, actively engaged in nation-building. As part of a small contribution towards a holistic nation building initiative under “Vikas Bharat 2049” we provide our assessments and recommendations on various projects to the relevant authorities for their consideration. Previously, we have submitted a comprehensive report on the Defence Industrial Corridor in Maharashtra.

2. At the outset, we extend our gratitude to the Chairman, JNPA, for facilitating the visit to Vadhavan Port. The assistance provided by your esteemed team is highly commendable.

3. This document is not an exhaustive report based on in-depth study and research but rather a compilation of diverse ideas and perspectives for the reference and consideration of the relevant authorities. We hold no doubt regarding the high standards of the report prepared by the concerned officials.

4. **Vadhavan Port -An Introduction.** The Union Cabinet, under the leadership of Prime Minister Shri Narendra Modi, has approved the establishment of a Major Port at Vadhavan near Dahanu, Maharashtra. The project will be executed by Vadhavan Port Project Limited (VPPL), a Special Purpose Vehicle (SPV) jointly formed by Jawaharlal Nehru Port Authority (JNPA) and Maharashtra Maritime Board (MMB), with a shareholding ratio of 74% and 26%, respectively. Vadhavan Port is envisioned as an all-weather Greenfield deep-draft major port located in Vadhavan, Palghar District, Maharashtra.

5. Presently, approximately 25% of the nation's cargo is transhipped, with 20% originating from the western region, particularly JNPT. Vadhavan Port in Palghar District has been identified as a key project to enhance maritime trade, accelerating the Maharashtra's industrial growth and export strategy. Chief Minister Shri Devendra Fadnavis has recently directed the establishment of high-speed connectivity between Vadhavan Port in Palghar District and Nashik in North Maharashtra. He has also emphasized completing the Mumbai Metro Line 3 by June/July. Additionally, plans for Vadhavan Airport are under consideration. He has instructed that the required land for the port be allocated by 31 March and a consultant be appointed to assess the feasibility of constructing a new airport at Vadhavan.

6. Vadhavan Port will feature nine container terminals, each measuring 1,000 meters in length, along with four multipurpose berths, including a coastal berth, four liquid cargo berths, a Ro-Ro berth, and a Coast Guard berth. The project entails the reclamation of 1,448 hectares of sea area, the construction of a 10.14 km offshore breakwater, and container/cargo storage facilities. Upon completion, the port will achieve a cumulative handling capacity of 298 million metric tons (MMT) per annum, including approximately 23.2 million TEUs (Twenty-foot Equivalent Units) of container handling capacity.

7. The project, with an estimated outlay of ₹76,000 crore, is being developed by Vadhavan Port Project Limited (VPPL), a joint venture between JNPA and Maharashtra Maritime Board (MMB), with a shareholding ratio of 74% and 26%, respectively. The capacities created will enhance EXIM trade flows through the IMECC (India-Middle East-Europe Economic Corridor) and INSTC (International North-South Transportation Corridor). World-class

maritime terminal facilities will foster public-private partnerships (PPP), leveraging cutting-edge technologies and efficiencies to establish state-of-the-art terminals capable of accommodating mainline mega vessels on international shipping routes connecting the Far East, Europe, the Middle East, Africa, and the Americas. Upon completion, Vadhavan Port is projected to rank among the top ten ports globally. Aligned with the objectives of the PM Gati Shakti program, the project will significantly boost economic activity and generate substantial direct and indirect employment opportunities for approximately 12 lakh individuals, contributing to the local economy.

8. Global port design and engineering firm AECOM, engaged under the Government of India's "Sagar Mala" initiative, has estimated an expenditure of approximately ₹10,000 crore (approximately \$1.5 billion) for developing basic infrastructure for the deep-water port at Vadhavan near Dahanu, Maharashtra. The consulting firm has further recommended adopting a "landlord" model for the development and operation of the facility.

First-Hand Assessment of Vadhavan Port and Surrounding Area

9. The port was visited on 13 Jan 2025 by our team in coordination with the JNPA. No technical assessments or evaluations were conducted during the visit following are our observations:-

Travel and Infrastructure Sighting. The journey commenced from Palghar station to Boisar station, during which we observed Tata Steel Rolling Mills, BARC, TAPs, and numerous other industrial units in the well-established MIDC area. At Vangoan/Kalovelvi village, we reviewed the proposed rail (60m wide) and 8-lane road (120m wide) connections.

Port Site Overview . The main project site was observed from a distance as per advisory. The proposed port is offshore, located approximately 3 km from the beach area at Chinini and Varoar villages, with a draft exceeding 20 meters. Reclamation of 1,499 acres is planned for the project, with key details summarized in the preceding sections.

Dahanu Area Observations. From Vadhavan Port toward the Dahanu end, we noted approximately 7 km of clear beachfront perceived to be a potential location for a Naval Base. No technical studies or assessments were conducted to support this observation. A bridge over Dahanu Creek, the Indian Coast Guard (ICG) office building near Dahanu Fort, and a gangway leading to an IC Boat were observed. The area hosts over 100 fishing trawlers, and resistance from local fishermen is anticipated but is reportedly being addressed appropriately. 3 km beyond Dahanu Beach, near the forested area, another clear beach was identified as a potential site for shipbuilding and repair facilities. At Dahanu Agar Beach, located 2 km further, a few fishing trawlers were observed. At Dahanu Narpad, 3 km from Dahanu Agar Beach, an ICG office was identified. This location may also serve as a viable site for a Naval Base or shipbuilding facility. At Bordi Beach, 8-10 km from Narpad, the area appeared free of fishing trawlers and other encumbrances, making it a promising site for a Naval Base or

shipbuilding facility. Draft and technical feasibility need to be verified for all suggested locations.

Recommendations for Coast Guard and Infrastructure. The Indian Coast Guard (ICG) Dahanu Station, located adjacent to Dahanu Port, has been serving national interests and maritime security since 2012. Although no port infrastructure was observed in the immediate vicinity, ICG Dahanu Station plays a pivotal role in safeguarding the region. Recently, ICG has been allocated an additional berth to enhance security provisions for Vadhavan Port, which is situated 12 km from the ICG Dahanu Station.

The core responsibilities of the Coast Guard include providing protection and assistance to fishermen in distress at sea, preserving and protecting the maritime environment, preventing and controlling marine pollution, and assisting Customs and other authorities in anti-smuggling operations. Additionally, ICG enforces the Maritime Zones of India Act.

Given the impending establishment of one of the largest ports in the vicinity, it is proposed that the facilities at ICG Dahanu Station be augmented and modernized. Necessary expansion plans should be considered to support the increased operational demands due to the Vadhavan Port's development.

Prospects for a Defence Nodal City. Based on our observations, the Palghar-Boisar-Dahanu region holds considerable potential to become a nodal city for the proposed Defence Industrial Corridor in Maharashtra.

10. It is pertinent to mention that further technical studies and feasibility assessments are essential to substantiate these observations. Detailed discussions are covered in subsequent sections of this report.

11. **Imperatives for Development for a Naval Station.** During the Indo-Pakistan War of 1971, the Indian Navy encountered significant security challenges for its Western Fleet stationed in Mumbai Harbour. The primary issue arose from the congestion in the shipping lanes caused by commercial shipping traffic, fishing boats, and tourists. Over the years, this congestion has increased substantially, and recently, an accident involving an Indian Navy speedboat and a tourist boat resulted in the tragic loss of 17 lives, along with significant asset damage. In addition, the local fishing community has raised concerns about the need for more leverage in the coastal area to support their businesses.

12. Vadhavan Port, upon completion in the next decade, is expected to be one of the largest ports in Asia, with an estimated asset value of ₹5-7 lakh crores. The port will accommodate a substantial number of ships, vessels, and containers, further increasing its strategic significance. Considering the growing threat perception from potential adversaries and the vital role of maritime security, we propose the construction of a Naval Base in the vicinity of Vadhavan Port.

13. The establishment of a Naval Base near Vadhavan Port is crucial to enhance the protection and security of one of Asia's largest ports. The base would support the security of the shipping lanes, address the increasing congestion, and offer rapid response capabilities for

any maritime security threats. The proximity of the proposed site to the port will allow for efficient naval operations, particularly in safeguarding the port's vast infrastructure and assets. Additionally, the establishment of a Naval Base will reinforce India's maritime defense strategy, ensuring preparedness in the region.

14. We understand that the Indian Navy has appointed AECOM as the project management consultant for its flagship Project Seabird at Karwar. This project, with an estimated cost of \$3 billion, is the largest naval infrastructure project for India and will provide the Navy with its most significant naval base on the west coast. AECOM's involvement in overseeing the planning, design, contracting, and construction of Project Seabird has been exemplary. Given their expertise and experience in handling such critical projects, we recommend considering a similar approach for the proposed Naval Base at Vadhavan, leveraging AECOM's capabilities in managing large-scale defense infrastructure projects.

Opportunities for Ship Building and Repair

15. The Vadhavan Port is projected to require a substantial amount of ship repair activity, which will, in turn, necessitate the establishment of associated industries in the vicinity. Additionally, to enhance India's shipbuilding capacity and compete with major global players like China, Japan, and South Korea—who collectively control 85% of the commercial shipbuilding market—it is essential to develop more shipyards within the country. Currently, India's share in the global commercial shipbuilding market remains minimal.

16. Several industry players have already initiated efforts to expand shipbuilding capacities. Swan Defence has acquired the largest shipyard near Pipavav and is collaborating with various countries for both ship repair and shipbuilding. L&T operates a shipyard in Chennai, and it is reported that Adani and Ambani are planning to establish shipyards along the western coast, particularly from Sindhudurg onwards.

17. In alignment with global trends, all major ports in India have shipbuilding facilities:

Mazagaon Docks Limited (MDL) – Mumbai Port
Goa Shipyard Limited – Goa/Mormugao Port
Garden Reach Builders and Engineers – Kolkata Port
Cochin Shipyard Limited – Kochi Port
Hindustan Shipyard Limited – Vizag Port

18. Given the need to augment India's shipbuilding capacity, it is strongly recommended that Vadhavan Port and its surrounding area should also host a shipyard dedicated to repairs and shipbuilding. This facility would serve the needs of the Indian Navy, Indian Coast Guard, and commercial cargo ships and vessels.

19. **Opportunities for Government or Private Shipyard Ownership.** The proposed shipyard at Vadhavan Port could be owned by either the government or a private entity. Several potential players, including Mazagaon Dockyard Limited (MDL), L&T, and Reliance Defence, have the capacity to establish or expand their operations at Vadhavan. MDL, located 130 km from Vadhavan, has already modernized its Mumbai facility and could expand to Vadhavan, leveraging its existing infrastructure and land acquisitions. L&T, with its established shipyard,

and Reliance Defence, which has agreements for ship repair with the US Navy, could also play key roles in the development of the shipyard. A combination of government support and private sector participation could facilitate the swift establishment of the facility, enhancing India's shipbuilding and repair capabilities.

20. **Emergence of Dahanu as an Industrial Hub.** Dahanu, located in Maharashtra's Palghar district, is rapidly evolving into a major industrial hub, bolstered by a series of infrastructure projects designed to enhance its connectivity and economic potential. The strategic location of Vadhavan Port, set to become one of Asia's largest ports, will significantly boost Dahanu's role in global maritime trade. Coupled with the Mumbai-Ahmedabad Bullet Train, the Mumbai-Delhi Expressway, and the proposed Palghar-Alibaug Expressway, these projects will improve both national and international accessibility. Additionally, the proposed international airport near Dahanu will further position the region as a critical industrial and commercial destination. The combination of these key infrastructure initiatives provides a strong foundation for the region's industrial growth, attracting businesses and investors seeking connectivity and proximity to major markets.

21 Dahanu's development into an industrial powerhouse is further supported by its potential as a nodal city in the proposed Defence Industrial Corridor for Maharashtra. With its proximity to major infrastructure projects and the development of Vadhavan Port, Dahanu is ideally suited for the establishment of a Naval Base and shipbuilding facilities. The growing industrial and commercial landscape, alongside the proposed Defence infrastructure, creates a perfect synergy for advancing national security and economic growth. This makes Dahanu a prime candidate for the development of advanced shipbuilding capabilities and defence-related industries, strengthening its position as a crucial hub in India's future industrial and strategic landscape.

22.. **Recommendations.** Vadhavan Port will be a landmark in the development and growth of our nation. Upon completion in the next decade, it is expected to be one of the largest ports in Asia, with an estimated asset value of ₹5-7 lakh crores. Given its strategic importance and the expected high traffic volume, it is strongly recommended that a Naval Base be established in the vicinity of Vadhavan Port to ensure the security of the port and the surrounding waters.

23 Additionally, it is recommended that the Indian Coast Guard (ICG) modernize and expand its existing facilities at Dahanu Port to support the increased maritime activity in the region. The significant ship repair activities anticipated at Vadhavan Port call for the establishment of a shipyard in the area. This would contribute to enhancing India's shipbuilding capacity to compete with leading global players like China, Japan, and South Korea. While this will require substantial investment and a conducive environment with subsidies, it would be a crucial step towards augmenting the nation's maritime capabilities. Lastly, Dahanu is poised to become one of Maharashtra's leading industrial hubs. With the establishment of a Naval Base and Shipbuilding facilities, it is ideally positioned to serve as a key node in the proposed Defence Industrial Corridor for Maharashtra, enabling the development of necessary infrastructure to support the region's strategic and industrial goals.

24. Also, please find attached the proposed report on the Defence Industrial Corridor in Maharashtra for your reference. In addition, I have also included a synopsis and proposal for the Defence Corridor for your perusal. On December 3, 2024, we held a seminar on the subject

in Pune, attended by Defence veterans, industrialists, and other professionals. It was unanimously agreed that the establishment of a Defence Corridor in Maharashtra is essential for developing economic prosperity and meeting the ever-increasing demand for weapons and equipment by our Defence forces. The viewpoints and discussions from the participants of the seminar can be found in the drive and the attached documents.

Thank you for your time and consideration.

Jai Hind

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