An Analysis on the Sectoral Dynamics in the Privatisation of Ports in India: The Way Ahead

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ABSTRACT

India's maritime port sector upholds enormous potential to grow against International benchmarked standards with its extensive coastline and port-led infrastructure. An integrated approach between the Central Government and private players would realize Indian ports true economic value. This article presents insights on the recent legislative developments and the government's playbook over the last decade in altering transition in private sector participation in Indian ports. The authors elucidate on the existing dynamics of the privately-owned minor ports against government owned major ports. The study highlights the prevailing set of circumstances in public-private-partnership (PPP) agreements in India and the prospects of future PPPs in determining holistic burgeoning of economic advancement in the port sector. The study tenders to offer a sectoral analysis of PPP agreements, privatization and corporatization in ascertaining India's fate in this sector. Finally, the authors analyze India's 2030 vision in administering best-in-class port infrastructure development, logistical modal-mix and adopting transition in existing legislative frameworks and modes of PPP in attracting private sector participation in benchmarking India as a Global port hub.

Keywords: PPP, Private, Infrastructure, Ports, Government

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Introduction

India's transition from a stagnant economy commenced in 1991 with the initiation of a liberalized industrial policy.[1] Today, India's maritime sector constitutes 12 Major ports and over more than 200 Minor Ports positioned across the long coastline of 7500 km and an extensive network of navigable waters.[2] The comprehensive trade growth of the country is detrimental to a country's maritime sector, which plays a pivotal role in measuring economic growth. India's 95% Export-Import (EXIM) trade volume and 65% trade value is assumed via maritime transport. Two Indian ports, Jawaharlal Nehru Port Trust (JNPT) and Port Mundra, ranked 33rd and 37th respectively in the Global Top 40 Container Ports.[3] The total traffic handled today by the Indian ports is 1307 Million Tonnes Per Annum (MTPA)[4]. Major Port sector in the last five years have witnessed a compound annual growth rate at 4% and have handled nearly 54% of the country's total cargo in 2019-20.[5] While the major ports across India are administered by the government under the Shipping Corporation of India, a vast majority of minor ports are operated by private corporations and enterprises. With the launch of the Sagarmala project by the Ministry of Shipping, Ports and Waterways, the last decade had witnessed some significant trends in the industry. The successive governments in India have extended sustenance to this evolution across three dimensions *firstly,* reshaping existing policies and introducing new policies to boost greater competition across the ports; *secondly*, creating opportunities for the private stakeholders and investors to shrink fiscal burden and elevate commercial activity; *thirdly*, devising frameworks and delivering inland and waterway infrastructure for port productivity and enhancement and hinterland connectivity.

However, India's port rejuvenation persists to lingers against the other rapidly flourishing economies like Singapore, China and Malaysia. India's infrastructure is in bad shape and port infrastructure is not an exception with low cargo handling standards, insufficient machinery or equipment, poor dredging capacity, absence of technical expertise and port connectivity to the hinterland thereby, resulting in increased cargo handling cost and slow vessel turn-around time. This inefficiency in operations have resulted in higher freight rates coupled with long cycle time thereby, keeping Indian ports at a competitive disadvantage against international standards.[6] The aforesaid illustration of a tightening bottleneck is evident through slow economic growth and deficient system in the port sector. One must take into purview that if India seeks to become a $5 trillion economy, it solely cannot become one by merely improving

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[1] Shashi N. Kumar, *The Indian Port Privatization Model: A Critique,* Transportation Journal, (April 1998).

[2] Indian Ports Association (IPA), Statistics report for FY20

[3] Lloyds list, *One Hundred Container Ports 2020,* https://lloydslist.maritimeintelligence.informa.com/one-hundred-container-ports2020#:~:text=Welcome%20to%20the%202020%20edition,the%20calm%20before%20the%20storm (last visited May 28, 2021).

[4] Ministry of Post, Shipping And Waterways, Government of India, *Update on Indian Port Sector up to 31.03.2020,* http://shipmin.gov.in/content/update-indian-port-sector-31032020 (last visited May 28, 2021).

[5] IPA, *supra* note 2.

[6] Indian Infrastructure, *Sector Review,* https://indianinfrastructure.com/2018/08/21/sector-review-3/ (last visited May 28, 2021).

infrastructure within the geography, India needs to create a demand for international trade[7].

Concurrently, India is witnessing a silent rise of private ports slyly shifting the cargo traffic from government-run ports to private ports. This advancement in the private sector is a relatively recent phenomenon. Gujarat has emerged as the chief maritime state in relation to port and operational capacity, cargo traffic and private sector investment, subsequently widening the existing gap in container volumes between itself and Jawaharlal Nehru Port Trust (JNPT; Major Port), thereby emanating itself as a rival to the dominant public ports. This transition landscape backed by aggressive marketing strategies demonstrated by the private players in the minor ports has affected the operations and profitability at government owned major ports. This transformation in the industry has created an exigency for the Government ports to take action to improve and stimulate private sector participation in the port industry. While presenting the Budget earlier this year (2021), the Finance Minister embarked a leap from shifting from a service model to a landlord model wherein a private operator would take over the handling of operations at the Major Ports entered through a Public-Private Partnership (PPP) mode, further proposing that operational projects worth 2000 crores across seven major ports in the country would be entered via PPP mode by Financial Year’22.[8]

This study is contextualized into expanding the very limited literature that is available on the Indian ports. The authors overcome this challenge by propounding existing port statistics released by the Centre. The goal and objective of this study is to bring into light the recent developments in the port sector and the latest trends in the industry that is revolutionizing the existing landscape for the government and the private sector. The first segment of the study highlights the existing government initiatives and legislative developments undertaken in the past decade to boost private sector participation and port productivity and identifies the shortcomings that may require a revamp in the system. The section also enumerates the effect of the requisite government initiative in shaping the current landscape in the port sector. The second section contextualizes the trends that have resulted in the rise of the private port sector and the existing deficiencies in the government owned ports. The authors in this segment attempt to establish their analysis based on the study of two rival ports in the country, i.e. JNPT and Mundra Port making the main focus of this study. The absence of empirical study discourages the authors to elucidate the potential impact of private ports in the existing port structure. The final section highlights the key issues concerning the port productivity that is discouraging the private players from entering the port sector and the future developments that India expects to undertake by 2030. The study identifies the sectoral issues prevailing and suggests adequate steps and measures to overcome the lacuna in the system.

On the brink of industrialization in a liberalized economy like India, in its intermediate stage offers an appropriate time phase to study the emerging private port sector and its

[7] Kailas Venkita Subramaniana, Jean-Claude Thillb, *Effect of privatization and inland infrastructural development on India's container port selection dynamics*, THE ASIAN JOURNAL OF SHIPPING AND LOGISTICS, 206 (2021)

[8]Ministry of Finance, Government of India, Union Budget 2021 (Issued on Feb. 1, 2021)

intersectional analysis in analyzing the dynamics of adopting the PPP model for the public sector.

Government Initiatives Undertaken for Private Sector Participation

'Sagarmala' – Nation Perspective Plan

Envisioned by the former Prime minister, Atal Bihari Vajpayee, the scheme of *Sagarmala* was conceptualized and approved by the Union Cabinet on March 25th, 2015 to foster port-led development and modernization, port industrialization and port connectivity development. Beyond 400 projects were devised and mapped at an estimated investment of Rs 8 Lac Crore[9]. *The National Initiative Programme (NIP)* under its Sagarmala project seeks to be a game-changer in India's logistic sector performance in unlocking India's full potential of its waterways and coastlines by lowering logistical costs for export and import cargo alongside adequate infrastructure investment.[10] The NIP devised its plan to revolutionize logistics by augmenting port-led modernization and industrialization alongside seamless intermodal port connectivity in unlocking India's true economic value. The programme highlighted a part-wise opportunity plan; i.e. by ameliorating the logistical modal-mix, India would accountably save between Rs 35-40000 Crores[11].Further by enhancing the time and cost of container shipment, the export and import competitiveness would marginally improve. Additionally, India lacks an international transhipment port. A sizable volume of transhipment is handled by ports of Singapore, Colombo and Klang, while ports of India, JNPT, Paradip port have a strong network, their element of transhipment is considerably small, hence, there is a need to transform India into a global force for container shipment[12]. The initiative locates industrial capacities near the coast to lower logistic cost of bulk commodities and suggests enhancing export competitiveness by embellishing port proximate discrete manufacturing clusters. In 2021, the *Sagarmala Development Company* (SDCL) signed 48 Memorandum of Understanding's (MOU) for undertaking maritime projects worth an investment of 11,870 crores with public and private stakeholders with respect to developing product-specific warehouses, coastal shipping vessels and manage operations of specialized vessels; roll-on and roll-off[13]. The *Maritime India Summit 2021* urged private investors to invest in Indian ports stating that the Sagarmala project has devised 574 projects worth an investment of Rs 6 Crore.[14]

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[9]Ministry of Shipping, Government of India, *The Sagarmala Post, January 2017*, http://www.shipmin.gov.in/sites/default/files/6642376426SagarmalaNewsletterFinal28122016.pdf. (last visited May 28, 2021).

[10]Ministry of Shipping, Government of India, Sagarmala The Big Picture http://sagarmala.gov.in/sites/default/files/Sagarmala%20the%20Big%20Picture.pdf (last visited May 28, 2021).

[11] *Id.*

[12] PTI, *Sagarmala Development Co inks pacts for maritime projects worth Rs 11,870 cr*, THE ECONOMICS TIMES (May 28, 2021 at 15:22) https://economictimes.indiatimes.com/industry/transportation/shipping-/-transport/sagarmala-development-co-inks-pacts-for-maritime-projects-worth-rs-11870-cr/articleshow/81272798.cms

[13]*Id.*

[14] Ministry of Port, Shipping and Waterways, Governement of India, *Maritime India Summit 2021*, Page 58 https://www.maritimeindiasummit.in (last visited May 28, 2021).

Project Unnati - Benchmarking India's Port Productivity

Project Unnati was conceptualized by the government for the identification of a benchmarking module of quantitative criteria of opportunities and areas of improvement by overseeing port operations, human resources, financial resources and efficiency parameters for the purpose of devising a framework for benchmarking productivity and efficiency of major ports against international standards in India and envisaged the chief performance indicators for the terminals and ports.[15] The aforesaid study to determine the quantitative benchmarking module is undertaken by *Boston Consulting Group* (BCG) with respect to scrutinizing maturity assessment of marine operations, cargo and vessel operations, maintenance, gate-in and gate-out operations, customs etc. so as to identify the efficient capacity utilization and underlying performance metrics by identifying gaps for further reinforcement[16]. According to a 2019 report, 116 initiatives were identified for the 12 Major Ports and a roadmap was proposed under Project Unnati to augment the traffic volume appreciably and to avoid capital expenditure. Among the 116 initiatives, 95 have been implemented.[17]

Model Concession Agreement for PPP

With an objective to imbibe a shift of the Major Ports to a 'landlord model' involving private players enter into commissioning agreements, in 2018, the Government approved amendments to the *Model Concession Agreement* (MCA)[18], with an aim to reflect the investment climate in the port sector further attractive and friendly for the future in Port Projects undertaken. One of the key amendments envisaged under the agreement was the constitution of the *Society for Affordable Redressal of Disputes – Ports* (SAROD - PORTS) to inculcate credence and trust among the private stakeholders[19]. Other features under the model agreement includes providing the private players with an exit route by disinvesting equity up to 100% following the completion of two years from the Commercial Operation Date (COD). Additionally, the land rates for the concessionaire have been reduced from 200% to 120%[20]. One of the long-prevailing grievance of the PPP operators was with regards to the revenue share being often payable at ceiling tariff rates, and as such, price discounts getting disregarded was resolved by an amendment made under the agreement pertaining to concessionaire paying royalty based on per metric tonne (M.T.) of cargo being handled which would be indexed to the variations in wholesale price index (WPI). Further, the concessionaire would have the discretion to station better facilities, technologies and equipment in order to achieve greater productivity and capacity utilization, thereby saving costs. The aforesaid amendments had been undertaken taking into consideration the past

[15] Unnati Organisation for Development Education, *Current Porjects – Programmes,* https://www.unnati.org/current-eu-projects.html (last visited May 28, 2021).

[16] Ministry of Shipping, Government of India, *Update on Ports Sector, 2019* http://shipmin.gov.in/sites/default/files/septcompressed.pdf (last visited may 28, 2021).

[17] *Id* and Ministry of Ports, Shipping and Waterways, *Implementation of UNNATI Project*, https://pib.gov.in/PressReleasePage.aspx?PRID=1523780 (last visited May 28, 2021).

[18] Concession Agreement, http://www.ipa.nic.in//showimg.cshtml?ID=826 (last visited may 28, 2021).

[19] Ministry of Ports, Shipping and Waterways, Government of India, *Shri Mansukh Mandaviya launches 'SAROD-Ports' today,* https://pib.gov.in/PressReleseDetailm.aspx?PRID=1652979 (last visited May 28, 2021).

[20] Ministry of Ports, Shipping and Waterways, Government of India, *Government Revises Model Concession Agreement for PPP in Major Ports,* https://pib.gov.in/PressReleasePage.aspx?PRID=1523352 (last visited May 28, 2021).

experiences in handling PPP projects and to enable to create a more investor-friendly environment for private players in the port industry.[21]

Currently, the MCA approved in 2018 is being followed. Despite the efforts undertaken in the form of amendments, the government failed in its attempt to create a lasting sentiment on the private stakeholders for PPP projects at Major Ports. This is evident from the fact that there has barely been any project that has been entered upon under the new MCA through the bidding process. This may partially be on account of overcapacity across the cargo sectors at the Major Ports and partly due to the depressed demand on a global economic scale. In order to understand this, one must take into consideration that the 12-state owned major ports across the country have an overall capacity to manage cargo of 1515.09 MT in a year. The 2019 statistical report stipulates that the ports combinedly loaded 699.10 MT of cargo, facilitating only 46% of capacity utilization[22], while during the financial year 2020, the ports together loaded cargo worth 552.83 MT, thereby averaging a 13.9% decrease in growth against the preceding year[23]. In 2020, MCA was adopted by the *Inland Waterways Authority of India* to privatize India's first riverine terminal at Varanasi with respect to maintaining infrastructure and operational requirements. However, on account of no bidders showing up, the tender was cancelled by Inland Waterways Authority of India (IWAI)[24]. Currently, in the light of the aforesaid, the Ministry of Shipping again seeks to make amendments to the prevailing MCA to draw a parallel with the best practices in order to further attract private players in the port sector.[25]

Major Port Authorities Act, 2021 – The Game Changer

In February 2021, the parliament enacted the *Major Port Authorities Act, 2021* which replaces the *Major Port Trust's Act, 1963*. This Act seeks to provide autonomy to the Major Ports in the country. The Act attends to furnish provisions on operations, regulation and planning of major ports alongside bestowing greater autonomy to the major ports. The Act redefines the mantle of the Tariff Authority for Major Ports (TAMP) by envisaging power to the Port Authority to fix tariff rates which would consequently be a reference tariff for the purpose of bidding in Public-Private-Partnerships (PPP) Projects. The aforesaid tariff rates would be thereafter fixed at the discretion of the concessionaire taking into consideration the market conditions prevalent and other conditions as notified.[26] Further, the port authority board has been entrusted with the authority under the Act to fix the scale of rates assets and services

[21]*Cabinet approves revised Model Concession Agreement for PPP Projects in Major Ports*, PMINDIA https://www.pmindia.gov.in/en/news_updates/cabinet-approves-revised-model-concession-agreement-for-ppp-projects-in-major-ports/ (May28, 2021 at 15:51).

[22]Ministry of Ports, Shipping and Waterways, Government of India, *Basic port Statistics 2018-2019*. http://shipmin.gov.in/content/basic-port-statistics-2018-2019 , (Last visited May 28, 2021).

[23]Government of India, *Indian Shipping Statistics 2020*, http://shipmin.gov.in/sites/default/files/ISS2020.pdf Last visited May 28, 2021).

[24]P Manoj, *No takers for Varanasi multi-modal terminal privatisation; waterways body scraps tender*, The Hindu Business Line (Feb. 09, 2020) https://www.thehindubusinessline.com/economy/logistics/no-takers-for-varanasi-multi-modal-terminal-waterways-body-scraps-tender/article30776169.ece

[25]P Manoj, *Government seeks to recast model concession agreement for PPP projects at major ports*, THE HINDU BUSINESS LINE (Feb. 10, 2020) https://www.thehindubusinessline.com/economy/logistics/govt-seeks-to-recast-model-concession-agreement-for-ppp-projects-at-major-ports/article30780702.ec

[26] The Major Port Authorities Act, 2021, § 27, No. 1, Acts of Parliament, 2021 (India).

that would be available at the Major Ports. In addition to this, the Act entails the constitution of an Adjudicatory Board[27] that would carry out residual functions of TAMP and would look into and adjudicate disputes that may arise between ports and the PPP operators, review the PPP projects that are stressed and provide recommendations to revive the project and alongside look into the complaints addressed with respect to the services that are furnished by the private/port operators involved in port operations[28].

While the government claims that this Act was introduced to spur private investments and provide greater autonomy to the ports in order to facilitate a faster decision-making process to boost the economic growth of the ports, some experts believe that this law has been devised to initiate privatization or strategic disinvestment.[29] The corporatization of ports under the Act would make the government reap profits and dividends arising from such ports. Additionally, the transition into port authorities would enable privatization of formerly operated state-owned cargo handling terminals by following the Landlord Port Model for handling port operations, primarily cargo related. In March 2020, the government's 67% stake holdings in Kamarajar Port Ltd (state-owned port run by a Company) was acquired by Chennai Port Trust for Rs. 2383 crore, thereby constituting it as a wholly-owned subsidiary.[30] The Finance Minister, during her budget speech, proposed a transitional shift, stating that the Major Ports would move from handling the port operations on their own to a model wherein a private partner would undertake to handle it, further stating that about seven operational projects of Major Ports that are worth more than Rs. Two thousand crores would be entered into on PPP mode in the Financial Year'22.[31]

In furtherance, apart from the aforementioned initiatives undertaken, the government also permits Foreign Direct Investment (FDI) up to 100% under automatic route for projects pertaining to construction and maintenance of harbours & ports in the country.[32] Additionally, flexibility in pricing is enjoyed by the private ports since the government permits the non-major ports to fix tariffs after consultation with the State Maritime Boards.

[27] *Id,* at *§* 54
[28] *Id,* at *§* 54
[29] P Manoj, *With proposed Port Authorities law, major ports may be privatised*, The Hindu Business Line (Feb. 07, 2021) https://www.thehindubusinessline.com/news/with-proposed-port-authorities-law-major-ports-may-be-privatised/article33776171.ece .
[30] N Anand, *ChPT acquires 67% stake in Kamarajar Port*, THE HINDU (Mar. 28, 2021) https://www.thehindu.com/business/chpt-acquires-67-stake-in-kamarajar-port/article31194570.ece
[31] Government of India, *Speech of Nirmala Sitharaman*, https://www.indiabudget.gov.in/doc/budget_speech.pdf (last visited May 28, 2021).
[32] Reserve Bank of India, Foreign Investments in India A.P. (DIR Series), Circular No.38 (Issued on Dec. 3, 2003).

Sectoral Dynamics of Privatisation, PPP & Corporatisation of Ports

Silent Burgeoning of the Private Sector Ports – Privatization

In the last quarter of the previous year, Adani's flagship Mundra Port became the busiest port in the country after overhauling JNPT in Mumbai.[33] In 2021, Mundra port proved to come out of staging recovery of the economy from covid that the Centrally handled JNPT could. Since the economic slump, Mundra port has consistently endeavoured to broaden the prevailing gap in container volumes of itself and JNPT. The F.Y. 2020 statistics enumerate 16% growth than the preceding year that Mundra Port has demonstrated by passing through 7.22 million Twenty Foot Equivalent Unit (TEU). While JNPT only handled 4.68 million TEU, on a decline of 7% than the preceding year. The Adani Group in the last couple of years, have been multiplying its strategy and has managed to undertake within its realm nearly half of the minor ports existing in the country. Cargo tonnage at minor private-owned ports witnessed a surge at 10.1% per year against government-owned major ports at 2.9% growth during the F.Y. 2019-20.[34] This upsurge in the port sector market, enabled the private players to further their way into the freight market. In March 2021, India had devised a production-linked incentive scheme that aims to accelerate exports and imports of intermediate goods. This target to almost double India's Gross Domestic Product (GDP) cannot be made possible unless there is considerable acceleration in the exports of the country. And it is in the midst of this crisis that Adani Ports seek to draw advantage from. The numerous minor ports in the country that run through the coastline, owned by the state governments or privately, constitutes nearly half of the cargo handling capacity. It is in these ports that much of the action lies. The last few years have estimated a volume growth of 0.6 times GDP at the Major Ports, while on the contrary, the Minor Ports have seen a growth of 1.3-1.4 times of GDP. Some experts forecast that the cargo volumes in Financial Year 22 would estimate 8% year-on-year the basis that would principally be led by the private ports in the country.[35]

The private ports have cannibalized traffic away from the major ports by offering mechanization and accelerated turn-around time along with enhanced productivity to the hinterland. While major ports in order to process imports take as long as 23 hours and for exports take around 77 hours, the private ports, on the other hand, have been able to turn around both exports and imports under 10 hours respectively.[36] Turn-around time is a chief performance indicator that covers the total time that a vessel undertakes between its arrival and departure. This slow movement of cargo has made India's logistical costs most expensive within the global sphere which comes at a cost of 13% of our GDP against an average of 7-8% in other developing countries. This

[33] The Maritime Executive, *Mundra Edges Out JNPT to Become India's Busiest Container Port*, THE MARITIME EXECUTIVE, https://www.maritime-executive.com/article/mundra-edges-out-jnpt-to-become-india-s-busiest-container-port (last visited May 28, 2021 at 16:19).

[34] India Special Correspondent, *India's private ports gain ground on public rivals,* THE JOURNAL OF COMMERCE ONLINE, https://www.joc.com/port-news/asian-ports/india%E2%80%99s-private-ports-gain-ground-public-rivals_20190429.html (last visited May 27, 2021).

[35] Abhishek Nigam, *The silent rise of India's private ports*, The Mint (Apr. 12, 2021), https://www.livemint.com/news/india/the-silent-rise-of-india-s-private-ports-11618153700290.html (last visited May 25, 2021 at 16:25)

[36] India Exim Bank, *Domestic Policy Constraint for exports in select sectors*, https://www.eximbankindia.in/Assets/Dynamic/PDF/Publication-Resources/SpecialPublications/Report-on-Domestic-Constraints-on-Exports-of-Selected-Sectors-new.pdf (last visited May 25, 2021 at 16:29).

wide disparity has caused much incongruity and imbalance thereby forming the basis of losing a competitive advantage in the global economic industry as a trading outpost. The turn-around time of export/import cargo at an Indian port accounts for an average of 84 hours against a global hub average of seven hours. This makes the average turn-around time 12 times slower against the global competitors like Singapore, China and Hong Kong.[37]

The private business held by Jindal, Jindal South West (JSW) Infra operates two ports – Dharamtar and Jaigarh along with the handling of eight terminals in Major Ports. JSW commenced this vertical under its business operations primarily to handle and target bulk dry shipments (coal, iron ore) for its steel and energy business, however, it has now grown its operations such that its third-party business has now become a quarter of its turnover. By the quarter end of the year 2022, JSW is expecting to expand its cargo handling capacity from 100-150 MT and subsequently, including gas and liquid handling capacities and thereafter, seek further acquisitions.[38]

Adani's Master Plan

If there exists any entity that has taken advantage of India's decline in port productivity and logistic cost, the name would be Adani. The last five years have embarked on a rather steady increase in port investments marking a benchmark high of $2.35 billion in 2020.[39] Mundra Port is the largest privately-owned port, handling cargo volumes of 144.4 MT in F.Y. 2020-21, Adani Group's APSEZ, Adani Ports and Special Economic Zone, made major acquisitions including the bankrupt Dighi Port in Maharashtra and Krishnapattam Port near Nellore in Andhra Pradesh.[40] In March 2021, the total ports operated by Adani became 13 when it acquired an 89.6% stake in Gangavaram Port (near Vishakhapatnam) at Rs. 5,558 crores.[41] Taking into purview the recent acquisitions made by Adani, APSEZ would handle approximately 30% of cargo operation in India.[42] The overall cargo capacity of APSEZ is way beyond the capacity handled by the local competitors. Some experts believe that Krishnapattam port would be the upcoming Mundra Port in the country by the next decade. According to Credit Lyonnians Securities Asia's *(CLSA)* analysis, Krishnapattam Port is India's with 6800 acres of land, has the potential to grow its volume by five times thereby potentially making it India's second-ranked private port.

Adani Group recently unveiled its plan on devising a framework for handling logistics, connectivity through road and rail and storage such that they are able to generate a

[37]NIGAM, *Supra* note 36

[38]JSW Infrastructure, *Annual Report 2019-20*, https://www.jsw.in/sites/default/files/assets/downloads/infrastructure/Annual%20Reports/2019-20/JSW-Infrastructure-Ltd_2019-20.pdf (last visited May 25, 2021 at 16:37).

[39]Ouail El Imran & Aziz Babounia, *Benchmark and Competitive Analysis of Port performances model: Alfeciras Bay, Rotterdam, New York-New Jersey and Tangier Med,* European Journal of Logistics, Purchasing and Supply Chain Management 28, (2018).

[40] Adani Ports and Logistics, *An Economic Gateway for the Nation,* https://www.adani.com/-/media/Project/Adani/downloads/PortBrochure.pdf (last visited May 25, 2021 at 16:43).

[41]Business Today, *Adani Ports to buy 58% stake in Gangavaram Port*, The Business Today (Mar. 23, 2021), https://www.businesstoday.in/current/corporate/adani-ports-to-buy-58-per-cent-stake-in-gangavaram-port/story/434628.html (last visited May 25, 2021 at 16:45).

[42]Adani Ports and Logistics, *APSEZ Announces FY20 & Q4 FY20 Results,* https://www.adaniports.com/Newsroom/Media-Releases/APSEZ-announces-FY20--Q4-FY20-Results (last visited May 25, 2021).

methodology for offering its customers a door-to-door service and subsequently, charge for such services a premium. Once the targeted freight corridors are fully commissioned, there will be a considerable decline in the logistical costs.[43] Adani's fast-paced movement in operations and logistics will further steal the traffic from the major ports leading to a devastating decline of government owned ports in the country further leading to revenue losses. This comes after Adani's strategy to improve service quality of its privately-owned ports that are located near to the neighbouring Major Ports (for instance, Mundra port is located near Hazira and JNPT, Dhamra Port is located near Paradip and Kuttupalli Port near Chennai). Further, ASPEZ has signed into entering into joint ventures with giant shipping partners like French Shipping Line Compagnie Maritime d'Affretment (CMA), Compagnie Generale Maritime (CGM) etc.[44]

An expert suggested that it would tentatively take around 3-4 years of uninterrupted GDP growth in order to uplift the overall average capacity utilization from currently prevailing 60-65% to a global average of 70-75% among the Indian ports.[45] Taking the aforesaid into view, in the meantime, private sector layers have been taking a ride on the ports with significantly prolonged concession periods because once the GDP growth hits the high tide, there would be considerably high supernormal profits because of higher entry barriers into the sector.

JNPT's Performance Predicament and Existing Landlord Model (PPP)

JNPT lingers on prime performance indicators as against the other large ports globally. The leisurely growth in cargo traffic handled by JNPT is faced by rapid competition by private competitors, especially on the country's west coast. As India thrusts towards becoming a global export hub, the public ports will have to increase operational efficiency. Port operations are by and large driven by container volume being handled, which is further dependent upon the size of the vessel which the port can lodge. However, the maximum available draft is 14m at JNPT as against international ports; Shanghai 20m, Rotterdam 24m, and even lower than Indian private ports (Mundra and Pipvav Port) which acts as a limitation in handling cargo volumes.[46] JNPT witnesses a higher berthing and idle time at the time when the ship is berthed accounting due to either personnel or equipment unavailability such as the crane utilization. Limited technological advancement coupled with higher turn-around and berthing time period has resulted in shipping line monopolies choosing private container freight stations neighbouring JNPT.[47]

Currently there exist more than 270 cargo berths across the major ports that are state-owned and are devised to enable cargo operations. The JNPT hosts a total of 34

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[43] NIGAM, *Supra* note 36

[44]Our Bureau, *Adani Ports forms joint venture with France's CMA CGM group to operate box terminal*, https://www.thehindubusinessline.com/economy/logistics/adani-ports-forms-joint-venture-with-frances-cma-cgm-group-to-operate-box-terminal/article9665780.ece (last visited May 25, 2021 at 16:53).

[45]Jagannarayan Padmanabhan, Livemint, *The Silent Rise of India's Private Ports*, http://www.zuccess.in/uploads/news/APRIL-2021/1618282335975.pdf (last visited May 25, 2021).

[46]Aman Rathi, Ambesh Pratap Singh, Sundaravalli Narayanaswami, *Enhancing Port Performance: A Case of Jawaharlal Nehru Port Trust,* Pg 61, https://web.iima.ac.in/assets/snippets/workingpaperpdf/17904292902020-12-04.pdf (last visited May 25, 2021 at 17:00).

[47] SUMMIT, *Supra* note 15

berths, among which 11 are maintained and operated by private concessionaires and three along with a shallow drift facility is handled by the port authority.[48] In January 2020, the authorities and officials of JNPT observed a steady decline in their cargo traffic at the port and increasing competition arising out of strategic investments made by private players in the private ports which subsequently caused to create an exigency to regain the two chief cargo berths. This subsequently led to seeking Build, Operate, Transfer (BOT) operators for stressed cargo berths across major ports.

JNPT was one of the foremost ports in the sector after liberalization that offered berthing operations following a landlord model by entering into a PPP agreement. The landlord model is a hybrid business model devised under a public-private orientation wherein the port authority acts as a regulatory body, i.e., landlord; and the port operation that primarily includes cargo operations are maintained and undertaken by the private companies. It is only towards the last quarter of the 1990s and subsequently liberalization of the Indian economy, that the port sector steadily started transitioning from the conventional and long-established '*service model'* to a *'landlord model'*. However, the pricing regulations along with the revenue sharing guidelines have been an intrusion and cause of a dealbreaker for the private investors who are seeking a level playing field with the no-major ports involved in cargo operations or greenfield minor ports. One such illustration of the aforesaid scenario pertaining to unjustifiable revenue sharing model is, Dubai Ports World that is operated by Nhava Sheva International Contained Terminal (NSICT) at the JNPT, which was also a spearhead to the country's initial public-private-partnership model commencing its operations in 1999, had to wind down and depreciate its cargo handling operations from 1.2 million TEU to 0.64 million TEU in 2020. This contraction came after unpropitious royalty obligations that were held against the landlord port authority via a-vis the government.[49] It was only after the enactment of the new Port Act, that the government has made a historical amendment pertaining to pricing regulations to provide greater autonomy to operators and abolishing the threshold of age-old bureaucratic control.

Infrastructure enhancement and modernization for ports also include within its realm the adoption of aggressive landlord model adoption for facilitating effectiveness in berth operations in Major Ports. At present, in the major ports, nearly 28% of berths are under PPP/Captive mode, which also handles 51% of the overall cargo.[50] Maritime Vision India (MIV) 2030, identified 39 berths across major ports and stipulated the need for prioritization for the adoption of a landlord model. Long term strategic intervention for India creates a dire need for India's major ports leading to embracing the landlord model and further the process of private sector participation for attaining enhanced operational efficiency.[51] Hence, the Centre iterated the requirement of modernizing ports infrastructures through the PPP model across targeted zones including increasing the size of draft availability so as to allow maintenance and

[48]Bency Mathew, *India mulls privatizing stressed public cargo facilities to regain growth*, https://www.joc.com/port-news/international-ports/india-mulls-privatizing-stressed-public-cargo-facilities-regain-growth_20200114.html (last visited May 25, 2021).
[49]*Id.* at 49.
[50]Only operational berths considered as of FY20. IPA's Port Statistics report, Discussions with Major Port Teams
[51]SUMMIT, *Supra* note 15

handling of mega-ships, to maximize berth mechanization and fastening the landlord model adoption.[52]

Corporatization of Ports

The talk about Corporatizing the ports has been into consideration for over a decade now. In the 2015 Budget's speech, the then Finance Minister proposed that Ports in the public sector may need to endeavour towards attracting investments and coupled with this, leverage the huge unused land resources that are lying with them. In order to effectuate the aforesaid, the public sector ports would be motivated to corporatize and become companies under the Companies Act.[53] Later, in 2020, it was yet again proposed by the Finance Minister that a minimum of one major port would be corporatized and listed in the stock exchange. Kamarajar Port in Ennore was the only major port to have been incorporated as a Company under the Companies Act, 1956, thereby keeping its administration outside the purview of TAMP authorities. This aforementioned port would have been an ideal option for stock listing, however, the government in 2019 sold its 67% stake to Chennai Port Trust. The corporatization of ports entails with it a need to create a new law or suitable amendments in the existing law within the country.[54]

Unlike JNPT wherein individual berths are leased out on a BOT basis to the private operators, Port of Singapore and Rotterdam are eminent examples to understand how the global top port hubs handle their operations using a corporatized management system. For instance, in the case of Singapore Port, the government has established the Port of Singapore Authority Corporation (PSA Corp) that undertakes to provide port services, while the Maritime Port Authority (MPA) of Singapore performs only the regulatory functions. The port's performance is based on a 'profit-sharing model' that is distributed amongst all concerned persons involved, including MPA, PSA, shipping line, labour force, sub-contractor etc.[55] Further, funding made to the Port of Singapore is undertaken by the parent company, PSA International Ltd. that has holdings across the world. Currently, PSA is contributing as a strategic partner to international ports in China, Vietnam, India, South Korea etc. However, no such profile/portfolio is maintained by any port in India. Hence, turning the major ports into public limited companies would allow the ports more aggressively to enter into partnership agreements, give them access to private investments and open gates for foreign direct investment coupled with the factor of being free from tariff regulation. Despite the aforesaid, the government in the recent past has not released any executive order enumerating its decision to corporatize a port.[56]

[52] SUMMIT, *Supra* note 15.

[53] BW Online Bureau, *Corporatisation Of Ports: What Does It Entail For India?*, THE BUSINESS WORLD http://www.businessworld.in/article/Corporatisation-Of-Ports-What-Does-It-Entail-For-India-/27-04-2015-80635/ (last visited May28, 2021 at 17:18).

[54]P. Manoj, *At least one major port trust to be corporatised and listed: FM*, THE BUSINESS WORLD, https://www.thehindubusinessline.com/economy/budget/at-least-one-major-port-trust-to-be-corporatised-and-listed-fm/article30710729.ece, (last visited May 25, 2021 at 17:2 3).

[55] Ankush Guha, *Privatisation of Port – Singapore and JNPT*, European Public Private Partnership Law Review 38 (2011)

[56]Dr. M.Bina Celine Dorathy, *Corporatisation of Major Ports in India- the game changer*, American International Journal of Research in Humanities, Arts and Social Sciences, ISSN (Online): 2328-3696.

The fate of India's Maritime Vision and the Prospective Contribution of Private Sector in it

Need for a Best-in-class Port Infrastructure in Attracting Private Sector

Covid-19 embarked on a catastrophic wave in handling cargo containers of petroleum, oil, lubricants (POL) and coal among other commodities. Despite the current capacity utilization of the Indian ports drifting at a mere 60% on account of the current covid scenario and economic slump followed by a depressed demand, the government is affirmative that this trend would soon reverse. The *recent Production-linked-initiative (PLI) scheme*[57] covers the Centre's Rs. 1.7 trillion worth amount across 10 sectors and aims to uplift India's manufactured commodities' export competitiveness. As a result of the growth of manufactured goods, India will have to progress towards moving the cargo faster. Consequently, the Ministry of Shipping announced a ten-year blueprint – *Maritime India Vision 2030* (MIV 2030)[58] that envisaged more than 150 initiatives thrusting on the port, shipping and waterway sector. The blueprint which has been drafted after several discussions with more than 350 public and private stakeholders enumerates a detailed phasing and implementation roadmap attributed towards different initiatives to ensure coordinated and accelerated growth along with devising policy and regulatory measures to substructure the aforesaid initiatives. The Prime Minister stated that India expects to invest in port infrastructure and enhancement projects up to $82 billion (6 trillion) by 2035.[59]

Indian ports overall traffic handling capacity has risen from 885 MTPA in 2010-11 to 1307 MTPA in 2019-20. According to a report, only nearly 25% of transhipment of Indian cargo[60] was handled by the Indian ports while the remaining were handled by the international ports. This per se leads to loss of potential revenue opportunities and increasing dependence on trade. Hence, enabling a framework for developing a Transhipment Hub in India would not only cover up for the prevailing losses in revenue but may also lead to undertaking the advantage of attaining an attractive global maritime position for trade routes in the future. Among the top 10 ports in the world, seven are Chinese Ports. With JNPT and Mundra port emerging in the top 40 port category[61], there is a noteworthy prospect for India to become a competitor in the port industry against other nations like, China, United States of America (U.S.), Singapore etc. by changing the current landscape through modernized port-led infrastructure. In furtherance, the global shipping industry is changing its landscape towards mega-size vessels. It has been accounted that, beyond 40% of the orders that have been booked for the next 3-5 years would be transhipped through vessels that are 20,000 TEU and above.[62] Ideally, a capsize vessel calls for a draft that is beyond 18m+, and the drafts at Indian ports range broadly between 7-20m. Hence, the aforementioned necessitates Indian ports to lay their emphasis on increasing draft availability keeping in view the

[57]PIB Delhi, *Cabinet approves PLI Scheme to 10 key Sectors for Enhancing*, https://www.pib.gov.in/PressReleasePage.aspx?PRID=1671912 (last visited May 28, 2021).

[58]SUMMIT, *Supra* note 15.

[59]HT Correspondent, *India to invest $82 billion in port projects by 2035: PM Modi*, The Hindustan Times (Mar. 2, 2021) https://www.hindustantimes.com/india-news/india-to-invest-82-billion-in-port-projects-by-2035-pm-modi-at-maritime-summit-101614696960498.html (last visited May 28,2021).

[60]IPA, *Supra* note 3.

[61] LLYODS, *Supra* note 4.

[62]Drewry Maritime Advisors Annual Review report 2020.

requisite cargo profile.[63] As vessels become specialized and bigger in size, the per day ship cost would increase in order to lessen the cost of transportation and hence, the total time spent by the ship at the port shall be reduced. The aforesaid approach in the industry has led to the world-class development of Mega Ports in the world in order to facilitate enhanced infrastructure for acceleration in operations and lower costs of operations (for instance; Port of Hedland, Port of Yangshan etc). The Maritime Summit 2021 upon evaluation identified 3 Mega Ports in the country based on their growth potential; Vadhavan-JNPT cluster, Deendayal Port and Paradip Port having an overall capacity greater than 3000 MTPA.[64]

Ameliorating Logistics Efficiency and Cost Competitiveness

The existing logistical system in the country fails to meet the international standards with respect to efficiency, costs, safety and sustainability. Consequently, this results in increasing the cost of ease of doing business and thereby accounting to increased prices of goods and services thereby discouraging the private players from entering into this sector. Adding to this, is the heavy reliance on the carbon-intensive mode of transportation leaving behind an environmental footprint. The report by the Confederation of India Industry noted that the current logistic cost of India is 14% and that of Europe and the U.S.'s cost lies between 8-10%. The supply chain and the logistic sector of India accounts as largest globally at $215, growing at 10.5% Compound Annual Growth Rate (CAGR).[65] Despite the aforesaid, India's supply chain faces challenges accounting to its deranged logistic modal mix, splintered infrastructure and cross-connectivity, coupled with a slender approach to adopting technology. There is an immediate need for the country to reduce its logistic cost to 7-8%. According to the World Bank's Logistics Performance Index India's ranking worsened from the former 35th rank in 2016 to 44th in 2018.[66] India in this regard is behind some of the leading and emerging economies such as Germany, China, South Africa and Singapore. The Ministry of Commerce and Industry with an objective to improve growth in the sector is under consideration to replace the *Multimodal Transportation of Goods Act*, 1993 (MMTG) with a *National Logistics Efficiency and Advancement Predictability and Safety Act* (NLEAPS).[67] The NLEAPS would endeavour to define several participants under the logistic sector and generate a light regulatory system. Hence an effectual execution of the Act would result in providing impulsion to trade and increase the country's ranking in the Logistics Performance Index (LPI) alongside Ease of Doing business.

The Ministry of Ports, Shipping and Waterways (MPSW) had addressed this issue of logistical efficiency and cost competitiveness by devising four focus areas including Cargo Modal Shift and Coastal Shipping, Port Industrialisation, Reducing Cost of

[63]SUMMIT, *Supra* note 15, at 14.

[64]PIB India, *PM inaugurates Maritime India Summit 2021*, https://pib.gov.in/PressReleasePage.aspx?PRID=1701886 (last visited May 28, 2021).

[65]Confederation of Indian Industry, *Reimagining India's supply chain- A bold vision for 2030,* https://www.adlittle.com/sites/default/files/reports/adl_indias_bold_vision_2030_v2.pdf (last visited May 28, 2021 at 17:50).

[66]The World Bank, Global Ranking 2018, https://lpi.worldbank.org/international/global (last visited May 28,2021).

[67]*National Logistics Efficiency Advancement Predictability and Safety (NLEAPS) Act in the making*, The Maritime Gateway, https://www.maritimegateway.com/national-logistics-efficiency-advancement-predictability-safety-nleaps-act-making/ (last visited May 28,2021).

Doing Business, boosting operational efficiency and evacuation at ports. India's freight-modal mix, i.e., the cumulative contribution of inland and coastal waterways towards transportation constitutes 6% against neighbouring country's modal-mix; Bangladesh – 16% and Thailand -12%, thereby calling attention to the scope of improvement in India.[68] Enhancement of water-based transport would considerably reduce logistical costs, since the aforesaid is cheaper than road and rail transports. The MPSW, in the last 4 years have undertaken to facilitate numerous initiatives for coastal shipping including the incentivizing of coastal berths, reduction in coastal traffic, moderation of cabotage reforms, provisioning green channel clearance etc. The initiatives resulted in 13% growth in the 2 years against a 4% growth rate in the preceding years in coastal shipping movement.[69] Despite the aforesaid, there is still a vast potential in this sector that is yet to be realized. Aggressive adaptation of port-led industrialization comprising of an integrated plan needs to be undertaken extensively in order to realize the true growth potential against competitive locations. India needs to shift its focus from a traditionally used self-development model to a *Co-development model,* which includes tie-ups with state government programs, private players etc. For instance, the government's endeavour to drive industrial development by the creation of Special Purpose Vehicles fashioned between National Industrial Corridor Development and Implantation Trust (NICDIT) & State Government shall be approached by following co-development model[70] by introducing a private co-developer succeeding an appropriate revenue model. Additionally, the government has devised plans for promoting evacuation via enhanced E2E connectivity via rails, roads, waterways coupled with improving port performance against world-class standards for container and bulk terminals. Hence, by benchmarked targeted levels in the initiatives undertaken by the government, India is expecting to save nearly up to INR (Indian rupee) 17000-20000 Cr in inventory holding costs and INR 9000-10000 Cr. in logistics costs per annum coupled with, port-led industrialization that has approximately. INR 10000+ Cr. value by unlocking the potential for Major Ports.[71]

Revolutionize New Models in Public-Private-Partnership Agreement

With the recent endeavours undertaken by the government over the last decade, one cannot rule out that India did witness an increase in private participation in the Maritime Port sector over 15 years. 30% berths across ports function under the PPP model.[72] However, the existing port statistics and private players disputes/grievances suggest a need for the port sector to further strengthen its existing agreements and drive further ahead towards future acceptance of PPP in other port operations. Major Port Act, 2021[73] acts as a landmark step from moving from a '*service model'* to a '*land-lord model'* by opening gates for private stakeholders. Taking the aforesaid Act into purview, the government now needs to propose frameworks to strengthen the existing Model Concession Agreement and introduce new modes of PPP in order to enable investments by the private sector in this sector. The Centre should revise the existing MCA to facilitate and improve the contracting process and add measures to further

[68] SUMMIT, *Supra* note 15, at 66.
[69]Ministry of Ports, Shipping and Waterways Annual Reports.
[70] SUMMIT, *Supra* note 15, at 96.
[71] IPA's port statistics report FY19-20; TRT considered for Major Container Ports (JNPT), Chennai, Cochin, Vishakapatnam, and V.O. Chidambaranar); SUMMIT, *Supra* 15 Page 101.
[72] SUMMIT, *Supra* note 15 at 120.
[73]The Major Port Authorities Act, 2021, No.1, Acts of Parliament, 2021 (India).

attract the private sector investments. Additionally, new models of PPP shall be used to promote sectoral PPP for different infrastructure and services across ports. These models may extend to berth operations, equipment management, Industrial land services management with respect to warehousing, yard management, dry-docking and ship repair, dredging etc. For instance, the annual dredging cost in Kolkata major port alone is 300 crores. Global ports have adopted various PPP models to facilitate operations at the ports. Top nations in the maritime sector have demarcated a detailed strategy for PPP that is customized to suit the needs and requirements of ports. Government should facilitate a tier-wise strategy to enable movement to landlord model stretched across 10-15 year master planning for the Indian ports. Unlike the existing MCA that gives form to BOT, new MCAs shall be through into existence that facilitates models like *Equip, Operate and Transfer* (EOT) *Model and Operate and Maintain* (O & M) model on fees or annuity basis.[74]

India's maritime vision to increase port capacity, ship repair and building coupled with hinterland connectivity would need enormous funds that can be realized by private sector capital in the sector. This need for fiscal support and financial resilience should be supported by a regulatory framework and necessary policy coupled with technological advancement and requisite skill development. The MIV blueprint envisaged the proposal to develop a *Maritime Development Fund* (MDF) to ease raising long term funds in domestic and international markets.[75] Subsequently, these funds would be given as loans at competitive rates to the maritime sector, which could further be utilized through PPP Agreements for establishing new ports and improve the capacity of existing ports.

The port industry demonstrated a pivotal role in contributing towards India's GDP and overall comprehensive economic growth. India envisions to be a global port hub in navigable waters and compete against international ports in the global trade business. The past two decades witnessed a considerable increase in the participation from the private sector, however, despite the aforesaid, India's F.Y. statistical reports unveils our failure in realizing India's true economic value. A more intrinsic and comprehensive integrated approach shall be undertaken by the government in initiating greater investments by the private sector and participation by the private entities and corporations in working towards holistic development in port infrastructure and meeting international trade demands efficiently and cost-effectively. In the last five years, the Central Government has continually contributed to this initiative by bringing several legislative developments into force, however the prevailing bureaucracy in the system, existing models of PPP and lack of efficient port infrastructure and hinterland connectivity has discouraged the private players from entering into this sector. It is up to the country to decide if it should triumph over west coast growth led by Adani in meeting international benchmarks or loathe over the monopolistic rein led by only one entity parenting about 13 private ports across India. The aforesaid analysis by the Authors, demonstrates the failure of the Executive in establishing an investor-friendly environment for the private players in the port sector. The year 2021 embarked on a robust master plan released by the Central government entailing India's maritime vision for best class port infrastructure and logistical efficiency in attracting future PPPs in the

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[74] SUMMIT, *Supra* note 15, at 136.

[75] Apace Digital Cargo, *Maritime India Vision 2030 plan includes new port regulator & development fund*, https://apacedigitalcargo.com/maritime-india-vision-2030-plan-includes-new-port-regulator-development-fund/ (last visited May 28, 2020 at 18:02).

sector. The blueprint elucidates a comprehensive targeted benchmarked approach in realizing India's goals for an investor-friendly environment and the authors hope for the blueprint to succeed into rationality and India to become a major economic port hub.

Conclusion

The port industry demonstrated a pivotal role in contributing towards India's GDP and overall comprehensive economic growth. India envisions to be a global port hub in navigable waters and compete against international ports in global trade business. The past two decades witnessed a considerable increase in the participation from the private sector, however, despite the aforesaid, India's FY statistical reports unveils our failure in realising India's true economic value. A more intrinsic and comprehensive integrated approach shall be undertaken by the government in initiating greater investments by the private sector and participation by the private entities and corporations in working towards holistic development in port infrastructure and meeting international trade demands efficiently and cost-effectively. In the last five years, the Central Government has continually contributed to this initiative by bringing several legislative developments into force, however the prevailing bureaucracy in the system, existing models of PPP and lack of efficient port infrastructure and hinterland connectivity has discouraged the private players from entering into this sector. It is up to the country to decide if it should triumph over west coast growth led by Adani in meeting international benchmarks or loathe over the monopolistic rein led by only one entity parenting about 13 private ports across India. The aforesaid analysis by the Authors, demonstrates the failure of the Executive in establishing an investor-friendly environment for the private players in the port sector. The year 2021 embarked on a robust master plan released by the Central government entailing India's maritime vision for best class port infrastructure and logistical efficiency in attracting future PPPs in the sector. The blueprint elucidates a comprehensive targeted benchmarked approach in realising India's goals for an investor friendly environment and the authors hope for the blueprint to succeed into rationality and India to become a major economic port hub.