



# IJRASET

International Journal For Research in  
Applied Science and Engineering Technology



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

**Volume:** 14    **Issue:** III    **Month of publication:** March 2026

**DOI:** <https://doi.org/10.22214/ijraset.2026.78639>

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# India's Maritime Foundations and the Expanding Strategic Importance of Its Oceanic Geography

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**Abstract:** *India's maritime roots are inextricable from its history, geography, and current strategic goals. India holds a commanding central position in the Indian Ocean, a maritime area that handles about 80% of the world's seaborne oil trade and over 60% of the world's maritime trade, with a coastline of about 7,516 km, including island regions, and an Exclusive Economic Zone (EEZ) of over 2.3 million square kilometers (UNCTAD, 2023; IEA, 2022). According to the Indian government's Ministry of Ports, Shipping, and Waterways, almost 95% of the volume and 68–70% of the value of India's trade are transported via sea routes. In the past, India's ports served as a hub for monsoon-driven trade routes that linked the nation to Southeast Asia, East Africa, and the Persian Gulf. The strategic significance of India's oceanic geography has increased in the modern era as a result of the increased salience of maritime chokepoints like the Straits of Hormuz and Malacca, Sea Lines of Communication (SLOCs), offshore energy reliance, and growing Indo-Pacific geopolitics. India's central position in the Indian Ocean Region (IOR) changes it from a continental power with maritime access to a crucial maritime player as the struggle for global dominance increasingly focuses on maritime Asia. This article examines how India's oceanic geography, previously underappreciated in its post-independence strategic thinking, has reemerged as a cornerstone of its regional clout, economic security, and naval modernization.*

**Keywords:** *India, Indian Ocean, Maritime Power, Indo-Pacific Strategy, Maritime Security.*

## I. INTRODUCTION

For India, geography has presented both continental challenges and maritime opportunities; as such, geography frequently determines fate. India, which is located at the intersection of significant east-west sea routes connecting the energy-rich Gulf area to East Asia and connecting Europe to the Indo-Pacific, lies like a massive peninsula extending into the Indian Ocean. Approximately one-third of the world's bulk freight traffic and two-thirds of the world's oil shipments pass through the Indian Ocean alone (UNCTAD, 2023). This marine area is economically and technologically important because it carries a large portion of the world's offshore oil output as well as key submarine cable infrastructure.

India has been involved in maritime activity for a long time. Indian traders and sailors created trade and cultural connections between the Swahili Coast of East Africa and the Indonesian archipelago between the early centuries BCE and the medieval era. Historical and archaeological data emphasize the significance of bustling ports like Lothal, Tamralipti, and Muziris, which promoted trade in precious stones, spices, textiles, metals and precious stones. These exchanges helped to establish civilized interactions that influenced maritime trade routes and the political landscape of Southeast Asia (Brewster, 2014).

However, India's contemporary strategic perspective following 1947 remained mostly focused on the land, notwithstanding its history. Continuous continental challenges, such as conflicts and border disputes, diverted focus from maritime strategy. The 1990s, however, saw a sea change in this calculation as a result of economic liberalization and globalisation. India's reliance on maritime commerce increased as its economy integrated with the rest of the world. The majority of India's crude oil imports, which are currently at over 85%, pass through susceptible maritime chokepoints like the Strait of Hormuz and the Strait of Malacca (IEA, 2022). A disruption in these maritime routes would have instant ramifications for India's economic stability and energy security.

Furthermore, Lakshadweep in the Arabian Sea and the Andaman and Nicobar Islands in the Bay of Bengal are India's strategically located island territories, giving it a distinct advantage over important maritime routes. The Andaman and Nicobar Islands, which lie near the Strait of Malacca's western entrance, are traversed by about 25% of the world's traded commodities every year. India's capacity to monitor maritime traffic is increased by this geographical advantage, which also contributes to the development of its naval strategy, which prioritizes sea control and sea denial capabilities. India's oceanic location has become even more strategically important in the 21st century. Maritime space has become a battleground for strategic rivalry due to the rise of the Indo-Pacific as a geopolitical concept, more naval deployments by major powers, and competition for influence in the Indian Ocean Region.

The region's complexity is increased by non-traditional security dimensions such as piracy, maritime terrorism, unlawful fishing, climate change, and natural catastrophes.

As a result, India's maritime outlook has shifted from ignorance to active involvement. A renewed maritime consciousness is reflected in initiatives like SAGAR (Security and Growth for All in the Region), increased naval modernization plans, coastal infrastructure development, and collaborations throughout the Indo-Pacific. India is increasingly establishing itself as a net provider of security and a stabilizing force in the area, moving away from its position as simply a coastal state of the Indian Ocean.

Therefore, in order to comprehend India's maritime foundations, one must place its geography within the context of larger economic, strategic, and geopolitical shifts. The increasing significance of its oceanic environment is not a coincidence; it is the result of historical continuity, structural geography, and changing global power relations, which place the seas at the center of India's national future.

## II. INDIA AND THE SEA: CIVILIZATIONAL ROOTS AND OCEANIC GEOGRAPHY

India's relationship with the sea is rooted in its geographical environment and civilizational history, not in contemporary strategic thinking. Historically, India's peninsular form, which extends into the Indian Ocean, placed the subcontinent at the nexus of important maritime routes that linked East Africa, West Asia, Southeast Asia, and East Asia. The ocean served as a facilitator for economic exchange, cultural dissemination, and political engagement, rather than being a peripheral area.

The port of Lothal (c. 2400 BCE) in the Indus Valley period shows sophisticated dockyard and tidal management systems, according to archaeological and literary data that indicates a vibrant maritime economy as early as then (Ray, 2003). Indian traders exploited monsoon wind systems during the early historical and medieval eras to create consistent trade routes throughout the Arabian Sea and Bay of Bengal. Between Indian ports like Muziris and foreign marketplaces in the Roman Empire, East Africa, and the Persian Gulf, the Periplus of the Erythraean Sea records a thriving commercial exchange. Gold, silver, and high-end items made their way to the Indian subcontinent, while Indian exports, such as cotton textiles, spices, indigo, beads, and precious stones, were the backbone of trade in the Indian Ocean (Mukherjee, 2011).

These maritime encounters weren't only about commerce. Along with trade, there were cultural and religious exchanges that helped disseminate Buddhism, Hinduism, scripts, architectural forms, and political views throughout Southeast Asia. The continuous maritime and cultural influence of India is demonstrated by Indianized kingdoms such as Funan, Srivijaya, and Majapahit, which emphasizes the sea's function as a channel of civilizational transmission rather than separation.

This maritime orientation was strengthened by geography. Including its island territories, India's coastline is about 7,516 km long, making it one of the longest in the world. Its Exclusive Economic Zone (EEZ), which spans more than 2.3 million square kilometers, provides access to abundant marine biodiversity, fisheries, seabed minerals, and offshore hydrocarbons (Government of India, Ministry of Earth Sciences). Coastal states account for about 60% of India's GDP and are home to the majority of its main ports and industrial hubs, making a substantial contribution to the country's economic production (NITI Aayog, 2021).

India's island territories give it an additional oceanic edge. One of the world's most crucial marine chokepoints, the Strait of Malacca, is located near the western approaches to the Andaman and Nicobar Islands. Nearly 25–30% of all global trade and a large portion of East Asia's energy imports pass through this point annually (UNCTAD, 2023). In a similar manner, Lakshadweep's location in the Arabian Sea offers strategic depth along routes connecting the Middle East, Africa, and South Asia.

Partition, boundary disputes, and worries about continental security continued to dominate India's post-independence strategic attention, despite these long-lasting benefits. Despite its economic importance, maritime geography was not fully integrated into strategic planning for many years. Nonetheless, underlying factors like India's reliance on maritime trade, offshore energy resources, and maritime links continued to dominate. The sea's significance became impossible to ignore by the beginning of the twenty-first century, as maritime routes carried about 68–70% of India's trade by value and about 95% by volume (Ministry of Ports, Shipping, and Waterways).

Therefore, India's maritime geography is a union of structural necessity and historical continuity. Because the same maritime areas that previously supported cultural interaction are now the foundation of economic security and strategic reach, the sea remains a constant in India's history and a growing determinant of its current strategic landscape.

## III. THE INDIAN OCEAN'S IMPORTANCE AS A STRATEGIC AND ECONOMIC HUB

One of the most important arteries of the world economy and a focal point of current geopolitics has become the Indian Ocean. Across the Indian Ocean, maritime trade links major destinations in the Middle East and Africa, as well as South Asia, Southeast Asia (which is currently connected to New Guinea), and East Asia.

It is essential to the operation of the globalized economy since it handles about 80% of the world's seaborne oil trade, about one-third of the world's bulk cargo, and over 60% of all maritime commerce (UNCTAD, 2023; IEA, 2022). For India, which is situated at the center of the ocean geographically, this marine area is more than just a transit route; it is a strategic and economic lifeline.

The Suez Canal provides Europe access to East Asia, and the Persian Gulf's energy producers are connected to the major consumers in South and East Asia via the Indian Ocean's worldwide shipping routes. These routes converge around important maritime chokepoints, such as the Strait of Malacca and the Strait of Hormuz. About one-fifth of the world's consumption of petroleum liquids passes through the Strait of Hormuz alone, which accounts for the transit of about 20–21 million barrels of oil every day (U.S. Energy Information Administration, 2023). Meanwhile, the Strait of Malacca is one of the most strategically important waterways in the world, carrying over 25 to 30 percent of all commodities traded worldwide and about a quarter of all oil traded at sea (UNCTAD, 2023).

These marine routes are essential to India's economy. Maritime connectivity is essential to India's economic development, as shown by the fact that about 95% of the country's commerce by volume and 68–70% by value is carried out by sea (Ministry of Ports, Shipping and Waterways, Government of India). More than 85% of India's crude oil needs are imported, with a large portion coming from the Gulf area and passing via the Strait of Hormuz (IEA, 2022). The uninterrupted sea lanes across the Indian Ocean are also essential for LNG imports, which are crucial to India's energy transition.

In addition to energy and shipping flows, the Indian Ocean serves as a vital hub for the world's digital infrastructure. It is thought that submarine fiber optic cables, many of which traverse the Indian Ocean basin and connect Europe, the Middle East, South Asia, and East Asia, are responsible for carrying around 95% of the world's data traffic (TeleGeography, 2023). The western and eastern coasts of India have become hubs for cable landing with Mumbai and Chennai being two of the key centres for the global digital economy. Any interruption to these cables, whether accidental or intentional, might have domino effects on financial markets, communication, and national security. The Indian Ocean's economic importance has gradually turned into strategic rivalry. Major powers have gradually increased their naval deployments, foreign bases, port access agreements, and maritime infrastructure projects in Indian Ocean Region (IOR). This tendency is indicative of the overall shift of the Indian Ocean Region (IOR) into a hub of Indo-Pacific geopolitics, where energy access, trade security, and strategic power converge. The region's strategic significance has been enhanced by the militarization of ports, the rivalry for maritime infrastructure, and the presence of international or we can say the foreign navies. This changing environment only serves to highlight how inextricably linked economic prosperity and maritime security are for India. Any interruption to the concentration of trade routes, energy flows, and digital infrastructure in the Indian Ocean, be it caused by geopolitical conflicts, piracy, or unconventional threats, would have quick and devastating economic repercussions. Consequently, the Indian Ocean's strategic and economic importance is no longer theoretical but rather directly influences India's policy goals, naval force, and participation in the larger Indo-Pacific maritime order.

#### IV. INDIA'S INDO-PACIFIC VISION AND MARITIME SECURITY

With the growing convergence of economic globalization, energy dependence, and geopolitical rivalry in the Indo-Pacific maritime arena, maritime security has become a key component of India's strategic perspective. Given that between 68 and 70% of India's trade by value and almost 95% by volume is transported through maritime routes, the security of Sea Lines of Communication (SLOCs) is essential for the country (Ministry of Ports, Shipping and Waterways, 2023). With more than 85% of its crude oil and an increasing proportion of its natural gas coming by sea, mainly through the Arabian Sea and the Bay of Bengal, India's reliance on imported energy exacerbates this vulnerability (IEA, 2022). Disruptions to these routes, regardless of the cause, would have immediate and far-reaching consequences for the Indian economy.

These anxieties have been exacerbated by the Indo-Pacific's changing strategic landscape. Major powers have maintained a continuous presence in key choke points like the Strait of Hormuz, Bab el-Mandeb, and the Strait of Malacca, and there is currently a high concentration of naval deployments in the Indian Ocean. These chokepoints are centers of strategic rivalry because they handle a large amount of the world's maritime commerce and energy flows (UNCTAD, 2023). Ensuring freedom of navigation and safe access to these maritime routes has become a key security goal for India.

India has reacted by beginning a consistent naval modernization strategy with the objective of improving its capacity to control the sea, deny it, and project power. The Indian Navy has increased its blue-water operational capability by utilising aircraft carriers, nuclear-powered submarines, long-range maritime patrol planes, and network-centric warfare systems. With more than 75% of naval platforms now produced locally, indigenous shipbuilding has become more popular, demonstrating the strategic significance of self-sufficiency in maritime defense (Ministry of Defence, 2023). India's capacity to protect SLOCs, react to contingencies, and aid in maintaining maritime stability in the area is enhanced by these capabilities.

In the Indo-Pacific region, maritime security concerns go beyond conventional military threats. Unconventional security threats, such as piracy, maritime terrorism, illegal fishing, human trafficking, and climate-related catastrophes, continue to be a challenge. Despite a decrease in piracy off the Horn of Africa since its height in the early 2010s, incidents in the Gulf of Guinea and the western Indian Ocean point to the persistent fragility of maritime security environments (International Maritime Bureau, 2023). These risks are made worse by climate change, which poses a threat to maritime livelihoods, island communities, and coastal infrastructure throughout the area due to rising sea levels, more frequent extreme weather occurrences, and ocean warming.

The island territories of India are essential in mitigating both traditional and non-traditional threats. Through which about a quarter of all global trade passes each year (UNCTAD, 2023), the Andaman and Nicobar Islands, which are situated close to the western mouth of the Strait of Malacca, give India a strategic vantage point over one of the busiest maritime routes in the world. India's sole tri-service command, the Andaman and Nicobar Command, highlights the increasing focus on maritime presence and jointness. Lakshadweep also strengthens India's monitoring and operational capabilities in the Arabian Sea, notably with regard to the energy supply routes originating in the Middle East.

India's maritime perspective is also influenced by growing partnerships both within and outside the region. India strives to advance a rules-based maritime order and strengthen collective security through capacity-building projects, information-sharing accords, and bilateral and multilateral naval drills. India's involvement in initiatives like the Indo-Pacific Oceans Initiative (IPOI) and frameworks like the Quad demonstrates an attempt to strike a balance between strategic competition and cooperative security structures. These collaborations support India's goal of being a net security supplier in the Indian Ocean Region, which would help smaller coastal nations with humanitarian aid, disaster response, and maritime domain awareness.

India's Indo-Pacific outlook, which incorporates SLOC protection, naval capacity building, non-traditional threat management, and strategic alliances, demonstrates a thorough comprehension of maritime security. India's capacity to protect its maritime interests while promoting regional stability will continue to be a key component of its overall strategic path as maritime Asia emerges as the center of global power relations.

## V. THE FUTURE OF INDIA'S MARITIME POWER AND THE CHALLENGES IT FACES

In a strategic context defined by increased geopolitical rivalry, structural capacity limitations, and rising environmental pressures, India's maritime profile is expanding. Formerly regarded as a rather calm marine area, the Indian Ocean has become a battlefield for strategic rivalry between major and middle powers. India has faced new strategic challenges as a result of the increased maritime infrastructure, growing defense alliances, and ongoing naval presence of extra-regional players in the Indian Ocean Region (IOR) (Pant, 2020; Brewster, 2014).

Geopolitical rivalry is one of the most pressing issues facing India. Increasing foreign naval force deployment, such as submarines and surveillance ships, together with the growth of dual-use ports and logistical infrastructure in the IOR, has raised worries about strategic encirclement and maritime superiority. Due to its importance to international commerce and energy movements, the Indian Ocean is thought to be home to over 100 foreign navy ships at any given moment (UNCTAD, 2023). Sustained naval preparedness, improved maritime domain awareness, and strengthened security alliances are necessary for India to assure freedom of navigation and maintain a positive balance of power.

Similar difficulties arise from limitations on resources and capacity. India's army is still spread out across a sizable maritime area, despite having one of the biggest navies in terms of manpower in the whole world. With a surface area of about 70 million square kilometers, the Indian Ocean necessitates continuous monitoring and quick response mechanisms. The Indian Navy had about 150 vessels and submarines in its inventory in the early 2020s, which is a somewhat small number given the size of its region of responsibility and its strategic goals (Ministry of Defence, 2022). Other factors that impede maritime modernization efforts include budgetary restrictions, delays in local ship construction, and reliance on foreign defense technologies.

India's capacity to take full advantage of its oceanic advantage is also hampered by maritime infrastructure gaps. Even though Indian ports handle around 90% of India's EXIM trade by volume, their average vessel turnaround times are considerably longer than worldwide norms, and they account for just about 5% of the total capacity of ports worldwide (Ministry of Ports, Shipping and Waterways, 2023). Logistical expenses are increased and competitiveness is diminished by inadequate deep-water harbors, restricted transshipment capacity, and underdeveloped coastal shipping infrastructure. It is imperative to address these structural flaws in order to link maritime power with economic development. India's maritime issues are exacerbated by environmental constraints, which introduce a crucial nontraditional aspect. Coastal communities and infrastructure are at risk from rising sea levels, coastal erosion, ocean warming, and severe weather occurrences. Coastal resilience is a national priority in India, where around 250 million people reside within 50 km of the coast (IPCC, 2022).

Furthermore, long-term threats to maritime livelihoods and food security are posed by overfishing, marine pollution, and the deterioration of coral ecosystems, particularly in island regions like the Andaman and Nicobar Islands and Lakshadweep (MoES, 2021).

The strategic need for integrating maritime power into India's wider national vision is highlighted by these overlapping difficulties. The shift from a historically continental focus to a commanding maritime position necessitates investment in port-led development, sustainable ocean resource management, and consistent maritime governance, in addition to naval modernization. The growing understanding that India's future security and well-being are inextricably linked to the sea is reflected in initiatives like the Maritime India Vision 2030, SAGAR (Security and Growth for All in the Region), and improved Indo-Pacific relations.

When viewed in this light, India's maritime strength may be seen as a fusion of economic infrastructure, environmental stewardship, regional diplomacy, and hard security capabilities. India's capacity to successfully leverage its oceanic geography and cement its position as a major maritime player in the Indian Ocean Region will depend on its capacity to handle geopolitical rivalry, address capacity limits, and address environmental issues.

## VI. CONCLUSION

India's maritime voyage is a reflection of the enduring truth, influenced by its history and geography, that the sea has always been at the center of its prosperity, security, and international ties. India's connection to the ocean has changed over time in reaction to changing political, economic, and strategic environments, from ancient monsoon-driven trade networks to modern naval deployments. This relationship has become increasingly urgent and relevant today as the world's center of gravity shifts toward maritime Asia.

India is in a strategic position to impact one of the most important marine areas in the world because it is located in the heart of the Indian Ocean. The Indian Ocean is a strategic area where economic interdependence, security rivalry, and environmental susceptibility converge, rather than just a transit route for international trade and energy flows. Although India has a long coastline, island territories, and a large Exclusive Economic Zone, geography alone is not enough to assure maritime dominance. These benefits must be complemented by sustained investment, institutional capacity, and strategic purpose.

A comprehensive understanding of maritime power is necessary for India's transformation from a primarily continental force to a dominant maritime player. Though still a crucial factor, naval power is only one element of a larger maritime ecosystem that also includes port infrastructure, coastal connection, marine management, technical innovation, and environmental protection. The increasing emphasis on maritime domain awareness, regional partnerships, and indigenous naval modernization in India signals a slow but significant change in strategic thinking.

India's maritime future will also be determined by how well it handles difficult issues. India's maritime ambitions are put to the test by the increasing geopolitical rivalry in the Indian Ocean Region, the scarcity of resources and capabilities, and the rising effects of climate change. Sustainable ocean management is as important as conventional security concerns because rising sea levels, coastal erosion, and severe weather occurrences put infrastructure and livelihoods at risk. Addressing these challenges requires collaboration between civilian and military organizations as well as collaboration with partners in the area and beyond.

The evolution of India's maritime perspective has ramifications for the entire region. India's position as a responsible and stabilizing maritime actor becomes more and more important as trade, energy security, and connectivity increasingly tie the fortunes of Indian Ocean states together. Its capacity to foster inclusive growth, maintain freedom of navigation, and address unconventional security risks will influence how its leadership is perceived throughout the Indo-Pacific.

Rediscovering the sea's power is ultimately about achieving strategic balance, not about abandoning India's continental priorities. India may strengthen its economic lifelines, increase its regional influence, and establish itself as a key player in a maritime century by integrating maritime power into its national vision. India's history has long been reflected by the ocean, which is now set to become a key battleground for its future.

## REFERENCES

- [1] Brewster, D. (2014). *India's Ocean: The Story of India's Bid for Regional Leadership*. Oxford University Press.
- [2] Brewster, D. (2014). *India as an Asia-Pacific Power*. Routledge.
- [3] Government of India, Indian Navy. (2015). *Ensuring Secure Seas: Indian Maritime Security Strategy*. New Delhi.
- [4] Government of India, Ministry of Defence. (2022). *Annual Report 2021–22*. New Delhi.
- [5] Government of India, Ministry of Defence. (2023). *Annual Report 2022–23*. New Delhi.
- [6] Government of India, Ministry of Earth Sciences. (2021). *India's Blue Economy: Policy Framework*. New Delhi.
- [7] Government of India, Ministry of Earth Sciences. (2022). *India's Exclusive Economic Zone and Coastal Resources*. Government of India.



- [8] Government of India, Ministry of Ports, Shipping and Waterways. (2023). Maritime India Vision 2030. Government of India, New Delhi.
- [9] International Energy Agency (IEA). (2022). World Energy Outlook 2022. Paris.
- [10] International Maritime Bureau. (2023). Piracy and Armed Robbery Against Ships: Annual Report. Kuala Lumpur.
- [11] Intergovernmental Panel on Climate Change (IPCC). (2022). Sixth Assessment Report: Impacts, Adaptation and Vulnerability. Geneva.
- [12] Mukherjee, R. (2011). India in the Indian Ocean World: From Early Times to c. 1800. Pearson Longman.
- [13] NITI Aayog. (2021). Harnessing the Blue Economy: Perspectives for India. Government of India.
- [14] NITI Aayog. (2021). Role of Coastal Regions in India's Economic Development. Government of India.
- [15] Pant, H. V. (2020). The Indo-Pacific: Regional Dynamics and India's Strategic Response. Observer Research Foundation.
- [16] Ray, H. P. (2003). The Archaeology of Seafaring in Ancient South Asia. Cambridge University Press.
- [17] TeleGeography. (2023). Submarine Cable Map and Global Bandwidth Report. TeleGeography.
- [18] United Nations Conference on Trade and Development (UNCTAD). (2023). Review of Maritime Transport 2023. United Nations, Geneva.
- [19] U.S. Energy Information Administration (EIA). (2023). World Oil Transit Chokepoints. U.S. Department of Energy.



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