Indian Maritime Security Strategy for Indian Ocean Region: Implications for China and Pakistan

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Abstract

The Indian Ocean Region (IOR) creates a triangle of opposition, competition and conflict between India, China, and the US. India's naval modernization and ever-expanding influence in IOR has challenged the naval balance with clear regional implications especially for China and Pakistan. This competition is reflected in the establishment of naval bases, investments in infrastructure, and the formation of strategic partnerships. India, as a rising regional power, is actively engaged in securing its maritime trade routes, ensuring energy security, and countering challenges such as balancing China's presence in the region. India's dependence on the resources and trade routes in the IOR shape its strategic calculus. India's naval expansion encircling China, coupled with its strengthening ties with the US, further complicates the geopolitical balance in the region. There is also a growing maritime competition between India and Pakistan, as both countries seek to assert their influence and secure their maritime interests. This competition adds an additional layer of complexity to the overall security and stability of the region. Through the theoretical lens of Mahan's Maritime perspective, this paper dissects the nature and dynamics of India's IOR strategy and explains that India's naval modernization and its expansion of presence/influence in the region along with its multilateral initiatives like SAGAR and especially bilateral strategic partnership with US have created a security-insecurity dilemma in the region with a possibility of enhanced multi-pronged competition with the regional and extra regional powers with clear implications for China and Pakistan.

Key Words: Indian Ocean Region, India's Maritime Security Strategy, India's Naval Modernization, US-India Strategic Partnership, Sino-India Maritime Competition.

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Introduction

The Indian Ocean Region (IOR) creates a triangle of opposition, competition and conflict between the USA, China, and India. India's naval modernization and ever-expanding influence in IOR have challenged the naval balance with clear regional implications especially for China and Pakistan. Maritime competition in the IOR involves major powers like India, China, and the US competing for naval dominance, control of crucial sea routes, and protection of economic interests. India, as a rising regional power, is actively engaged in securing its maritime trade routes, ensuring energy security, and countering challenges such as piracy and terrorism while also seeking to strengthen its geopolitical influence and balance China's presence in the region.

India has taken stringent measures to secure trade in the southern IOR while protecting transit points in the region. India's economic stability and energy security depend heavily on the maritime sector. A large portion of India's trade volume and value passes through the ocean, as well as a majority of their oil and liquefied natural gas (LNG) imports. This has resulted in India's high dependence on seaborne oil, making it important for the country to maintain a strong maritime presence. Furthermore, the IOR serves as a valuable resource hub, enriching India's industries and households with diverse resources such as fish and minerals. The IOR's strategic significance extends beyond being a vital lifeline, as it also serves as a critical gateway to trade and commerce between India and other nations in the region, making it imperative for India to maintain a stable and secure maritime environment in the region. India's naval presence in the southern IOR gives India an advantage over other countries in the region.

In pursuit of its economic and geopolitical objectives, India is actively undertaking naval expansion and modernization efforts. In addition, the possibility of India's naval expansion encircling China, coupled with its strengthening ties with the US, further complicates the geopolitical balance in the region. There is also a growing maritime competition between India and Pakistan, as both countries seek to assert their influence and

secure their maritime interests. This competition adds an additional layer of complexity to the overall security and stability of the region.

Background of the Study

India's strategic position in the IOR grants it influence over crucial trade routes, shaping its commerce. As in 1946, K.M Pannikar said, "It is the geographical position of India that changes the character of the Indian Ocean." Although possessing a vast and strategic maritime geography with a 7,517-kilometer coastline, but India's foreign policy prioritized land security while neglecting maritime power. Concurrently with the evolving geopolitical landscape of the Indo-Pacific, India's maritime outlook has undergone a significant transformation, driven by strategic imperatives arising within the region.

To cope with the shift, it is crucial to adopt an inclusive approach that incorporates the development of maritime infrastructure and strengthens capacity building. Indian Navy encountered many maritime challenges and conflicts from the 1960s, but until the early 1990s, its budget allocation remained lower than 15%.³ In the early 1990s, India harboured blue water ambitions by partnering with the US through initiatives like MALABAR. Additionally, India took pro-active steps to improve cooperation with neighboring countries like Bangladesh, Sri Lanka, Thailand, and Singapore and held its first MILAN conference in 1995.⁴

These early engagements laid the foundation for expanding beyond the Indian Ocean and marked a shift towards power projection navy, leading to increased naval construction

¹ Taraknath Das, "India and the Indian Ocean: An Essay on the Influence of Sea Power on Indian History. By *K. M. Panikkar.*" *The American Historical Review* 51, no. 2, (January 1946): Pages 314–315, https://doi.org/10.1086/ahr/51.2.314.

² "India - Estimated Length of Coastline by State 2019," Statista, accessed March 1, 2024, https://www.statista.com/statistics/734258/length-of-coastline-by-state-india/.

³ Richard D. Marshall Jr, "The String of Pearls: Chinese Maritime Presence in the Indian Ocean and Its Effect on Indian Naval Doctrine" (Master diss., Naval Postgraduate School Monetary California, 2012), 23 https://apps.dtic.mil/sti/citations/ADA574434.

⁴ Mohd Zakariya, "Indo-U.S. Relations: From Estrangement to Engagement," *International Journal of Research in Social Sciences and Humanities* 6, no. 2 (April-June 2016): 64-69 https://apps.dtic.mil/sti/tr/pdf/ADA441522.pdf.

and procurement, setting India on a new course as a globally recognized maritime power. By the mid of the 21st century, India's nascent maritime ambitions had transformed into a robust strategic calculus. In 2004, the Indian Navy formulated the "Indian Navy Maritime Strategy" and in 2007, the "Freedom of Use of the Seas" document emerged as resounding proclamations, expressing a compelling vision of commanding presence in blue waters.⁵

Later produced in 2009,⁶ Indian Maritime Doctrine, is an updated version of 2004 document. These conceptual frameworks aimed to transition the navy from its previous focus on regional dominance, propelling India towards greater maritime power. The Indian Navy's Maritime Doctrine 2009, updated for strategic planning, includes a wide scope of defence ranging from the Persian Gulf to the Malacca Strait, reflecting India's global interests in energy supply protection and global trade arteries. The doctrine depicts a shift from an entirely defensive to an assertive role while emphasizing Indian dominance on the international maritime stage, and potentially having implications for China.

The 2015 Indian Maritime Security Strategy (IMSS) called 'Ensuring Secure Seas' signifies a shift from perceiving India as a 'constable' to a 'strongman' with active leadership and influence in the Indian Ocean. It identifies three core areas that define India's role in the region: first, expanding its scope beyond Asia-Pacific with independent defence partnerships in the "Indo-Pacific" region; second, broadening strategic interests to include important choke points across the Indian Ocean; and third, building security partnerships, utilizing technological advancements and joint exercises to stabilize the region. The strategy's 'strongman' identity signifies India's proactive approach in becoming a regional leader, actively shaping the future of the Indo-Pacific. Moreover, IMSS consists of five key strategies signifying its strategic posture in region. These strategies include: strategy for deterrence;

⁵ Allah Nawaz, "India's Evolving Maritime Strategy," *South Asian Voices*, May 31, 2023, https://southasianvoices.org/indias-evolving-maritime-strategy/.

⁶ "Indian Maritime Doctrine Indian Navy Naval Strategic Publication 1.1." accessed 15 April 2024. https://www.indiannavy.nic.in/sites/default/files/Indian-Maritime-Doctrine-2009-Updated-12Feb16.pdf.

⁷ "Ensuring Secure Seas: Indian Maritime Security Strategy." 2015. https://www.indiannavy.nic.in/sites/default/files/Indian_Maritime_Security_Strategy_Document_25Jan16.pdf. ⁸ Ibid.

strategy for conflict; strategy for shaping a favorable and positive maritime environment; strategy for coastal and offshore security; strategy for maritime force and capability development.

Theoretical Framework

This study utilized Maritime theoretical perspective developed by Alfred Thayer Mahan. As this theoretical approach and its emphasis on maritime strategy are highly relevant to India's current ambitions to expand and modernize its navy, as the mastery of the sea is seen as crucial in shaping historical trajectories of great powers and ensuring their national security. Alfred Thayer Mahan posits in his treatise, *The Influence of Sea Power upon History 1660–1783*, that maritime strategy holds pivotal importance in both wartime and peacetime. Mahan's central thesis contends that the historical trajectories of Europe and America have been fundamentally shaped by the utilization and mastery of the sea.

The potency of his influence is demonstrably apparent in the formidable strength of the contemporary American Navy. Furthermore, Mahan identifies a robust navy as a prerequisite for national expansion into overseas economic ventures. In essence, Mahan's work lays the groundwork for a comprehensive understanding of maritime strategy, highlighting its enduring relevance and persuasive case for prioritizing naval strength in national security frameworks. The modernization of the Indian Navy is driven by three primary factors: safeguarding the country's vast coastline and valuable maritime economic zones, pursuing regional and global ambitions, and protecting crucial sea lanes that facilitate India's trade and supplies.

In keeping with these objectives, the Indian Navy has adopted a more forceful and proactive doctrine rooted in Alfred Mahan's 1897 prophetic statement, 'Whoever controls the Indian Ocean will dominate Asia. This ocean will be the key to the seven seas in the 21st

⁹ Alfred Thayer Mahan, *The Influence of Sea power upon History 1660–1783* (Boston: Little, Brown and Company, 1890), 22–23.

Century. The destiny of the world will be decided on its waters.'¹⁰ With India's rapidly growing economy, aspirations to become a regional power, and its ongoing efforts to secure sea-borne trade, Mahan's theory offers insights into the reasons for New Delhi's increased investment in naval modernization. Mahan's prophetic declaration about the pivotal role of the Indian Ocean in the 21st century holds significance. Controlling the Indian Ocean would translate into Asian nations acknowledging one's authority, while commanding its waters would be the gateway to global dominance. In the strategically crucial environment of the Indian Ocean Region, where major powers like China and the USA are competing for authority, India has emerged as a proactive player in the region.

Changing Security Dynamics in Indian Ocean Region

Oceans are inherently 'anarchic' in nature as there are no concrete boundaries present under water. Therefore, confrontation, conflict and competition are innate traits of security dynamics of oceans. Indian Ocean owns a distinct maritime geography whereby it can only be accessed through various choke points unlike other oceans that can be accessed freely. Thus, in this way Indian Ocean is a 'closed ocean'. Three contested choke points are Strait of Hormuz, Strait of Malacca and Bab-el-Mandeb. More than 50% of global maritime trade passes through these choke points and these choke points connect three major water bodies, Arabian Sea, Bay of Bengal and Red Sea. Struggle over control of these choke points is a defining feature of IOR security framework. Contemporary security dynamics of IOR revolve around two factors, increased Chinese presence in the region and great power rivalry.

Chinese Maritime Presence

With China's increasing need for energy imports due to economic growth, the vulnerable nature of its vital maritime trade routes across the vast Indian Ocean becomes

¹⁰ Lt Gen Prakash Katoch, "Sea and Space Power," *Indian Defence Review*, November 13, 2020, https://www.indiandefencereview.com/news/sea-and-space-power/.

apparent. Approximately two-thirds of Chinese trade passes through strategic choke points like the Malacca Strait each year, leaving them susceptible to potential blockades by rival maritime powers. In response to this threat, the Chinese Navy has expanded its presence in the Indian Ocean as a means to protect its energy lifeline and safeguard its economic strength. This reflects the pivotal role the Indian Ocean plays in China's economic development and the measures it is willing to take to ensure its security.¹¹

Table No. 1
Economic and Strategic Relationships
of Selected South Asian Countries with China

Country	Active Naval Vessels of China	Ports Infrastructure and developed by China	Chinese Investments 2005-2017 (US\$ billion)	Status of Free Trade Agreement with China
Bangladesh	46	Chittagong port	24.1	Biggest trading partner (2016)
Maldives	0	iHavan project	NA	Signed 2017
Myanmar	17	Kyaukpyu port	7.4	ASEAN-China 2010
Pakistan	15	Gwadar port	50.6	Signed 2007
Sri Lanka	17	Hambantota port	14.7	Signed 2014

Source: Economic and Strategic Relationships of Selected South Asian Countries with China¹²

China is present in Indian Ocean, diplomatically, economically, and militarily. The most concerning of all is its naval presence in the IOR. This began with naval deployments in the Gulf of Aden, showcasing its capabilities and allowing for diplomatic engagement with

¹¹ Avinandan Choudhury, and P. Moorthy, "Strategic-Maritime Triangle in the Indian Ocean: An Emerging Indo-US Naval Entente?" *India Quarterly: A Journal of International Affairs* 74, no. 3 (2018): 306. https://doi.org/10.1177/0974928418785477.

¹² "Belt and Road Portal", accessed date March 14, 2023, https://eng.yidaiyilu.gov.cn/.

littorals like Sri Lanka. Establishing a military base in Djibouti in 2017 solidified its commitment to the region. By proactively securing key waterways and building relationships with littoral states, China is asserting its strategic interests and shaping the future of the IOR. Moreover, with its BRI, China is increasing its presence in South Asia. Table 1 shows Chinese Naval as well as economic and strategic existence in South Asia. People's Liberation Army and Navy's existence on Chittagong Port of Bangladesh and Gwadar port of Pakistan under its 'string of pearls strategy' (as claimed by the rivals) is a major cause of concern for India, as India perceives it as a "strategy of encirclement."

The Indian Navy has raised concerns about PLAN's growing submarine presence in the IOR, alarmed by repeated visits to Sri Lanka and regular deployments for anti-piracy missions. India worries as these missions not only aid in data gathering but also equip China for potential littoral warfare, exacerbating the existing submarine capability gap between the two nations. In combination, China's submarine activities and the inherent asymmetry in underwater capabilities are viewed as the potential destabilizing factors for the IOR.¹⁵

Great Power Rivalry: A Strategic Triangle

The enormous economic significance of the region has made it the hotbed of conflict and contestation, especially between India and China while the USA remains the vigilant watchdog trying to maintain the status-quo. Besides the economic significance of the region threat perception regarding the presence of several great navies is a significant factor in increasing temperature of IOR.

¹³ Darshana M. Baruah, "Surrounding the Ocean: PRC Influence in the Indian Ocean," *Carnegie Endowment for International Peace*, April 18, 2023, https://carnegieendowment.org/2023/04/18/surrounding-ocean-prc-influence-in-indian-ocean-pub-89608.

¹⁴ Maliha Zeba Khan, "Strategic Posturing of China in IOR." Policy Perspectives 19, no. 1 (June 30, 2022):21 https://doi.org/10.13169/polipers.19.1.ra1.

¹⁵ Mari Izuyama and Masahiro Kurita, "Security in the Indian Ocean Region: Regional Responses to China's Growing Influence" *East Asian Strategic Review* (March, 2017): 42-44, https://www.nids.mod.go.jp/english/publication/east-asian/pdf/2017/east-asian_e2017_preface.pdf

CHINA KUWAIT BAHRAIN GATAR Chinese-built ports, refuelling stations INDIA BANGLADES SAUDI ARABIA Chittagong Indian aval bases OMAN LAOS Visakhapatnam* Bay of Bengal ERITREA YEMEN THAILAND CAMBODIA DJIBOUTI Nicobar Is. LANKA MALAYSIA MALDIVES JGANDA INDONESIA SEYCHELLES COMOROS MALAWI Réunion (Fr.)

GREAT POWER COMPETITION IN THE INDIAN OCEAN

Source: Map showing presence of India, China and USA naval bases in Indian Ocean¹⁶

Extended Chinese presence in the region exacerbates India's anxiety and tensions. Historically, the Indian Navy defines the entire Indian Ocean, from the African coast to the Andaman Sea, as its primary area of responsibility. India considers Chinese expansion to this area as an act to control key straits in the region while curbing Indian control over region. For this, India, turned towards US mainly to counter Chinese rise. Contrary to this, China considers India's strategic position as an inevitable threat to China's economic lifeline. US

¹⁶ Brahma Chellaney, "China's Strategic Subterfuge." *Stagecraft and Statecraft*, June 11, 2011. https://chellaney.net/2011/06/10/618/.

presence in the region has two-faced implications. Traditionally, US presence in the region was mainly to cater its security needs in Middle East and South China Sea. Now, US is an important player to counter Chinese rise, considering such rise as a threat to current International order, by backing India to become a parallel rival power. Such US presence through its "Indo – Pacific strategy" is a threat for China. Beyond resource grabs and shipping control, the Indian Ocean contests boil down to a power play – principal actors striving for a regional order most advantageous to them, sparking geo-political clashes that jeopardize stability and peace.¹⁷

Post-2015 Indian Naval Modernization and Evolving Maritime Posture

India is asserting its maritime influence on both regional and global levels, aiming to secure key resources, project power, and solidify its status as a great power. The Indian Navy is undergoing modernization efforts, focusing on upgrading weaponry, information systems, and equipment while collaborating with countries like Russia and the US. Through initiatives like the Malabar exercises and participation in organizations such as the Indian Ocean Rim Association and Indian Ocean Naval Symposium, India has strengthened regional cooperation, promoted maritime security, and enhanced its maritime posture. The SAGAR initiative, launched in 2015, plays a vital role in bolstering ties with maritime neighbours, countering China's influence, and promoting sustainable development in the Indian Ocean through infrastructure modernization and humanitarian assistance.¹⁸

Indian Naval Modernization

The Indian Navy has embarked on a transformative journey of modernization, bolstering its maritime prowess through cutting-edge advancements and the acquisition of

india-s-maritime-diplomacy-sagar-policy-as-the-focal-point.

Netajee Abhinandan, "Changing Security Environment in Indian Ocean: Decoding the Indian Strategy." *Indian Foreign Affairs Journal* 14, no. 2 (2019): 141-142, https://www.jstor.org/stable/48636720.
 Raagini Sharma, "India's Maritime Diplomacy (SAGAR Policy as the Focal Point)." *Research Institute for European and American Studies* (2022): 4, https://rieas.gr/researchareas/global-issues/asian-studies/4696-

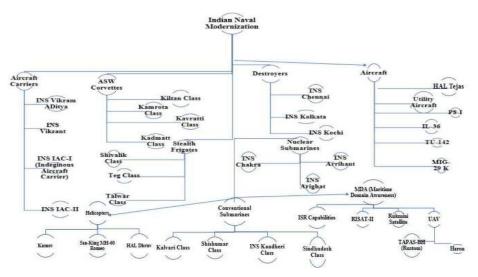
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state-of-the-art naval assets. This strategic initiative ensures India's naval fleet is equipped with the latest technologies, further enhancing its operational capabilities and asserting its significance in the region. The Center for Strategic and International Studies (CSIS) conducted an analysis in 2016, unveiling the remarkable maritime capabilities of the Indian Navy during that period.¹⁹

The Indian Navy proudly showcased its two fully operational aircraft carriers, INS Vikramaditya and INS Viraat, presenting aerial strike capabilities from the vast expanse of the seas. Its surface fleet was formidable, counting 28 principal surface combatants ranging from destroyers to corvettes, ensuring effective patrolling and engagement. Beneath the waves, 17 submarines, both nuclear and diesel-electric, provided covert presence and strategic deterrence. Vigilant coastal defence was entrusted to 207 patrol and coastal combatants, safeguarding India's shores and economic zones. Robust logistical support was guaranteed by 57 dedicated vessels, keeping the entire force operational.

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¹⁹ Anthony H. Cordesman, "Indian Ocean Region Strategic Net Assessment: The South Asia Sub region," *Centre for Strategic and International studies*, April 14, 2016, https://www.csis.org/analysis/indian-ocean-region-strategic-net-assessment-red-sea-and-horn-subregion.



Source: Manifestation of Indian Naval Modernization 20

Aircraft Carriers: Ensuring Indian Sea Power

Aircraft carriers, by traversing vast oceans far from their shores, offer nations a potent tool for projecting power and influence globally. These floating airbases launch devastating attacks, often serving as symbols of a nation's military might and global ambitions. Currently, India has two Aircraft carriers and aiming to have more in upcoming years. INS Vikramaditya is a modified Kiev-class carrier, acquired from Russia in 2013, serves as the Indian Navy's flagship. With its MiG-29K fighters and Ka-31 ASW helicopters, provide considerable power projection capability at regional scale. INS Vikrant is India's first indigenously-built aircraft carrier, christened in September 2022, successfully completed its sea trials in November 2023.²¹ Currently, equipped with MiG-29K fighters INS Vikrant is expected to employ French

²⁰ Muhammad Shan Bilal, Muhammad Jawad Hashmi, Basharat Hussain, Dr. Saira Nawaz Abbasi and Dr. Hidayatullah Khan, "Indian Naval Modernization-2030: Challenges and Options for Pakistan," *Journal of Xi'an Shiyou University* 19, no. 7 (July 2023), https://www.xisdxjxsu.asia/V19107-65.pdf.

²¹ John Pike, "Indian Naval Air Arm," The Global Security, accessed March 28, 2024 https://www.globalsecurity.org/military/world/india/naval-air-intro.htm.

Rafle M fighter aircrafts in future. INS Vishal (IAC-2) is an ambitious project and aims to build a 65,000-ton flat-top carrier with a CATOBAR system that enables launch and recovery of heavier aircraft. Expected to join the fleet by 2030, INS Vishal will significantly enhance India's naval capabilities. In September 2023, India successfully tested the Twin-Boom Barrier Arresting Gear (TBAG) system, a critical technology for CATOBAR operations on future carriers. The Navy is also exploring the development of indigenous aircraft carriers beyond IAC-2, aiming for even greater capabilities in the future.²²

Destroyers: Bolstering Indian Maritime Influence

India's naval strength is demonstrated through advanced destroyers like the Kolkataclass (INS Kolkata, Chennai, and Kochi), which combine stealth capabilities and advanced weaponry. This modernization push extends beyond construction. Enhanced C4ISR systems (Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, and Reconnaissance) integrate satellite technology, offering a decisive tactical advantage. For nations with established trade links and strong IOR and Pacific presence, these advancements could pose potential challenges to maritime security and economic stability.

As follow on, project four Visakhapatnam class destroyers are in commissioning phase. Recent government approvals worth over 97,300 crores (\$12.9 billion) reveal a commitment to equipping these vessels with cutting-edge technology, including the supersonic BrahMos cruise missile (co-developed with Russia) and the Barak missile system (a joint effort with Israel).²³ Thus, these modernized destroyers give more operational flexibility to Indian navy.

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²² Saif-ul-Haq, "Indian Naval Modernization and Its Implications for Pakistan." *IPRI Journal* 21, no. 02, (2021): 81, https://doi.org/10.31945/iprij.210203.

²³ Swarajya, "Indian Navy's Under-Construction Four Destroyer Ships to get Lethal Weapons, Sensors After Cabinet Committee's Nod," *Bharat Shakti*, January 16, 2020, https://bharatshakti.in/indian-navys-under-construction-four-destroyer-ships-to-get-lethal-weapons-sensors-after-cabinet-committees-nod/.

Indian Surveillance and Reconnaissance (ISR) Capabilities: Strengthening Indian Aerial Eyes

Marking a significant step in maritime vigilance, the Indian Navy obtained its first of four 'P-8I Poseidon' maritime reconnaissance and anti-submarine warfare aircraft from the US in December 2021. Equipped with cutting-edge sensors, these potent platforms join an existing fleet of eight P-8I aircraft, bolstering India's long-range surveillance and reconnaissance capabilities across vast stretches of ocean. Beyond manned flight, the Navy prioritizes unmanned aerial vehicles (UAVs) for maritime patrols.

Three dedicated squadrons operate these UAVs, equipped with electro-optic cameras and COMINT systems for gathering crucial intelligence. This upgrade would significantly enhance network efficiency between submarines, aircraft carriers, and shore-based assets, replacing the current reliance on G-SAT 7. With advanced aircrafts, drones, and enhanced communication channels, the Indian Navy is soaring towards a future of unparalleled maritime vigilance, solidifying its position as a dominant force in the region ²⁴

Frigates

Two important projects encompass development of frigates. Firstly, under Project 17A "Nilgiri", seven frigates are under construction, which will be equipped with supersonic Barak-8 and BrahMos missiles. ²⁵ These 6,600-ton vessels are being built by Mazagon and GRSE shipyards. Secondly, through the Project 11356 'Talwar' frigates India is acquiring four advanced frigates. Two frigates are under construction in Russia, while two are being constructed in India. Displacing more than 4000 tons, these frigates represent balanced combination of offensive and defensive capabilities and commissioning is expected by end of 2024.

²⁴ Saif-ul-Haq, "Indian Naval Modernization and Its Implications for Pakistan," 85.

²⁵ "Nilgiri-Class (Project 17A) Frigates," Naval Technology, accessed March 3, 2024, https://www.naval-technology.com/projects/nilgiri-class-project-17a-frigates/.

Nuclear Submarines

India's underwater might is rising with its Arihant-class nuclear submarines. Four are planned: INS Arihant commissioned in 2016, INS Arighat is under trials, and two larger, more heavily armed successors called S-4 are under construction. By 2030, all four will be operational, and will have capability to launch K-4 and K-15 submarine launched ballistic missiles. A conceptual S5 submarine, twice the size payload including 12-16 K-6 missiles with multiple warheads, is in initial development phase. Meanwhile, Russia's Chakra-3 attack submarine is expected to join the fleet in 2025. Additionally, India is working to indigenously construct six nuclear attack submarines under the Project-7 SA .India's underwater ambitions paint a picture of a growing naval power, poised to shape the future of the Indian Ocean.

Conventional Submarines

The Indian Navy, already boasting a robust coastal defence force, is diving deeper into ambition with a submarine expansion campaign. Driven by geopolitical goals and power projection aspirations, the fleet currently relies on 16 conventional submarines. Most capable conventional submarine in Indian disposal is Kalvavi class submarine. Five boats have been commissioned and one move is in sea trials. Three additional boats of similar class are being negotiated between France and India. Beside, four Shishumar class submarines of German origin and seven kilo class submarines of Soviet origin are operational. This submarine expansion, fuelled by a blend of defensive strategy and ambitious global aspirations, signals the Indian Navy's growing presence in the maritime domain.²⁷

²⁶ "India Submarine Capabilities," *Nti.Org.* accessed March 3, 2024, https://www.nti.org/analysis/articles/india-submarine-capabilities/.

²⁷ Muhammad Shan Bilal, Muhammad Jawad Hashmi, Basharat Hussain, Dr. Saira Nawaz Abbasi and Dr. Hidayatullah Khan, "Indian Naval Modernization-2030: Challenges and Options for Pakistan," *Journal of Xi'an Shiyou University* 19, no. 7 (July 2023), https://www.xisdxjxsu.asia/V19107-65.pdf.

Indigenization of Naval Forces

India's ambitious Naval Indigenization Program, launched in 2015, rides the wave of self-reliance, aiming for 50% indigenization by 2030.²⁸ Strategic independence, economic growth, and technological advancement fuel this journey. From sea trials of INS Vikrant to planned construction of INS Vishal, major warship projects mark progress. Technological leaps in sonar, combat systems, and weaponry are underway. Challenges like skill development and robust testing persist, while strategic partnerships offer a helping hand. With each indigenized vessel and system, the Indian Navy navigates closer to self-sufficiency, poised to secure national interests and project its maritime power on the global stage.

Indo-US Maritime Cooperation

Maritime collaboration between the US and India offers promising opportunities for a strong partnership, addressing security concerns and enhancing humanitarian efforts. The deepening relationship, marked by agreements and expanded exercises, strengthens bilateral ties through defence cooperation. USA sees India as a crucial security partner in the Indo-Pacific, particularly as a "net security provider" in the Indian Ocean.²⁹ In June 2017, PM Modi and President Trump significantly strengthened the India-US defence and security partnership. The Biden Administration is actively pursuing closer cooperation with India in the Asia-Pacific region, specifically in the maritime domain with the aim of strengthening ties and advancing shared interests.

Logistic Exchange Memorandum of Agreement (LEMOA)

The LEMOA signed in 2016, is a game-changer in US-India maritime cooperation. It provides a framework for Mutual logistical support whereby both countries can

²⁸ "Indigenisation Efforts of Navy," drishiti IAS, accessed March 4, 2024, https://www.drishtiias.com/printpdf/indigenisation-efforts-of-navy.

²⁹ Sufian Ullah and Zeeshan Hayat "India as a Net Security Provider in Indo-Pacific and Implications for the Region," *NUST Journal of International Peace & Stability* 4, no. 1(2021): 30-31, https://njips.nust.edu.pk/index.php/njips/article/download/77/73/.

refuel, replenish, and repair their ships and aircraft at each other's ports and bases, facilitating longer patrols and operations. It enhanced interoperability of both forces by joint military and also improved maritime security by enabling both states to share resources and information effectively. Therefore, strengthens both nations' capacity to combat piracy, terrorism, and other maritime threats. Through policy of shared burden, LEMOA helps alleviate the strain on US forces by leveraging India's growing capabilities, to efficiently counter Chinese presence. However, concerns exist about potential compromises to India's strategic autonomy and information security but its benefits are undeniable. Thus, LEMOA symbolizes a new era of maritime cooperation between the US and India.

Communication Compatibility and Security Agreement (COMCASA)

Signed in 2018, COMCASA, has cemented India as a crucial strategic partner of USA. Its secure US data link, considered the world's best, potentially grants access to valuable US intelligence on China and Pakistan's military activities, bolstering Indian decision-making. This agreement goes beyond intelligence, with the US providing sensitive communication equipment and codes, enabling real-time information sharing between frontline units and commanders through secure channels. This significantly reduces communication vulnerabilities during potential conflicts. COMCASA also empowers India with armed MQ-9B Sea Guardian drones, enhancing its anti-submarine, surface warfare, and search & rescue capabilities, marking a significant leap in military prowess. While concerns linger about strategic autonomy and information security, COMCASA stands as a cornerstone of US-India maritime cooperation, poised to play a critical role in maintaining regional stability and safeguarding both nations' interests in the face of China's growing presence.³⁰

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³⁰ Muhammad Ali Baig and Alyan Waheed, "Issue Brief on LEMOA, COMCASA, and BECA In India's Foreign Calculus," *Institute of Strategic Studies Islamabad,* (2022): 3, https://issi.org.pk/issue-brief-on-lemoa-comcasa-and-beca-in-indias-foreign-calculus/

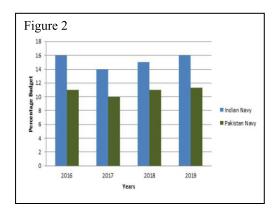
Basic Exchange and Cooperation Agreement (BECA)

In a landmark move, India signed BECA with the US, on 27th October 2020 after a decade long negotiations and discussion, granting access to real-time American geospatial intelligence.³¹ This data promises to boost the accuracy of automated systems, weapons, and navigation for drones and ships. Beyond military applications, it will also aid in natural disaster response. Additionally, the agreement allows for sharing high-resolution satellite images and telephonic intercepts, and facilitates India's domestic Geographic Information (GI) policy goals. On the other hand, signing BECA could isolate India from other states like Russia. China, too, perceives it as a threat to regional stability and a possible catalyst for an arms race. Ultimately, BECA signifies a deeper US-India partnership and a strategic manoeuvre to balance China's influence.

Implications for Pakistan Navy

The rapid modernization of the Indian Navy, armed with offensive capabilities and fuelled by a larger defence budget, casts a long shadow over Pakistan's maritime security. A comparison of Pakistan and Indian naval prowess shows a stark difference giving India superiority over Pakistan. Figure 2 and 3 show the comparison of budget allocation and naval equipment vis-à-vis Pakistan Navy and Indian Navy. This disparity has huge implications for Pakistan and for the regional stability also. India's naval modernization poses a challenge to Pakistan in several ways. Firstly, it increases India's naval capabilities, giving it an edge in potential conflicts and threatening Pakistan's maritime security. Secondly, India's enhanced naval presence and partnerships in the region limit Pakistan's ability to maintain a strong naval presence and influence. Lastly, India's modernization efforts allow it to secure critical sea lanes, potentially affecting Pakistan's trade routes and economic interests.

³¹ Muhammad Ali Baig and Alyan Waheed, "Issue Brief on LEMOA, COMCASA, and BECA in India's Foreign Calculus," 4.



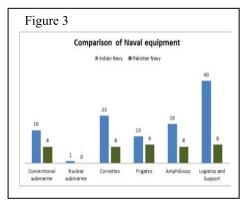


Figure 2: Comparison of Maritime Defence Budget of Indian and Pakistan³²

Figure 3: Comparison of Indian and Pakistan Naval Equipment³³

As currently Pakistan is struggling with the worst economic crisis and could not modernize its naval assets massively, therefore, it considers Indian advancement in the region as offensive. To counter its traditional rival, Pakistan embarked upon the journey to upgrade its navy. China and Turkey are assisting Pakistan to upgrade naval equipment. In 2018, the two nations penned a pivotal contract for the construction of four powerful Milgem-class corvettes, drawing inspiration from Turkey's formidable Ada-class ships. This deal guarantees Pakistan's receipt of all four vessels by February 2025, adding significantly to its maritime punch.³⁴ However, this may increase the threat of arms race in already volatile South Asian region. Pakistan is concerned about India's growing relationship with the US. India's technological advancements, including LEMOA and COMCASA, have heightened Pakistan's

³⁴ Syed Fazl Haider, "China Increases Support for Pakistan's Naval Modernization with an Eye on the Indian Ocean," *The Jamestown Foundation Global Research and Analysis China Brief* 22, no. 20, (2020). https://jamestown.org/program/china-increases-support-for-pakistans-naval-modernization-with-an-eye-on-the-indian-ocean/.

³² Saif-ul-Haq, "Indian Naval Modernization and Its Implications for Pakistan," 88.

³³ Ibid, 89.

vulnerability, leading to increased cooperation with China to balance the Indo-US equation. China is already involved in developing Gwadar Port. This will be a huge assistance for Pakistan to monitor and control SLOCs across Strait of Hormuz. Also, the PN's participation in joint drills with the PLAN in the East China Sea in 2022, further underscores the deepening military cooperation between the two nations.³⁵

China's commitment to deliver eight submarines to Pakistan will significantly enhance its underwater warfare capabilities, posing a potential challenge to regional maritime dynamics. The potential acquisition of Chinese-made J-10 fighter jets equipped with anti-ship missiles could further strengthen Pakistan's naval strike capabilities in the Arabian Sea and Indian Ocean. Indian multilateral cooperation including joint military exercises in Quad and increasing investment in Chahbahar Port in Iran reveals India's regional ambitions. This resulted in increased Indian naval presence in IOR. This could have implications for Pakistan's maritime security as Indian Presence at Chahbahar allows it to have strategic foothold near Pakistan's coast. This may involve developing its naval infrastructure, acquiring advanced naval assets, and strengthening its maritime surveillance and intelligence capabilities.

Implications for China

India's ambitious naval modernization program is sending ripples across IOR, with PLAN taking careful notice. As India strives for "blue water" capabilities, the implications for China's maritime ambitions in the region are multifaceted and far-reaching. While PLAN currently boasts a larger fleet and more advanced submarines, India's rapid modernization is steadily bridging the gap. Acquisition of indigenous warships challenges China's perceived IOR dominance. It is predicted that the balance of maritime power in the IOR could shift significantly towards India.³⁶ India's naval presence in the South China Sea could potentially

³⁵ Liu Xuanzun and Guo Yuandan, "China, Pakistan Kick off Joint Naval Drill off Shanghai, with China-Built Warship from Pakistan Joining," *Global Times*, Jul 10, 2022. https://www.globaltimes.cn/page/202207/1270153.shtml.

³⁶ Gabriel Honrada, "India Eyes Massive Naval Build-up to Challenge China." *Asia Times*, October 2, 2023. https://asiatimes.com/2023/10/india-eyes-massive-naval-build-up-to-challenge-china/.

have implications for Chinese trade routes and its long-standing claim over disputed islands in the region.

From a trade perspective, China is heavily reliant on the South China Sea as a key transit point for its energy supplies and commercial traffic. Any disruptions to this trade route could have significant economic implications for China. India's naval presence could potentially disrupt China's trade routes and increase the perceived risks for shippers in the region, driving up shipping costs and impacting Chinese competitiveness. From a territorial perspective, China has been increasingly assertive in its claims over disputed islands in the South China Sea, including those also claimed by other countries such as Vietnam, the Philippines, and Malaysia. India's naval presence could potentially challenge China's de facto control over these islands and limit its ability to assert claims through military means. This could lead to possible escalation or conflict if China perceives India's presence as a direct threat to its territorial claims.

India's offensive capabilities and naval buildup in the Indian Ocean could pose a potential threat to China's vital sea routes. This may necessitate adjustments in China's military deployment and force structure, potentially leading to stronger strategic partnerships and influencing bilateral relations between India, China, and other Indian Ocean nations.³⁷ India's naval nuclear capabilities may further complicate the already intricate regional nuclear security landscape. While both nations maintain no-first-use policies, the presence of advanced naval nuclear assets on both sides raises concerns about accidental escalation and miscalculations.

Conclusion

As a rising power in the Indian Ocean region, India has been actively formulating and implementing its maritime doctrines and strategies to safeguard its national interests and

³⁷ Darshana M. Baruah, "What Is Happening in the Indian Ocean?" *Carnegie Endowment for International Peace*, March 3, 2021. https://carnegieendowment.org/2021/03/03/what-is-happening-in-indian-ocean-pub-83948.

maintain its strategic influence that has significant implications for both China and Pakistan. This strategy involves a combination of naval modernization, regional cooperation, and proactive engagement with other maritime powers. The primary objective of India's maritime security strategy is to ensure a stable and secure maritime environment in the Indian Ocean region, which is vital for the country's economic growth and national security. China, being a major player in the region, closely monitors India's maritime security strategy. The growing naval capabilities and assertiveness of the Indian Navy have raised concerns in Beijing.

China views India's efforts to strengthen its maritime defenses as a potential challenge to its own strategic interests in the Indian Ocean. This has led to a geopolitical conflict between the two countries, particularly in areas such as the South China Sea and the Indian Ocean, where their interests often collide. Pakistan, on the other hand, sees India's maritime security strategy as a direct threat to its national security. The Indian Navy's increasing presence in the Arabian Sea and the Bay of Bengal has raised concerns in Islamabad. Pakistan perceives India's efforts to project power in these regions as an attempt to encircle and isolate Pakistan.

Moreover, India's naval modernization and cooperation with other maritime powers have given it a greater influence in the region, which further undermines Pakistan's security objectives. India's maritime security strategy has wide-ranging implications for both China and Pakistan. While China sees it as a challenge to its own strategic interests, Pakistan perceives it as a direct threat to its national security. As India continues to strengthen its naval capabilities and expand its influence in the Indian Ocean region, it is likely to face resistance and competition from China and Pakistan, leading to heightened geopolitical tensions in the region.

Disclosure Statement

No potential conflict of interest was reported by the authors.