INDIA'S GROWING STRATEGIC BEHAVIOUR IN THE INDIAN OCEAN: IMPLICATIONS FOR REGIONAL STRATEGIC ENVIRONMENT

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Abstract

India's strategic behaviour in the Indian Ocean is important, given its geographic location, economic and military power expansion, and growing regional footprint. The Indian Ocean, a critical conduit for trade and energy, with major sea lanes passing through it, is significantly influenced by India's strategic behaviour and intentions. The mounting sea-based nuclear forces, as a crucial and survivable component of nuclear deterrence, have also emerged as a concern for assessing the state of a credible second-strike platform. Therefore, the significance of naval nuclear forces has stimulated a continual, global focus shift from land to the seas. In this context, South Asia has also developed this major component of national power in the last few decades. This paper discusses the main features of ongoing naval build-up in India and Pakistan, the motivations and aspirations of both India and Pakistan and the ongoing debate on naval nuclear-capable developments in the Indian Ocean region. Also, how will naval nuclear developments be assessed for escalation risk and crisis stability in the maritime domain? The implications of India's naval build-up for the regional strategic environment are profound, influencing neighbouring states' and external stakeholders' policies and actions.

Keywords: Indian Ocean Region, Competitive Naval Build Up, Sea-Based Deterrence, Naval Nuclear Dynamics.

Introduction

Naval competition amongst nation-states is rooted in their geography, national interests, and security. Therefore, they invest in developing naval forces to advance their maritime security, trade, and prestige and to maintain a credible deterrent at the high seas. India's approach to the region has been characterised by efforts to maintain a balance of power and secure its maritime interests. This includes protecting vital sea lanes from piracy and ensuring safe passage for commerce, particularly considering the region's growing geostrategic importance due to the presence of other regional and extra-regional powers. The evolution of India's strategy in the Indian Ocean will continue to have profound implications for the regional strategic environment, influencing the policies and actions of neighbouring states and external stakeholders.

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The scope of naval competition and regional stability equilibrium in South Asia correlates with the trends and trajectories of India's rapid advancement in naval arms buildup and contours of stability. To ensure safe seas, a coordinated and cooperative set of measures is needed, considering a variety of dangers and obstacles. These tactics include dispute resolution and creating a conducive marine environment.[1] Strategic nuclear stability also includes a naval component, but in practice, a doctrinal posture is the outcome of both sea control and power projection capabilities. Advances in military technology have enhanced the importance of naval assets in nuclear deterrence while at the same time increasing their vulnerability, thus becoming a primary concern for maintaining regional stability.

Indian Ocean Strategic Overview

From a political standpoint, India has long separated the Indian Ocean into its eastern and western halves, prioritising the east region in its interactions and presence. India's areas of interest are in the northern Indian Ocean, which includes the Arabian Sea, the Bay of Bengal, and the Persian Gulf. Historically, India has prioritised its strategic cooperation and interest with Mauritius and Seychelles over its immediate maritime neighbours, Sri Lanka and the Maldives, among other neighbouring islands in the Indian Ocean. At the edge of India's reach into the Indian Ocean are the countries of Comoros and Madagascar. The way the Indian Ocean is divided and its member nations are approached is primarily due to continental sub-groupings. Mauritius, Seychelles, Madagascar, and Comoros are in Africa, whereas Sri Lanka and the Maldives belong to South Asia and its subregions. India's strategic outreach and engagements in the Indian Ocean have included Port Louis and Victoria because of the more significant diaspora in Mauritius and Seychelles compared to Madagascar and Comoros.[2]

A growing Chinese presence across its diplomatic, political, and military footprint is undoubtedly a cause for deep concern in Delhi. India is already tense and volatile with China along its northern continental border. An assertive China in the Indian Ocean amplifies Sino-Indian competition across land and maritime boundaries. Yet, these advancements naturally interact with the border-sharing states of China and Pakistan. They affect nuclear thresholds and raise the possibility of unintentional nuclear escalation because of misunderstandings.[3]

However, the IOR will also develop concerns about regional security challenges and an arms race in regional countries like Sri Lanka, Nepal, etc., which could lead to increased militarisation and tension. The delicate balance between enhancing naval capabilities for defensive purposes and avoiding aggressive posturing is a subject of ongoing diplomatic dialogue[4]. India's outreach and engagement with smaller IOR nations are crucial in this regard, as it seeks to reassure them of its intentions and to promote a vision of collective security and prosperity.

Trends and Trajectories of India's Naval Arms Buildup: Regional and Global Paradox

The trend of naval nuclear developments impacts escalation dynamics while paving a path for undermining regional strategic calculus. The strategic underpinnings behind the nuclear capabilities of both India and Pakistan at sea are distinct. India's strategic planning mentioned China's primary concern, which had roots in its conflict on the Sino-Indian border in 1962. However, it also signals Pakistan. On the other hand, Pakistan's security policies mainly focus on the eastern border due to the historical baggage of Pakistan-India unresolved issues. Therefore, the strategic deterrent has become vital for Pakistan to confront its nuclear-armed adversary along with conventional superiority.

Regarding Indian naval build-up, the recent Indian defence budget is proposed to be around US$72.6 billion for the fiscal years 2023-24, 13% up from the previous period's estimates.[5] The Indian Navy will increase by 11 per cent from 2022 to 23. The Navy will spend this amount on its modernisation drive.[6] Around two decades ago, India possessed limited Russian-made submarine-based missile technology. Ship-based variants have been on Indian frigates and aboard six Russian-made Kilo-class submarines (the Sindhughosh-class in the Indian Navy). The Prithvi-III, an indigenous Indian ship-to-surface missile, has been in the inventory since the early 2000s; however, due to technical issues, India concentrated on deploying nuclear-powered surface ships and submarines in the future.[7]

India's aspirations to become a regional dominant power are evident in the way that its strategic thinking is constantly evolving. States now need to defend their interests in distant areas with cutting-edge, complex, and massive weapons due to the growth of their national interests. India announced its most recent maritime policy immediately after and promptly expedited its 2030 naval modernisation plan. This plan includes three aircraft carriers, modern warships, more than 200 aircraft for naval usage, nearly six Scorpene-class submarines, five nuclear-powered submarines, and additional P-8I observation aircraft.

Upgrading operational capabilities to account for shifts in doctrine is known as naval modernisation. It addresses the material component. It entails modernising weaponry, information, surveillance, intelligence systems, and systems for the defence and self-sufficiency of military personnel. The Indian Navy is working with partners abroad and enhancing its domestic maritime capabilities. One possible market for Russian naval armaments is India. Additionally, it is importing a range of technologies from the US. In 2009, India bought eight US-made P-8I long-range maritime surveillance aircraft. The total value of this deal was US$2.1 billion. According to Rear Admiral Dinesh Tripathi, the Indian Navy requires 600 aircraft carriers and 200 cruisers.

The primary conclusions state that in July 2009, India launched the Advanced Technology Vessel (ATV), also known as the S-2, its first ballistic missile submarine

(SSBN). Later, in August 2013, the nuclear reactor aboard the submarine INS Arihant turned critical, and in 2014, it was declared that a second SSBN would be launched shortly. By 2025, up to eight Arihant outfitted with Sagarika nuclear submarine-launched ballistic missiles with a maximum range of 700 km and a 1,000 lb payload may not be put into service. Plans for developing India's frigates, destroyers, and aircraft carriers will allow for the integration of nuclear-capable BrahMos cruise missiles, which have a 290-kilometer range, and the 1,000-kilometer-range Nirbhay cruise missiles.

The principal India's naval nuclear capability findings include that India launched its first ballistic missile submarine (SSBN), the Advanced Technology Vessel (ATV), or S-2, in July 2009. Later, the INS Arihant, the submarine's nuclear reactor, went critical in August 2013, and in 2014, it was announced that a second SSBN would be launched soon.[8] Around Arihant could not be fielded by 2025 and will be fortified with Sagarika nuclear submarine-launched ballistic missiles with a range of 700 km and a 1,000 kg payload. India's advancement plans for frigates, destroyers, and aircraft carriers will enable the induction of the nuclear-capable BrahMos cruise missiles, with a range of 290 km, and the Nirbhay, with a range of 1,000 km.[9] Arms Control Today estimates that the K-4's range is 3,500 km. India intends to use the K-4 on its ballistic missile submarines of the Arihant class, which are constructed in the country.[10] The current subs will probably be able to hold four K-4s, but future subs may be able to accommodate eight launch tubes. The K-15, an Indian surface-to-air missile with nuclear capability, is thought to have a 700-kilometer range.[11] Indian Prime Minister Narendra Modi declared in November 2018 about a demonstration of India's first ballistic missile submarine deterrent patrol.[12] Up to 12 K-15 missiles can be carried by Arihant-class submarines.[13] This progress represents Modi's 2016 goal of Security and Growth for All in the Region (SAGAR) for the Indian Ocean. New Delhi wants to 'engineer virtuous cycles of cooperation' with regional governments in the Indian Ocean as part of SAGAR.[14]

Conversely, Indian ground delivery endeavours have prioritised localised growth, extended ranges, and improved precision in nuclear payloads. Since 1994, it has been using the Prithvi-I ground-based ballistic missile, which has a 150 km range, a 1,000 kg payload, and restricted accuracy. The Indian army, air force, and Strategic Force Command began testing the Prithvi-II, a long-range, highly accurate ground-launched missile with nuclear capability in 2010.[15]

Regional Paradox

The trend of growing naval arms buildup and trajectories in strategic calculations are interrelated with the significant components of deterrence stability *capability, credibility,* and *communication, which India rounded up in these naval developments*. However, the signalling aspect of communication is vital in South Asian strategic dynamics. For the record, Indian Prime Minister Modi called the INS Arihant's November 2018 deployment an 'open warning for the country's enemies' and

a reaction to 'those who indulge in nuclear blackmail'.[16] Although Pakistan was not mentioned by name, his remark was probably addressed to Islamabad. Pakistan formally launched the Naval Strategic Force Command HQ programme in 2012 to strengthen its sea-based deterrence. These advancements result from strategic uncertainty, robustly projecting dual-use assets, and an unorthodox naval nuclear force organisation. [17] These developments lead to the unconventional naval atomic force structure, sturdily projecting dual-use platforms and strategic ambiguity.

These measures aim to secure a strongman status. The primary factor behind the Indian race achieving strongman status was China's growing naval and economic power. In retaliation to the Chinese 'string of pearl theory',[18] India is trying to adopt a 'necklace of diamonds approach'.[19]

Strategic experts argue India may soon modify its 2015 doctrine and add an anti-China encircling policy. The Indian Navy has developed over time into a multifaceted force with various ships, boats, submarines, and planes with robust satellite communication systems, according to the Maritime Security Strategy released in 2016.[20] Following India's Ladakh standoff with China, these plans gained a sense of urgency to counter China's rising presence in the Indian Ocean. Subsequently, in 2021, there were reports of runways being extended at the naval air stations, INS Kohassa in Shibpur and INS Baaz in Campbell Bay, to support operations by large aircraft.[21] The maritime space constitutes the prospective medium in which South Asian nuclear platforms will likely interact.[22] India is undertaking a comprehensive modernisation programme to turn its navy into a 'Blue-Water Navy' with advanced capabilities. India, the world's largest weapon importer, has already set aside US$16 billion for nuclear-powered submarines and naval warships. [23] Given these developments, Pakistani concerns about the massive expansion potential of Indian nuclear forces may not be overstated.

In parallel, the Indian navy has been structured into Western and Eastern fleets under four naval commands. It operates from ten naval bases, ensuring dispersal and flexibility.[24] Considering the Pakistan-India historical naval confrontation, India effectively used its naval prowess during the 1971 war by implementing a blockade of Karachi port, Pakistan's only major harbour at the time.[25] In response, Islamabad was only able to use its submarine force to break through the Indian blockade, which sank an Indian frigate.[26] In 2019, after the Pulwama Balakot crisis, the Indian Navy later revealed that during the crisis, its Carrier Battle Group, including nuclear submarines that had been participating in an exercise, moved to full operational readiness.[27]

However, Pakistan perceives a significant threat from the growing capabilities of the Indian navy. To meet this threat, it has decided to invest in expanding its submarine fleet despite the economic constraints. A practical and credible sea-denial capability is vital to Pakistan. Thus, the Pakistan Navy guards Pakistan's Sea Lines of Communication (SLOC). Pakistan's international trade and import of petroleum products are primarily done by sea.

Global Paradox

Being a significant littoral state with substantial stakes in the Indian Ocean, Pakistan faces both possibilities and difficulties in this complex strategic context. Pakistan would suffer from several issues, including the US and India's militarisation of the Indian Ocean and the growing maritime cooperation between India and the Gulf nations, especially Oman.[28] Furthermore, Pakistan's national interest, security, defence, and status are negatively impacted by India's fast naval modernisation and expansion, the Quad nations' role in limiting China, and India's nuclearisation of the Indian Ocean.[29]

Pakistan can benefit from the shifting geopolitical landscape in the Indian Ocean, including China's active participation in the Belt and Road Initiative (BRI), of which the China-Pakistan Economic Corridor (CPEC) is a key component. Gwadar Port is crucial to the CPEC because it strengthens Pakistan's geostrategic position and paves the way for economic growth. Furthermore, Pakistan can fortify its defensive and strategic connections with the Muslim nations in the IOR through its maritime cooperation with Iran, Turkey, and Saudi Arabia.[30]

The Evolving Strategic Dynamics in the Indian Ocean Region and Implications

The strategic dynamics in the Indian Ocean Region (IOR) are evolving and changing the regional strategic environment. The critical factor of naval strategic developments includes impacts on scenarios of escalation and crisis stability in the region. As happened during the Cold War, strategic operations in South Asia are significant in naval deployments, and operations under a nuclear overhang have the potential for an escalation spiral. Since India's main priority has changed from exploiting the seas to safeguarding the waters, its strategic involvement in the IOR has grown in tandem with the shifting dynamics of regional security.[31]

The Indian Ocean is emerging from a 'Zone of Peace' into a hotspot of nuclear politics as China, India, and Pakistan use nuclear weapons at sea. India has been cooperatively discussing with the US, offering its military bases to the US in exchange for access to weaponry technologies to assist it in closing the gap with China to defuse tensions. The two sides will also discuss anti-submarine warfare (ASW), which employs delicate military tactics and technology. The security-burden-sharing mechanism between the US and India in the Indo-Pacific region (IOR) should be the foundation for a long-lasting navy-to-navy cooperation that develops into a joint ASW capability.[32] Although it doesn't entirely shift the game, India's acquisition of Duqm significantly improves New Delhi's geopolitical standing.[33] The scene is being prepared for a sustainable security network in the Indian Ocean with the resurgence of interest in the Quadrilateral Initiative and the growing support among like-minded democratic governments in the area for the Japanese-led 'free and open Indo-Pacific' idea. This

includes Duqm and other facilities; for at least a few decades, most of it will probably provide minimal returns.[34]

According to Brecher and Wilkenfeld, a rise in the intensity of hostile encounters between two or more opponents, with a high probability of armed conflict both during peacetime and during times of war, and unfavourable changes in the military balance are the characteristics of an international crisis.[35] Indian sea-based deterrent would strain Pakistan's quest for balance in the regional order and achieve deterrence stability. Although India has traditionally used China as a bogey to justify considerable developments in its nuclear force posture, its military remains poised toward Pakistan. For instance, the development of the K-15 Sagarika SLBM, with an approximate 750 km range, is Pakistan-specific.

India's land and air arsenals and its recently created canister-based missile capacity are visible alongside its sea-launched missile capability. Some Indian land-based systems would ostensibly be on a launch-on-warning mode, in which warheads would be mated and ready to use at short notice. The combination of cauterised missiles, BMD capability, and the available arsenal on board SSBNs poses a risk and might lead to a preemptive attack inclination. Such bias would carry dangerous ramifications in times of crisis. It is easy to conclude that such a sea-based deterrent shall further erode the credibility of India's NFU declaration.[36]

India's naval nuclearisation also raises significant safety-related concerns. With a history of incidents and accidents where expensive vessels and equipment were lost due to the crew's low professional prowess, experts have observed that the Indian Navy currently lacks adequate dockyard facilities to support the increasing number of sophisticated platforms. Mumbai Naval Dockyard has witnessed collisions of submarines and frigates in recent years. Accidental damage or radiation leakages from nuclear propulsion plants will not only critically jeopardise the safety of seafarers but could have far-reaching humanitarian as well as environmental consequences.

In economic terms, IOR is an imperative trade route connecting Europe and the Americas to Africa. 32.2 million barrels of crude oil and petroleum are carried daily through the Middle East and Asia, strengthening the interdependence of economic and political objectives.

In political terms, Pakistan and India, both inherently regional nuclear powers, seek to enlarge their spheres of influence inside the IOR. India sees its expanding footprints from the Persian Gulf in the north to Antarctica in the south, the Cape of Good Hope, the east coast of Africa, the Straits of Malacca, and the archipelagos of Malaysia and Indonesia in the east side. It uses a 7,516.6 km long stretch of coastline and a 20,13,410 sq km Exclusive Economic Zone. Notably, one-third of India's 1.25 billion people reside along the shore.[37]

The strategic partnership between the US and India also contributes to deepening the level of engagement between the US and Indian navies. Both navies

have recently conducted joint exercises and patrols in the Indo-Pacific region. In the next ten years, the Indian Navy plans to operate more than 160 platforms, of which over 70% will be able to be deployed in blue water outside of its principal area of responsibility.[38] The intersection of competing interests means that regional instability will be further compounded.

Pakistan is also an essential player in the IOR, and simultaneously, it is focusing on addressing the strategic imbalance vis-à-vis India. Thus, any conflict between Islamabad and New Delhi may also lead to competition on the high seas.

Pakistan's naval posture also infers a vigilant strategy to protect its maritime security under the nuclear shadow, keeping in view India's provocative doctrines like the Cold Start and the Monroe doctrine's Indian adaptation, which many people in the strategic community in India seem to have adopted as gospel.[39] Islamabad's primary objective includes avoiding the interdiction of its sea lanes by the Indian navy by implementing necessary plans to ensure the free movement of both military and commercial vessels. Hence, these forthcoming overlapping matters will further complex the strategic imbalance in the context of naval nuclear deterrence.

Iskandar Rehman, a Carnegie research fellow, has articulated the China factor in India's naval nuclear deterrent dynamics vis-à-vis China. Specifically, the Logistics Exchange Memorandum of Agreement (LEMOA) strengthens India's maritime capability.[40] He explained that New Delhi would have to build bigger SSBNs with more missile transport capacity and potent nuclear reactors if India wanted an effective sea-based deterrent against China. Indian naval capacity plans show some indication of these trends. This aspect of nuclear deterrence in the region is inherently embedded with challenges of the building supporting infrastructure, surface-based components, and their command-and-control issues.

They are taking note of the Indian Navy's 2014 announcement on plans to build a significant deep-water facility near Rambilli, on the Bay of Bengal, 50 kilometres (about 31 miles) southwest of Visakhapatnam, where there is deeper water and closer access to China.[41] Belligerent handling of maritime issues is required, given the dynamism of deployment plans and the quick build-up of the fleet. Smaller neighbours in the East and South China Seas respond by concentrating intensely on strengthening the navy fleet's operating posture, which forces governments to resist perceived threats.

Choke Points in Indian Ocean Region[42]

The Cape of Good Hope is not a traditional choke point because there is enough room and depth of sea to the south of it, and no land restrictions prevent ships from passing. However, strong currents and economic factors entice ships to take a more coastal	At its narrowest point, **the Mozambique Channel measures** 250 nautical miles (nm) in width and 1,000 nm in length. When the Suez Canal opened in 1869, fewer people used this canal. However, the channel may regain importance as a

course. This route is used by vessels that cannot travel through the Suez Canal. Between 1967 and 1975, there was a significant surge in traffic in this region due to the closure of the Suez Canal.	major sea route and choke point, given estimates that Mozambique holds over 100 trillion cubic feet of recoverable natural gas, one of the most significant gas finds in the world, and enormous coal reserves.
The Suez Canal is connected to the Red Sea and the Gulf of Aden by **Bab-el-Mandeb**, a 17 nm vast body of water. For whatever cause, the Bab-el-Mandeb would close. Impede access to the Suez Canal and the Red Sea littoral from the Arabian Sea and Asia. Maintaining the amount of oil and trade flow would require a significant increase in shipping and tanker capabilities via additional ISLs and choke points.	The 105-nm-long Suez Canal is the marine route connecting Europe and Asia. Any reason-related closure of the Suez Canal would result in traffic being rerouted around the Cape of Good Hope, lengthening travel times and raising transportation expenses. For example, the Suez Canal travels 6,200 nm from Mumbai to London, while the Cape of Good Hope travels 10,800 nm.
The main navigable channel of **the Strait of Hormuz** spans a zone that is six nm wide. It connects the Arabian Sea, the Gulf of Oman, and the Persian Gulf. Its width is approximately thirty nm. It is a crucial choke point because there is no maritime detour. Approximately 17 million barrels of oil, or 35% of the global oil trade by sea, flow through this strait daily. Any closure of this strait will seriously impact many countries, including India's, energy security.	The Indian Ocean is connected to the Pacific and South China Seas by **the Straits of Malacca and Singapore**. It is a crucial choke point in the IOR, offering the quickest maritime passage from the Persian Gulf to the East Asian and West Pacific regions. It is a busy shipping area with almost 70,000 ships annually. The navigable portion of the Phillip Channel in the Singapore Strait, which is 1.5 nm wide, is the narrowest point between the two straits.
The Sunda Strait, which is 50 nm long and 15 nm broad at its northeast entrance, offers an alternate route to the Malacca and Singapore Straits. However, the strait's depth limitations, high currents, and navigational risks make it unfavourable for large ships to travel through.	The Lombok Strait offers an alternate route between the Indian and Pacific Oceans for larger ships. It has a minimum channel width of 11.5 nm, sufficient width and depth, and reduced congestion.
Timor and Wetar are separated by **the Ombai and Wetar straits**, respectively, and Alor and Timor by the Wetar strait. It is often not preferable to go via this area instead of the Malacca and Singapore Straits because of the greater distance. The path offers enough depth for submerged submarines to travel between the Pacific and Indian oceans.	

Implications

The Indian Ocean region will likely become a theatre of competition among regional and great powers in the coming decades. India's vital geostrategic location and maritime advantage bestow a natural comparative advantage in IOR. Extensive naval force modernisation is inevitable, leading to a new arms race while causing instability in the South Asian region.

Regarding the spiral of escalation, the threat of a possible naval blockade is a severe security and strategic target for Pakistan. Hence, it will, in turn, focus on expanding its naval platforms while also working on introducing a naval deterrent to cater to Indian naval doctrine and emerging force posture.[43] Pakistan has already agreed with China to build and purchase eight attack submarines to bolster its naval capabilities.[44] It is also strengthening its surface warfare capabilities with the induction of surface ships from China and Turkey.[45]

In the current India-Pakistan dynamic, rising marine tactics and land-based military doctrines complement each other. Since neither land power nor sea power can be regarded as a stand-alone tool capable of pressuring a choice in a conflict, these doctrines and tactics cannot be examined in isolation.[46] Naval strategic calculations are essential to comprehending potential patterns of strategic interaction between India and Pakistan because of their historically tense ties and current developments in the Pacific and Indian Ocean basins.

Against this backdrop, India's ongoing naval modernisation programme, Pakistan's efforts to maintain a certain balance vis-à-vis the Indian Navy, and emerging naval competition have the potential to undermine regional stability in the future.

Firstly, there is a chance that a crisis akin to Mumbai in 2008 or Balakot might include limited naval action between India and Pakistan in the future. With its 7517 km coastline, including the beaches of the Lakshadweep Islands in the Arabian Sea and the Andaman and Nicobar Islands in the Bay of Bengal, the Indian Navy has a natural edge. The Arabian Sea to the west, the Bay of Bengal to the east, and the Indian Ocean to the south encircle the 6100 km long Indian coastline. Numerous significant ports, including those at Kandla, Mumbai, Navasheva, Mangalore, Cochin, Chennai, Tuticorin, Vishakhapatnam, and Paradip, are scattered throughout India's extensive coastline.

The commanders on these submarines may view the Pakistan Navy's efforts to track Indian nuclear submarines as aggressive during a crisis. It is important to remember that, to maintain survivability, India will need to delegate some command and control of its nuclear weapons at sea. This may lead to a 'use-it or lose-it dilemma' in reaction, further escalating tensions between the two governments. Furthermore, China's growing influence in the IOR may lead to an uptick in India's assertiveness

towards Pakistan. Such actions on the part of the Indian navy would start a problem that might get worse.[47]

Secondly, the lack of a credible second-strike capability in both South Asian nations makes mutual nuclear deterrence inherently unstable since it leaves open the possibility of preemption in the event of immediate danger.[48] Furthermore, India may lose its current delicate deterrence if it were to acquire the Airborne Warning and Control System (AWACS), particularly with the arrival of P-8I maritime patrol aircraft from the US, the ballistic missile defence system, and a sea-based second-strike capability.

India's naval nuclear aspirations would jeopardise the instability of the IOR arms race and crisis stability. The nuclearisation of India's IOR poses significant operational and strategic difficulties for the stability of South Asian politics. This military and naval exceptionalism on the part of India will help it employ coercive tactics and nuclear blackmail against Pakistan. The strategic stability between Pakistan and India would suffer as a result. Thus, Pakistan must invest in anti-submarine warfare and secure a second-strike capability. States will find themselves in major military engagements that are not restricted to the IOR if the security calculation in the region does not alter, which will impact world peace and stability.

Recommendations for Diplomacy and Future Conflict Management in the IOR

The diplomacy in crisis management option in the Indian Ocean Region (IOR) may involve extra-regional powers to mediate because the Pakistan-India conflict does not always stay bilateral. In this case, the US and China are most relevant.[49] The US places the Indian Ocean Rim Association (IORA) at the centre of its 'Indo-Pacific' strategy in the IOR.[50] According to reports, India has further amplified its rhetoric to promote synthesis between the Indian and Pacific Oceans by including it in Quad discussions.[51] Some other options for constructing diplomacy and peace in the IOR are as follow.

- The Indian Ocean Security Cooperation Association (IOSCA), an extensive multilateral security body, must address the security and military concerns of the Indian Ocean littoral states. Security forums are time-barred and targeted at hegemonic forces. A notable example is the ASEAN Regional Forum (ARF), although it does not include all of the Indian Ocean's coastal states.[52]
- The Free Trade Partnership of the Indian Ocean (IOFTP), an economic forum involving all the littoral states of the Indian Ocean, should be established to increase trade and economic cooperation among member states and create a monetary union for trade integration.[53]

- The Association for Indian Ocean Culture (IOCA), a cultural forum, ought to be established to promote many cultures, including Southeast Asia, Africa, Australia, Islam, India, and the Arab world.[54]
- The Indian Ocean Nuclear Free Zone (IONFZ), the massive military, nuclear, missiles, and conventional build-up in the Indian Ocean, severely dims the prospects for peace.[55] Previously, the proposal for the Indian Ocean Zone of Peace (IOZP) had been there for quite some time, for instance, the UNSC Resolution 2832, XXVI, of 1971.[56] Some countries like Sri Lanka and others even suggested de-militarising the Indian Ocean.

Conclusion

The rise in India's global role, influence, and sea-based strategic capabilities result from long-term planning, sustainable investment in high-quality education, capital-intensive Research and Development (R&D), extensive industrial infrastructure, economic growth, and relevance with multiple existing and emerging power centres. A similar strategy would be needed if Pakistan were to finally build up its nuclear ballistic missile fleet, which would provide an assured second-strike capability. However, Pakistan's tri-services are methodically organised, unlike India's. Therefore, it will be feasible to develop and sustain such a capacity.

In a nutshell, India's strategic naval build-up and the nuclearisation of the Indian Ocean impact operational and technical stability. The conventional wisdom holds that having the option to launch a second strike increases the stability of deterrence between enemies. However, this feature only enhances stability if the enemies have the strength and institutions to support them. By evaluating the changing dynamics between Pakistan, India, and IOR using the stability metrics previously mentioned, some future predictions regarding the region's strategic stability may be made. It incorporates the technological advancements in Pakistani Indian naval strength that were previously discussed, as well as the significance of elements like the political, economic, and strategic interests of central and regional nations in the Indian Ocean Rim. A strategic imbalance and unstable deterrence would result if either fighter lacked these qualities. The stability of the situation in South Asia is directly threatened by the possibility of an ambitious or careless use of nuclear assets deployed at sea.

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