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BLUE SECURITY

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Maritime Security and the Blue Economy in Southeast Asia: Linkages, Impacts and Prospects

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EXECUTIVE SUMMARY

This paper explores the critical interplay between maritime security and the Blue Economy in Southeast Asia, emphasising that regional economic aspirations are intertwined with geopolitical realities. While ASEAN has made significant strides in articulating a collective vision for the Blue Economy—most notably through the 2021 Leaders' Declaration and the 2023 ASEAN Blue Economy Framework—these initiatives largely sidestep the region's complex security challenges.

The authors argue that maritime disputes, criminal activities, and great power competition, particularly in the South China Sea, pose significant threats to Blue Economy outcomes. These tensions undermine regional cooperation, deter investment, and hinder sustainable development. Conversely, the paper posits that advancing Blue Economy initiatives could foster improved maritime security, leveraging the symbiotic relation between development and stability.

Three key sectors are examined for their impact: marine spatial planning, maritime connectivity (including port development and shipbuilding), and monitoring, control, and surveillance (MCS). The paper highlights the need for integrated, cross-border marine spatial planning, equitable port development, and regional MCS frameworks to support sustainable fisheries and deter illegal activities.

Policy recommendations include establishing ASEAN task forces for marine spatial planning and port security, investing in regional shipbuilding, and leveraging existing maritime domain awareness infrastructure for MCS. The authors advocate for a shift in ASEAN's approach—from avoiding security issues to actively engaging with them through economic cooperation. The paper calls for ASEAN to embrace the Blue Economy not just as a growth strategy, but as a pathway to regional peace, stability, and sustainable ocean governance.

INTRODUCTION

In 2021, ASEAN issued the Leaders' Declaration on the Blue Economy, which affirmed ASEAN's commitment to "taking the lead on regional cooperation in relation to the Blue Economy". The ASEAN Blue Economy Framework of 2023 lays out a more detailed vision for developing an inclusive and sustainable regional Blue Economy using a multilateral and integrated approach. However, both documents do not dwell on the interaction between regional security concerns and the Blue Economy objectives. The manner in which the geopolitical and maritime security environment is shaped and managed will be a critical factor for fulfilling ASEAN's Blue Economy aspirations.

This paper establishes the linkages between the maritime security environment in Southeast Asia and ASEAN's Blue Economy objectives, and seeks to examine mutual effects and impacts. Recognising that ASEAN's collective Blue Economy vision will be influenced by regional geopolitics and differing security perspectives of individual states, the paper identifies key security challenges that could constrain the advancement of the Blue Economy framework. In addition to developing essential maritime security requirements for advancing ASEAN's Blue Economy initiative, the paper also examines the intersection and interaction between maritime security and the Blue Economy in three specific areas, namely: 1) marine spatial planning; 2) development of maritime infrastructure, such as ports and shipbuilding; and 3) monitoring, control and surveillance. The paper makes policy recommendations for ASEAN as a collective to advance its Blue Economy objectives while enhancing regional peace, security and stability.

DEVELOPMENT OF ASEAN'S BLUE ECONOMY INITIATIVE AND MEMBER STATES' RESPONSE

ASEAN's embrace of Blue Economy initiatives aligned with similar developments around the world. These were foreshadowed by significant global developments that advanced the notion of sustainable development, such as the Rio+20 Conference in 2012, the *2030 Agenda for Sustainable Development*, including Sustainable Development Goals (SDG), and the Paris Agreement of 2015. Since then, there has been a growing awareness of the importance of oceans to meet sustainability goals and for climate change risk mitigation. The idea of Blue Economy emerged in many forms and at multiple levels; for instance, the European Union (EU) Blue Growth in 2012, Seychelles Blue Economy Roadmap, and many others.

POLICY DRIVERS FOR ASEAN'S TURN TO BLUE ECONOMY

Much like the EU Blue Growth and other global initiatives, ASEAN's Blue Economy policy was driven by factors such as economic opportunity, demands for environmental protection, preventing resource depletion, and the need for sustainability.[1] More recently, ASEAN leaders view growth opportunities provided by the Blue Economy as an opportunity for economic recovery, particularly in the wake of the COVID pandemic.[2]

Within Southeast Asia, the oceans and seas are considered prime drivers of economic growth and innovation, contributing approximately 15% to regional GDP and 18% to employment.[3] This underscores the critical importance of maintaining the health and security of these waters, as they are essential for regional economic growth and directly enhance the well-being and prosperity of the local population. In this context, the ASEAN Blue Economy Framework (ABEF) states that "developing a framework needs a whole-government approach that ensures effective implementation of ASEAN Blue Economy, with a focus on the economic aspects".[4] In discussing the Blue Economy framework in context of the regional political challenges, the ASEAN Maritime Outlook (AMO) states: "The framework will focus only on economic development and new growth engines and **will not include political and security issues**"[5] (emphasis added). It is evident, therefore, that economic benefit is the key driver of ASEAN's turn to the Blue Economy, even as it acknowledges the considerable geopolitical challenges.

ASEAN's pursuit of the Blue Economy is also driven by its ambition to unlock new sources of economic growth for the region. This was particularly evident in the 2023 ASEAN Leaders' Declaration, which referred to Indonesia's 2023 chairmanship theme "ASEAN Matters: Epicentrum of Growth", recognised the opportunities arising from green and blue economies, and envisioned ASEAN at the core of regional and global economic growth.[6] Regional Blue Economy aspirations are also advanced by the need to adopt a more integrated approach to governing and managing oceans-based activities in the region. This includes integrating the spatial, sectoral, and sustainable development elements of activities in the oceans and freshwater spaces, whilst ensuring coherence among existing and emerging policies.

The ASEAN Blue Economy Framework emphasises the need for abandoning traditional siloed approaches and moving towards a more integrated, participative and multilateral approach to policy development and implementation.[7] In a way, the framework has the potential to be a 'living laboratory' to assess the cohesiveness of ASEAN member states, and to evaluate the extent to which the value of ASEAN regionalism works towards sustainable ocean development, particularly as security and geopolitical concerns create considerable hurdles. Furthermore, the regional pursuit of Blue Economy can support the achievement of SDGs by preventing degradation of the marine ecosystem, moving towards sustainable marine activities, and reducing the impacts of climate change. Fulfilling regional and international commitments relevant to the sustainability agenda, such as the *2030 Agenda for Sustainable Development* and the Paris Agreement, is an attractive proposition for ASEAN member states to pursue Blue Economy as a subset of their collective regional strategy.

In addition to national and regional motivations, ASEAN's turn to the Blue Economy was driven to some extent by the availability of external assistance and aid, especially since 2021. The statement from the combined 38th and 39th ASEAN summit acknowledged "the growing interest from external partners to engage ASEAN member states in the concept [of Blue Economy], both bilaterally and regionally", and committed to action and cooperation both within ASEAN and with external partners.[8] This position was validated as technical and financial assistance from international partners such as the United Nations Development Programme (UNDP), UN Environment Programme (UNEP), the International Labour Organisation (ILO), the Organisation for Economic Cooperation and Development (OECD), and the Asian Development Bank (ADB) supported the development of Blue Economy policy in ASEAN and its member states like Indonesia and Vietnam.[9] Considering the economic capacity of ASEAN member states, the availability of external aid is a key factor in sustaining Blue Economy initiatives in the region, and one that is vulnerable to many external factors, particularly the global and regional security environment.

ASEAN's Blue Economy Framework articulates three guiding principles for implementation; namely, value creation, inclusivity, and sustainability.[10] These are indicative of the principal drivers for ASEAN's turn to the Blue Economy, which are: economic growth, advancing ASEAN unity and solidarity, and protecting the marine environment. The availability of external assistance in pursuing these objectives made ASEAN's turn to the Blue Economy almost inevitable.

THE ADVANCEMENT OF ASEAN'S BLUE ECONOMY

The development of a regional Blue Economy policy is currently underway in Southeast Asia. The idea of utilising Blue Economy as a viable strategy to advance regional growth was proposed before 2021 through various initiatives in the wider East Asian region. For instance, the Partnership for Environmental Management for the Seas of East Asia (PEMSEA)-led initiative, the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), was introduced in 2015.[11] The 2021 Leaders' Declaration clearly signals ASEAN's political willingness to drive the development of Blue Economy (despite ambiguity in the concept's definition) and the sectors it encompasses.[12] Following the declaration, ASEAN sought external assistance to develop a regional policy for Blue Economy. Partnering with international entities is a common practice in policy development for developing countries, including among ASEAN member states. A notable example of partner-assisted policy development is the collaboration between the ASEAN Secretariat, UNEP, UNDP, the UN Economic and Social Commission for Asia and the Pacific (UNESCAP), and the Australian National Centre for Ocean Resources and Security (ANCORS), in conducting three regional webinars on the Blue Economy in June, November, and December 2022.[13]

Countries like Australia, India, and China have also aided ASEAN member states in developing policies for harnessing the Blue Economy.[14] Blue Economy is one of the four key themes for cooperation identified jointly by Australia and ASEAN.[15] Within this partnership, the direct link between security and Blue Economy outcomes is evidenced by the fact that one of the outcomes of cooperation has been the delivery of civil maritime security programs to personnel from ASEAN countries by the Australian Border Force College since 2023.[16] ASEAN and India have recurrently committed to "cooperate on areas such as maritime security, Blue Economy, sustainable fisheries, marine environmental protection, marine biodiversity, and climate change".[17] These statements have been supplemented with an uptick in collaborative activities, such as the series of Blue Economy workshops.[18] The increase in combined maritime security activities, whilst not directly linked to Blue Economy activities, may not be entirely coincidental. For instance, the first ASEAN-India maritime exercise was conducted in May 2023, and included a multilateral naval exercise involving nine ships and about 1400 personnel.[19] China, on its part, has offered attractive terms for assistance in developing ASEAN's Blue Economy. Some estimates suggest that joint ASEAN-China investments in the Blue Economy could yield a 450-615 per cent return on investment over a 30-year period between 2020-2050.[20] Arguably, there is a strong economic rationale for other countries to invest in ASEAN's Blue Economy efforts. However, the geopolitical and diplomatic aspects of this assistance cannot be ignored. The geoeconomic significance of the region, the geopolitical interests of aid-providing states, and the regional security environment are likely to play key roles in Blue Economy outcomes in Southeast Asia.[21]

Progress in advancing the Blue Economy agenda within ASEAN is also influenced considerably by its chairmanship, which is rotated annually among member states. There is empirical evidence to indicate that leaders of states with a strong domestic Blue Economy focus tend to carry over the impetus when they assume leadership of ASEAN, thus making a notable collective impact. The Sultan of Brunei, for instance, announced Brunei's intention to embrace Blue Economy concepts within national development frameworks in 2019. This was later incorporated into a national document titled *Towards a Dynamic and Sustainable Economy: Economic Blueprint for Brunei Darussalam*.[22] On assuming chairmanship of ASEAN in 2021, the Sultan of Brunei carried over his Blue Economy vision, and oriented the organisation's focus to Blue Economy policy development. Cambodia, which took over the chairmanship in 2022, was not as active in advancing the Blue Economy agenda, and Brunei continued to lead ASEAN's efforts in that direction, contributing majorly to organising the First Regional Webinar Advancing the Sustainable Blue Economy in ASEAN Region in June 2022.[23] ASEAN's Blue Economy agenda received considerable attention in 2023, when Indonesia took over its chairmanship, along with presidency of the G-20. The ASEAN Blue Economy Framework, released in the same year, was the culmination of Indonesia's efforts to translate the 2021 Leaders' Declaration into a tangible and practical concept.[24] With Lao PDR as chair in 2024, this momentum continued, as evidenced by the Leaders' Declaration, which stated:

> *We are committed to implementing the ASEAN Blue Economy Framework through the establishment of the ASEAN Coordinating Task Force on Blue Economy and the convening of its first meeting and the 2nd ASEAN Blue Economy Forum, as well as organising the 14th ASEAN Maritime Forum and the 12th Expanded ASEAN Maritime Forum this year.*[25]

It is therefore evident that progress on ASEAN's Blue Economy policy development is directly linked to the extent to which individual member states are invested in the idea. Presently, there is insufficient collective momentum to drive substantial progress within ASEAN, with individual countries pursuing their own pathways to derive benefits from the Blue Economy. As such, the current level of policy maturity within ASEAN countries is varied, and in some instances, there are subordinate policies for individual aspects such as Marine Spatial Planning (MSP) or Integrated Coastal Zone Management (ICZM). Using a novel assessment criterion developed by one of the authors of this paper, it is estimated that Indonesia leads the ASEAN countries in terms of development of Blue Economy policies, with Brunei, Cambodia and Vietnam in tow. Other ASEAN member states are classified as low in this metric (see Figure 1). It is therefore likely that the maturity of ASEAN's Blue Economy framework will hinge on the ability of the leading states to drive this agenda within the collective, and the willingness of other states to invest greater effort in this direction.

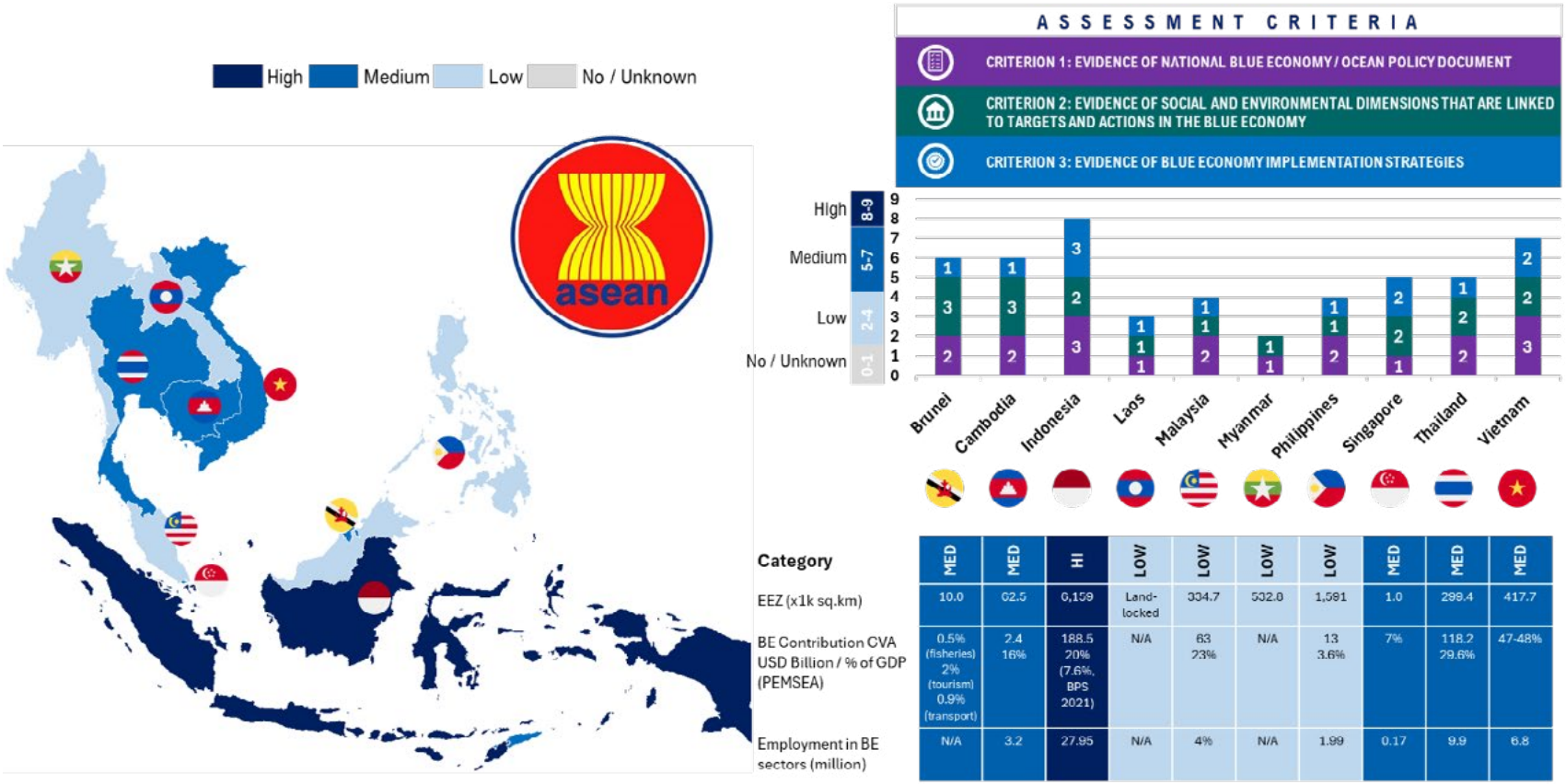


Figure 1. Blue Economy Development in ASEAN Member States.[26]

REGIONAL MARITIME SECURITY ENVIRONMENT AND IMPACT ON BLUE ECONOMY

While ASEAN's Blue Economy aspirations reflect an optimistic and positive vision for the region, Southeast Asia's maritime security realities portend a gloomier outlook. Multiple threats undermine the region's economic potential, creating an environment where cooperation and capital come under threat from geopolitical tensions and the possibility of conflict. This section examines three key issues that exert considerable influence on Southeast Asia's maritime security environment—namely, regional maritime disputes, maritime criminal activities, and great power competition—and assesses their impact on regional Blue Economy goals.

REGIONAL MARITIME DISPUTES

The process that started with the 1958 Geneva Convention on the Territorial Sea and Contiguous Zone and culminated with the 1982 United Nations Convention on the Law of the Sea (LOSC) added a new dimension to the vexed issue of boundary delimitation between states.[27] What was hitherto confined to the terrestrial, now extended to the maritime domain. While land borders provide clear boundaries of sovereignty, the maritime domain acts as a frontier with multiple zones of sovereign control and rights that vary with distance from land.[28] Nowhere has the problem of disputed maritime boundaries and features influenced regional geopolitics more than in the South China Sea, and consequently, in the Southeast Asian littoral area. This has also significantly affected regional Blue Economy outcomes.

Multiple Southeast Asian states make competing claims over rocks, reefs and other features in the South China Sea. These include Brunei, China, Malaysia, Philippines, Taiwan and Vietnam. While Indonesia does not stake a claim to any South China Sea features, its Exclusive Economic Zone (EEZ) overlaps with China's claims, which, arguably, are the most assertive. China stakes its claims over a large, vaguely defined maritime area that has been progressively identified by its 11-dash line (since 1947), nine-dash line (since 1952), and since 2023, a 10-dash line.[29] Each of these versions enclose around two-thirds of the South China Sea, with China never clarifying the significance of the dashed lines—particularly whether the enclosed water body would form part of its Territorial Seas or its EEZ.[30] The legal basis for claiming this large body of water has also not been articulated. Contested features enclosed by China's dashed lines include the Paracel Islands and Scarborough Shoal in the north, and the Spratly Islands in the south. China claims "indisputable sovereignty over these islands" and their adjacent waters.[31] While China does not define "adjacent waters", ostensibly, this would encompass the maritime space enclosed within its dashed line representations. The network of claims in the South China Sea, within which China's are the largest, most asserted, and aggressively pursued, has embroiled littoral states in a seemingly intractable dispute, with significant impact on regional economic development prospects.

Economic gains have been at the core of maritime disputes in the South China Sea since the late nineteenth century, when British guano diggers laid claims to reefs and islands.[32] Guano, or bird dropping, was harvested extensively for manufacturing fertilisers. With guano supplies being long exhausted, most rocks, islands and reefs in the South China Sea have been rendered worthless. However, these features are now contested for the maritime claims they may generate, as well as potential resources in the water column and seabed that would be available to a coastal state with sovereign rights for extraction in related maritime zones—specifically, the EEZ and the Continental Shelf. It is estimated that the South China Sea contains between six to twelve billion barrels of oil in proved or probable reserves, which is comparable to oil reserves in the Gulf of Mexico.[33] In addition, the seabed is estimated to hold between 100-300 trillion cubic feet of natural gas.[34] While the actual extractable reserves of oil and gas in disputed areas may be considerably less, the economic importance of South China Sea's mineral resources cannot be ignored.[35] The semi-enclosed sea is a large marine ecosystem, home to nearly 3,500 known species of marine fish, and accounts for 12 per cent of the global fisheries catch, worth over US$20 billion.[36] The prospect of harnessing and harvesting these resources is central to South China Sea claimant states, both as a driver for contested maritime areas, and as an aspect that is significantly influenced by the way disputes manifest in the region.

A precondition for harnessing the economic potential of a maritime space is that sovereign rights and obligations must be clearly demarcated and generally accepted by relevant coastal states. In the South China Sea, aggressive assertion of claims, particularly by China, prevent states from undertaking economic activities in disputed areas. For instance, Filipino fishers have been harassed, threatened and intimidated by the Chinese coast guard and maritime militia whilst fishing in the Philippines' EEZ.[37] Instability in the region has further caused coastal states to expend considerable resources on security at the expense of realising the Blue Economy potential of surrounding ocean spaces through exploration and scientific research.[38] The ill-effects of the lingering disputes are consequently felt most acutely by less developed states, vulnerable populations, and coastal communities. The hostile regional environment also impacts attainment of the United Nations Sustainable Development Goals (SDG), particularly SDG 14 pertaining to life below water, which seeks collective action on issues such as overfishing and the regulation of marine plastic debris to "conserve and sustainably use the oceans, seas and marine resources for sustainable development".[39]

Political drivers of the maritime disputes in the South China Sea render them particularly vexatious, and prevent claimant states from negotiating a technical resolution. Most maritime boundary disputes are resolved using the principles of equidistance or equity, and technical solutions can be applied to complex geophysical contexts, if there is political will to drive such resolution.[40] However, as Østhagen notes:

> *[W]hen a maritime dispute reaches the political agenda, there are (domestic) actors who stand to benefit from infusing it with intangible dimensions like 'national pride' or 'being cheated out of what is ours'. Contrary to popular belief, maritime disputes may assume some of the same characteristics as disputes on land. Although disputes over ocean space may initially be more concerned with tangible questions of resource delimitation and 'who owns what', they too can become infused with symbolism and intangible characteristics.*[41]

This is particularly relevant to the South China Sea maritime disputes, where a large number of claims are based on nationalistic interpretations of historical narratives, as opposed to the legal framework provided by the LOSC. This is exacerbated by the power asymmetry between China and other claimant states, which complicates negotiations. The deeply politicised rhetoric surrounding these disputes has significant implications for the Blue Economy aspirations of regional states, particularly those in Southeast Asia.

MARITIME CRIME

Criminal activities in the maritime domain have far reaching impacts on the sustainable use of oceans for collective economic growth and human well-being. Southeast Asia has a long history of maritime criminal activity, deep rooted in traditional practices that predate global efforts to regulate maritime activity. Coastal communities in the Indonesian and Philippine archipelagos and Malaysia have a long history of piracy and trafficking in commodities and people, concealed by the unregulated movement of people across porous maritime borders.[42] With the sea being the main medium of transportation in the archipelagic region, organised criminal activity in Southeast Asia has a distinct maritime emphasis. These criminal groups have exploited the maritime geography and gaps in national enforcement capabilities to engage in large-scale criminal activities targeting maritime resources and supply chains, with considerable detriment to Blue Economy goals.

Illegal, unreported and unregulated (IUU) fishing is a serious threat to human and economic security in Southeast Asia. The South China Sea is one of the richest fishing grounds in the world, with incredible marine biodiversity, and fish stocks that fulfil the nutritional and economic needs of around 190 million people living in the littoral area.[43] Over three quarters of this population is directly dependent on pelagic fishery resources for their protein intake and as a source of employment.[44] More than half of the world's fishing vessels operate in the South China Sea, and around 86 per cent of these vessels are operated by small-scale and artisanal fishers.[45] This complicates measures for monitoring control and surveillance of fishing activities in the region, which is essential for countering IUU fishing. It is also important to recognise that within the broad categorisation of IUU fishing, the "illegal" element is arguably the only one that can be effectively countered by a securitised approach; the "unreported" and "unregulated" aspects are caused by deficiencies in civil governance mechanisms, and need to be addressed as such. However, the cumulative effects of IUU fishing in the South China Sea are stark, and pose a formidable threat to human well-being in the region.

The most immediate threat posed by IUU fishing relates to depleted fish stocks and the consequent loss of a vital food source. In the South China Sea, 26 per cent of fish stocks are overexploited, and 21 per cent are collapsed.[46] Total stocks in the area have been depleted by as much as 95 per cent since 1950, and catch rates are about a quarter of what they were 20 years ago.[47] The effects of depleting fish stocks are felt most acutely by small-scale artisanal fishers who now have to sail further afar and spend more time at sea for progressively diminishing returns. Their woes are exacerbated by climate change effects, which cause more frequent storms, damaging boats and fishing gear and reducing the number of days available for fishing activities. If current fishing trends prevail, it is estimated that the South China Sea will lose up to 93% of its biomass (corresponding to annual economic losses of up to USD 11.4 bn) by 2100.[48]

The Southeast Asian littoral and South China Sea continue to be vulnerable to incidents of piracy and armed robbery at sea. In 2024, 107 incidents of armed robbery and piracy were reported across Asia, of which 92 occurred in the Southeast Asian maritime region, including the Singapore and Malacca Straits.[49] Most of these incidents were minor

in nature, without any loss of life or significant impacts on property. Of note is the fact that there were only two incidents of piracy—that is, attacks on ships outside the territorial seas of coastal states. This is in welcome contrast to peak figures of up to 45 incidents of piracy annually between 2010-2015.[50] However, the persistently high instances of armed robbery events indicate that it is a simmering problem, kept in check only by a concerted international effort to counter attacks on the high seas. Moreover, incidents of armed robbery continue to burden national law enforcement agencies, disrupt maritime trade operations, and impose financial costs, including loss of property and increased insurance liabilities.

Blue Economy efforts are highly vulnerable to the effects of maritime criminal activities, a link that has not been recognised and understood widely. Criminal activities and actors are increasingly converging into organised crime networks engaged in large-scale trafficking, illegal dumping, and violence at sea. For instance, in the case of IUU fishing, the United Nations distinguishes between crimes committed at sea along the fisheries value chain and those that are associated with the sector but have no direct connection to fisheries.[51] The former includes illegal fishing, document fraud in reporting fisheries catches, and trafficking of endangered species. The latter includes trafficking in narcotics, arms and humans, slavery, piracy and terrorism. These "crimes of convergence" exact a considerable toll on coastal states in Southeast Asia, and dent national efforts to harness the benefits of the Blue Economy.[52]

In this context, SDG 16, which seeks to evolve peaceful and inclusive societies for sustainable development through equitable justice and effective and accountable institutions, is a vital supplement to Blue Economy considerations in SDG 14. The United Nations Office on Drugs and Crime states:

> *[T]he achievement of SDG 14 is likely to fail unless States also take action towards achieving SDG 16, by improving criminal justice responses to crimes that affect marine biodiversity and mainstreaming such considerations into ocean conservation, risk mitigation and resource management policies.*[53]

It is evident, therefore, that the pursuit of Blue Economy goals needs to be supplemented with a holistic approach to countering maritime crime, a problem that is prominent in the South China Sea and the Southeast Asian littoral space.

GREAT POWER COMPETITION

Geopolitical tensions in the South China Sea are driven in one part by the maritime disputes, and in the remaining by rivalry between China and the United States. China's assertive actions in the South China Sea have raised concerns among its neighbours and prompted a U.S.-led international response to counter Beijing's interpretation of international law. The United States sees China's regional dominance as a challenge to the "rules-based international order", while China views U.S. actions as efforts to contain its rightful international influence. Managing these tensions is vital for upholding international law, maintaining maritime order, and mitigating risks of conflict, all of which are essential preconditions for regional Blue Economy efforts to succeed.

In 2016, a tribunal under the LOSC invalidated China's extensive maritime claims in a case brought by the Philippines. China's reaction to the award involved rejecting and delegitimising the ruling. Beijing moved its legal arguments away from the nine-dash line to concepts such as outlying archipelagos and historic rights, which are not supported by conventional interpretations of the LOSC. Additionally, China has constructed artificial islands and fortified them with military installations, asserting sovereignty through administrative actions and expanding its coast guard and maritime militia fleets. These actions have led to a significant maritime presence of Chinese military and law enforcement vessels, infringing on the maritime entitlements of other claimants within their EEZs.

China justifies its actions by novel arguments, legal or otherwise, such as the concept of "community of common destiny" and the Belt and Road Initiative (BRI), which aim to establish a regional order where other states defer to Beijing in exchange for its goodwill.[54] In response, the United States and its partners, including Japan, South Korea, Australia and India, have promoted the idea of a "Free and Open Indo-Pacific" (FOIP) as a counter to China's dominance. The FOIP concept was the brainchild of Prime Minister Abe of Japan, who developed this strategy in 2016 to coalesce support from regional partners like India, particularly in the face of declining U.S. influence and capacity. During President Trump's first term, the U.S. adopted this strategy, replacing the Obama administration's "pivot to Asia" with the Indo-Pacific concept. While the BRI and the FOIP are not necessarily in direct conflict with each other, they present competing views of the international order, compelling regional states to pick a side at the expense of antagonising the other.

China's assertiveness and the U.S.-led pushback raise the risk of escalation in the region. The United States views China's dominance as a significant risk, particularly in relation to Taiwan's independence and the security interests of its ally, the Philippines. China prioritises securing its "core" interests and its periphery over the legitimate rights and concerns of regional states. The United States and its partners perceive Beijing's behaviour in the South China Sea as a test of China's role as a great power. The competition is framed as a contest to determine international order, heightening the risk of conflict. A Sino-U.S. security dilemma is taking shape, with both sides seeing evidence of malign intent in the other's actions. China's rapid military modernisation and the U.S.'s extensive regional footprint contribute to mutual distrust. Concurrently, South-East Asian claimants have hardened their positions in recent years, balancing economic interests with preserving maritime claims. Vietnam has built up a military deterrent and internationalised the disputes, while the Philippines has reversed its pivot to China that occurred under the Duterte regime. Malaysia has adopted a more confrontational stance, and Indonesia has bolstered defences around the Natuna Islands. All of this has contributed to an environment of heightened tension in the region. This great power competition and strategic rivalry divert attention and resources from collaborative Blue Economy projects, such as joint fisheries management, marine conservation, and sustainable tourism. It also creates an environment of mistrust, making it difficult for regional states to engage in cooperative initiatives. Instead of focusing on sustainable development, which requires stability, trust, and regional cooperation to succeed, countries are compelled to prioritise security and sovereignty concerns.

INTERACTION OF BLUE ECONOMY ASPIRATIONS AND MARITIME SECURITY REALITIES IN SOUTHEAST ASIA

The interaction between maritime security and the Blue Economy tends to be viewed from two contrasting lenses: dichotomy and integration. The dichotomy perspective tends to view them as distinct, and highlights how one may be developed without impacting the other. For instance, the ASEAN Maritime Outlook states that the Blue Economy framework will focus solely on economic issues without considering political or security matters.[55] The integration perspective, on the other hand, highlights their interdependence.[56] A more granular view of this perspective suggests that maritime security and the Blue Economy interact in two ways: namely, maritime security as an enabler of the Blue Economy, and maritime security as a sector or outcome of the Blue Economy.[57] Since security is an obvious prerequisite for productive economic activities, we focus on the latter in this paper, examining maritime security impacts of Blue Economy activities in Southeast Asia. We focus on three activities for this purpose, namely, marine spatial planning, maritime connectivity through port development and ship building, and fisheries management through monitoring, control and surveillance (MCS) functions.

MARINE SPATIAL PLANNING

Marine spatial planning is defined as a process of analysing and allocating marine areas to specific uses, to achieve ecological, economic and social objectives.[58] It is a process, not a tool, and yields a comprehensive plan or vision for an area. It is also an ongoing effort that continues to plan into the future, and hence is never "done".[59] In the context of the Southeast Asian littoral area and South China Sea, marine spatial planning is particularly important to preserve the region's marine ecology, and to provide a framework within which various activities linked to the Blue Economy can access areas and resources. Marine spatial planning is an important facet in the suite of options to leverage the Blue Economy, mitigate risks to the marine environment, and reduce adverse effects of climate change and human activities in the maritime domain. While there are over 100 cases of marine spatial planning across the world, at varying stages and scales of complexity, all of them share common characteristics of being "ecosystem-based, spatially focussed, integrated across sectors, and with participatory processes that are transparent, adaptive and inclusive".[60] Implementation of marine spatial planning in the South China Sea and the Southeast Asian littoral space is, therefore, critical for Blue Economy aspirations of regional states, and will also have a positive impact on the regional security environment.

While there is a strong case to be made for a regional approach to marine spatial planning, efforts in Southeast Asia have remained generally confined to coastal areas where most economic activity occurs, and which are mainly governed by national jurisdictions. All ASEAN states, except Brunei, Laos, and Singapore, have advanced marine spatial planning processes in their ocean areas, with Malaysia, Philippines, Myanmar, Thailand and Vietnam classified as being in the early stages, and Indonesia and Cambodia at the intermediary stage.[61] Additionally, Indonesia, the Philippines, and Vietnam have approved plans at the local, sub-national and national levels (see Table 1). However, the absence of cross-border marine spatial planning initiatives in the region is notable and has substantial ramifications for Blue Economy ventures in Southeast Asia.

Countries	MSP at early stage*	MSP at intermediary stage**	Local plan approved	Sub-national plan approved	National plan approved
Brunei	N/A		N/A		
Cambodia		YES	N/A		
Indonesia		YES	N/A	YES	YES
Laos	N/A		N/A		
Malaysia	YES		N/A		
Myanmar	YES		N/A		
Philippines	YES		N/A	YES	N/A
Singapore	N/A		N/A		
Thailand	YES		N/A		
Viet Nam	YES		YES	YES	N/A
TOTAL	5	2	1	3	1

*Whenever a country/territory has only pilots, it was considered at early stage independent of the level of development of the project.
**For at least part of the maritime area.
Note: Countries/Territories classified more than once due to the complexity of their planning systems: Indonesia, Philippines, Viet Nam
Reference: Pilot State of the Ocean Report (Pilot StOR) Marine Spatial Planning – Supplementary Material (MSPGlobal IOC-UNSESCO, 2022)

Table 1. MSP implementation in ASEAN countries[62]

Considering the nature of the maritime domain and the fact that it is an enclosed sea surrounded by several developing states, limiting marine spatial planning to national maritime jurisdictions in the South China Sea is likely to be ineffective. An ecosystem-based approach is essential for marine spatial planning efforts, and marine ecosystems do not transition with, or conform, to legal or negotiated maritime zones. There have been efforts made in the past to examine transboundary marine spatial planning in regions involving some southeast Asian states, but none have been explored in the South China Sea. For instance, the Global Environment Facility sponsored studies examining the Bay of Bengal Large Marine Ecosystem, which encompassed the EEZs of Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka, and Thailand, from 2008-2017 and from 2018-2023.[63]. Another project studied large marine ecosystems of East Asia, involving China, Indonesia, Philippines and Vietnam from 2013-2017.[64] Similarly, the Coral Triangle Initiative for Coral Reefs, Fisheries and Food Security, involving Indonesia, Malaysia, Philippines, Papua New Guinea, Solomon Islands, and Timor Leste, was established in 2009 and sought to safeguard marine and coastal biological resources in a defined ocean area.[65] While Southeast Asian countries have been involved in limited marine spatial planning efforts at the sub-regional level, any such effort in the South China Sea has been conspicuously absent.

Unresolved maritime claims and boundaries in the South China Sea pose considerable challenges to the prospect of marine spatial planning in contested areas. However, with economic activities being pushed out further to sea, the co-use of ocean space and its effective management will eventually become essential. This will be particularly relevant as states seek to harness offshore renewable energy production and access deep seabed mineral resources. Cross-boundary marine spatial planning frameworks will be required to manage activities that occur across the EEZ and territorial seas of two or more states. This is possible even in the absence of agreed boundaries, a scenario in which the LOSC encourages use of "provisional arrangements". Articles 74(3) and 83(3) of the LOSC, dealing with demarcation of EEZ and continental shelf boundaries respectively, state:

> *Pending agreement as provided for in paragraph 1, the States concerned, in a spirit of understanding and cooperation, shall make every effort to enter into provisional arrangements of a practical nature and, during this transitional period, not to jeopardize or hamper the reaching of the final agreement. Such arrangements shall be without prejudice to the final delimitation.*[66]

A marine spatial planning framework could constitute a "provisional arrangement" in this context, permitting the sustainable use of maritime areas even in a contested environment. Detailed and technical discussions need to underpin such arrangements, and would require acceptance from all stakeholder states. However, efforts in this direction would yield considerable direct economic benefits, and shift the primary narrative from that of contestation to co-development. They would also prevent escalatory activities in the identified area and improve resolution prospects of maritime disputes, such as the Sabah dispute between Malaysia and the Philippines and the EEZ boundary dispute between Indonesia and Thailand in the Andaman Sea.[67] Importantly, it will ensure that the South China Sea's fragile and rich ecology does not fall prey to geopolitical contestations and disputes. The focus of key southeast Asian states to develop their Blue Economy prospects should, therefore, be leveraged to evolve cross-border marine spatial planning arrangements in the South China Sea.

MARITIME CONNECTIVITY: PORTS DEVELOPMENT AND SHIPBUILDING

The preponderance of sea areas over land in southeast Asia has made maritime connectivity a vital enabler of ASEAN regionalism and unity. There are two elements to this: links between ASEAN states that facilitate intra-regional trade and movement of people, and global maritime networks that crisscross the region, facilitating maritime trade connectivity between the Indian and Pacific Oceans. Consequently, maritime connectivity forms a major part of the Master Plan on ASEAN Connectivity (MPAC) 2025 and the ASEAN Transport Strategic Plan (ASTP) 2016-2025.[68] Intra-ASEAN maritime connectivity, in particular, has the potential to boost logistics efficiency, economic growth, and regional integration, thus contributing to regional Blue Economy efforts and improving maritime security outcomes.

In examining the prospects and impact of improved maritime connectivity on the Blue Economy and maritime security, it is important to acknowledge differences in connectivity infrastructure of ASEAN states. UN Trade and Development (UNCTAD) uses a measure called Liner Shipping Connectivity Index (LSCI) to compare connectivity between states. The LSCI is generated for all countries serviced by containerised shipping services, and represents a country's integration into global shipping networks, with a higher value reflecting better connectivity.[69] Within ASEAN, Singapore and Malaysia have the highest LSCI values, followed by Vietnam, Thailand, Indonesia, and the Philippines; Brunei, Cambodia, and Myanmar are the least connected (see Figure 2). The large variation in connectivity within ASEAN states is likely to pose considerable challenges, particularly in states seeking equity and equality in future development, which would then require large capital investments and reshaping of existing trade flows within and through the region.

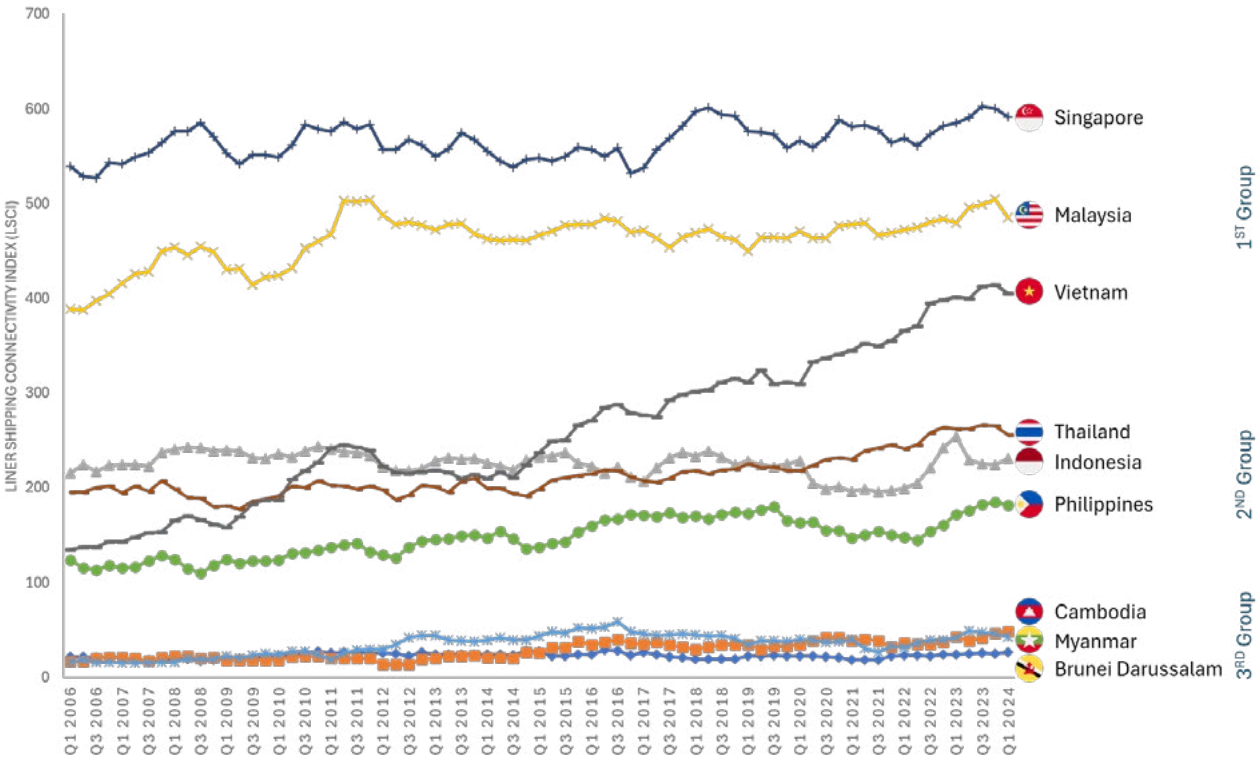


Figure 2. ASEAN - Liner Shipping Connectivity Index (LSCI) (Q1/2006 to Q1/2024)[70]

Another measure that is relevant to maritime connectivity is the reflects port capacity is the port liner shipping connectivity index (PLSCI), which evaluates connectivity levels of ports based on their capacity to handle container shipping.[71] It is evident from PLSCI values of the top ten ports in Southeast Asia that a number of ports in different states are clustered together with similar values (see Figure 3). For instance, the top two ports, Singapore and Port Klang, have comparable PLSCI values, and the next four (Laem Chabang, Haiphong, Ho Chi Minh City, and Tanjung Pelepas) are clustered close together. Competition between closely ranked ports in the region is a reality, and economic viability considerations will generally prevail over principles of inclusivity and equity, thus challenging region-wide Blue Economy development in connectivity.[72] It is important, therefore, to develop a viable plan for the development and management of ports in the region that genuinely advances connectivity and brings sustainable development to more areas.

The ASEAN Transport Strategic Plan (2016-2025) envisioned the establishment of a "single shipping market", the development of strategic economic corridors, and the promotion of maritime safety and security.[74] This plan identifies maritime safety and security as inseparable components of the regional maritime transport architecture and related measures to advance economic development. Specifically, the plan seeks to develop pan-ASEAN search and rescue cooperation, a regional oil-spill response action plan, and to address the transfer of harmful aquatic organisms in ships' ballast.[75] The plan also highlights the need to improve port security in ASEAN states through implementation of the Port Security Group recommendations.[76]

These objectives are being pursued with mixed results; some, such as an ASEAN agreement on Aeronautical and Maritime Search and Rescue, have been completed.[77] Importantly, the Transport Strategic Plan was followed by the ASEAN Plan of Action in Combating Transnational Crime (2016-2025), which seeks to develop a pan-regional framework for countering threats to security and economic development.[78] Evidently, ASEAN states have collectively recognised the direct linkage between security and economic development through the Blue Economy, and are seeking to develop concurrent capacities in both areas.

As a sector within the Blue Economy, maritime security demands could contribute to developing the regional shipbuilding industry. As states seek to bolster maritime law enforcement capabilities, the need for affordable and capable vessels is likely to increase. Despite a rich history of shipbuilding, Southeast Asia has not been able to keep up with advancements in the industry, which have been harnessed with greater success in China, Japan and South Korea.[79] The stark difference in shipbuilding capacities between these states and ASEAN countries is illustrated in Figure 4, which shows the gross tonnage of ships constructed by them. Vietnam, Philippines and Singapore lead the ASEAN states in shipbuilding, but they remain relatively miniscule players in the regional shipbuilding industry. However, there has been a renewed thrust in some ASEAN states for equipping their navies with locally manufactured ships.[80] As regional and national maritime security demands increase, there is an opportunity for ASEAN states to advance their shipbuilding capabilities to produce fit-for-purpose, affordable vessels particularly for maritime law enforcement, which will contribute to advancing the collective Blue Economy agenda in multiple ways.

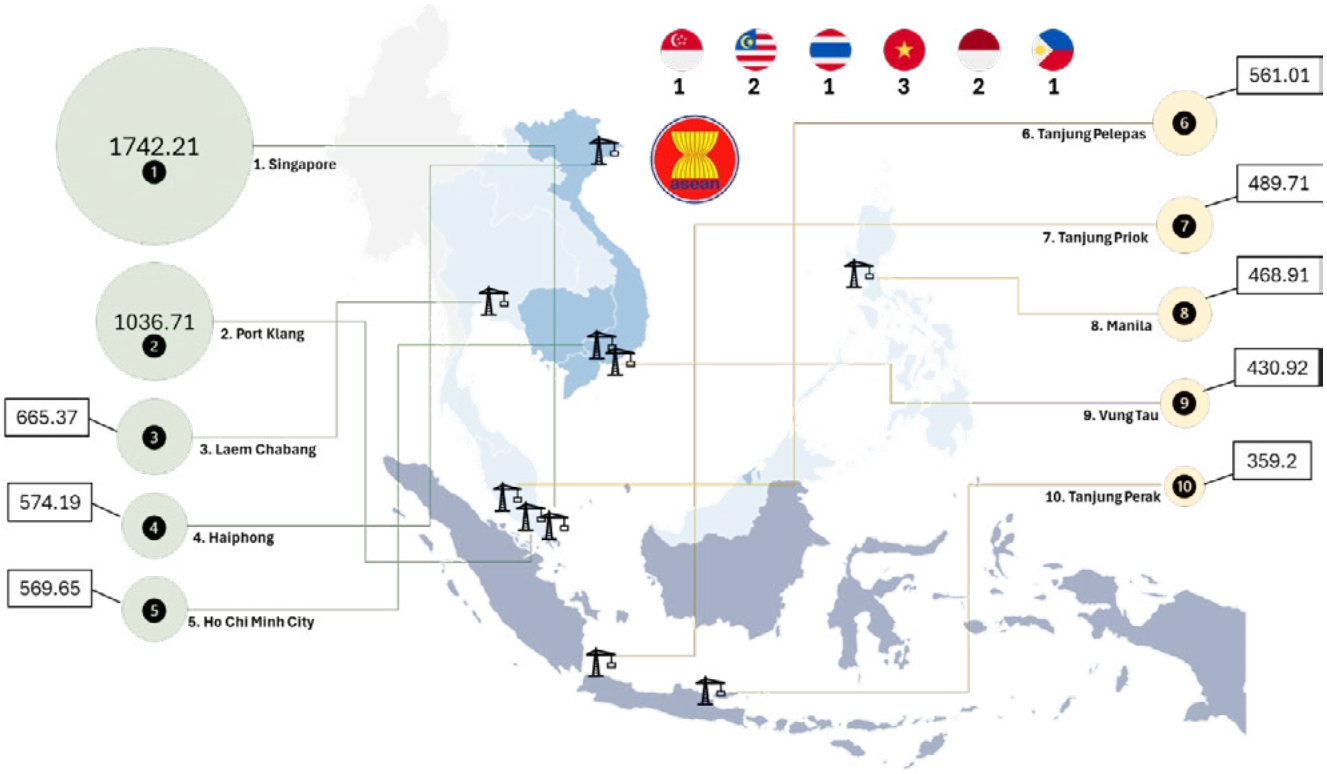


Figure 3. Top 10 ASEAN Ports based on Port Liner Shipping Connectivity Index[73]

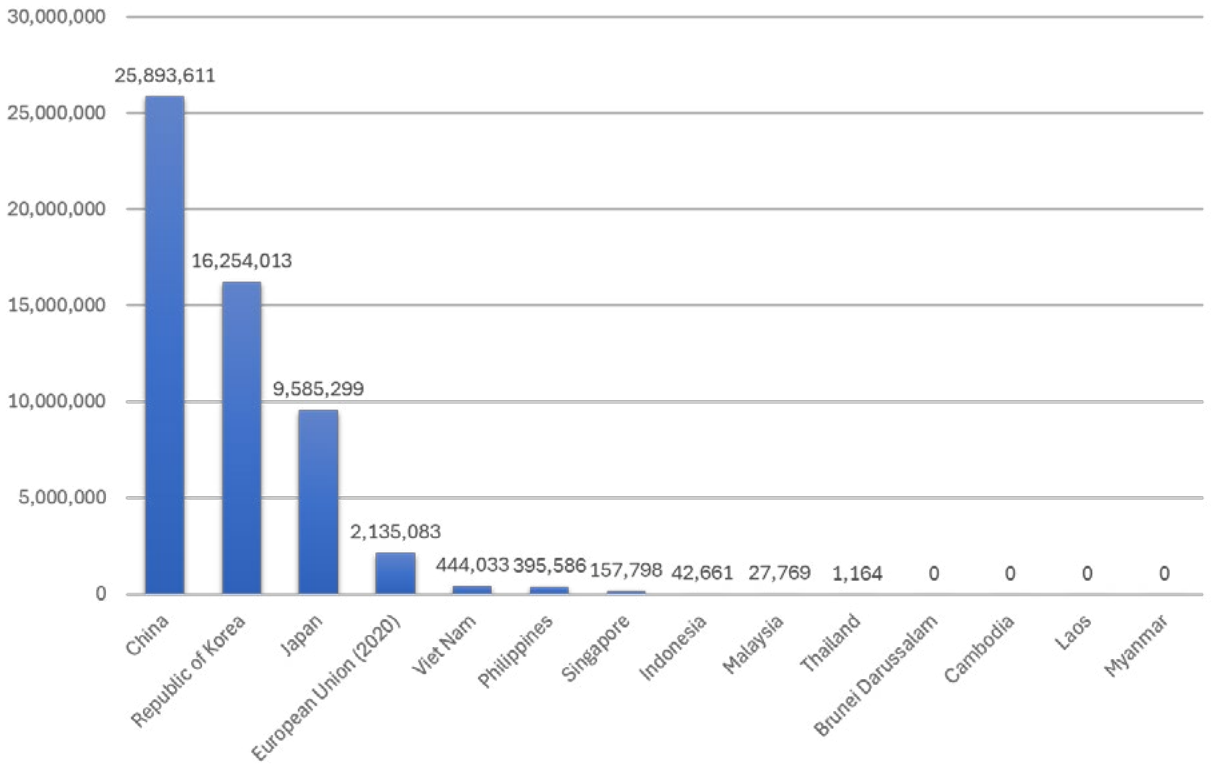
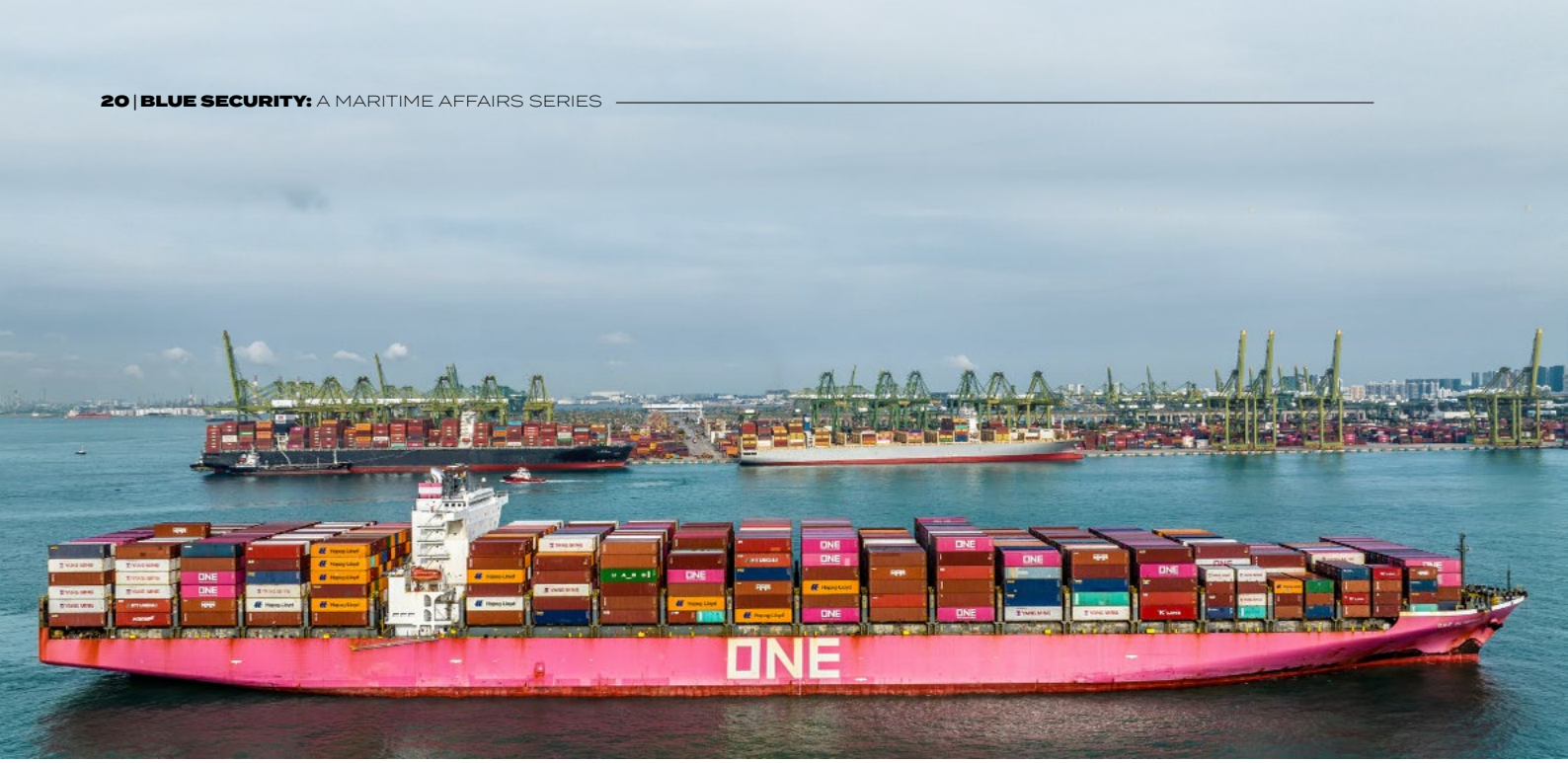


Figure 4. Ships built by country (Gross Tonnage, 2022) ASEAN, China, the Republic of Korea, Japan, and the EU[81]



MONITORING, CONTROL, AND SURVEILLANCE (MCS)

Monitoring, control, and surveillance operations are essential for fisheries management to ensure sustainable exploitation of living resources, and to counter IUU fishing. The Food and Agriculture Organisation defines MCS as:[82]

a. Monitoring: "the continuous requirement for the measurement of fishing effort characteristics and resource yield";
b. Control: "the regulatory conditions under which the exploitation of the resources may be conducted";
c. Surveillance: "the degree and types of observations required to maintain compliance with the regulatory controls imposed on fishing activities".

Effective MCS systems are particularly important for southeast Asia considering the contribution of fisheries to national economies, the vulnerabilities of different fish stocks in the region's waters, and the lack of capacity within individual countries to deter and defeat fisheries crime in their EEZ.

While a comprehensive study of MCS practice and potential in Southeast Asia is beyond the scope of this paper, the relationship between MCS and maritime domain awareness (MDA) is arguably important. The International Maritime Organisation defines MDA as "the effective understanding of anything associated with the maritime domain that could impact security, safety, the economy or the marine environment".[83] The MDA process requires collecting information through surveillance and intelligence, analysis, and sharing of actionable information to relevant agencies with the objective of defeating maritime security threats. As is evident, there are several elements common to MDA and MCS, such as the need for surveillance to gather information, processing, analysis, and sharing of large volumes for effective enforcement, and the overarching objectives of legal and sustainable use of the maritime domain. In Southeast Asia, these linkages could drive considerable synergy between efforts to harness the Blue Economy, and to achieve regional maritime security outcomes.

Within ASEAN, MCS systems are generally nested within national institutions, despite requiring regional coverage of the Indian and Western Pacific Oceans. MDA systems, on the other hand, tend to have supra-national stakeholders and impacts even when managed by a single country. For instance, the Information Fusion Centre (IFC), Changi, and the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against ships in Asia (ReCAAP) information sharing centre are hosted in Singapore, while the International Maritime Bureau (IMB) piracy reporting centre is based in Malaysia. These institutions have an international body of stakeholders and customers that enable them to deliver regional maritime security impacts.[84] However, these centres remain focussed on maritime security threats, such as piracy and armed robbery, and make limited contributions to civilian and economic endeavours associated with the Blue Economy. The infrastructure and capabilities within these facilities could contribute directly to MCS efforts, particularly in developing an interconnected network across the region through information gathering, analysis and sharing, thus supporting MCS' monitoring and control functions. This will require the development of a policy framework and contributions from other states to become "co-investors" in these facilities and drive coordinated efforts for Blue Economy and maritime security outcomes.

RECOMMENDATIONS

Conventional thinking suggests that a favourable security environment is a vital precursor for meaningful economic development. In a region such as Southeast Asia, the geopolitical environment is arguably inimical to collective economic endeavours, with maritime disputes, criminal activities, and great power competition being three major spoilers of the regional security environment. Simultaneously, there is a collective recognition for the need to harness the Blue Economy and to realise the full potential of the oceans for growth, prosperity and sustainability. This paper suggests that instead of being hostage to the lack of an enabling security environment, prioritising Blue Economy pursuits in the region could drive better security outcomes, thus reversing conventional cause and effect belief systems, and setting in motion a self-perpetuating cycle of greater economic development and better security outcomes. This is by no means a novel line of thought—as mentioned earlier, the ASEAN Maritime Outlook also seeks to set aside geopolitical issues in the pursuit of collective economic growth. The nuance that we highlight is that ASEAN could engage with challenges in a more direct manner and "ride the wave", rather than avoid advancing a collective Blue Economy agenda due to other political sensitivities.

We suggest three major lines of effort, focussed on:

1. marine spatial planning,
2. intra-region connectivity and shipbuilding, and
3. regional MCS.

Pursuing these Blue Economy outcomes is likely to create a positive impact on the regional security environment. Specific recommendations in each of these sectors are listed as follows.

MARINE SPATIAL PLANNING

a. Encourage all ASEAN member states to develop national marine spatial planning templates for claimed maritime zones.

b. Create an ASEAN task force to evaluate national marine spatial planning proposals and identify those in disputed areas, and those that could be developed into trans-boundary marine spatial planning zones.

c. Support creation of bilateral and trilateral frameworks for co-managing trans-boundary marine spatial planning zones and those in disputed maritime areas.

INTRA-REGION CONNECTIVITY AND SHIPBUILDING

a. Establish a task force for identifying essential conditions and existing constraints for creating the ASEAN single-shipping market.

b. Draft a common ASEAN port security measures framework that establishes common standards and protocols for security at ports along regional trade routes to enable efficient cargo inspection and clearance.

c. Seek international investment for developing local shipyards capable of building ships for regional trade and national maritime enforcement agencies.

EVOLVE REGIONAL MCS FRAMEWORK

a. Develop a regional MCS strategy akin to the Pacific Islands Forum Fisheries Agency regional MCS strategy (2024-29).

b. Seek foreign aid and assistance for establishing a regional MCS agency.

c. Identify how existing regional MDA agencies (IFC Changi, ReCAAP ISC, and IMB PRC) can contribute to MCS efforts and negotiate the supply of requisite products from them.

d. Establish linkages with extra-regional arrangements such as the IFC-IOR and the Quad's Indo-Pacific Maritime Domain Awareness program to support regional MCS efforts.

In making the above recommendations, it is important to acknowledge that certain enabling conditions need to be fulfilled before meaningful progress can be made in these areas. Therefore, it is important for ASEAN to develop norms and guidelines for advancing the Blue Economy agenda, identify common objectives, and enhance the level of trust between states.[85] This will facilitate the development of an integrated regional ocean governance mechanism, embracing interconnectedness across sectors, including the Blue Economy and maritime security. While this may appear to be an ambitious goal, the Pacific Islands Forum's experience has highlighted that the process of integrating ocean governance across a sub-region is iterative, and may take a long time to eventuate, depending on the depth of cooperation achieved and the spirit of regionalism among member states.[86] The ABEF is a good starting point; what is now required is a focussed collective effort to realise Blue Economy objectives, which, in turn, are likely to yield better maritime security outcomes for the region.

CONCLUSION

ASEAN's ambitious economic objectives have largely remained hostage to the regional security environment, which continues to be unfavourable to collaborative efforts essential for Blue Economy ventures. Realising the region's Blue Economy potential, however, is an increasingly pressing requirement, as it is the most viable pathway to sustainable economic growth for southeast Asian states. Resolution of the myriad security issues in the region appears to be a far-fetched goal for the foreseeable future. It may therefore be more prudent to explore Blue Economy pursuits that could gain wider regional acceptance as the drivers of economic growth and, as a welcome by-product, better regional maritime security outcomes. Focussing on mutually beneficial economic pursuits is likely to soften the zero-sum approach to dispute resolution, enhance states' capacity to tackle maritime criminal activities, and reduce their vulnerability to great power competition in the region. Therefore, viewing the Blue Economy as one of the drivers of regional maritime security will help to unshackle economic growth while creating a more favourable regional security environment and promoting sustainable ocean development practices in the region.

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