



Revisiting Indonesia's Blue Economy Vision in IORA

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Abstract

Indonesia utilizes the Blue Economy framework, which combines economic growth, environmental care, and social equity by leveraging its abundant ocean resources. To some extent, the Blue Economy could also positively contribute to Indonesia's maritime security architecture as it provides the capital to boost its maritime security apparatus. To achieve this purpose, Indonesia actively participated in the Indian Ocean Rim Association (IORA), particularly after 2015, when the country led the organization and delivered on its vision of being the Global Maritime Fulcrum a year before. However, Indonesia's Blue Economy initiative through the IORA appeared to be ineffective in resolving maritime challenges at the national level. Furthermore, its emphasis on an ocean-centric strategy for economic development is hampered by a half-hearted government that inconsistently supports the idea of a global maritime fulcrum. This study seeks to revisit Indonesia's Blue Economy through involvement in the IORA. In addition, this study used the qualitative method to examine the difference between the IORA's visions, the Blue Economy, and Indonesia's Global Maritime Fulcrum. This study discovers that Indonesia's involvement in the IORA does not successfully assist the country in expanding its marine sector, and it also experiences a divergence in the maritime-centric approach to development.

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INTRODUCTION

Indonesia is sometimes called a maritime country due to its vast network of islands, seas, and coastlines. Its topography and natural resources have established its identity as a coastal nation. Indonesia is the world's biggest archipelago, with more than 17,000 islands. With its geographical location, Indonesia has enormous potential in its territorial area, particularly in the economic sector. It also includes land-based and maritime-based economic areas that can develop into various industries and other business sectors such

as transportation, trade, and vital communications between multiple islands. The country's coastal and marine ecosystems contribute significantly to global biodiversity protection. Indonesia's maritime beauty entices visitors from all over the world. Traditional marine culture and practices are also firmly ingrained in the lives of coastal residents (IORA, 2023).

Given its large marine borders, Indonesian sovereignty and security are inextricably tied to maritime concerns. Indonesia regularly engages in regional and international talks about maritime security, navigation rights, and protecting its interests. Indonesia created a comprehensive maritime policy framework known as the Global Maritime Fulcrum under President Joko "Jokowi" Widodo's administration in 2014. This strategy seeks to strengthen Indonesia's maritime interests, ensure the long-term development of marine resources, and expand its involvement in regional and international maritime affairs. Long before Global Maritime Fulcrum, Indonesia was a founding member of the Indian Ocean Rim Association for Regional Cooperation (IOR-RA), renamed the Indian Ocean Rim Association in 2013. This multinational organization seeks sustainable development growth, maximum development potential through economic cooperation, and the liberalization of the flow of products, services, investment, and technology amongst its member states. Indonesia could see the IORA as a possible vehicle for furthering its interests in realizing the Global Maritime Fulcrum objective because both share strategic values (Achmadi et al., 2022).

One of the key proposals presented during the 14th IORA Ministerial Meeting in Perth, Australia, in 2014 was the Blue Economy as the primary goal for economic sustainability in the Indian Ocean (IORA, 2023). The IORA then adopted the Blue Economy Declaration at its inaugural Ministerial Blue Economy Conference in 2015 to harness marine and maritime resources to stimulate economic progress, job creation, and innovative practices while ensuring ecological sustainability and conservation. For this reason, the IORA has six main pillars based on the Blue Economy concept: fisheries and aquaculture, renewable marine energy ports and shipping, offshore hydrocarbons and seabed minerals, marine biotechnology, and tourist research and development (IORA, 2023). On the other hand, Indonesia's leadership role as chairman of IORA from 2015 to 2017 has strengthened the organization's relevance in the region. Indonesia is the only Member Country to have successfully hosted the First IORA Summit since the organization's inception. The IORA Summit ratified the Jakarta Concord and Action Plan 2015-2021, which served as a guide in developing the follow-up Action Plan 2022-2027 (IORA, 2023).

As blue research becomes increasingly important in comprehending the world, politicians and academic institutes concerned with marine and coastal areas seek more and better study of the Blue Economy. Blue Economy, a new development paradigm and "blue machine," has emerged as a critical driver of worldwide sustainable development. Nonetheless, the broad international perspective on the development of the Blue Economy concept is still evolving and requires the cooperation of numerous actors to make it a success (Wenhai et al., 2019). When the visions within the Blue Economy framework are adequately supported and implemented, they could deliver many benefits, as demonstrated by the European Union. The appreciation for the cooperation between the European maritime industry and government organizations and the training of diverse expertise became the hub of applying the European Blue Economy (Martínez-Vázquez et al., 2021).

The concept of the Blue Economy has developed from the growing interest in the economic potential of resources within national waters. It emphasizes the need for

sustainable use and environmental protection to ensure the long-term availability of oceanic opportunities. Additionally, it relies significantly on maritime security to safeguard these opportunities from various threats and to create a safe and secure environment for its development. Hence maritime security is an important part of the success of Blue Economy as it supports and enhances the application of Blue Economy (Voyer et al., 2017).

Studies have given hopeful views on how Indonesia could profit from IORA as it seeks to become the Global Maritime Fulcrum. Indonesia is expected to benefit from meaningful involvement in the IORA since it promises more potential for physical growth supporting maritime-related sectors, specifically trades, tourism, and blue economies in general. Furthermore, Indonesia may strengthen its favorable image before worldwide audiences by contributing to the IORA to confront the contemporary issues it faced, notably during Indonesia's leadership from 2015 to 2017. Indonesia would also find the IORA helpful in promoting Indonesia's vision in maritime affairs, as both entities share similar visions and approaches through persuasive maritime diplomacy (Kementerian Luar Negeri, 2024). Indonesia is deemed vital in supplying major norm foundation and specific marine diplomatic approaches leading the IORA's non-traditional security mechanism, which also benefits Indonesia's defense in general in dealing with IUU fishing issues (Jose & Fathun, 2021)

On the other hand, numerous classic maritime sector challenges persist regardless of what Indonesia has done to the IORA, consistent with Indonesia's Global Maritime Fulcrum, which faded, particularly during President Jokowi's second term. The uniqueness of dangers and the national capabilities to manage maritime challenges in Indonesia encouraged the country to address these issues autonomously (Amri & Zahidi, 2023). Moreover, the effectiveness of Indonesia's policy against IUU fishing shortly appeared in 2014-2019 when Susi Pudjiastuti, the Minister of Maritime and Fishery, firmly applied burning the fishing vessels involved in the IUU fishing acts to create a deterrence effect (Aryo & Wiswayana, 2020). Afterward, the Government's priority in the maritime sector may be deemed degrading, as the Government is no longer advocating the Global Maritime Fulcrum (Prakoso et al., 2022). Other significant aspects of that strategy, such as marine economic and military modernization, appear to be modified by the president himself (Defence Ministry of The Republic of Indonesia, 2015). In other words, Indonesia must still act independently to address its numerous maritime concerns, notwithstanding its membership and commitment to the IORA, while also experiencing a substantial shift in its naval outlook.

This study aims to investigate the disparity between Indonesia and the IORA's common vision in marine affairs and the contemporary maritime difficulties that persist despite Indonesia's participation in the organization. In contrast to previous studies that focused on what Indonesia could gain from the IORA, this study contends that, while the Blue Economy concept developed by the IORA has not been controversial among its members, Indonesia continues to struggle to maximize its maritime blessings regardless of its membership in the IORA.

METHODS

This research uses a qualitative descriptive method, which provides a detailed and comprehensive description of a phenomenon, event, or topic. Qualitative descriptive research produces data that describes the 'who, what, and where of an event or experience' from a subjective point of view (Kim et al., 2017). This method was chosen to reveal the 'what' and 'how' of a particular study subject using a systematic and structured

data collection and analysis approach. This method is especially useful when the goal is to gain a deeper understanding of a phenomenon and convey its characteristics, context, and meaning. Data collected will be through a study of literature selected based on its suitability to capture the most relevant and accurate information.

RESULT AND DISCUSSION

Indonesia's Maritime Potentials and Challenges

Indonesian waters are part of the Coral Triangle, often called the "Amazon of the Ocean" (Indonesia Climate Change Trust Fund, 2020). The region holds the highest marine biodiversity on earth, with an extraordinary diversity of coral reefs, fish species, marine mammals, and other marine life. The health and conservation of these ecosystems is critical to global biodiversity. Coral Triangle is home to more than 75% of known coral species, covers 53% of global coral reefs, hosts more than 3,000 fish species, and boasts the largest coverage of mangrove forests on the planet. In addition, evaporation from the ocean, especially in tropical areas, produces most rain clouds, which influences the location of wet and dry zones on land (World Meteorological Organization, 2023). However, IUU fishing, pollution, and habitat destruction are some of the threats to its marine ecosystem. Regarding sea transportation, the minimal role of supporting vessels to distribute goods to remote corners and the role of people's shipping vessels is still underdeveloped by The Indonesian Government, which has an impact on the safety aspects of shipping (Renata et al., 2024).

Indonesia's maritime resources are very important to its economy. The country's fisheries and aquaculture sectors contribute to GDP and provide livelihoods for millions of people. In 2020, the value of Indonesia's maritime GDP was IDR1,212 trillion or 11.31% of the total National GDP comprising IDR10,722 trillion (Biro Komunikasi Kementrian Koordinator Bidang Kemaritiman dan Investasi, 2022). Moreover, maritime trade is fundamental to the Indonesian economy as it is located along major shipping routes, such as the Malacca Strait and the Sunda Strait, with as much as 90% of world trade routes being transported by sea and 40% of this trade passes through Indonesia (Biro Komunikasi dan Informasi Publik, 2018).

Marine resources generate many benefits for the world economy and offer significant opportunities. Among important sectors that benefit from Indonesia's strategic maritime geography are transportation, food production, energy, mineral extraction, biotechnology, human settlement in coastal areas, tourism, recreation, and scientific research (Kaczynski, 2011). Sustainable use of marine resources for economic growth, improving livelihoods and jobs, and preserving marine ecosystems (Solomon, 2013). On the other hand, tourism has played a decisive role in the economic development of many islands, spurring other activities to benefit the local economy. Likewise, aquaculture and fisheries have contributed to the economic development of certain regions without jeopardizing access to important resources such as small-scale fisheries (Martínez-Vázquez et al., 2021). The Organization for Economic Cooperation and Development (OECD), in its 2022 Tourism Trends and Policies Report, stated that in 2019, the tourism sector contributed 5.0% of Indonesia's gross domestic income (GDP) (Purwowitz, 2023). OECD estimation also shows that the sea-based sector contributed around USD31.7 billion (constant 2010 prices) to Indonesia's global added value in 2015 (Tortora & Agnelli, 2021).

Indonesia's current challenge for the renewable energy industry is the contribution of marine and wind energy, which is still limited by their combined share in total renewable energy use, which only falls below 3%. Overall, this level of investment does

not correspond to the level of investment needed to meet the renewable energy mix target of 23% by 2025 (The Ministry of National Development Planning/National Development Planning Agency, 2023). Apart from that, some problems that affect people's daily lives are also fundamental. The salt industry is still unable to meet domestic needs; it is even claimed that the national salt production will not be able to meet the needs of the domestic industry until 2024 (Nababan, 2023).

Local fishermen are pressured by developments such as mining and reclamation, which pollute the sea and disturb the lives of the local fishermen (Sahputra, 2023). In the Riau Islands, marine pollution is not caused by mining but by the dumping of black oil or waste by international ships passing through the waters of the Malacca Strait (Sahputra, 2023). To this day, the sovereignty of local workers in Indonesian seas is still not guaranteed. Some underwater jobs are still controlled by foreigners (Sahputra, 2021). The linkages between more than 1,000 ports across Indonesia remain relatively weak. The imbalance in economic and trade activities between Indonesia's western and eastern regions adds to the problem of connectivity and efficiency in transporting goods (Nasution, 2022). According to the Ministry of Transportation's records, there were 2,439 ports in Indonesia in 2020. This figure increased by 38.6% compared to the previous year, 2019, which comprised 1,760 ports (Kementerian Perhubungan Republik Indonesia, 2022).

Apart from that, transnational crimes that occur in Indonesian seas still become an unresolved issue. Until 2022, ten piracy incidents occurred in Indonesian waters. During the measurement period, the highest number of incidents occurred in 2013, with 83 piracy incidents recorded. In 2021, Southeast Asia was the most targeted region by piracy attacks worldwide (Mona, 2023). Apart from that, there have also been various cases of illegal fishing recorded, starting from fishing with trawls, which are caught using large laden vessels in Indonesia (Aryo, 2023).

General History of the Blue Economy and its application in Indonesia

UNEP and other international organizations took the idea of a blue economy from the green economy. They are pushing to tackle climate change through low-carbon, resource-saving shipping, fishing, marine tourism, and renewable energy industries. In 2012, the European Union proposed a "Blue Growth" strategy, which stipulated that Blue Growth would be at the core of maritime policy and clearly stated the main development areas and specific actions for the future (Wenhai et al., 2019). The article "The Future of the Blue Economy: Lessons for the European Union" marks the beginning of research on the blue economy and makes some initial considerations about the growing convergence of economic, social, technical, and environmental factors that contribute to generating new opportunities in the world's oceans. Furthermore, with the cooperation between the European maritime industry and government agencies and the training of various experts, they have become the epicenter of the application of the European blue economy at sea (Kaczynski, 2011).

The blue economy concept emphasizes the need to balance economic development with environmental preservation and social justice. It aims to promote activities that utilize the potential of marine resources while minimizing negative impacts on the marine environment and coastal communities (Sdoukopoulos et al., 2019). The blue economy is increasingly important as the world recognizes the importance of healthy oceans for a variety of reasons, including biodiversity conservation, climate regulation, food security, and economic resilience. It also addresses the UN Sustainable Development Goal 14, Life Below Water, which aims to conserve and sustainably use marine resources

for present and future generations. Globally, shipping is the primary means of supplying raw materials, consumer goods, and energy, facilitating world trade, and contributing to economic growth and employment at sea and on land. In addition, the shipbuilding industry provides real added value for many coastal communities (Sdoukopoulos et al., 2019).

The importance of the ocean for sustainable development has been recognized since the beginning of the United Nations Conference on Environment and Development (UNCED) process, Agenda 21, the Johannesburg Plan; its implementation and confirmation have been documented at the Rio+20 Conference. The ongoing trend of exploitation and degradation of marine and coastal ecosystems shows that efforts to ensure sustainable development to date have been insufficient (Bari, 2017). Despite its tremendous potential to ensure ocean sustainability, the blue economy's growth presents several challenges. One of the most obvious obstacles is the lack of agreed common goals (Martínez-Vázquez et al., 2021). The blue economy presents significant challenges at economic, social, and environmental levels; therefore, blue economy strategies are presented as a key piece of the puzzle to ensure ecological sustainability and efficient management of sea and ocean resources.

Indonesia's blue economy development strategy aligns with the 14th sustainable development goal (SDG), which is life underwater. This is in line with the seventh objective of the national development policy in Indonesia's Long-Term National Development Plan (RPJPN) 2005-2025, which is to make Indonesia an archipelagic country that is independent, advanced, strong, and based on its national interests through sustainable economic development that is environmentally friendly as currently natural resources which is an object of tourism and a potential source of the economic driving factors is increasingly threatened by environmental degradation due to unsustainable tourism (The Ministry of National Development Planning/National Development Planning Agency, 2023).

Understanding, utilizing, and protecting the ocean is a shared goal and responsibility for all humanity to achieve sustainable marine development in the future. At present, the blue economy, as a new development concept and "blue engine," has become an important driving force in order to achieve global sustainable development. Environmental monitoring plays a strong technical supporting role in realizing blue economy development (Wenhai et al., 2019). For this reason, Indonesia also realizes the importance of partnerships between countries that support blue economy development and cooperation. Currently, Indonesia has joined several International Declarations and Joint Statements, which consist of bilateral and multilateral cooperation between Indonesia and other countries (The Ministry of National Development Planning/National Development Planning Agency, 2023).

Indonesia proposes principles for developing the marine and fisheries industry based on its blue economy concept for formulating comprehensive economic and environmental protection policies, encouraging regional economic development, realizing sustainable development by promoting clean production systems and encouraging creative and innovative investment. Highlights of the development of the blue economy in Indonesia include developing the marine fishing industry, maritime transportation, tourism, energy, and material production based on the blue economy concept; further refining and coordinating national maritime and land economic policies; developing blue economy demonstration zones; strengthening links between trade and infrastructure, and encouraging the development of technology and human resources (Wenhai et al., 2019).

Several complex economic activities, such as shipbuilding, shipping, and ship scrapping, are very beneficial for Indonesia and should be in accordance with the blue economy. Shipbuilding has the highest human input with either gas or liquid release. When compared, shipping on a ton-km or man-km basis is the champion among mechanized modes of transport in terms of pollution and costs (Bari, 2017). Ship scrapping, a recycling process that contributes directly to national development while saving natural resources of much-needed base metals, can be carried out in accordance with the Blue Economy Concept. In short, its potential is limitless water helps life to grow as well as supports sustainable living.

Blue Economy

Sustainable marine economics is understood as part of a new wave of economic thinking that emphasizes the sustainable use and conservation of natural resources in the world's oceans, seas, and coastal areas for sustainable development, in line with the 2030 Agenda for Sustainable Development (OECD, 2020). The blue economy concept refers to a sustainable and holistic approach to exploiting the resources and economic potential of oceans, seas, and coastal areas while ensuring the well-being of marine ecosystems and coastal communities. The term "Blue Economy" became popular as the world recognized the need to balance economic growth with environmental conservation, particularly in the context of marine resources (The World Bank, 2024). It includes a range of economic activities, policies, and practices that promote responsible and inclusive development of marine and coastal resources. Developing marine aquaculture could be an opportunity for certain developing countries, although this should not come at the expense of coastal ecosystems. Aquaculture can provide an additional source of income for vulnerable coastal communities, which may depend on agriculture or fishing (The Ministry of National Development Planning/National Development Planning Agency, 2023).

The basis of the blue economy concept itself is sustainability, where this concept prioritizes the sustainable use of marine resources, focusing on practices that do not deplete or damage marine ecosystems and biodiversity. Furthermore, this concept covers various economic sectors directly or indirectly related to oceans and coasts. These sectors include fisheries, aquaculture, maritime transportation, tourism, renewable energy generation, marine biotechnology, ocean-based research, and more (IORA, 2023).

The economic downturn triggered by the COVID-19 crisis will particularly impact the fish trade and local economies that depend on exports. An integrated approach that emphasizes the interconnectedness of various sectors in the Blue Economy is needed to run the economy. It encourages integrated planning and management across sectors to avoid conflict, minimize negative impacts, and maximize synergies. The Blue Economy also encourages the development and application of innovative technologies and practices to increase the efficiency and sustainability of economic activities. This could include advances in fisheries management, ocean monitoring, waste reduction, and renewable energy generators. Conservation and restoration of marine ecosystems are important factors in successfully implementing the blue economy. Efforts to protect coral reefs, mangrove forests, and other important habitats are integral to maintaining the health and resilience of the oceans. This is then related to the ocean's role in climate regulation and resilience. Sustainable coastal infrastructure and ecosystem-based adaptation strategies are important components of the blue economy, helping communities cope with the impacts of climate change.

The development of the blue economy is expected to increase employment opportunities, productivity, and added value in the country. This roadmap aims to

provide a comprehensive structure to facilitate the realization of Indonesia's Blue Economy and determine the necessary steps and direction of progress (Arise Plus Indonesia, 2023). To achieve all these benefits, international cooperation, and good policies and governance are needed. Given that the oceans are a shared resource, the blue economy often involves international collaboration to address transboundary problems, such as overfishing, pollution, and maritime security. For this reason, effective policies, regulations, and governance frameworks are needed to guide the responsible use and development of resources. Stakeholder engagement and participatory approaches are critical to ensure the benefit of equity.

Indonesia's Efforts at IORA Forum to Promote Blue Economy

The IORA stands as a testament to the power of regional cooperation in driving economic growth, enhancing security, and promoting cultural ties between countries bordering the vast Indian Ocean. Founded in 1997, IORA has grown into a dynamic platform encompassing 23 member countries and nine dialogue partners, united by a common interest in harnessing the enormous potential of the Indian Ocean region. Initially, IORA sought to build and expand mutually beneficial understanding and cooperation through a consensus-based, evolutionary, and non-intrusive approach (IORA, 2023).

By addressing issues such as piracy, maritime terrorism, and illegal fishing, IORA contributes to maintaining stability and safe passage in this critical maritime space. Furthermore, IORA recognizes the importance of sustainable development and environmental protection. The unique ecosystems of the Indian Ocean are vital to the global climate system; hence preservation is paramount. As the third largest ocean woven together by trade routes, controlling a major sea lane carrying half of the world's container ships, a third of the world's bulk cargo traffic, and two-thirds of the world's oil shipments, the Indian Ocean remains a vital lifeline for international trade and transportation. Home to almost 2.7 billion people, member states whose shores are washed by the sea are rich in cultural diversity, languages, religions, traditions, arts, and cuisine (IORA, 2023).

The Indo-Pacific region has experienced strong and sustainable economic growth and contributes more than 60% of the global GDP, with around half of global trade occurring via sea routes in this region (Indo-Pacific Outlook, 2022). This has led to increased connectivity, regional and inter-regional cooperation, and greater economic opportunities. Therefore, IORA is strongly interested in ensuring peace, prosperity, economic cooperation, maritime safety and security, and stability for everyone in the Indo-Pacific region. IORA has six main pillars that form the basis of its activities, which are included in the blue economy concept. It was discussed at the 14th IORA Ministerial Meeting in Perth, Australia, on 9 October 2014. The IORA Secretariat has identified the following six priority pillars in the blue economy as recommended by the Council of Ministers meeting (COMM) and revised by the Secretariat in consultation with member states (IORA, 2017):

1. Fisheries and Aquaculture. Fisheries are vital marine resources at the core of the Blue Economy. They are one of the main resources of the Indian Ocean, providing food for hundreds of millions of people and making a major contribution to the livelihoods of coastal communities.
2. Renewable Ocean Energy. The world population is expected to increase to around 9 billion people by 2050, which is 1.5 times greater than the current population, increasing countries' demand for fossil fuels (International Energy Agency, 2021).

Therefore, this is the right time to explore the potential of renewable energy originating from the sea. The oceans offer huge potential for renewable “blue energy” from wind, wave, tidal, thermal, and biomass sources.

3. **Seaports and Shipping.** The ports and maritime transportation sector are among the important priority sectors under the Blue Economy, in which member states show greater interest. Despite the continuous increase in maritime transportation and shipping transactions in the region, an uneven distribution of trade exists among countries, with only a handful benefiting economically from maritime exchange and transportation (The Ministry of National Development Planning/National Development Planning Agency, 2023).
4. **Offshore Hydrocarbons and Seabed Minerals.** With the decreasing mineral deposits on land and increasing industrial demand, much attention is focused on mineral exploration and mining on the seabed. Seabed exploration in the Indian Ocean has begun, but the main obstacle to the commercialization of these resources lies in the fact that Member States have limited data on the resources belonging to their exclusive economic zones (EEZs).
5. **Marine Biotechnology, Research, and Development.** This sector is considered a fascinating and potential field due to its contribution to building an environmentally friendly and highly efficient society. In addition, the marine environment is a largely untapped source of new compounds that have the potential to be used in a variety of new products that could address key environmental issues, such as bio-sensing technologies to enable ocean monitoring, bioremediation, and developing cost-effective and non-toxic antifouling technologies.
6. **Tourism.** Maritime tourism, with maritime activities, is a growing industry that is an important contributor to the country's economy and creates jobs. However, these activities can develop parasitic relations with the environment if not managed sustainably. This requires measures for environmental protection to prevent irreversible impacts that may arise from the marine tourism industry.

After establishing the six priority pillars, the first IORA Ministerial Blue Economy Conference was held in Mauritius in 2015, where the Blue Economy Declaration was adopted. Reflecting on global trends, this declaration seeks to harness oceans and maritime resources to drive economic growth, job creation, and innovation while preserving and protecting the environment (IORA, 2017). Indonesia then hosted the Second Ministerial Blue Economy Conference on “Financing the Blue Economy” on 8-10 May 2017, in Jakarta, Indonesia, where the Jakarta Declaration on the Blue Economy was adopted, aimed at optimizing the use of existing financial instruments in the IORA region to increase development Blue Economy in member states (IORA, 2017).

The Inaugural IORA Leaders' Summit held on March 7, 2017, in Jakarta, Indonesia, entitled “Strengthening Maritime Cooperation for a Peaceful, Stable and Prosperous Indian Ocean,” brought together Prime Ministers and Presidents from 21 Member Countries. In addition to commemorating IORA's 20th anniversary, this summit provides momentum to strengthen regional cooperation in the Indian Ocean Region. The summit produced three important documents to guide the organization toward the future: The Jakarta Concord, which the Leaders of Member States signed, the IORA Action Plan 2017-2021, and the Declaration on Preventing and Countering Terrorism and Violent Extremism issued by the Minister of Foreign Affairs on March 6, 2017 (IORA, 2023).

It is estimated that the development of the Blue Economy at IORA will be further strengthened and become IORA's main agenda in the coming years with the formation of the Blue Economy Working Group (WGBE). The formation of WGBE began with the IORA

Action Plan 2017-2021, which was adopted at the Leaders' Summit held on March 5-7, 2017, in Jakarta, Indonesia. Some of the IORA activities that have been described are often carried out and facilitated by Indonesia, the main aim of which is to benefit Indonesian seas through the blue economy concept. The many initiatives initiated through IORA certainly bring various benefits for cooperation utilizing the maritime sector through the blue economy concept. For this reason, it is necessary to look at Indonesia's efforts to implement the blue economy concept.

Indonesia's Internal Efforts to Implement the Blue Economy

Priority areas of cooperation which are also Indonesia's national interests on a priority scale are (i) maritime safety and security; (ii) natural disaster risk management; (iii) facilitate trade and investment; (iv) fisheries management; (v) cooperation in the fields of academics, science, and technology; and (vi) cultural and tourism exchange (Kementerian Luar Negeri, 2019). Internalizing norms in IORA is also Indonesia's priority. The norms are how IORA member states, most of which are developing countries, can build bridges and prioritize appropriately (Jose & Fathun, 2021). The formation of the Maritime Security Agency (*Badan Keamanan Laut* or Bakamla), one of which aims to oppose Illegal Unreported Unregulated Fishing (IUUF), as an effort to encourage the issue of non-conventional maritime cooperation and the integration of early detection with related actors.

Verbally, Indonesia has emphasized the development of a blue economy, which involves the sustainable use of marine resources for economic growth. This includes promoting responsible fisheries, aquaculture, marine tourism, renewable energy, and maritime transport. Indonesia also plans to establish a blue economy pilot zone on the islands of Lombok and Anambas, as well as Tomini Bay, to explore a blue economy model featuring the marine industry, fisheries, livestock, seaside tourism industry, small island collectives, regional and bay development (Wenhai et al., 2019).

The Government, in this case, the Ministry of Maritime Affairs and Fisheries through the Directorate General of Capture Fisheries, consistently invites fishermen to conserve the sea by managing sustainable capture fisheries. In 2017, the Government also provided insurance premium assistance to 2,241 fishermen. Since 2016, as many as 5,579 fishermen in the Regency have received the fishermen's insurance. Meanwhile, for North Sumatra Province, the fishermen's insurance premium assistance in 2017 reached 14,935 fishermen. Regarding the increasing collaboration in marine environmental protection, the Ministry of Transportation collaborates with relevant domestic ministries and institutions and actively establishes partnerships with various other countries. The main focus of this collaboration is to overcome the problem of oil pollution across national borders. Several countries in the Asia-Pacific region collaborate with Indonesia, including Australia, Brunei Darussalam, China, the Philippines, Japan, Cambodia, Laos, Malaysia, Myanmar, Singapore, Thailand, Timor Leste, and Vietnam (David and Lucile Packard Foundation, 2018).

The Memorandum of Understanding on Transboundary Marine Pollution Preparedness and Response has been agreed upon between the Indonesian Government through the Directorate General of Sea Transportation and the Australian Government through the Australian Maritime Safety Authority (AMSA). They are a revolving Fund Committee which is a collaboration and good intention of the Governments of Indonesia, Malaysia, Singapore, and the Malacca Strait Council to preserve the marine environment, especially in the Malacca Strait (Direktorat Jendral Perhubungan Laut, 2021). Apart from IORA, Indonesia is also supported by the World Bank. The World Bank supports the

Government's efforts to realize a sustainable marine economy or a blue economy strategy. This strategy focuses on investments to improve the livelihoods of coastal communities and restore critical ecosystems, the Coral Reef Rehabilitation and Management Program – a 20-year investment for coral reef management and research, and the Integrated and Sustainable Tourism Development Program (*Program Pembangunan Pariwisata Terintegrasi dan Berkelanjutan* or P3TB), a platform for planning and integrated and sustainable tourism infrastructure (Fernando, 2021).

Apart from that, Indonesia is also participating in the Coral Reef Rehabilitation and Management Program-Coral Triangle Initiative World Bank or COREMAP-CTI WB, one of the Government's efforts to protect marine and coastal ecosystems. Not only does it focus on preserving marine and coastal ecosystems, COREMAP-CTI also aims to improve the welfare of communities around the coast. The Ministry of National Development Planning/Bappenas has set marine and coastal management targets as outlined in the National Medium Term Development Plan (*Rencana Pembangunan Jangka Menengah Nasional – RPJMN*) for 2020 to 2024 (Prihatini, 2022). At the Our Ocean Conference (OOC) forum, the Indonesian Government submitted a Particularly Sensitive Sea Area (PSSA) program for environmental protection on Nusa Penida Island to the International Maritime Organization (IMO), where the application process began in 2016, and it is planned that a full application will be submitted at the 74th Marine Environment Protection Committee (MEPC) session in 2019.

As of the end of the third quarter of 2021, around 28.4 million hectares of marine protected areas (MPA) have been designated, consisting of 9.9 million hectares managed by the Central Government and 18.5 million hectares managed by the Provincial Government (Nasution, 2022). The Indonesian government is targeting marine conservation areas to reach 32.5 million hectares by 2030. This area is an ideal achievement because it has reached the target of 10 percent of the total area of Indonesia's waters (Ambari, 2020).

However, water areas that are still in reserve should immediately be designated as new water conservation areas. At least this status can be determined by the Minister of Maritime Affairs and Fisheries or the Regional Government no later than the year 2024 (Ambari, 2021). Regarding transnational crime, according to Jose and Fathun's research, illegal, unreported, and unregulated fishing cases occurring during the 2019-2020 period tended to fluctuate when Susi Pudjiastuti served as Minister of Maritime Affairs and Fisheries, from January 2019 to April 2019 there were arrests of 38 foreign ships which carried out IUUF. In total, 15 ships came from Vietnam, 13 from Malaysia, and 10 from Indonesia (David and Lucile Packard Foundation, 2018).

However, Indonesia also increased its efforts in implementing a blue economy as the Indonesian Ambassador to South Africa, Salman Al Farisi, was elected as Secretary General of the Indian Ocean Rim Association (IORA) for the 2022-2024 period (IORA, 2023). After Indonesia's chairmanship of IORA, this country could combine the principles that had been formed into the ASEAN cooperation structure. This is proven by the existence of various forms of inter-regional partnerships within ASEAN, such as through the ARF mechanism, which also discusses maritime security issues.

CONCLUSIONS, RECOMMENDATIONS, AND LIMITATIONS

Indonesia is an archipelagic country that is often called the "Amazon of the Ocean" because of its various natural resources and the myriad of benefits that can be obtained from its marine sector. Despite having a multitude of advantages, there are still many obstacles in the management and preservation of Indonesia's marine areas. For this

reason, a basic concept is needed to run the economy and preserve the marine environment in Indonesia and the world, known as the Blue Economy concept. This concept emphasizes the need to balance economic development with environmental preservation and social justice, which aligns with the UN's Sustainable Development Goals and Indonesia's (RPJPN) in 2005-2025.

Many maritime security forces have been strong advocates for the Blue Economy concept, especially in the Indian Ocean region. In this area, security partnerships between various maritime nations have actively focused on defining their roles in tackling threats to ocean-based economic development. The growing interest in the economic opportunities offered by the oceans has intensified the need to clearly define and protect maritime areas, necessitating significantly more maritime surveillance and enforcement. As a result, maritime security has expanded from primarily focusing on naval defense and military action to also addressing a variety of other roles and functions related to what are known as 'non-traditional' threats.

Indonesia has emphasized developing a blue economy, which involves the sustainable use of marine resources for economic growth. This includes promoting responsible fisheries, aquaculture, marine tourism, renewable energy, and maritime transport. The Government consistently invites fishermen to conserve the sea by managing sustainable capture fisheries. The marine sector should continue to be developed with the Blue Economy features as its basis. However, transnational crime still occurs in Indonesia, especially related to illegal, unreported, and unregulated fishing. Therefore, Indonesia's engagement in the IORA should be in line with its serious national maritime vision, which should be carried out consistently by the country's government to ensure the attempt to excel in the maritime sector.

REFERENCES

- Achmadi, T., Nugroho, R., Habil, N. I., Ardiyanto, F., Abritia, R. N., Umaroh, Atika Khoirul Filemon, F., Gumelar, I. M. W., Sandika Putra, A. A. M. I., Norega, A., & Putri., S. D. (2022). *Macro and Micro-Case of Maritime Highway and Pelindo Merger* (T. Achmadi & R. Nugroho (eds.)). ITS Press, Surabaya 2022.
- Admin Portal Direktorat Jenderal Perhubungan Laut. (2021). *Langkah Nyata Indonesia dalam Upaya Perlindungan Lingkungan Maritim*. Direktorat Jenderal Perhubungan Laut. <https://hubla.dephub.go.id/home/post/read/10566/langkah-nyata-indonesia-dalam-upaya-perlindungan-lingkungan-maritim>
- Ambari, M. (2020). *Pemanfaatan Kawasan Konservasi Perairan Belum Maksimal*. Mongabay. <https://www.mongabay.co.id/2020/08/03/pemanfaatan-kawasan-konservasi-perairan-belum-maksimal/>
- Ambari, M. (2021). *Ini Upaya KKP untuk Menjaga Laut Lestari, Mendorong Ekonomi Bergerak*. Mongabay. <https://www.mongabay.co.id/2021/02/12/ini-upaya-kkp-untuk-menjaga-laut-lestari-mendorong-ekonomi-bergerak/>
- Amri, U., & Zahidi, M. S. (2023). Indonesian Maritime Diplomacy. *Nation State: Journal of International Studies*, 6(1), 71–78. <https://doi.org/10.24076/nsjis.v6i1.949>
- Arise Plus Indonesia. (2023). *Indonesia Advances Towards a Sustainable Blue Economy: Public Consultations Shape the Roadmap for Economic Transformation*. <https://ariseplus-indonesia.org/en/activities/indonesia-advances-towards-a-sustainable-blue-economy-public-consultations-shape-the-roadmap-for-economic-transformation.html>
- Aryo, M. A., & Wiswayana, W. M. (2020). Orientasi Baru Kebijakan di Laut oleh Pemerintah Indonesia: Pergeseran dari Deterensi ke Strategi Ekonomi. *Jurnal*

- Lemhannas RI*, 8(2), 57–75. <https://doi.org/10.55960/jlri.v8i2.309>
- Aryo, R. D. (2023). *Polemik Masalah Illegal Fishing di Indonesia*. Fakultas Hukum Universitas Indonesia. <https://law.ui.ac.id/polemik-masalah-illegal-fishing-di-indonesia/>
- Bari, A. (2017). Our oceans and the blue Economy: Opportunities and Challenges. *Procedia Engineering*, 194, 5–11. <https://doi.org/10.1016/j.proeng.2017.08.109>
- Biro Komunikasi dan Informasi Publik. (2018). *Empat Puluh Persen Jalur Perdagangan Dunia Melewati Indonesia Kementerian Perhubungan Republik Indonesia*. Kementerian Perhubungan Republik Indonesia. <https://dephub.go.id/post/read/empat-puluh-persen-jalur-perdagangan-dunia-melewati-indonesia>
- Biro Komunikasi Kementrian Koordinator Bidang Kemaritiman dan Investasi. (2022). *Pemerintah Terus Dukung Visi Pembangunan Maritim Menuju Indonesia 2045*. Kementerian Koordinator Bidang Kemaritiman dan Investasi. <https://maritim.go.id/detail/pemerintah-terus-dukung-visi-pembangunan-maritim-menuju-indonesia-2045>
- David and Lucile Packard Foundation. (2018). *Tren Sumber Daya Kelautan dan Pengelolaan Perikanan di Indonesia*. California Environmental Associates. <https://www.packard.org/wp-content/uploads/2019/05/tren-sumber-daya-kelautan-dan-pengelolaan-2018.pdf>
- Defence Ministry of the Republic of Indonesia. (2015). *Defence White Paper* (N. 2015 Third Editions (ed.)). Ministry of Defence of the Republic of Indonesia. <https://www.kemhan.go.id/wp-content/uploads/2016/05/2015-indonesia-defence-white-paper-english-version.pdf>
- Fernando, D. (2021). *Conserving Oceans in the Eastern Seas of an Indonesian Archipelago*. World Bank Group. <https://www.worldbank.org/en/news/feature/2021/06/07/conserving-oceans-in-the-eastern-seas-of-an-indonesian-archipelago>
- Indo Pacific Outlook. (2022). *IORA's Outlook on the Indo-Pacific* (Issue November). <https://www.iora.int/sites/default/files/2024-03/indo-pacific-outlook.pdf>
- Indonesia Climate Change Trust Fund. (2020). *7 Fakta Menarik Terumbu Karang di Indonesia*. ICCTF. <https://www.icctf.or.id/7-fakta-menarik-terumbu-karang-di-indonesia/>
- International Energy Agency. (2021). *Net Zero by 2050 A Roadmap for the Global Energy Sector*. <https://www.iea.org/reports/net-zero-by-2050>
- IORA. (2017). Declaration of the Indian Ocean Rim Association on the Blue Economy in the Indian Ocean Region. In *Indian Ocean Rim Association* (Issue March). <https://www.iora.int/media/8218/jakarta-declaration-on-blue-economy-final.pdf>
- IORA. (2023). *Ekonomi Biru*. <https://www.iora.int/blue-economy>
- Jose, H. S., & Fathun, L. M. (2021). Diplomasi Maritim Indonesia di IORA pada Kasus Illegal, Unreported, dan Unregulated Fishing. *Jurnal Dinamika Global*, 6(02), 232–258. <https://doi.org/10.36859/jdg.v6i2.624>
- Kaczynski, W. (Vlad) M. (2011). The Future of Blue Economy: Lessons For European Union. *Foundations of Management*, 3(1), 21–32. <https://doi.org/10.2478/v10238-012-0033-8>
- Kementerian Luar Negeri. (2019). *ASEAN Outlook on Indo-Pacific Diperkenalkan Kepada Kanada*. Kementerian Luar Negeri. <https://kemlu.go.id/portal/id/read/821/view/the-asean-outlook-on-indo->

- pacific-
Kementerian Luar Negeri. (2024). *Kerjasama Regional Indian Ocean Rim Association (IORA)*. https://kemlu.go.id/portal/id/read/167/halaman_list_lainnya/indian-ocean-rim-association
- Kementerian Perhubungan Republik Indonesia. (2022). *Pembangunan Pelabuhan untuk Merajut Konektivitas Transportasi di Sulawesi* Kementerian Perhubungan Republik Indonesia. <https://dephub.go.id/post/read/pembangunan-pelabuhan-untuk-merajut-konektivitas-transportasi-di-sulawesi>
- Kim, H., Justine S. Sefcik, A., & Bradway, C. (2017). Characteristics of Qualitative Descriptive Studies: A Systematic Review. *Res Nurs Health*. <https://doi.org/10.1002/nur.21768>.
- Martínez-Vázquez, R. M., Milán-García, J., & de Pablo Valenciano, J. (2021). Challenges of the Blue Economy: Evidence and Research Trends. *Environmental Sciences Europe*, 33(1), 1–18. <https://doi.org/10.1186/s12302-021-00502-1>
- Mona, S. (2023). *Indonesia: Number of Actual Piracy Incidents 2013-2022*. Statista. <https://www.statista.com/statistics/985256/indonesia-actual-piracy-incident/>
- Nababan, W. M. C. (2023). *Impor Garam Belum Bisa Dihentikan*. Kompas. <https://www.kompas.id/baca/ekonomi/2023/06/13/impor-garam-belum-bisa-dihentikan>
- Nasution, M. (2022). Potensi dan Tantangan Blue Economy Dalam Mendukung Pertumbuhan Ekonomi di Indonesia: Kajian Literatur. *Jurnal Budget: Isu Dan Masalah Keuangan Negara*, 7(2), 340–363. <https://doi.org/10.22212/jbudget.v7i2.136>
- OECD. (2020). *Sustainable Ocean for All Harnessing the Benefits of Sustainable Ocean Economies for Developing Countries*. The Development Dimension, OECD Publishing, Paris. <https://doi.org/10.1787/bede6513-en>
- Prakoso, S. G., Ardita, N. D., Puspitasari, R., & Putra, F. A. Al. (2022). The Intersection between China's Belt and Road Initiative (BRI) and Indonesia's Global Maritime Fulcrum (GMF) after COVID-19. *Politicon: Jurnal Ilmu Politik*, 4(2), 205–236. <https://doi.org/10.15575/politicon.v4i2.18257>
- Prihatini, Z. H. K. N. S. (2022). *Melestarikan Ekosistem Laut dan Pesisir, COREMAP-CTI Jadi Program Pemerintah*. Kompas. https://www.kompas.com/sains/read/2022/05/12/090200823/melestarikan-ekosistem-laut-dan-pesisir-coremap-cti-jadi-program?lgn_method=google&google_btn=onetap
- Purwowidhu, C. (2023). *Kian Melesat di 2023, Pariwisata Indonesia Bersiap Menuju Level Prapandemi* Media Keuangan. Media Keuangan. <https://mediakeuangan.kemenkeu.go.id/article/show/kian-melesat-di-2023->
<https://journal.ppns.ac.id/index.php/SeminarMASTER/article/view/2318>
<https://journal.ppns.ac.id/index.php/SeminarMASTER/article/view/2318>
- Renata, Y. A., Khautal, R. A., Rafly, R. A., & Radianto, D. O. (2024). Ketertarikan Mahasiswa D4 ME1C terhadap Industri Maritim dan Kelautan di Indonesia. *Seminar MASTER PPNS* 8(1). <https://journal.ppns.ac.id/index.php/seminarmaster/article/view/2318>
- Sahputra, Y. E. (2021). *Iskindo: Amburadul Pengelolaan Laut Indonesia*. Mongabay. <https://www.mongabay.co.id/2021/10/07/iskindo-amburadul-pengelolaan-laut-indonesia/>
- Sahputra, Y. E. (2023). *Segudang Masalah Nelayan Kecil di Negara Maritim*. Mongabay.

- <https://www.mongabay.co.id/2023/04/19/segudang-masalah-nelayan-kecil-di-negara-maritim/>
- Sdoukopoulos, E., Tsafonias, G., V.M. Perra, M. B., & Lago, L. F. (2019). *Identifying Skill Shortages and Education and Training Gaps for the Shipbuilding Industry in Europe*. CRC Press. <https://doi.org/10.1201/9780367810085>
- Solomon, B. D. (2013). Fish To 2030 Prospects for Fisheries and Aquaculture. In *Dictionary of Ecological Economics: Terms for the New Millennium* (Issue 83177). <https://doi.org/10.4337/9781788974912.w.29>
- The Ministry of National Development Planning/National Development Planning Agency. (2023). *Indonesia Blue Economy Roadmap* (Leonardo A. A. Teguh Sambodo (ed.); Issue 2). Ministry of National Development Planning/National Development Planning Agency (Bappenas). https://perpustakaan.bappenas.go.id/e-library/file_upload/koleksi/migrasi-data-publikasi/file/unit_kerja/dir_industri%2c_ekonomi_dan_kreatif/dummy_indonesia_blue_economy_roadmap_ebook.pdf
- The World Bank. (2024). Charting Croatia's Blue Economy Pathways. In *The World Bank* (Issue February). <https://doi.org/10.1596/41409>
- Tortora, P., & Agnelli, A. (2021). *Organisation for Economic Co-operation and Development* (Issue April). [https://one.oecd.org/document/DCD\(2021\)5/en/pdf](https://one.oecd.org/document/DCD(2021)5/en/pdf)
- Voyer, M., Schofield, C., Azmi, K., Warner, R., & Alista. (2017). Maritime Security and the Blue Economy: Intersections and Interdependencies in the Indian Ocean. *Journal of the Indian Ocean Region*, 14(1), 28–48. <https://doi.org/10.1080/19480881.2018.1418155>
- Wenhai, L., Cusack, C., Baker, M., Tao, W., Mingbao, C., Paige, K., Xiaofan, Z., Levin, L., Escobar, E., Amon, D., Yue, Y., Reitz, A., Sepp Neves, A. A., O'Rourke, E., Mannarini, G., Pearlman, J., Tinker, J., Horsburgh, K. J., Lehodey, P., ... Yufeng, Y. (2019). Successful Blue Economy Examples with an Emphasis on International Perspectives. *Frontiers in Marine Science*, 6(Jun), 1–14. <https://doi.org/10.3389/fmars.2019.00261>
- World Meteorological Organization. (2023). *How the Ocean Shapes Weather and Climate*. <https://wmo.int/content/how-ocean-shapes-weather-and-climate>