

## THE ROLE OF THE BLUE ECONOMY FOR THE FUTURE OF INDONESIAN MARITIME DEFENSE

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### ABSTRACT

The blue economy concept seeks to ensure the sustainability of coastal and marine resources and environments as well as encourage economic growth in the marine and fisheries industry, considering that Indonesia is a maritime country. The concept emphasizes interconnection across sectoral activities considering their impact on marine resources and calls for an integrated management approach, including marine spatial planning to manage cross-sector trade-offs, multi-stakeholder consultation and data enhancement, natural capital accounting to determine and communicate the value of resources, natural resources, and 'blue financing'. The theory used is economic growth theory, with the methodology used being qualitative. The aim of the marine economic concept is to make the ocean the basis of national economic development. The potential of Indonesia's maritime economy is not only in national waters, but also includes jurisdictional waters and international waters which can be managed in accordance with international law. Indonesia has a very large ocean area and potential, so that regional security as an inseparable integral has huge implications for economic sovereignty by maximizing the potential of Indonesia's marine resources. For the future prosperity of Indonesia's economy in the maritime sector.

**Keywords:** Blue Economy, Maritime Defense, Indonesia

### A. INTRODUCTION

The first time the term blue economy was coined was in 2009, in the United States Congressional Senate Committee on Commerce, Science, and Transportation. Furthermore, Pauli (2010) in Sakhujia (2015), published a book entitled, "The Blue Economy: 10 Years, 100 Innovations, 100 Million Jobs" and proposed it as an economic model based on technological innovation to supply products at low costs, promoting the creation of local employment, and a model that respects the environment and is competitive in the market.

The blue economy is a sustainable marine economy that produces economic and social benefits while ensuring the long-term sustainability of the source of these benefits (World Bank & UN DESA, 2017). The blue economy concept refers to the sustainable use of marine resources for economic growth and improved livelihoods. The concept emphasizes interconnection across sectoral activities considering their impact on marine resources and calls for an integrated management approach, including marine spatial planning to manage cross-sector trade-offs, multi-stakeholder consultation and data enhancement, natural capital accounting to determine and communicate the value of resources, natural resources, and 'blue financing' (World Bank, 2021).

The blue economy concept seeks to ensure the sustainability of coastal and marine resources and environments as well as encourage economic growth in the marine and fisheries industry, considering that Indonesia is a maritime country (Prayuda & Sary, 2019). Since 2012, the blue economy has entered the practice and exploration phase. Several countries and regions have proposed strategic frameworks and action plans for developing the blue economy (Wenhai et al., 2019). After 5 years of implementing the blue growth strategy, in 2017, the European Union issued a report reviewing what had been learned and what had been achieved since 2012, the beginning of the emergence of the blue economy (Patil et al., 2018).

Five aspects are explained in the report, including: (i) encouraging growth in five focus areas, including blue energy, aquaculture, coastal and marine tourism, blue biotechnology, seabed mineral resources, (ii) benefits of marine data, spatial planning and maritime surveillance to facilitate blue economic growth, (iii) promote a partnership approach, (iv) increase investment and (v) create a blue growth strategy in line with future challenges (Wenhai et al., 2019). The study of Wenhai et al. (2019) also proposed principles for developing the marine and fisheries industry based on the blue economy concept to formulate comprehensive economic and environmental protection policies; encouraging regional economic development; realizing sustainable development by promoting clean production systems and encourage creative and innovative investment.

Indonesia's oceans provide an unrivaled source of economic benefits that are estimated to support more than USD 180 billion in economic activity annually. Based on 2015 data, marine-related sectors consist of fisheries, marine and coastal tourism, sea-based transportation, energy and minerals, marine manufacturing (e.g., shipbuilding, salt

production), marine and nearshore construction, and government expenditure related to the sea. From these sectors it is proven that Indonesia's oceans have much more to offer if they are managed sustainably (World Bank, 2021). Indonesia, as the largest archipelagic country in the world, has enormous potential for marine and fisheries resources. According to Food and Agriculture Organization (FAO) data, Indonesia produced the second most seaweed, the fourth most aquaculture, and the second largest marine capture fisheries in the world in 2012. Despite this, output growth in capture fisheries has slowed recently and is likely to reach its peak. This is because the maximum sustainable yield (MSY) output, represented by the Total Authorized Catch (TAC) of 6.5 million tons per year, has been achieved.

Indonesia has around 35 thousand species of marine biota, consisting of 910 species of coral (75 percent of the world's total coral), 850 species of sponge, 13 of the world's 20 species of seagrass, and 682 species of seaweed, as well as 2,500 species of molluscs, 1,502 species of crustaceans, 745 species of echinoderms, 6 species of turtles, 29 species of whales and dolphins, 1 species of dugong and more than 2,000 species of fish. In the economic sector, Indonesia will play an important role in world trade, because 40 percent of international trade passes through Indonesian waters (Supriyono, 2019). This fact provides an illustration of the potential of Indonesian fisheries which, if managed well and responsibly so that its activities can be sustainable, can become one of the main sources of capital for development now and in the future. If this potential resource is managed sustainably, it will have positive economic and environmental implications. However, these efforts are also faced with many socio-economic challenges (World Bank, 2021).

The blue economy has become an important issue recently because healthy oceans provide jobs and food, support economic growth, regulate the climate, and support the well-being of coastal communities. Billions of people around the world, especially the world's poorest, rely on healthy oceans as a source of jobs and food, underscoring the urgent need to use, manage and protect this natural resource sustainably. According to the OECD, the oceans contribute USD 1.5 trillion per year in added value to the overall economy and this amount could reach USD 3 trillion by 2030 (World Bank, 2022). FAO estimates that around 58.5 million people work worldwide in primary fish production alone, around 21 percent of whom are women. Including subsistence and secondary sector workers, and their dependents, it is estimated that around 600 million livelihoods depend at least in part on

fisheries and aquaculture. Most are in developing countries, and are small scale, artisanal fishermen and fish farmers. Healthy oceans and coastal ecosystems are critical for economic growth and food production, but are also important contributors to global efforts to mitigate climate change (World Bank, 2022).

## **B. THEORETICAL FOUNDATION**

### **Blue Economy and Economic Growth**

In its development, implementing economic growth requires a blue economy, for example the interaction between growth and the blue economy is generally seen in the trade-off between the economy and the environment (McIlgorm, 2016). Life that depends on water/marine resources can make a significant contribution to food, energy and bio-based products. However, marine ecosystems are subject to increasing pressure and competitive use, due to resource overexploitation and pollution (Koundouri & Giannouli, 2015). Overall world economic growth and the economic progress of most developed market economies are leading to increased use of natural resources and at the same time, increasing environmental depletion and pollution (Sverdan, 2021). To have a sustainable blue economy, each country must find the best way to balance sustainability and economic growth to enable optimal use of maritime resources, while ensuring maximum benefits for the environment (Olteanu & Stinga, 2019).

Bari (2017) stated that in the South Asia region, especially in Bangladesh, it has begun to implement the blue economy concept. However, the region has not published data on the economic and social value of ocean-based industries or any assessment of the possibilities, prospects or types of industries and activities that can be carried out in line with the blue economy concept. The lack of available data limits the performance predictions of the industries under consideration. This will complicate policy integration. In line with this, Alharthi & Hanif (2020) stated that the blue economy can contribute significantly to economic growth if a country's blue resources are mapped and integrated well within a strong institutional framework and based on concrete policies and research.

## **C. RESEARCH METHODOLOGY**

A qualitative approach is carried out by discussing descriptions or explanations of data obtained from the literature study method. Data from the library study research method is

obtained by collecting information from literature in the form of books, reports/documents, research results conducted by various parties published in peer reviewed journals or working papers, policy briefs, and other forms of publication (Bowen, 2009; Darmalaksana , 2020; Snyder, 2019; Zed, 2004). The data analysis used is qualitative data analysis, namely the data obtained and then analyzed its content to support the problem being researched, the data used is related to the problem being researched. The data collection technique used in this research is library research, namely collecting theoretical and conceptual data from the internet in the form of journal articles, e-books, and other related ministry data (Sugiyono, 2019), which is related to blue economics research.

#### **D. DISCUSSION**

With a water area that is much wider than land, and a strategic cross-country position, it is only natural that Indonesia has a fundamental interest in controlling and utilizing the sea, has a strong maritime identity and culture, and utilizes its strategic position for the benefit of the nation and creating security in the region (Supartono, 2014). By having a predominantly water area, Indonesia also has great potential in the fisheries and marine economic sector. With this great potential, the development of a blue economy model can be one of the main strategies for improving the economy in Indonesia. The blue economy concept is the sustainable use of marine resources for economic growth, while maintaining the health of the marine ecosystem.

The blue economy business model can be applied by Indonesian people who use the fisheries and marine sectors as their livelihood. "This business model not only involves fishermen, but also entrepreneurs who develop processed fishery and marine products. The blue economy concept only covers all fisheries products that have economic value, but now the concept is expanding and includes the sustainability of marine ecosystems as one of the largest GDP contributors in Indonesia. Sustainability in the blue economy integrates the triple bottom line of sustainable development, namely environment, social and governance (ESG).

The implication for marine product producers is that the marine production they produce also pays attention to the sustainability of the marine ecosystem, zero waste management of marine products, and prohibits overexploitation practices. The current implementation of the blue economy in Indonesia, he said, has recorded an increase

compared to the previous year. He gave an example of one form of support provided by the Ministry of Tourism and Creative Economy (Kemenparekraf), namely the tourist village program. Every village in Indonesia is accommodated to explore the characteristics of their respective regions, which contribute to the implementation of the blue economy. Coastal communities who initially only focused on catching fish can now develop the potential of the fisheries and marine sectors. Not only does it diversify marine products, but also handicrafts that can become regional characteristics. In some villages or regions, they have even started to 'beautify' themselves to attract local and international tourists.

Policy implementation is an important stage in policy. Whether or not a policy is applicable is largely determined through policy implementation. This stage is also important for producing outputs and outcomes as planned. Output is the expected result of a policy, and can usually be seen within a relatively short period of time, namely during policy implementation. Meanwhile, outcomes are the impact of policies, which are expected to arise after the policy output is released. Outcomes are usually measured after the output is released or tend to be over a longer period of time after policy implementation (Indiahono, 2009).

In the security sector, Indonesia's strategic position has implications for the development of various maritime security issues. Some of them are, disputes over maritime boundaries and various crimes that often occur at sea, as well as various illegal activities that violate the law such as human trafficking, ship smuggling and piracy, piracy, illegal fishing, illegal towing, illegal exploitation of natural resources, smuggling, narcotics, as well as various threats of damage to marine ecosystems. All of these problems have an impact on hampering the achievement of Indonesia's vision as the world's maritime axis (Supriyono, 2019).

In accordance with President Joko Widodo's speech, the vision of Indonesian Maritime Affairs is to realize Indonesia as the World Maritime Axis. This means that, as one of the largest archipelagic countries in the world, Indonesia is expected to achieve progress, independence, sovereignty and strength in the maritime sector, so that the desired output is to achieve a positive contribution to regional and world security and peace in accordance with Indonesia's national interests. Indonesia's Maritime Policy is prepared by referring to Indonesia's Development Vision as stated in Law Number 17 of 2007 concerning the

National Long Term Development Plan 2005-2025 and Law Number 32 of 2014 concerning Maritime Affairs (Coordinating Ministry for Maritime Affairs, 2017).

As an archipelagic country, the current vision and policies of the Indonesian Government have opened up new hopes for Indonesia's development based on geo-strategic and geo-economic aspects. The current direction of government policy is very focused on the maritime sector. The vision known as the "World Maritime Axis" (PMD) is the main framework for development in all fields. As an archipelagic country consisting of various groups of islands, surrounded by oceans and seas, straits and bays, the Indonesian people cannot deny their living space. Indonesia will become the World Maritime Axis, a power that sails the two oceans, as a prosperous and dignified maritime nation." Based on this doctrine, it can be concluded that the main pillars of PMD are formed from important aspects that will be the breath of maritime state development, namely maritime culture, marine resources, infrastructure and connectivity, maritime diplomacy and maritime defense.

The concept of the blue economy can be used as an alternative in marine and fisheries development now and in the future. In the blue economy concept, aspects of sustainability and innovation are highly prioritized. The existence of these innovations can have implications for opening jobs and developing the economy on a scale that is in direct contact with society. Currently, the government has begun to implement this policy concept, one of which is the implementation of Law no. 32 of 2014 concerning Maritime Affairs, then strengthened by various regulations below it. Indonesia has also been actively involved in international sustainability economic forums. Then, so that this concept can be more widely absorbed by society, the community must be directly involved so that the success of this concept can be achieved (Alhusain, Mauleny, et al., 2019).

## **E. Conclusion**

The conclusion of this research is the Indonesian Development Vision as stated in Law Number 17 of 2007 concerning the 2005-2025 National Long Term Development Plan and Law Number 32 of 2014 concerning Maritime Affairs. The aim of the marine economic concept is to make the ocean the basis of national economic development. The potential of Indonesia's maritime economy is not only in national waters, but also includes jurisdictional

waters and international waters which can be managed in accordance with international law.

The aim of economic development based on marine resources is to improve people's welfare by mobilizing national resources through the formulation of a national marine program design accompanied by various complete fiscal, monetary and financial instruments, as well as cross-sector mobilization to support development in the marine sector. This policy is then reflected in several concepts, namely: Blue Economy, Maritime Domain Awareness, World Maritime Axis, Archipelago Insight.

As an archipelagic country, the current vision and policies of the Indonesian Government have opened up new hopes for Indonesia's development based on geo-strategic and geo-economic aspects. The current direction of government policy is very focused on the maritime sector. The vision known as the "World Maritime Axis" (PMD) is the main framework for development in all fields. Indonesia has a very important role from various aspects, considering that Indonesia has a very large ocean area and potential, so that regional security as an inseparable integral has huge implications for economic sovereignty by maximizing the potential of marine resources owned by Indonesia. Indonesia. Indonesia's maritime defense strategy policy must be focused on various aspects, especially from a security and economic perspective.

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## BIOGRAPHY

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