

The Education Perspective of Indonesia Maritime Geopolitics In the Indian Ocean

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Abstract – Indonesia's maritime geopolitics is implemented in the form of relations and interactions between regions, countries, communities, and national interests which have a broad context in the relations of cooperation and international relations. The geographical position of Indonesia, which connects the Indian Ocean and the Pacific Ocean, has strategic geopolitical potential and opportunities to realize the World Maritime Axis policy (WMA). This study aims to analyze the perspective of Indonesia's maritime geopolitics in the Indian Ocean, opportunities and challenges and collaboration with countries in the Indian Ocean. The research method used is a descriptive analysis of the dynamics of the global situation developing in the Indian Ocean. Indonesia's leadership has been recognized and respected by countries in the Indian Ocean region since the Asian-African Conference (AAC) 1955 in Bandung, then again strengthened at the 50th anniversary of AAC in 2015 in Bandung. Indonesia also took advantage of the opportunity when it was appointed to lead the Indian Ocean Rim Association (IORA) 2017 which gave birth to the agreed IORA Concord or Jakarta Concord as a document that can encourage maximum use of opportunities and respond to challenges in the region and is aimed at addressing non-traditional security issues, such as IUU fishing activities, human trafficking, illegal drugs, illegal immigrants, piracy, pollution of the marine environment, and others. Awareness of the importance of marine resources, maritime stability and security in the Indian Ocean region for the welfare of IORA member countries is realized by utilizing opportunities through a framework of strategic partnership and maritime diplomacy between countries in the region. The result of study, Indonesian maritime geopolitics in the Indian Ocean is a foreign policy utilizing Indonesia's geographical location in building the concept of maritime power in the Indian Ocean region based on strengthening cooperation with countries in South Asia, countries of the Middle East, East Africa, South Africa, Australia and countries others extracted the realization of the World Maritime Axis.

Keywords – Maritime Geopolitics, Indian Ocean, IORA Cooperation.

I. INTRODUCTION

The Indian Ocean is a very broad border bordering the African continent to the west, stretching south to Cape of Good Hope; Asian continent from Suez to the Malay Peninsula to the north and northeast; Singapore, Indonesia, Australia and Tasmania to the east; also the south pole in the south [29]. The maritime security environment in the Indian Ocean has changed due to cooperation and the capacity of countries that are still relatively weak and limited and alone control the sea area. This requirement concerns maritime security challenges in the region, which is quite large because it involves several key factors, such as military competition that requires large regional powers and extraction and protection of non-traditional security. These factors are in the main trends [37], namely (a) the efforts of the United States with its international partners, India, Australia, Singapore, Japan, France, Britain, and Canada, to access their authority in the Indian Ocean; achieve key strategic objectives to support or control countries such as China, Iran and Russia; to protect safe access to energy sources; and to fight terrorism and other security protections; (b) efforts by countries, such as China with its Belt and Road Initiative (BRI), Iran, Pakistan, and to some extent Russia

to strengthen their position and improve their capabilities in the Indian Ocean; to counter the potential that must be released by the United States; (c) activities of countries along the Indian Ocean Coast and those related to maritime security of regional competition areas in the form of sea boundary disputes and jurisdictional claims; and (d) Indian Ocean countries' challenges to overcome a variety of cross-border and non-traditional challenges, including environmental challenges involving climate change and hazardous waste pollution, IUU Fishing, human trafficking and trafficking, piracy and offshore security installations.

In recent years, many policies and the attention of regional countries and regions have focused on the BRI China proposal which aims to improve connectivity between Asia, Europe, and Africa. This initiative marks a new cycle of regionalism in the Indian Ocean. The Indian Ocean is very important for BRI China as China's entrance to various parts of the world. Indonesia, along with ASEAN and countries in the Indian Ocean region, gave a very careful response to BRI China because it has implications for sensitive security and political issues [35]. Some experts also believe that BRI is not necessarily in line with ASEAN's efforts towards economic integration and recommends that ASEAN ensure that its connectivity projects are competitive and relevant. Indonesia, as the traditional leader of ASEAN, needs to maintain its centrality in regional integration under efforts to implement the World Maritime Axis (WMA) policy.

Submitting WMA policy becomes a new doctrine for Indonesian foreign policy. This doctrine became a significant foundation in Indonesia's foreign defense ambitions, especially in the maritime field. The doctrine is not an only defense for the ASEAN region but extends its influence outside ASEAN towards the Indian Ocean and Asia Pacific region. The Indian Ocean region is the front page of Indonesia which is the third-largest ocean that provides a source of life for the people of Indonesia, especially along the west coast of the island of Sumatra and the southern coast of Java. Not only that, the location of the Indian Ocean makes Indonesia geographically and geo-strategically very important in the context of economic interests and also global security and defense.

II. MATERIAL REVIEW

II.1. Academic and Education Perspective

Maritime cooperation to deal with maritime security threats and sustainable use of marine resources is based on shared responsibility for the Navy's universal role as quoted from Ken Booth's Trinity theory, namely the role of the military, the role of the police, and the role of diplomacy [30].

The similarity of the inherent role will facilitate efforts to form a framework of cooperation between countries, both bilateral and multilateral, supported by the geographical similarity of Indian Ocean Rim Association (IORA) member countries to manage the same marine resources, namely the Indian Ocean. Alfred Thayer Mahan (1660-1783) explained that maritime power (sea power) is strongly influenced by six components, namely geographical location, physical shape of the region, area, population, population characteristics, and government policy [22]. Based on these two theories, IORA countries are obliged to individually and / or work together to protect the Indian Ocean from threats of maritime security, destruction of marine resources, and environmental pollution at sea.

Indian Ocean region maritime security cooperation on an international scale is also very important to deal with various maritime threats and crime. To achieve the objectives of safeguarding sea and shipping routes, the countries involved in the region must cooperate and respect one another and try to strengthen relations marked by the presence of the Navy as a controller in the sea command [11]. Within the scope of maritime security, security cooperation is structured in the concept of a combination of preventive and responsive measures to protect maritime from threats, illegal actions [14].

The form of cooperation in the second decade of the 21st century has changed towards 'strategic partnerships'. The strategic partnership is a form of relationship that combines flexibility and a deep approach so that it becomes a complement to multilateral negotiations on pressing global issues [12].

Strategic partnerships as part of foreign policy that functions in increasing cooperation between countries that have the same goals. Meanwhile, Barry Buzan argues that security is a relational phenomenon. In understanding regional security, Buzan offers the concept of the security complex, namely a group of countries whose main security issues are closely related enough so that their national security cannot realistically be considered separate from each other (a group of states whose primary security concerns links together sufficiently closely that they national securities cannot be realistically considered apart from one another) [10]. This concept covers aspects of competition and cooperation among related countries.

In *Indonesia Nawacita* number one is emphasized about an ideal to strengthen Indonesia's role in global and regional cooperation to build mutual understanding between nations, advance democracy, and world civilization. One of them is through the South-South Development Cooperation framework [36]. The cooperation framework is implemented through the establishment of a single agency South-South and Triangular Cooperation (SSTC) or South-South and Triangular Cooperation (SSTC) with characteristics (a) integrated or centralized in the form of one institution that acts as one gate policy; (b) budget centralization (pooling budget); (c) one-stop policy in terms of regional priorities, program priorities, and consideration of political (defense), economic, social and cultural benefits; (d) has a function to coordinate across sectors and ministries/institutions; and (h) has a good internal coordination mechanism within the institution so that decision making can be done quickly and accurately [1].

Based on Fredefich Ratzel's geopolitical theory, the Indian Ocean should be able to be a container for developing geographic conditions and positions with a focus on maritime power (at sea) caused by geopolitics. This theory provides an objective insight into the position of a nation to coexist and interact with and cooperate with other countries in international relations. The condition and position of the Indian Ocean geography is a maritime insight so it is appropriate when developed with the concept of maritime power. Sir Walter Raleigh's Geopolitical Theory and also Mahan stated that whoever controls the oceans will rule trade. Mastering trade means controlling the wealth of the world so that eventually it will rule the world itself [17].

The concept of Indian Ocean maritime power can only be achieved if it is supported by the strategic partnership and maritime diplomacy that requires the Navy, coast guard, and all sea power to be used for operational purposes. Maritime diplomacy is intended for deterrence of other countries, which can be understood as the use of threats by one party of deterrence in the context of military strategy to convince the other party to detain and deter various measures of action [27]. Therefore, WMA policies that prioritize the implementation of sovereignty at sea and settlement of sea boundaries as well as strengthening defense at sea and ensuring deterrence effects run as they should.

II.2. Indonesia's National Interest in the Indian Ocean

Indonesia has many interests in the Indian Ocean. The archipelago's spice path has always used the Indian Ocean as a maritime axis connecting India, the Middle East, and China, using shipping modes as part of the Indian Ocean maritime system that stretches from Southeast Asia to Africa. The strategic value of the Indian Ocean is Indonesia's opportunity to achieve national interests and strategic objectives in the political and security, economic and socio-cultural fields [20] and the environment.

In the political field, Indonesia has a very strategic position, which is located in the Indian Ocean region which allows interacting with countries in the region, namely countries in South Asia, the Middle East, East Africa-South Africa and Australia and extracts, such as the United States, Chinese and Japanese. As a large country with military power and a large population, Indonesia should be actively involved in the Indian Ocean region [2]. In the economic field, national interests can be realized through the large opportunities for trade and investment cooperation through the IORA. In the socio-cultural field, Indonesia has a long history of ties with the Indian Ocean and the countries within it that can be seen from various historical facts of the influence of social and cultural life in Indonesia. Archipelago kingdoms that once ruled and sailed in the Indian Ocean certainly is a fact that Indonesia is very close to the Indian Ocean in terms of social and cultural aspects as well as Indonesia's central role in the Bandung KAA 1955. Indonesia's historic role in bridging the interests of Asian-African countries and facilitating strategic alliances between countries in the region are often expressed in international forums, including ASEAN [33] and IORA. Whereas in the environmental field, Indonesia has an interest in maintaining the sustainability of biodiversity as a potential wealth of large marine resources from the threat of environmental pollution problems originating from ship waste and marine exploitation.

II.3. Indonesia's Interest in The South Asia Countries

To strengthen the friendly relations and cooperation between Indonesia and South Asian countries, in the fourth week of January 2018, President Joko Widodo visited South Asian countries, namely Sri Lanka, India, Pakistan, Bangladesh, and Afghanistan. The visit which was motivated by Indonesia's desire to strengthen friendship has resulted in several cooperative agreements [18]. The visit by President Joko Widodo is not sufficiently understood as a visit to state diplomacy, but also needs to be understood its strategic value for Indonesia.

Political and security strategic values can also be linked to the broader interests of Indonesia in the region, namely the importance of building ecosystems of peace, stability, and prosperity, which is known as the Indo-Pacific cooperation idea as an

effort to increase the interaction of countries in the Indian Ocean rim achieved the balance of power and dynamic balance or dynamic equilibrium.

II.4. Indonesia's Interest in The Middle East Countries

Efforts to implement a free and active foreign policy for the national interest are adjusted to Indonesia's strategic role in the Middle East, which is focused on two things, namely enhancing bilateral cooperation relations with Middle Eastern countries and optimizing Indonesia's role in promoting the process of democratization and peace in the region [4]. The dynamics of Middle East security also influence the efforts of the Indonesian government to reduce radicalization. The important role of the Indonesian government is carried out by increasing cooperation in the socio-economic and political-defense fields.

Indonesia-Middle East relations in the Indian Ocean cannot be ignored because there are security issues such as piracy cases in Somali waters and political issues such as the ISIS case, and of course the issue of the Khilafah ideology. At least four factors remain binding for an increasingly strong relationship between Indonesia and the Middle East, namely (a) Indonesia still has an interest in supporting the implementation of the Hajj and Umrah pilgrimage; (b) the historical chain of Indonesian Islamic renewal; (c) contact between economic needs and financial assistance in the context of Indonesia's development; and (c) the history of AAC involving countries in Asia and Africa, also cannot deny the presence of countries from the Middle East.

II.5. Indonesia's Interest in The East Africa Countries

Indonesia has a positive image among the countries in the African continent, mainly thanks to the 1955 AAC. Jawaharlal Nehru even called Bandung as the capital of Asia and Africa for a week of implementation. This event contributed to the recognition of the diplomatic interests of Asian-African countries and allowed them to enter world politics and submit their 'third-way' proposals. This also helps them develop a shared voice of solidarity and mutual support. This solidarity was echoed again in April 2015, when Indonesian President Joko Widodo, at the close of the conference, boldly stated: "This is the voice of the rise of Asian-African countries that cannot be replaced by anyone". Under the motto "Strengthening South-South Cooperation to Promote World Peace and Prosperity", the conference aims to commit to the Declaration to Revive the New Asian-African Strategic Partnership / NAASP) [38].

The importance of bilateral and multilateral relations with African countries is marked by an increase in Indonesia's official diplomatic presence in Africa. Indonesia has six Embassies in East Africa, namely in Kenya, Tanzania, Mozambique, Madagascar, and South Africa, including the Consulate General in Cape Town, South Africa. Indonesia's national interests are implemented in the form of (a) maritime connectivity cooperation; (b) technical cooperation and capacity building programs; (c) good governance; (d) counterterrorism; (e) combating transnational organized crime; (f) food security; (g) energy security; (h) small and medium businesses; (i) tourism; (j) gender equality and women's empowerment; (k) African-Asian Development University Network (AADUN) Network; and (l) Indonesian private sector investment in African countries.

African countries have developed the Africa Integrated Maritime Strategy 2050 (AIM Strategy) and the IORA Blue Economy initiative which support each other and strengthen environmental governance and the growth of the maritime industry, but require strengthening institutional capacity and enhancing the communication functions and networks of agencies this body. The most ambitious AIM 2050 strategy is a proposal for the establishment of new institutions to address various maritime security issues, such as fisheries, disaster risk management, sea border resolution, environmental crime, flag state surveillance, and port. Africa's strategy to establish the Exclusive Combined Maritime Zone of Africa (CEMZA) as 'Africa's unified maritime space' [7] aims to solve sustainable problems related to climate change, pollution, and fishing practices.

II.6. Imported Countries' Interests

Conflicts between regional countries, arms races, large natural resource potentials, and the lack of a spirit of togetherness among the countries of the Indian Ocean region opened a good gap for powers of insight to maximize influence by applying diplomatic tactics, building maritime bases, and the presence of the Navy [34], such as the United States of America. and its allies, China and Russia, the European Union, Australia, and others, to accommodate strategic, military, economic, and political interests.

a. United States of America

Indonesia-United States relations are mutually beneficial relations. The United States treats Indonesia as a traditional leader in the region. Indonesia has made its efforts in the global war against terrorism, including all terrorist networks that have grown at

home. Indonesia and the United States have jointly participated actively in maintaining international peace with Navy and Army forces deployed in Lebanon along with other UN forces in Darfur. The Indonesia-United States strategic partnership is based on equal partnership and shared interests and provides tangible and shared benefits to the people of Indonesia as part of mutually beneficial strategic stability in the region to achieve peace, stability, and cooperation in regional and global systems that continue to respect policies Indonesia's independent and active foreign affairs, where there is always room for both countries to agree to disagree [15].

The United States has vital national security interests in maintaining free and safe routes in Indonesian territory through the Malacca Strait, Makassar Strait, Sunda Strait, and Ombai Strait. Indonesia's safe sea lanes, including securing strategic maritime pipelines from the Middle East to Japan, the Republic of Korea, and Taiwan, China. The same sea channel also provides transit for United States Navy ships between the Pacific Ocean and the Indian Ocean. On the other hand, the United States Navy operates many Unmanned Systems, both UAV, USV, and USSV for operational purposes in the Indian Ocean.

b. China

The expansion of the Chinese Navy (PLA Navy) in the Indian Ocean was mainly due to the large economy with a strategic expansion risking the developing economy in China in transit trade and energy supply through the critical SLOC. In 2016 alone, 173.9 million tons of oil were transported from the Middle East to China and 52.4 million tons from Africa to China. In addition to developing its Navy capabilities, China is also developing a port in the Indian Ocean region that raises concerns of countries in the region because it can provide fueling stops not only for tankers but also warships, which allows the expansion and continuation of the presence of PLA Navy in the Indian Ocean [6].

BRI is a concept, which began in September 2015, uniting the Silk Road Economy Belt (SREB) and the 21st Century Maritime Silk Road (MSR), discourse in 2013. Belt or 'belt' is land that will connect China and Europe through Central Asia; Road or 'road' is the sea that connects the South China Sea, the Indian Ocean, and the Mediterranean. The China-Pakistan Economic Corridor (CPEC) and the China-India-Myanmar Economic Corridor (BCIM-EC) were added to improve connectivity with the Indian Ocean. BRI has expanded to cover 68 countries in Asia, Africa, and Europe, covering 70 percent of the world's population, two-thirds of energy sources, a quarter of goods and services, and 29 percent of global GDP of US \$ 21 trillion. China has built strategic seaports in Gwadar (Pakistan), Hambantota (Sri Lanka), Sittwe (Myanmar), and Chittagong (Bangladesh) to weaken the Indian monopoly in the Indian Ocean. China also continues to develop the port and economic zone facilities in Australia, Bangladesh, Djibouti, Indonesia, Kenya, Malaysia, Myanmar, Oman, Pakistan, Sri Lanka, and Tanzania, to gain maritime access and trade connectivity. The Port of Doraleh (Djibouti) is China's first military base abroad and the Port of Gwadar will likely accommodate Chinese submarines and aircraft carriers.

Multilaterally, Indonesia has built conducive working relations with China through various cooperation frameworks in the regional security architecture centered on ASEAN. The framework of cooperation includes the ASEAN Regional Forum (ARF), East Asia Summit (EAS), the ASEAN Defense Ministers Plus (ADMM Plus), and the ASEAN Maritime Forum Plus. The two heads of state of Indonesia and China have agreed to increase their relations to the level of comprehensive strategic partnerships in various fields [13]

In general, there are three views about BRI's initiatives in line with the vision of the World Maritime Axis. In a regional context, BRI promotes further connectivity among countries, particularly in the fields of security and diplomacy. The potential of BRI and the World Maritime Axis initiative to change prolonged disputes over territorial sovereignty and facilitate the smooth navigation of the sea in the Indian Ocean to create a free and safe sea. BRI is an opportunity for Indonesia to better control international shipping in the Southeast Asian waters to provide a new economic value for the state budget.

d. Australia

Viewed from the historical aspect, the relationship between Indonesia and Australia has strong amity and enmity, with enmity being more prominent. On the Indonesian side, the amity aspect of Australia began to grow and develop since Indonesia was still struggling for independence. A very close relationship was shown by Australia's support for Indonesia in dealing with the Netherlands. The Australian Government, especially the Labor Party, does not allow Dutch ships to dock in Australia. Australia also became a mediator in the Indonesian-Dutch conflict after Australia joined the United Nations Special Commission on Indonesia (UNCI). Australia is also very instrumental in building international public opinion, to help support Indonesia's struggle.

Other factors that have strengthened security are economic and trade interests. Australia needs Indonesia as a market, especially services, agricultural products, and livestock, as well as investment destination countries in the mining, education, and others. Indonesia needs Australia as a source of capital and economic assistance. In the field of defense and security, Australia needs Indonesia as a counter-country from the possibility of security disturbances from the north. For example, blocking the flow of transnational crime such as drug smuggling, human trafficking, illegal immigrants, and so forth. On the contrary, Indonesia needs Australia for technical and financial assistance in operations to maintain the security and stability of the region, from transnational crime.

The Australian enmity aspect of Indonesia does not completely close both aspects of amity. Although the two countries have many different interests and perspectives, they also have several common points of interest. One contributing factor to the strengthening of the amity aspect is geographical proximity. The two countries are directly bordered by being separated by the Indian Ocean and the Timor Sea. But this geographical proximity also has the potential to cause friction that can lead to conflict.

Indonesia and Australia once discussed the formation of a new and larger regional architecture that involved all countries in the Indian Ocean and the Pacific Ocean which was realized through negotiations on the Indo-Pacific Pact. Countries in both regions are regulated by norms and behaviors that are expected to support regional cooperation. The establishment of the Indo-Pacific Pact will play a key role in building trust, agreed norms, and behavioral expectations that can ensure that emerging security problems are managed in a spirit of cooperation [39].

III. RESULTS AND DISCUSSION

The strategic picture of the Indian Ocean in the future until 2030 is predicted to become an increasingly important and complex maritime space from a geostrategic and geopolitical perspective. This opportunity was marked by the continued involvement of the Navy from established regional and regional countries and steady improvements, such as the presence of Navy task forces from Asia, the European Union, and the United States and their allies.

III.1. Regional Examination Presence Competition

The Indian Ocean is a trade channel and a global security arena that connects producers and consumers in the region, such as the Middle East, Africa, and Asia, and regions, such as the United States, China, Japan, and the European Union. Increased prosperity in Asia has an impact on the dependence on natural resources, supply chains, and distribution networks so that regional and regional areas become closer. At the same time, maritime security problems arise, such as the threat of piracy and piracy; illegal sea trade (narcotics trade, small arms trade, and small arms trade, human trafficking); maritime terrorism; and IUU Fishing [16] and territorial conflicts in regional seas to environmental pollution of coastal and marine resources.

This condition is a significant governance challenge for maritime policymakers in the countries and regions of the Indian Ocean. Regional countries consist of 38 countries, ten of which have large Navy capabilities and strategic interests, namely Australia, Egypt, India, Indonesia, Iran, Israel, Malaysia, Pakistan, Singapore, and Thailand. Whereas the superintendent countries that have interests in the Indian Ocean, including the United States, China, and Japan, including France and the United Kingdom which have regions in the Indian Ocean region.

The presence of Navy forces and the expeditionary maritime forces of the superintendent countries has been going on for a long time. The United States is the largest and most permanent country since the Fifth Fleet, based in Bahrain, was reactivated in 1995 and strengthened after the validation of the U.S. organization. Pacom becomes U.S. Indo-Pacom in 2018, which indirectly equates the level of importance with the Pacific Ocean. Likewise, the presence of the European Union Navy, especially the British Navy and the French Navy has maintained a relatively strong presence in the Indian Ocean. The United States Navy is needed to ensure freedom of navigation (FON) for crude oil exports; conducting military operations during the war in the Persian Gulf; monitor military deployments and prevent Iranian aggression; and conducting maritime security operations (MSO), such as counterterrorism, anti-human trafficking, and anti-piracy using the formula for building and distributing coalitions to tackle anti-human trafficking, anti-terrorism and anti-piracy with the Joint Task Force (CTF 150, 158, 151, and 152) to overcome maritime security challenges in all important parts of the Indian Ocean. Other extras that have warships and maritime assets in the Indian Ocean are Canada, China, other European Union (Denmark, Germany, Greece, Italy, Netherlands, Norway, Portugal, Spain, and Sweden), Japan, New Zealand, Russia, South Korea, and Turkey.

III.2. The Challenge of Strategic Balance and Transnational Security

The emergence of the Indo-Pacific idea was partly determined by the United States' ongoing strategic role in the Indian Ocean and the interests and broad geographical and geopolitical reach of China and India, uniting it with established controls in the Pacific Ocean region; and transnational security threats. These interconnected phenomena are indicated in the revival of the economic and military forces of China and India with far-sighted views; expansion of economic interests; and strategic and diplomatic imperatives as zones of their maritime interests. Overall, this development makes the Indo-Pacific a center of strategic and world economic gravity. As a center of global gravity, social, economic, demographic and security interactions occur in the Indian Ocean region. Some challenges that affect the strategic balance include: (a) the emergence of the Indo-Pacific concept; (b) new dimensions in regional maritime security cooperation; (c) managers of maritime tensions in the Indian Ocean, especially in East Africa; (d) potential for cooperation on transnational security issues; (e) the role of regional and extra-regional countries in the Indian Ocean; and (f) maritime security partnership discourse in the Indo-Pacific era.

III.3. The Challenges of Maritime Security Cooperation in the Indian Ocean

There are two levels of cooperation challenges in the maritime security sector, namely strategic and sub-strategic security issues. Strategic maritime security issues are generally labeled as traditional/military (Navy) security forces that will influence the dynamics of the Indian Ocean maritime security environment, namely the strategic environment that is determined by the dynamics of emerging regional forces and the power structures that exist in the region. Although this is an important aspect of regional maritime security, it should not be ruled out sub-strategic maritime security as an easy way to build trust in dealing with maritime security issues in general. Collaboration between regional countries and / or with superintendent countries in the Indian Ocean can be developed to address maritime security.

While the level of challenges of sub-strategic maritime security cooperation are (a) conducting joint maritime patrols routinely or as needed to increase interoperability between the Navy and coast guard in the face of sea security threats; (b) comprehensive cooperation in the field of information exchange and intelligence within combat maritime security threats that have transnational networks; (c) strengthening SAR cooperation in technical and operational skills; (d) develop mechanisms for cooperation at sea and on land to deal with human trafficking, drug smuggling, and other transnational maritime security challenges, including increased surveillance of maritime boundary areas and increased personnel competency and equipment capability; (e) increasing cooperation in the field of humanitarian assistance and assistance in handling natural disasters (HA / DR) with the principle to overcome the risk of natural disasters, including those caused by human activities, such as oil spills and waste disposal; (6) cooperation in environmental protection, including anticipating risks and hazards of pollution at sea due to ship accidents or other types of cross-border sea pollution; (7) collaborative research and studies in the field of hydrography and science related to marine and maritime science, including studies on climate change and environmental aspects; and (8) cooperation in improving Maritime Domain Awareness (MDA) or maritime awareness as a driver to build confidence and confidence [24].

III.4. The Sustainability Model of IORA

IORA Sustainability is a dynamic condition of cooperation in the Indian Ocean which includes all aspects that are integrated, containing resilience and sustainability which contains the ability to develop the strength of the Indian Ocean in accordance with its function in dealing with and overcoming all challenges, threats, obstacles and disturbances, both coming from outside or from in, which directly or indirectly endangers the integrity, identity and survival of the Indian Ocean through the sea. Figure 1. shows the integration relationship between all cooperation in the Indian Ocean. This collaboration can increase the value of IORA's sustainability. The IORA sustainability value formulation can be defined as a causal loop relationship model based on the time dimension which can be shown as follows:

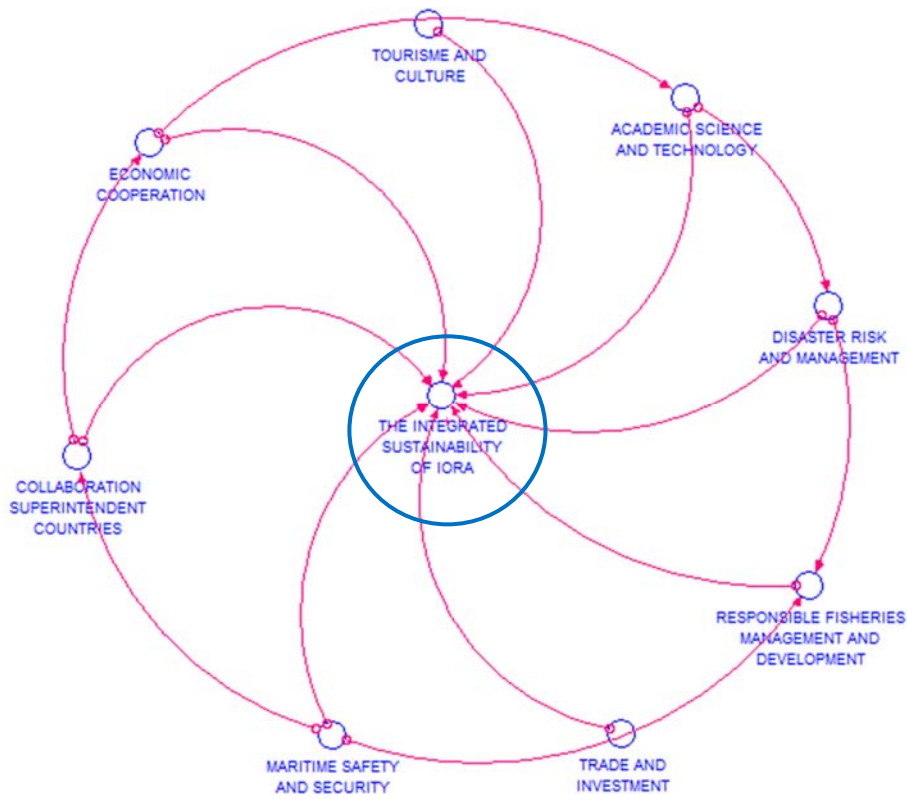


Figure 1. The Cooperation of Maritime Geopolitics in Indian Ocean as Sustainability Integrated Model

THE FORMULATION SUSTAINABILITY MODEL OF IORA:

$$\text{SUSTAINABILITY_OF_IORA}(t) = \text{SUSTAINABILITY_OF_IORA}(t - dt) + (\text{Value_Change}) * dt$$

$$\text{INIT SUSTAINABILITY_OF_IORA} = 7$$

INFLOWS:

$$\text{Value_Change} =$$

$$((\text{POLITICS_ :_ Strategic_Region.Vulnerability_Base_area} + \text{ECONOMY_ :_ Industrial_Development.Operation_Availability} + \text{TECHNICAL_ :_ Performance_of_IORA.Technical_Performance_of_IORA})/3) - \text{SUSTAINABILITY_OF_IORA}$$

$$\text{Technical_Performance_of_IORA}(t) = \text{Technical_Performance_of_IORA}(t - dt) + (\text{Change_of_Value}) * dt$$

$$\text{INIT Technical_Performance_of_IORA} = 7$$

INFLOWS:

$$\text{Change_of_Value} = (\text{Geo_Technical_of_IORA} + \text{Technical_Facility_of_IORA})/2 - \text{Technical_Performance_of_IORA}$$

$$\text{Operation_Availability}(t) = \text{Operation_Availability}(t - dt) + (\text{Change_Value}) * dt$$

$$\text{INIT Operation_Availability} = 5$$

INFLOWS:

$$\text{Change_Value} = (\text{Operation_Capacity}/\text{Ocean_Use}) - \text{Operation_Availability}$$

$$\text{Ocean_Use}(t) = \text{Ocean_Use}(t - dt) + (\text{Ocean_Use_Change}) * dt$$

$$\text{INIT Operation_Use} = 6$$

INFLOWS:

$$\text{Operation_Use_Change} = (\text{Operation_Use} * \text{Change_fraction_Ocean_area})$$

$$\text{Sea_Crime}(t) = \text{Sea_Crime}(t - dt) + (\text{Sea_Crime_Changes}) * dt$$

$$\text{INIT Sea_Crime} = 4$$

INFLOWS:

$$\text{Sea_Crime_Changes} = (\text{Sea_Crime} + \text{Illegal_Fishing} + \text{Illegal_Logging} + \text{Foreign_vessel_violations}) * \text{Fraction_crime_in_the_sea}$$

$$\text{Vulnerability_Base_area}(t) = \text{Vulnerability_Base_area}(t - dt) + (\text{Vulnerability_Base_area_changes}) * dt$$

$$\text{INIT Vulnerability_Base_area} = 3.5$$

INFLOWS:

$$\text{Vulnerability_Base_area_changes} = (\text{Sea_Crime} + \text{Land_Crime} + \text{Regional_Index_Strategic_economy}) / 3 - \text{Vulnerability_Base_area} + 1$$

III.5. The Opportunities Cooperation of Indonesia and Other Countries in the Indian Ocean Interest.

Cooperation relations between two countries or bilateral is one form of interaction between countries as actors in international relations to meet their respective national interests. This proves that each country is unable to fulfill its national interests without cooperating with other countries, both developing and developed countries.

The Indian Ocean, during Indonesia's leadership in the IORA in the 2015-2017 period, had agreed to the IORA Jakarta Concord which aims to consolidate and strengthen regionalism in the Indian Ocean. Opportunities for regionalism cooperation based on IORA Jakarta Concord [21]. This is implemented in various forms of cooperation between neighboring countries of shared geographical space, and with the following scrutiny, see Figure 2.

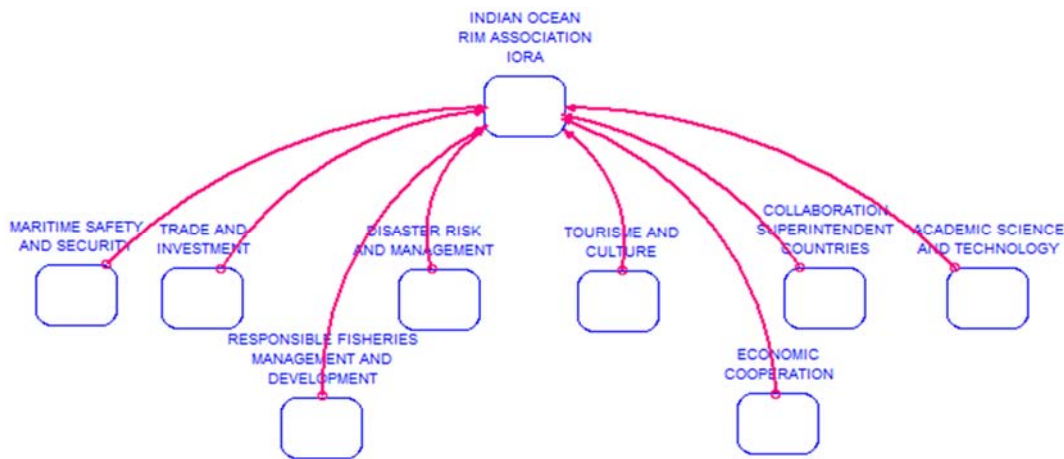


Figure 2. The Cooperation of Maritime Geopolitics in Indian Ocean

1. **Collaboration in the field of Maritime Safety and Security** by (a) increasing cooperation in preventing and managing accidents and incidents at sea and promoting effective coordination between aeronautical and maritime SAR services in IORA countries; (b) encourage sharing of expertise and resources to reduce sub-standard shipping and manage risks to ship safety and the marine environment in the Indian Ocean region; (c) strengthening regional cooperation to overcome cross-border challenges, including piracy, terrorism, human trafficking, human smuggling, illegal immigrants, drug trafficking, illegal wildlife trade, crimes in the fisheries sector, and environmental crimes; and (d) ensuring that countries in the region can use freedom of navigation and aviation navigation under international law, including UNCLOS.
2. **Cooperation in Trade and Investment** by (a) encouraging greater flow of IORA goods, services, investments and internal technology as a stimulus to further develop and grow the regional economy in a sustainable manner; (b) exploring various ways to increase production capacity, competitiveness, and value added products from the region; (c) promoting public-private partnerships in infrastructure development; (d) strengthening the involvement of the private sector, especially SMEs, through regular dialogue and interaction between government and business; (e) continuing regulatory reform to encourage competitiveness and innovation and promote ease of doing business; (f) increasing connectivity (institutional, physical, and person-to-person) in the Indian Ocean region, including facilitating the movement of business people; (g) understanding the importance of regional economic growth and developing skills in producing value-added goods and increasing participation in global value chains; (h) promoting shipping, ports, transportation, and logistical alliances within the region and regions; and (8) encourage the development of appropriate standards for IORA member countries, taking into account international and national standards.
3. **Collaborative and responsible Fisheries Management And Development** by (a) improving science-based management and conservation of marine living resources, including through supporting and strengthening the work of Regional Fisheries Management Organizations (RFMO), (b) and improving regional and international mechanisms to combat IUU Fishing; (c) promoting environmentally friendly practices in aquaculture, marine capture fisheries, and post-harvest technology; (d) increasing technical assistance and capacity building in fostering and strengthening the protection and preservation of the coastal and marine environment; and (e) supporting measures to increase the capacity of small-scale fishermen in line with sustainable fisheries practices so that they can promote and facilitate trade in fish and fishery products and access these products in the global market to improve their livelihoods.
4. **Cooperation in the field of Disaster Risk Management** by (a) understanding the vulnerability of developing countries on the coast and small islands due to climate change and ocean acidification and working together to implement the provisions of the Paris Agreement on climate change; (b) strengthening regional disaster preparedness, community resilience and disaster risk management; (c) enhancing geodetic data-sharing, methods and infrastructure to develop integrated early warning systems in the Indian Ocean region to predict and communicate risks and hazards related to disasters; and (d) increasing collaboration with stakeholders in dealing with issues related to disasters and climate change through capacity building including sharing information, experiences and best practices to improve community resilience in efforts to minimize disruption to economic activity.

5. **Collaboration in Academic, Science and Technology Sectors** by (a) increasing scientific knowledge, developing research capacity and transferring marine technology, between research and development institutions and academics; (b) increasing opportunities for accessible and affordable scholarships and capacity building for further human development, with a special focus on the challenges of Least Developed Countries (LDC) and Small Islands Developing States (SIDS); and (3) promote sharing and collaboration in technology and innovation and the implementation of e-Government and Information, Communication and Technology (ICT) solutions.
6. **Cooperation in the field of Tourism and Culture** by (a) increasing interaction between communities to encourage regional economic growth; (b) encourage the sustainable development of community-based tourism and ecotourism; (c) promote cultural heritage and utilize the economic potential of this heritage, including world heritage property and sites; (d) sharing experiences for sustainable tourism development; and (e) increase regional connectivity by encouraging direct aviation and shipping services, including cruise ships by encouraging investment in infrastructure.
7. **Economic Cooperation** by (a) developing ocean opportunities by promoting blue economy as the main source of inclusive economic growth, job creation, and education based on sustainable management of marine resources; (b) promoting gender equality and empowering women and girls, ensuring women's rights, access, and opportunities for participation and leadership in the economy and to eliminate violence and discrimination against women and girls in all its forms; (c) enhance cooperation in promoting democratic culture, good governance, fighting corruption, promotion, and protection of human rights and fundamental freedoms.
8. **Collaboration with the Superintendent Countries** by (a) enhancing and deepening relations as Dialogue Partners, including sharing technical expertise and other resources for mutual benefit; (b) expanding collaboration with countries in relevant regional and international organizations and organizations based on common interests; (c) broadening and deepening engagement with non-government stakeholders, including civil society, the chamber of commerce, the media and youth in the region to increase interaction between communities to realize understanding, trust and community development in the region.

IV. CONCLUSIONS

Maritime security in the Indian Ocean is crucial for global and regional trade. The territorial sovereignty of the sea is very important for regional stability and integrity of each country so that regional cooperation is needed to ensure the integrity and maritime security system of the countries concerned, both interception and extras oversight. The position of Indonesia and ASEAN is very strategic as the center of the meeting of the Indian Ocean and the Pacific Ocean and most ASEAN member countries have national interests and collective interests inseparable from the maritime context of the Indian Ocean. As a regional organization that has strong capacity and capability, ASEAN is committed to playing a role together in efforts to overcome maritime security threats under bilateral and multinational operations or the Joint Task Force, such as coordinated patrol that ASEAN has permanently carried out, namely Malacca Strait Patrol (MSP) by the Indonesian Navy, the Malaysian Navy, the Singapore Navy and the Thai Navy, and the Trilateral Maritime Patrol (TMP) by the Navy, the Malaysian Navy and the Philippine Navy. As a large country, Indonesia, together with ASEAN, can play a role by proposing initiatives to formulate a regional-based maritime power concept that might be adopted by IORA in managing the Indian Ocean.

Strengthening maritime cooperation is the basis for building effective and sustainable Indian Ocean maritime resilience to deal with the complex maritime security dynamics of the region. Indonesia and ASEAN have the capacity and capability to take on the role of initiators as well as balancing the settlement of interests between countries in the region or between countries in the region with an oversight state, to maintain security and stability in the Indian Ocean region. Indonesia and ASEAN have good relations with parties who have great interests and strength in the Indian Ocean, such as India, the United States, China, and Australia. Therefore, ASEAN must be more proactive in supporting the capabilities of the IORA so that it expands to build cooperation or regional maritime organizations and increase integration and interoperability between the Navy, coast guard, and other maritime security agencies. Indonesia's maritime geopolitics plays an important role in the dynamics of Indonesia's foreign policy both unilaterally and multilaterally within ASEAN utilizing the Indian Ocean to achieve national interests in realizing WMA.

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