



MAPPING EFFECTIVE MULTI REGIONAL TREATIES ON BLUE ECONOMY

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ABSTRACT

Indonesia as an archipelago with more than 17,000 islands, has a unique geographical and great potential as a maritime country. Primarily, Indonesia's efforts to realize sustainable fisheries is by promoting and implementing the ASEAN Blue Economy Framework as one of the country's economic deliverables. Furthermore, among the various measures and policies that have been set by the Indonesian government, measurable fishing is a breakthrough in fostering the marine and fisheries sector and specifically regulating the blue economy. In the context of international trade, Indonesia has also made several efforts including the implementation of measured quotas and sustainable certification. Quotas and certification are two ways to resolve the issue of legality. Even so, illegal fishing is still a major challenge in the framework of sustainability. One of the main goals that Indonesia can set to ensure its involvement and leadership in ASEAN maritime connectivity is the construction of a national sustainable fisheries system, that is specifically related to the implementation strategy of sustainability commitment, that serves as a pioneer/pioneer of similar systems in the regional arena.

Keywords: ASEAN; Blue Economy; Global Maritime Fulcrum.

I. INTRODUCTION

The idea of the Global Maritime Fulcrum, as idealized by the Indonesian President Joko Widodo, was introduced as a leading vision towards the restoration of Indonesia's maritime glory and the need for the state to enter into an important role in the entire maritime sector. Considering the situation where a shift of the geo-economic and geopolitical center from the West to the East is happening today, Indonesia is more than required, and further incentivized, to take strategic steps in realizing this particular vision. Such steps are not only strategic due to the recent politico-economic shift, but also based on the fact that as the largest archipelagic state in the world, Indonesia has enormous marine potential with an equally enormous economic value that is in need of supportive developmental infrastructure and robust maritime connectivity. This great marine potential can be simply inferred from certain indications to its economic worth. For example, The United Nations gave indications that each year, the marine economy is estimated to have a turnover of between US\$ 3 and 6 trillion, proving the great abundance of natural capital in the seas that are available for state exploitation.

Beside the issue of the maritime fulcrum and its paradigm, food security - especially its dimensions that are related to marine economy - has increasingly become a very strategic international issue in recent decades. Food security in the scheme of marine economy - also called blue economy - was discussed in the 2022 United Nations Ocean Conference and was considered to be pivotal in the resilience of over 80 percent of livelihoods in the world. The blue economy and its growth is expected to contribute to the social and economic welfare of the international community by playing an important role in poverty alleviation, international trade, climate and food security, job creation, and sustainability. However, this utilization of the ocean must take into consideration the resilience of its

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development which must be empowered through sustainable sea-based economies, especially for small developing island and underdeveloped states.

Sustainable economy is important in the entire scheme of marine development due to several current detrimental issues that can threaten the ocean and its environment. For example, the current increase in global fish consumption is spurring tireless fishing for fishery commodities. Unchecked expansion of fishing activities can lead to overfishing, overcapacity and destructive fishing practices as well as Illegal, Unreported and Unregulated (IUU) fishing. Overfishing, as a situation in which fishing in one area has exceeded the capacity of its fishery resources¹, as well as overcapacity and its impacts can be directly inferred from the report of the *Komisi Nasional Pengkajian Stok Ikan* (National Commission for the Assessment of Fish Stocks) as contained in the Decree of the Minister of Marine Affairs and Fisheries of the Republic of Indonesia Number 25 of 2011 on the Estimation of Fish Resource Potential in the Fisheries Management Area of the Republic of Indonesia, which proves that the issue of unsustainable practices of marine economy in Indonesia is readily apparent. Despite these problems, the international community sees the economic growth of the sea as one of the important future global goals. Of the 17 Sustainable Development Goals and 169 goals set by the United Nations to be achieved by 2030, the 14th goal is specifically focused on the health of the oceans and its biological resources.

Guarding the future vision of the nation's sea and supporting the mission of the Global Maritime Fulcrum mandated by President Joko Widodo, the Ministry of Marine Affairs and Fisheries (MMAF) continues to encourage the growth of the marine and fisheries sector with various policies. The ministry's policies are translated into the three pillars of sovereignty, sustainability, and welfare. The ministry's sustainability pillar adopts the concept of blue economy in managing and protecting marine and fishery resources which is to be done responsibly and with environmentally friendly principles as an effort to increase productivity and is to be carried out through marine environmental and biodiversity management, sustainable usage of resources and capture and cultivation practises, and the strengthening of the competitiveness of local marine and fishery products.

Generally, Indonesia's efforts to realize sustainable fisheries as a part of a sustainable marine economy is by promoting and implementing the Association of Southeast Asian Nations (ASEAN)'s Blue Economy Framework as one of the country's economic deliverables². Though in realizing this framework, the concept of blue economy, as a sustainable development effort which includes broad concepts related to ocean utilization that can be grouped into several activities including: utilization of biological resources, extraction of non-biological resources, commercialization and trade, and response to marine sustainability challenges³, must be considered as the four chief components of development of marine technology and sustainable economy.

Among the various measures and policies that have been set by the Indonesian government in realizing a feasible blue economy, measurable fishing can be considered a breakthrough policy in fostering the Marine and fisheries sector. A new framework of fishing quantification in the Government Regulation No. 11 of 2023 Concerning Measurable Fishing is one of the manifestations of this policy which contains applicable provisions related to measurable fishing. The regulation defined metered fishing as controlled and proportionate fishing practices carried out throughout

¹ Lukman Adam and T. Ade Surya, "Sustainable Fisheries Development Policy in Indonesia," *Jurnal Ekonomi & Kebijakan Publik* 4, no. 2 (2013): 195–211.

² Badan Perencanaan Pembangunan Nasional, "Indonesia Blue Economy Roadmap," no. 2 (2019): 3145374.

³ Pawan G. Patil et al., "Toward a Blue Economy: A Promise for Sustainable Growth in the Caribbean," *An Overview. The World Bank*, 2016, 92, <http://documents.worldbank.org/curated/en/965641473449861013/pdf/AUS16344-REVISED-v1-BlueEconomy-FullReport-Oct3.pdf>.

metered fishing zones and are based on metered fishing quotas as part of an effort to ensure the preservation of fish resources and marine ecosystems as well as equitable national growth.

This article discusses how the narrative of environmental sustainability can be achieved with the implementation of quotas and certification in measurable fishing and how Indonesia's role as ASEAN chair in 2023 can contribute in realizing its ambitions as the world's maritime fulcrum.

II. RESEARCH METHODS

This study was conducted using normative-descriptive research methodology. In the field of law, normative legal research techniques means that legal literature research methods include the research and assessment of secondary data, such as legislative products or relevant legal principles⁴. Such a methodology is also known as doctrinal research approach that focuses on normative aspects, such as rules, principles, theories, philosophy, and law in order to find solutions or answers to certain problems including those where there is a legal vacuum, conflict between certain norms, or vagueness in interpreting certain norms⁵. However, considering that the issue of blue economy is filled with possible differing political nuances between countries, this study also includes a descriptive approach as is often done in international relations research.

III. DISCUSSION AND RESULT

A. Blue Economy and the National Legal Framework

The World Bank defines Blue Economy as the sustainable development of integrated economic sectors over the world's healthy oceans. The World Bank's flagship initiative for the realization of the Blue Economy came in the form Problue, a multi-donor trust fund created to support and assist in the implementation of SDG Goal-14 which is aligned with the bank's twin goals of ending extreme poverty and increasing the income and well-being of the poor in a sustainable manner. Essentially, the Blue Economy moves beyond business as usual to consider economic development and ocean health as compatible prepositions. In the Blue Economy, environmental risks and ecological damage from economic activities should be significantly reduced⁶ and thus, economic activity is well-balanced with the enablement of a long-term capacity of marine ecosystems that is resilient, healthy, and can support economic activities. Blue Economy is understood as a long-term strategy that aims to support sustainable economic growth through ocean-related sectors and activities, while at the same time improving human well-being and social justice and preserving the environment.

Generally, in terms of ocean and food, the World Bank found that a sustainable fishing industry can be an important component of a successful Blue Economy, with Marine Fisheries contributing more than US\$270 billion a year to global GDP⁷. The fishing industry is also a reliable source of food in meeting the nutritional needs of 3 billion people and a livelihood of more than 300 million people⁸. However, climate change has had an acute impact on fisheries and coastal marine ecosystems⁹. As much as 31.4 percent of fish stocks are estimated to be overfished and unsustainable¹⁰. The World Bank indicated that the main factors hindering the development and management of the sustainable

⁴ I Made Pasek Diantha and I Made, "Metode Penelitian Hukum Normatif Dalam Justifikasi Teori Hukum," *Jakarta: Prenada Media Grup*, 2017.

⁵ Yati Nurhayati, Ifrani Ifrani, and M. Yasir Said, "Metodologi Normatif Dan Empiris Dalam Perspektif Ilmu Hukum," *Jurnal Penegakan Hukum Indonesia 2*, no. 1 (2021): 1–20, <https://doi.org/10.51749/jphi.v2i1.14>.

⁶ World Bank and United Nations Department of Economic and Social Affairs, "The Potential of the Blue Economy," *The Potential of the Blue Economy*, 2017, <https://doi.org/10.1596/26843>.

⁷ Alys Einion, "Moving Beyond GDP: How to Factor Natural Capital into Economic Decision," *World Bank*, n.d., <https://doi.org/10.1145/2735399.2735418>.

⁸ Food and Agriculture Organization, *The State of World Fisheries and Aquaculture 2016: Contributing to Food Security and Nutrition for All*. (Food and Agriculture Organization, 2016).

⁹ World Bank and United Nations Department of Economic and Social Affairs, "Potential Blue Econ."

¹⁰ Food and Agriculture Organization, *The State of World Fisheries and Aquaculture 2016: Contributing to Food Security and Nutrition for All*.

fisheries sector are the lack of institutional capacity and human resources in the public and private sectors, the complexity of coastal fisheries management, post-harvest losses, underdeveloped fishing vessel safety regulations, and an underdeveloped national pioneer fishing industry.

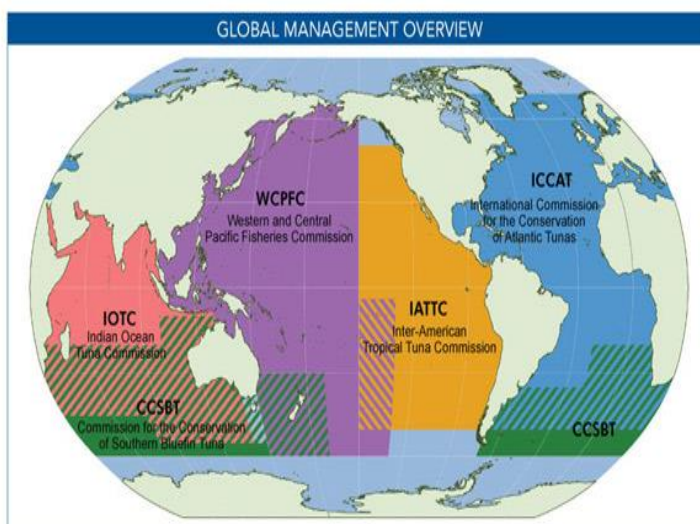
In the national scene, BAPPENAS has further indicated the importance of the Blue Economy for Indonesia and proclaimed that it is a sustainable framework for development as its potential to drive economic transformation and diversification through a sustainable marine economy is very high. Though Indonesia's past scheme of development in the blue economy still presents quite a challenge despite it having the richest areas in the world for marine resources. This is confirmed for example by the Ocean Health Index (OHI) which places Indonesia at rank 137 out of 221 countries and considered that the various coastal tourism sectors in Indonesia were not environmentally friendly.

To address this, Indonesia has created a more robust concept of Blue Economy in Indonesia which consists of several points: first, the economic aspect that is carried out by contributing to improving the safety and efficiency of marine activities; second, the social aspect of ensuring a decent and sustainable livelihood for fishermen; third, a blue economy that contributes to sustainable development that is more environmentally friendly. Referencing these three aspects, Bappenas then segmented the main sectors that need to be developed within the Blue Economy paradigm which included fisheries, aquaculture, seafood processing, port management, ship building, offshore oil and gas mining, marine manufacturing, marine education and marine tourism.

Several national policies which have been formulated to implement this national translation of Blue Economy included the Government Regulation No. 115 of 2015 which strengthened the eradication of illegal, unreported, and unregulated fishing both on the high seas and in territories within national jurisdiction. Moreover, in realizing SDG point 14, the government has committed to declare 10 percent of its total marine area - about 32.5 million hectares - as a marine protected area by 2030. However, the main challenges for Indonesia in the continued implementation of Blue Economy are the lack of sustainable exploitation of the sea, the need for the development of marine technology in terms of utilization of marine natural resources, and marine conservation that must be further developed in the practical realm given the large dependence Indonesia has on ecosystems and marine life.

To further build the state's capacity in realizing a pragmatic blue economy, The Minister of Maritime Affairs and Fisheries on September 1, 2023 has issued Regulation Number 28 of 2023 concerning the Implementing Regulation for the Government Regulation Number 11 of 2023 concerning which explain in detail the field application of measured fishing that has been explained previously. Its implementation provides a further view that the state not only considers measured fishing, which not only is a part of efforts to achieve Indonesia's blue economy targets, as important but also to ensure that fishing activities are carried out in a sustainable manner to maintain the health of Indonesia's marine ecosystems.

B. Blue Economy in the Framework of International Trade



In Southeast Asia itself, in addition to state membership of ASEAN countries (except Cambodia) in UNCLOS, there are several regional organizations that manage fisheries (RFMO - Regional Fishery Management Organization) such as the Asia-Pacific Fishery Commission (APFIC); Environmental Working Group of the ASEAN; Southeast Asian Fishery Development Center (SEAFDEC) UNEP Regional Seas Programme: Coordinating Body on the Seas of East Asia (COBSEA); APEC Ocean and Fisheries Working Group; Partnerships in Environmental Management for the Seas of East Asia (PEMSEA); and International Center for Sustainable Aquatic Resources Management (ICLARM). Related to the sustainability paradigm of organizations as mentioned above, there is still a need for harmonization of management including issues related to fishing quotas, management of joint EEZ areas and compliance of each country which is highly dependent on national commitments.

The main problem with the current structure of international fisheries is the oftenly uncompleted treatment of collective management of living mineral resources in favor of individual approaches by states based on their own advantages over reachable fishery resources. Determining the positions of states in the exploitation of living marine resources can be seen from two intermingling paradigms of actions which in such a way influence each other and can offer a conjectural image of future actions based on states actions: multilateralism and unilateralism.

Table 1. Current Global Management of Fishery Resources

The IOTC	The WCPFC	The CCSBT	The IATTC	The ICCAT
<p>To promote cooperation among the Contracting Parties (Members) and Cooperating Non-Contracting Parties of the IOTC with a view to ensuring, through appropriate management, the conservation and optimum utilization of stocks covered by the organization's establishing Agreement and encouraging sustainable development of fisheries based on such stocks.</p> <p>The Commission has four key functions and responsibilities which enable it to achieve its objective. They are drawn from the United Nations Convention on the Law of the Sea (UNCLOS), and are:</p>	<p>Seeks to ensure, through effective management, the long-term conservation and sustainable use of highly migratory fish stocks (i.e. tunas, billfish, marlin) in the western and central Pacific Ocean.</p> <p>The Commission has several functions and responsibilities which were drawn from UNCLOS and crystalized in article 10 of the WCPFC Convention. These functions include:</p> <ul style="list-style-type: none"> determine the total allowable catch or total level of fishing effort within the 	<p>Seeks to ensure, through appropriate management, the conservation and optimum utilization of the global Southern Bluefin Tuna fishery.</p> <p>The Commission has several functions. These functions are:</p> <ul style="list-style-type: none"> Is responsible for setting a total allowable catch and its allocation among the members; Considers and administers regulatory measures to meet Convention objectives; 	<p>Is responsible for the conservation and management of tuna and tuna -like species, associated species and their ecosystems, throughout the Eastern Pacific Ocean, from Canada, in the north, to Chile, in the South. Its mandate and competence are therefore much broader than the reference in its name to tropical tunas – inherited from a distant past – would seem to indicate.</p> <p>The Commission has several functions and responsibilities which were drawn from multiple international agreements on fisheries such as the UNCLOS and the 1995 FAO Code of Conduct for Responsible Fisheries. These functions include:</p> <ul style="list-style-type: none"> promote, carry out and coordinate 	<p>Seeks to co-operate in maintaining the populations of tuna-like fishes at levels which will permit the maximum sustainable catch for food and other purposes.</p> <p>The Commission has several functions and responsibilities drawn from relevant international agreements and its basic texts which include:</p> <ul style="list-style-type: none"> Collecting and analyzing statistical information relating to the current conditions

<ul style="list-style-type: none"> • to keep under review the conditions and trends of the stocks and to gather, analyze and disseminate scientific information, catch and effort statistics and other data relevant to the conservation and management of the stocks and to fisheries based on the stocks; • To encourage, recommend, and coordinate research and development in activities in respect of the stocks and fisheries covered by the IOTC, and such other activities as the Commission may decide appropriate, such as transfer of technology, training and enhancement, having due regard to the need to ensure the equitable participation of Members of the Commission in the fisheries and the special interests and needs of Members in the region that are developing countries; to view the current capacity building activities of the Commission please visit the Capacity Building page; • To adopt – on the basis of scientific evidence – Conservation and Management 	<p>Convention Area for such highly migratory fish stocks as the Commission may decide and adopt such other conservation and management measures and recommendations as may be necessary to ensure the long-term sustainability of such stocks;</p> <ul style="list-style-type: none"> • Promote cooperation and coordination between members of the Commission to ensure that conservation and management measures for highly migratory fish stocks in areas under national jurisdiction and measures for the same stocks on the high seas are compatible; • adopt, where necessary, conservation and management measures and recommendations for nontarget species and species dependent on or associated with the target stocks, with a view to maintaining or restoring populations of such species above levels at which their reproduction may become seriously threatened; • adopt standards for collection, verification and for the timely exchange and reporting of data 	<ul style="list-style-type: none"> • Conducts and coordinates a scientific research program aimed at providing information to support the Commission's management objectives (the program is a mixture of member managed activities and activities managed directly by the CCSBT Secretariat); • Takes decisions to support and implement fishery management; • Provides a forum for the discussion of issues relevant to the conservation objectives of the Convention; • Acts as a coordination mechanism for member's activities in relation to the SBT fishery; • Fosters activities directed towards the conservation of ecologically related species (living marine species which are associated with the SBT fishery) and bycatch species; • Encourages non members engaged in the fishery, to accede, apply for cooperating non-membership, or participate as observers in Commission activities; • Cooperates and liaises with other regional tuna fishery management organizations in areas of mutual interest. 	<p>scientific research concerning the abundance, biology and biometry in the Convention Area of fish stocks covered by this Convention and, as necessary, of associated or dependent species, and the effects of natural factors and human activities on the populations of these stocks and species;</p> <ul style="list-style-type: none"> • adopt standards for collection, verification, and timely exchange and reporting of data concerning the fisheries for fish stocks covered by this Convention; • adopt measures that are based on the best scientific evidence available to ensure the long-term conservation and sustainable use of the fish stocks covered by this Convention and to maintain or restore the populations of harvested species at levels of abundance which can produce the maximum sustainable yield, inter alia, through the setting of the total allowable catch of such fish stocks as the Commission may decide and/or the total allowable level of fishing capacity and/or level of fishing effort for the Convention Area as a whole; • determine whether, according to the best scientific information available, a specific fish stock covered by this Convention is fully fished or overfished and, on this basis, whether an increase in fishing 	<p>and trends of the tuna fishery resources of the Convention area;</p> <ul style="list-style-type: none"> • Studying and appraising information concerning measures and methods to ensure maintenance of the populations of tuna and tuna-like fishes in the Convention area at levels which will permit the maximum sustainable catch and which will ensure the effective exploitation of these fishes in a manner consistent with this catch; • Recommending studies and investigations to the Contracting Parties; and • Publishing and otherwise disseminating reports of its findings and statistical, biological and other scientific information relative to the tuna fisheries of the Convention area.
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<p>Measures (CMM) to ensure the conservation of the stocks covered by the Agreement and to promote the objective of their optimum utilization throughout the Area;</p> <ul style="list-style-type: none"> • To keep under review the economic and social aspects of the fisheries based on the stocks covered by the Agreement bearing in mind, in particular, the interests of developing coastal States. <p>The Commission agreed to undertake a review of its performance since its inception in 1996, through an evaluation process aimed at identifying weaknesses and gaps in its structure and necessary actions to improve its effectiveness and efficiency in fulfilling its mandate.</p>	<p>on fisheries for highly migratory fish stocks in the Convention Area in accordance with Annex I of the Agreement, which shall form an integral part of this Convention;</p> <ul style="list-style-type: none"> • Compile and disseminate accurate and complete statistical data to ensure that the best scientific information is available, while maintaining confidentiality, where appropriate; • obtain and evaluate scientific advice, review the status of stocks, promote the conduct of relevant scientific research and disseminate the results thereof. 		<p>capacity and/or the level of fishing effort would threaten the conservation of that stock;</p> <ul style="list-style-type: none"> • adopt, as necessary, conservation and management measures and recommendations for species belonging to the same ecosystem and that are affected by fishing for, or dependent on or associated with, the fish stocks covered by this Convention, with a view to maintaining or restoring populations of such species above levels at which their reproduction may become seriously threatened. 	
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C. Multilateralism and Unilateralism in International Fishery

Though in certain situations of stocks depletion and over-exploitation of fishery stocks, states may seek unilateral policies in its territories or beyond, transborder issues are still often dealt with multilaterally. Bilateral and multilateral negotiations are conducted due to the fact that states are often unable to independently accomplish their objectives due to the global and transnational character of environmental issues, which cannot be properly addressed by a single country alone¹¹.

For instance, a state is unable to ensure the preservation of highly migratory anadromous, catadromous, or oceanodromous fish species such as the sea trout, eels, and salmons due to the fact that no matter how successful its independent conservation measures are, these species can always face threats in other locations. This intrinsic logic of most international environmental issues leads to a significant preference for cooperative management measures to overcome these issues. Factually, at the time of the Rio Conference on Environment and Development in 1992, there were already more than 900 international agreements specifically focused on environmental protection with the UN

¹¹ J. Samuel Barkin and Elizabeth R. DeSombre, "Unilateralism and Multilateralism in International Fisheries Management," *Global Governance* 6, no. 3 (2000): 339–60, <https://doi.org/10.1163/19426720-00603004>.

Environment Programme (UNEP) identified approximately 150 multilateral agreements that were exclusively dedicated to environmental protection.

While multilateral efforts became a major feature of International Fisheries Law, unilateral actions, though sparsely used, continue to affect future multilateral dimensions due to their significant impacts¹². For example, the unilateral acts of certain South American Countries in the 1950s for the protection of their domestic tuna industries had a significant impact on international maritime law as it led to the establishment of exclusive economic zones (EEZs) extending 200 miles from the coast. The Canada-European Union Turbot Conflict in 1995 resulted in the most profound political crisis between Canada and Spain, both NATO allies, in the twentieth century which resulted in the European Union being granted a larger share of the allowable turbot catch and the establishment of stronger mechanisms for enforcing international fishing rules. In the dimension of International Trade Law, The United States' unilateral efforts to safeguard dolphins from tuna fishers in international waters have resulted in substantial conflicts between the United States and several of its key trading allies such as Mexico and Canada inside the WTO. Unilateral actions can come in the form of import restrictions, administrative measures such as fines levied on users of a fishery resource, and even the use of force to deter the unrestricted usage of fishery stocks. Though unilateral actions can be ascribed to certain state interests or even the avoidance of certain obligations, they can also be used as tools in support of a bilateral and multilateral outcome which coagulates to individual efforts at international cooperation.

In the current scheme of international fishery, unilateral actions are heavily connected with economic substitutability, which in the case of fisheries pertains to the degree to which the consumer of fish can find its reasonable substitutes in the case of depletion of fish stocks. In this case, consumers refer to states with most vested interests on certain fish species as its primary customers such as Canada or China with Turbot, The United States or the European Union with Tuna, and Norway with the Sea Trout. For example, States with greater substitutability for a fishery do not benefit from taking unilateral action to protect that fishery, as they can rely on other fisheries resources if this one becomes excessively depleted. In a tragedy of the commons scenario, a state's primary approach is to excessively consume the resource, regardless of whether it exceeds sustainable levels, while others practice conservation.

Though, a cooperative outcome can be achieved when all states acknowledge that pursuing such an action simultaneously would result in a worse end for anyone involved compared to accepting their second-best option and conserving resources collaboratively, states that have greater capacity to replace the resource in question are less affected by the deterioration of that resource compared to other states. Such a phenomenon encourages states with limited substitutability to engage in unilateral action as it is the sole existing means to counterbalance the negotiating advantage that certain countries possess in international forums due to their capacity to consume more than their equitable portion, according to their higher levels of substitutability.

When one sees such a possibility of a situation wherein unilateral actions can emerge, the question becomes whether there are any effective multilateral mechanisms in force to prevent violation of substitutability advantage that a state has over another and how much impact does failed bilateral or multilateral mechanisms generate which results in unilateral actions.

The Case of Antarctic Fisheries

To answer such questions, case analysis is needed to construct a more clear picture of the relevant issues at hand. A first case in point is the ill-equipped interaction between the 1980 Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) and the recent development of the fishing industry¹³. Previously, the fisheries operations conducted in Antarctic

¹²Daniel Bodansky, "What's So Bad about Unilateral Action to Protect the Environment?," *European Journal of International Law* 11, no. 2 (2000): 339–47.

¹³Beth C. Clark and Alan D. Hemmings, "Problems and Prospects for the Convention on the Conservation of Antarctic Marine Living Resources Twenty Years On," *Journal of International Wildlife Law and Policy* 4, no. 1 (2001): 47–62, <https://doi.org/10.1080/13880290109353971>.

waters throughout the 1970s and 1980s were rather limited in terms of the size and range of species being targeted. These operations mostly relied on a single fishing method, namely trawling, and were thus constrained by the presence of ice. The practice of fishing in the Antarctic was limited to a smaller number of countries. Importantly, the vessels used were under the direct authority of the flag state, which, with very few exceptions, was also a Party to CCAMLR.

However, gradually as fisheries in the area become more successful¹⁴, facts emerge that in international fishery activities in the Antarctic waters, there is not always a direct connection between the flag, operations, and decision-making, and key modalities can be changed in the course of a voyage. Diversification of fishery activities are accompanied with enhanced technical capacity which has expanded the scope of human activity in terms of space and time. Routine fisheries efforts now encompass higher latitudes and winter operations. Technological advancements have also yielded more potent fishing techniques and processing alternatives. The fast expansion of access to the Southern Ocean has resulted in a significant degradation of the Antarctic marine ecology and the current fishing activities have dire implications on target species and seabirds, including a significant portion of the global albatross populations.

Factually, these gradual deterioration of local marine ecology were not resulted by the activities of the states of the southern hemisphere which is geographically closer and has to have a vested interest in the fishery stocks in the area¹⁵. But by fleets of northern industrialized countries with great degree of fishing technology. The fact that at one time most major fleets came from far-away countries such as Poland, Russia, Japan and New Zealand with deep-sea ships that can venture long distances and process their catches onboard and are thus capable to fish in all territories of the high seas indicate that exploitation of fish stocks in the antarctic waters are of a substitutable nature. A debatably major failure of the CCAMLR in providing an adequate multilateral solution to recent over-exploitation of living marine resources came in the form of the Antarctic Peninsula MPA proposal that Chile and Argentina proposed in 2018¹⁶.

Vested interests of Chile and Argentina as geographically-connected countries to the Antarctic and therefore its environment resulted in their proposal of the designation of the Antarctic Peninsula, one of the busiest areas of Antarctica and the fastest warming areas of the world, as a Marine Protected Area (MPA), though such a proposal has been vetoed repeatedly by Russia and China which put further pressure on the instability of krill fishery around the Area, an industry that Chile was hugely involved in. Several studies have attributed the mechanism of consensus in the CCAMLR as the fundamental reason why highly-active fishery grounds around Antarctica are often contested in MPA proposals. Despite no unilateral measures have been undertaken by Chile, Argentina or other states despite the current structure of CCAMLR, future unilateral actions may take place due to the low substitutability advantage of southern countries such as Chile against industrialized states with high activity in Antarctica and the Southern Ocean such as China if no substantive reforms for relevant vested interests are duly taken.

The Pacific Salmon Case Between the United States and Canada

Another similar conflict was the Pacific Salmon dispute between the United States and Canada¹⁷. Historically, Pacific salmon from Canada and the United States mix extensively on their migratory travels along the coastlines of both countries, as well as with Asian populations in the open ocean. However, different species exhibited highly varied migratory patterns. Sockeye, the first type of salmon to be canned, and chum salmon engaged in vast migrations throughout the Gulf of Alaska.

¹⁴Karl Hermann Kock, "Fishing and Conservation in Southern Waters," *Polar Record* 30, no. 172 (1994): 3–22, <https://doi.org/10.1017/S0032247400020994>.

¹⁵E. E. Hofmann and T. M. Powell, "Environmental Variability Effects on Marine Fisheries: Four Case Histories," *Ecological Applications* 8, no. 1 (1998): S23–32.

¹⁶Lynda Goldsworthy and Eaven Brennan, "Climate Change in the Southern Ocean: Is the Commission for the Convention for the Conservation of Antarctic Marine Living Resources Doing Enough?," *Marine Policy* 130, no. May (2021): 104549, <https://doi.org/10.1016/j.marpol.2021.104549>.

¹⁷Ted L. McDorman, "A Canadian View of the Canada-United States Pacific Salmon Treaty: The International Legal Context," *Williamette Journal of International Law and Dispute Resolution* 6, no. 1 (1998): 79–98.

Pink salmon demonstrated a greater inclination to stay near the rivers from which they originated. Coho salmon, widely sought after by saltwater anglers, exhibited limited migratory patterns since they tend to remain in close proximity to their native streams throughout their lifespan. The Chinook salmon, which was the largest species of salmon, exhibit a propensity of remaining close to the shoreline during their vast migrations along the coasts of Oregon, Washington, British Columbia, and Alaska, rather than traveling into the North Pacific Ocean¹⁸.

The migratory behavior of salmon enables Canadian fishermen to catch American stocks and vice versa, allowing for the interception of salmon originating from the United States by Canadian fishers. Given the commingling of American and Canadian stocks in the water, these interceptions were unavoidable. The research undertaken by both countries has discovered substantial interception activities. Alaskan fishermen caught salmon that are moving towards British Columbia, Washington, and Oregon. Canadian fishermen on the west coast of Vancouver Island intercepted salmon migrating to rivers in Washington and Oregon. Furthermore, fisheries located in the northern region of British Columbia intercepted salmon that were on route to Alaska, Washington, and Oregon. Moreover, American fishermen captured Fraser River salmon as they made their way through the Strait of Juan de Fuca and the San Juan Islands en route to the Fraser River¹⁹.

To reduce the chances of future stock interception, Canada and the United States both agreed to sign the Canada-United States Pacific Salmon Treaty (PST) in 1985. Essentially, the treaty created a Pacific Salmon Commission (PSC) to provide guidance to each country and serve as a platform for developing yearly management plans for significant fisheries as regulated by article 2 of the treaty²⁰. Furthermore, the treaty introduced specific fundamental principles that require the salmon catch to remain within sustainable limits, and that the allocation of the catch between the two states shall be proportionate to the percentage of the entire stock that reproduces in each state's rivers. Nevertheless, attempts to establish the tangible execution of these principles and any precise quotas failed to reach a conclusion in 1992, 1993, and 1998²¹.

Upon reviewing prior research on the matter, it has been shown that Alaskan interceptions of Canadian-origin stocks have regularly exceeded Canadian interceptions of Alaskan stocks in both quantity and value since 1985 while Canadian interceptions of U.S.-origin salmon from Washington and Oregon have experienced a consistent decrease since the 1980s in the southern region. Both states concur that in 1985, the United States intercepted an excess of 2.4 million salmon when compared to interceptions done by Canada²². In 1996, the projected discrepancy in interceptions amounted to almost 35 million fish, valued at around C\$500 million, in favor of the United States²³. Thus, it remained factual that Canada was less capable than the United States in effectively substituting specific Pacific salmon species, particularly those sourced from Canadian rivers which were more vulnerable. Moreover, Canada was interested in these particular populations due to their significance in general conservation and their support of a thriving offshore, riverine, and sport fishing industry, which was vital for tourism. However, the U.S. salmon industry mostly emphasized offshore fishing, resulting in less reliance on specific riverine stocks.

Due to the failure of bilateral negotiations, Canada has chosen to adopt unilateral measures to further its own interests. For instance, in 1994, the Canadian government implemented a temporary legislation enabling them to impose a transit license fee of \$1,500 on American boats undertaking this

¹⁸L.S. Parsons, *Management of Marine Fisheries in Canada* (National Research Council and Department of Fisheries and Oceans, 1993); William G. Percy, "Salmon Production in Changing Ocean Domains," in *Pacific Salmon & Their Ecosystems*, ed. Deanna J. Stouder, Peter A. Bisson, and Robert J. Naiman (Springer Science and Business Media Dordrecht, 1997), 331–52.

¹⁹Pacific Salmon Commission, "Report of the Fraser River Panel to the Pacific Salmon Commission on the 1996 Fraser River Sockeye Salmon Fishing Season," 1999.

²⁰Fraser River Sockeye Public Review Board, "Fraser River Sockeye 1994: Problems & Discrepancies" (Public Works and Government Services Canada, 1995).

²¹Pacific Salmon Commission, "Report of the Fraser River Panel to the Pacific Salmon Commission on the 1996 Fraser River Sockeye Salmon Fishing Season."

²²Department of Fisheries and Oceans, "The Pacific Salmon Treaty: An Overview" (Department of Fisheries and Oceans, 1996).

²³Kathleen Miller, "North American Pacific Salmon: A Case of Fragile Cooperation," *Environmental and Societal Impacts Group*, no. January 2003 (2002), <http://www.fao.org/docrep/006/y4652e/y4652e09.htm>.

journey. This action was strategically taken to compel the United States into engaging in a diplomatic resolution. Subsequently, in 1996, a policy was implemented that mandated all American salmon vessels traversing Canadian waters to officially register with the Canadian Coast Guard. This measure, though apparently aimed to facilitate fishery monitoring, inadvertently caused inconvenience to American ships. In the subsequent year, the Canadian Coast Guard utilized the same regulation to seize four salmon boats from the United States. The boats were confiscated due to their failure to notify Canadian authorities while transiting Canadian waters and were subsequently released upon payment of a \$300 penalty by each captain. Actions undertaken by Canada throughout this conflict exhibited its own position on the willingness of the United States to undergo consultations for a more practical agreement between the two states. Despite previous budging on the part of the United States, unilateral actions of Canada resulted in a new arrangement of catch quotas between the two states in 1999, that assigned more of the catch of chinook salmon to the United States and more of the catch of the Fraser River sockeye salmon catch to Canada, which put an end to Canadian unilateral actions²⁴.

The Case of Hake Exploitation by Spanish Fleets in Namibian Waters

A third related case was the Spanish exploitation of the Hake species along the coast of Namibia²⁵. Historically, Spanish fleets engaged in fishing activities within the international waters beyond the 3-mile boundary of coastal jurisdiction. There was no existing international agreement to govern the fishing activities in those areas, hence the Spanish catch was not subject to any legal restrictions. Moreover, despite the International Commission for South East Atlantic Fisheries (ICSEAF) since 1969, Namibian interests were not represented in the convention as the United Nations Council for Namibia was not a member of ICSEAF. By 1979, as South Africa's mandate over Namibia was already revoked when it attempted to introduce an Exclusive Economic Zone in Namibian waters and because there was no military presence to establish order in Namibia's fishery zones²⁶, the EEZ was ignored and Namibian waters were destined to remain essentially an unregulated open-access area until Namibia's independence in 1990. Between the 1960s and 1990s, Spanish and Soviet fleets caught significant amounts of hake, amounting to between 80% and 90% of the hake catches of all foreign fleets off the Namibian coast²⁷. Over-exploitation of hake stock resulted in the reduction of Hake population by 50% by 1980, and catch per unit effort had declined by 60%²⁸.

However, once gaining independence in 1990, Namibia claimed a 200-mile EEZ²⁹ in which fishing would be allowed only by license and then only by states with which Namibia concluded a fisheries agreement. However, the fact that Namibian fishing fleets were relatively small and technically subpar, which contributed to it only harvesting about 18 percent of the catch in the newly declared EEZ, provided significant difficulties for the new state to utilize its claimed EEZ³⁰. In contrast, Spanish fishing fleets were almost entirely distance fleets which enabled them to fish anywhere in the high seas. The fact that the Spanish fleet possessed the potential to locate other fishing grounds indicated that it had a significant level of substitutability for the hake caught in Namibia's EEZ.

Once declaring a 200-mile EEZ, Namibia implemented a restriction on illegal fishing within it and set a significantly reduced limit on the overall catch in order to protect its fish supplies. Subsequently, it engaged in discussions with the European Community (EC) over the authorization of EC fishing vessels to catch Namibian hake, in return for compensatory payments. However, Spanish

²⁴ Miller.

²⁵ Barbara Paterson and Paulus Kainge, "Rebuilding the Namibian Hake Fishery: A Case for Collaboration between Scientists and Fishermen," *Ecology and Society* 19, no. 2 (2014), <https://doi.org/10.5751/ES-06370-190249>.

²⁶ Richard Moorsom, *Walvis Bay: Namibia's Port*, Volume 247 (International Defence & Aid Fund for Southern Africa, 1984); Peter Robert Manning, "Managing Namibia's Marine Fisheries: Optimal Resource Use and National Development," 1998.

²⁷ Barkin and DeSombre, "Unilateralism and Multilateralism in International Fisheries Management," p. 348.

²⁸ Moorsom, *Walvis Bay: Namibia's Port*.

²⁹ Paterson and Kainge, "Rebuilding the Namibian Hake Fishery: A Case for Collaboration between Scientists and Fishermen," p. 3.

³⁰ Dyhia Belhabib, Nico E. Willemsse, and Daniel Pauly, "A Fishery Tale: Namibian Fisheries between 1950 and 2010," *Fisheries Centre, University of British Columbia* 65 (2015): 1–17.

ships, facilitated by the Spanish government's failure to enforce relevant regulations, persistently engaged in fishing operations within the aforementioned limits and violated the imposed moratorium. Ultimately, Namibia resorted to deploying fisheries inspectors and soldiers aboard Spanish trawlers from helicopters in order to seize the trawlers and apprehend the personnel. In response, the Spanish decided to withdraw from the license negotiations of the EC and leave Namibian waters after its government refused to tolerate illegal Spanish vessels as a business-as-usual condition.

The Canadian-Spanish Turbot Case

Another relevant case in this regard was the Case of Turbot³¹ exploitation between Canada and the European Union on behalf of Spain. Turbot was a species of halibut found in the Northwest Atlantic and was formally under the management of the Northwest Atlantic Fisheries Organization (NAFO). Due to the increasing consumer demand of Talbot in early 1990s, which resulted in the depletion of Talbot stocks within Canada's EEZ, Canada's fleets began to arrive in open waters in search for healthy stocks. Spanish fleets which targeted the same stocks, also began flocking to the same area.

To prevent an issue on the quota of Talbot fishing allowed in the Northwest Atlantic, the question of total allowable catch (TAC) was raised and given a maximum tonnage of 20,000 in 1995. A majority vote to establish national quotas among invested parties resulted in, among others, a grant of 16,300 tonnes for Canada and 3,400 tonnes for the European Union based on underlying reasons submitted by each party. Under NAFO regulations, countries have the right to raise objections to certain quota decisions. In this case, the European Union, representing the Spanish fisheries, exercised such a right³². Consequently, it was exempted from the obligation to adhere to its designated quota. Consequently, notwithstanding the agreement between the Spanish and Canadian authorities over a Total Allowable Catch (TAC), the lack of consensus on quota allocation rendered the TAC essentially meaningless.

Canada's lack of a high-seas fleet fishing beyond its Exclusive Economic Zone (ZEE), in contrast to the well-equipped deep-fishing vessels of Spanish fleets, clearly indicated that the Canadian fishing fleet had a significantly lower substitutability compared to the Spanish fleet. At a disadvantage technically and legally, Canadian authorities took, after failure with a multilateral approach in the NAFO, action unilaterally by seizing and impounding a Spanish vessel and apprehending its crew³³. Following a protest by Spain, a compromise was achieved whereby Canada's quota was reduced and Spain's was increased³⁴. Thereafter, Spain entered into compliance with the revised TAC.

D. Lessons from Past Multilateral Efforts in Blue Economy: Looking Forward Towards the Case of Natuna Fisheries in the South China Sea

From the analyzed cases above, there are many aspects that, due to the failure of bilateral or multilateral mechanisms, led to the unilateral actions, or possibility thereof, by states. One of the most fundamental reasons, as exemplified by the Pacific Salmon Case was that in certain bilateral settings, the execution of negotiations and implementations of mutually agreed TACs or fishing quotas depend highly on a state's willingness to enter into negotiations and to abide by a preceding agreement. Differently from RFMOs regulations that states frequently abide by, bilateral settings, as the case between Canada and the United States, seemingly in need of certain unilateral maneuvers to secure the interest of disadvantaged states in a fishery conflict.

Another issue, as has been examined in the Antarctic Fisheries Case, is the - arguably - problematic decision-making structure in the CCAMLR which mandated full consensus in the

³¹Marvin A. Soroos, "The Turbot War: Resolution of an International Fishery Dispute," in *Conflict and the Environment*, ed. Nils Petter Gleditsch (Springer-Science+Business Media, B.V., 1996).

³²Allen L Springer, "The Canadian Turbot War With Spain : Unilateral State Action in Defense of Environmental Interests Author (s): Allen L . Springer Source : The Journal of Environment & Development , March 1997 , Vol . 6 , No . 1 (March Stable URL : [Https://Www.Jstor.Or](https://Www.Jstor.Or) 6, no. 1 (1997): 26–60.

³³Springer, p. 35-36.

³⁴Donald Barry, "The Canada- European Union Turbot War: Internal Politics and Transatlantic Bargaining," *International Journal* 53, no. 2 (1998): 253–84.

acceptance of proposals by member-states. Several research³⁵ have indicated that consensus can be a substantial obstacle in the way of large-scale conservation decisions that affect an area of great interest to the party as it was the case with the Antarctic Peninsula. As failure in multilateral approach can result in future unilateral actions as it was the case with the Turbot Case, it can be suggested that reforms to the consensus standard, a changing into a majority vote as apparently applied in various TACs allocation decisions, can be applied to prevent unsavory defensive mechanisms by deeply affected states.

The Namibian-Spanish Hake case portrayed a classic issue that still persists in International Fisheries Law to this very day: weak compliance of international regulations. After Namibia's moratorium was drafted and the government entered into negotiations with the European Community, a passed agreement was followed with non-existent compliance by the Spanish government as a part of the European Union. Though this was tightly connected to state's willingness - and to an extent also sovereignty, the fact that such a weak compliance, that even resulted in the Spanish withdrawal from enacted license negotiations with Namibia, was freely exhibited suggest a need for more stringent compliance rules in the framework of International Fisheries Law.

Weak compliance was also exhibited by the Canadian-Spanish Turbot case, which dealt with the refusal of the European Union to abide by the enacted TAC for the Talbot fishing in Northwestern Atlantic. However, different from the Hake case, weak compliance in the Turbot dispute arose from NAFO's lax regulation which allowed for a party to object passed quota decisions despite its enactment following a legal procedure. The possibility of a refusal may indicate a less-stringent nature of current fishery regulations in effect which needed to be revised in order for more progressive advancements to be made in the field of International Fisheries Law.

The Conflict in the South China Sea and Indonesia's Fisheries in the Natuna Sea

The pitfalls in the implementation of past multilateral agreements can become lessons in the creation and enactment of future agreements which govern similar contentions at sea. One major case being the on-going dispute over fishing rights in the South China Sea between China and certain sovereign states in Southeast Asia³⁶ such as the Philippines and Vietnam, with the recent inclusion of Indonesia to the conflict³⁷. The case centered on the claims made by different states regarding the extent of the sea wherein their exclusive rights to fish stocks, exploration and potential exploitation of crude oil and natural gas in the seabed area, and the strategic control of important shipping lanes, can be upheld with the claims themselves not only based on certain legal considerations, such as those regulated in the United Nations Convention on the Law of the Sea 1982, but also historical and geographical ones also.

Despite the broader nature of this conflict in comparison to others already treated within the general confines of this article, the same principles regarding an effective mechanism - through treaty - to resolve maritime disputes can still be applied in this case, due to certain similar characteristics. For example, the main issue regarding the application of fishing rights is connected to economic potential

The South China Sea has due to it providing for nearly 10% of global fish consumption and, thus, is an essential component of food security³⁸. To strengthen the claim that a state, for example being China, has over the area, it has utilized its maritime law enforcement agencies and Chinese fishers so that its active presence and utilization of marine resources there can be more easily proven. Further escalations have been observed in the South China Sea, such as the unilateral banning of

³⁵ Clark and Hemmings, "Problems and Prospects for the Convention on the Conservation of Antarctic Marine Living Resources Twenty Years On"; Goldsworthy and Brennan, "Climate Change in the Southern Ocean: Is the Commission for the Convention for the Conservation of Antarctic Marine Living Resources Doing Enough?"

³⁶ Mohammad Hazyar Arumbinang, Yordan Gunawan, and Rizaldy Anggriawan, "The Fishing Rights Conflict in the South China Sea between Vietnam and China," *Sriwijaya Law Review* 5, no. 2 (2021): 205-17, <https://doi.org/10.28946/SLREV.VOL5.ISS2.875.PP205-217>.

³⁷ Damos Dumoli Agusman, "Natuna Waters: Explaining a Flashpoint Between Indonesia and China," *Indonesian Journal of International Law* 20, no. 4 (2023): 617-48, <https://doi.org/10.17304/ijil.vol20.4.1>.

³⁸ Rizki Roza et al., "Konflik Laut China Selatan Dan Implikasinya Terhadap Kawasan" (Jakarta, Indonesia, 2013).

fishing activities by China in territories which overlapped with Vietnam's claimed ones since 1999 and has threatened Vietnam's access to fish stocks needed to maintain their own fishery industry³⁹.

Mounting tensions over the exploitation of marine resources were also observed in the case of Indonesia, alongside the Philippines, which has been implicated when China introduced the concept of 'traditional fishing grounds' as an extended justification for its nine-dash-line claim over the South China Sea⁴⁰ in what is known as Natuna Waters. Since 2016, several instances have been observed wherein Chinese vessels have trespassed into the Exclusive Economic Zone (EEZ) near Indonesia's Natuna Islands and engaged in IUU Fishing which put the fish stocks around the area and its ecosystem into danger, especially without a joint-management system agreed between the contending states in place. The absence of a specific RFMO or a similar fisheries management organization that can assist in resolving this prolonged conflict, which has been in the making since the 1990s, may have exacerbated the tensions in the area, especially after the South China Sea Arbitration case between the Philippines and China which made the case, despite the merit of its decisions, even more convoluted than before.

However, a possible answer to this issue may come in the form of the ASEAN-China Declaration on the Conduct of Parties in the South China Sea (DOC) and its implementing Code of Conduct for the South China (COC) which has been heralded as a solution to the conflicts of interests within the South China Sea. The COC is expected to be a code of conduct that reflects international norms, principles and rules that are in line with and refer to international law, especially UNCLOS 1982 with the aim of achieving a stable, safe and peaceful relations and cooperation in South China Sea, with a general framework that is expected to guide its creation approved in 2017. Principally, the agreed framework offers several solutions regarding past conflicts in the South China Sea. For example, maintaining the agreed provisions of the DOC, the framework in its general provisions provided an objective to build "trust and confidence" and "enhance favorable conditions for a peaceful and durable solution of differences and disputes among the countries concerned". Moreover, both China and the ASEAN, through the framework, further substantiated such an objective by adding that the COC must also be mitigating by preventing and managing incidents at sea. Furthermore, in the principles section of the general provisions of the framework, the COC, is also to "respect for each other's independence, sovereignty and territorial integrity in accordance with international law, and the principle of non-interference in the internal affairs of other states." Other parts of the framework, such as the basic undertakings where parties to the COC will have the duty to cooperate within the meaning of article 197 of the UNCLOS 1982, promotion of trust and confidence, and prevention of maritime incidents, will potentially help in securing a more peaceful cooperation in and economic utilization of the South China Sea in the future.

However, several articles have expressed concerns on the fundamental nature of the COC itself⁴¹ and put much weight on an aspect that is most fundamental in making marine multilateral-multiregional treaties effective, which is compliance. As what have been elaborated in this article, what can make the implementation of agreed upon treaties debilitating is the willingness of parties to it to realize it based on their good will and compliance to the treaties concerned and much have been elaborated on this issue especially if the agreements are non-binding in nature. Conflicting interests between China and Southeast Asia may emerge again once the COC is in place and compliance is demanded by one party or another. A binding agreement may still be problematic in its implementation, much less non-binding ones which the COC is expected to be. For example, the arbitral award in the South China Sea Arbitration case between the Philippines and China, which was brought about under Annex VII of the 1982 UNCLOS which has been ratified by China in 1996, was rejected to be implemented by China, and Philippines at last decided to once again approach the issue diplomatically and not legally. The same situation can arise within the context of the COC if compliance cannot be sufficiently secured.

³⁹Ha Anh Tuan, "The Tragedy of Vietnamese Fishermen: The Forgotten Faces of Territorial Disputes in the South China Sea," *Asia Journal of Global Studies* 5, no. 2 (2013): 94–107.

⁴⁰Verdinand Robertua and Obsatar Sinaga, "Indonesia in the South China Sea Dispute: Humble-Hard Power," *Jurnal Global & Strategis* 11, no. 2 (2018): 73, <https://doi.org/10.20473/jgs.11.2.2017.73-83>.

⁴¹Rahul Mishra, "Code of Conduct in the South China Sea: More Discord than Accord," *Maritime Affairs: Journal of the National Maritime Foundation of India* 13, no. 2 (July 3, 2017): 62–75, <https://doi.org/10.1080/09733159.2017.1412098>.

The COC, for example, avoided the term non-binding in the framework and instead used the more flexible term rules-based in the first objective of its general provisions which may open for interpretations. Moreover, despite there being a plan for the establishment of necessary mechanisms for monitoring implementation in the framework's final clauses, the framework is entirely silent about enforcement measures and dispute resolution mechanisms which may further weaken the COC if it really is to be non-binding in nature. The absence of any details on the scope of implementation of the COC through provisions on geographical indications or borders necessary to establish a clear extent of COC's realization also may contribute to its uncertain nature which again may open to interpretations once the COC is in force.

Relevant studies on treaty effectiveness⁴² has emphasized that both a strong regulatory design or normative posture and compliance is essential in any treaty realization and past experience in treaty-making and its implementation has made it clear that if an agreement does not include a strong regulatory design or normative posture, simple compliance may not generate results. Likewise, poor drafting may enable states to claim to be technically compliant when their actual observance may be weak. Thus, it can be seen as imperative for the COC and its contents to be solidified and more importantly, for it to be more enforceable, preferably by making it legally-binding. Even if a legally-binding status cannot be attained due to any prevailing circumstances, the possible outcome of a normatively strong COC which lays out specific and pragmatic provisions on enforcement measures and dispute resolution mechanisms can make it effective both for China and states in Southeast Asia. If such issues within the COC can be resolved, it can be ascertained that a conducive economic cooperation in the South China Sea can be achieved, and unilateral actions from any parties concerned with COC's implementation can be prevented.

IV. CONCLUSIONS

Indonesia has embarked on strategic leadership steps in the fisheries sector through the strengthening of national legal regulations and the application of international law and advocacy in various organizations both in the regional and international scenes. However, collaborative and cooperative steps are still needed to further strengthen Indonesia's role in various forums. Especially within the national legal framework, various existing regulations, especially related to quota restrictions, have shown significant potential for the realization of related sustainability commitments especially SDG 14. However, there are some areas that can still be developed, such as for Indonesia to take a rather active role in regional fisheries organizations as a decision maker and mediator in marine dispute resolution forums. Indonesia's chairmanship in ASEAN is also expected to be an opportunity to demonstrate the effectiveness of national strategies and regulations in the field of conservation and management of the fishing industry that can be used as an example for other member countries.

One of the main goals that Indonesia can set to ensure its involvement and leadership in ASEAN maritime connectivity is the construction of a national sustainable fisheries system that serves as a pioneer of similar systems in Southeast Asia. For example Indonesia can substantiate its leadership by providing adequate maritime connectivity infrastructure such as cold chain systems that serve to maintain the quality and health of fish products along the product distribution chain. Through the realization of such a program, other ASEAN countries can be encouraged to implement their own cold chain systems so that each national sustainable fisheries sub-systems that are according to international standards can be formed.

Especially related to the implementation strategy of relevant sustainability commitments, some of issues that also need to be considered are: (1) the systematic integration of more regional and national legal instruments; (2) the financing of RFMO members states in conducting ecosystem-based as a form of national capacity building; and (3) the conducting of periodic RFMO performance reviews based on transparent criteria and methodologies.

⁴²Such as Thomas F. McInerney, "Factors Contributing to Treaty Effectiveness: Implications for a Possible Pandemic Treaty," *Global Health Centre Policy Brief*, 2021.

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