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Extra-continental Influence and Maritime Safety on High Seas: the new American challenge

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Abstract

Population growth poses one of the greatest challenges for human survival in the 21st Century and, increasingly, man is turning to the sea for food and energy. As the ocean has no physical boundaries, it is inevitable that some of these activities will affect jurisdictional waters of coastal States, negatively affecting those nations' seashore, with all the economic and social ramifications that entail. Recent studies point to most threats to maritime jurisdictions coming from undetected acts perpetrated on the high seas. Most of these acts in America's surroundings oceans are carried on by ships flagged in extra-continental countries or with the support of those nations, aiming to influence Latin America by given funds and investments that would compromise the States sovereign in the future. Therefore, this paper looks at potential threats in this domain and measures to mitigate those threats, in full compliance with the provisions of the United Nations Convention on the Law of the Sea. Their occurrence area makes it impossible for any one country to address these issues alone. Increasingly States need the support of hemispheric alliances, such as the Organization of American States, and transboundary water agreements such as the Zone of Peace and Cooperation of the South Atlantic. Leveraging those alliances and agreements to reinforce maritime safety is a new challenge for the American States and the surest way to foster cooperation

among developing nations, including those with coasts along the South Atlantic and South Pacific, and to prevent maritime threats from undermining their future.

Key Words: Maritime Safety; High Seas; Illegal-unreported-unregulated Fishing; International Alliances; Extra-continental Influence

1. Introduction

The modern world experiences its biggest challenge since the end of the Second World War. United Nations (UN) Department of Economic and Social Affairs projections indicate that the world population, nowadays 7.7 billion inhabitants, will reach 9.7 billion in 2050ⁱ. According to this study, this 2 billion inhabitant increase will occur in an unbalanced way with only 6 million of them (equivalent to the Rio de Janeiro City population) living in the more developed regions, like Europe, North America, Australia, New Zealand, and Japan.

The future scarcity of energy, mineral resources, and food in the continental parts of the Earth indicates the oceans as the new sources of these riches, where humans will seek new energy matrices, such as the ones generated by waves, tides, density differences, and wind fields. In the same way, increases in the exploration of oil as well as in the search for mineral deposits and chemical elements to produce fertilizers and agricultural pesticides to increase food production, in addition to the clear demand for fish and living organisms of the marine biota, many of which are the raw material for the pharmaceutical industry.

This seek will not be limited to areas close to the seashore and, if conducted in a rampant way, can cause an environmental imbalance that will transform the oceans, not in a solution, but

in one of the factors causing the scarcity of living resources also in the continents, due to worsening climate changes affecting the Earth.

The 7th edition of the United States National Intelligence Council's Global Trends Reportⁱⁱ, published in March 2021 (National Intelligence Council, 2021), points out the compromised of food safety and the increase of poverty as the main causes of world peace destabilization and of internal conflicts in the countries, in the next 20 years. In this period, the increase of overfishing, warming, and acidification of the oceans and environmental pollution will worsen this scenario. Thus, nations that are already in a situation of vulnerability to feed their population today will be a source of large migrations to other countries and potentially cause frequent humanitarian crises until 2040.

This study reflects on the importance of international organizations for the protection of the high seas, tracing a brief history of the construction of the concept of the high seas in international law and understanding the relationship of natural phenomena occurring in the high seas with ecosystem changes in areas under the jurisdiction of a given State. Then, it aims to map extra-continental actions and influence on high seas that affect Latin American nations' jurisdictional waters, and what immediate measures can be taken to mitigate them, especially in areas beyond national jurisdiction.

2. High Seas brief history

The legal system for establishing rights at sea evolved over time, albeit slowly, following social and commercial motivations. However, during the 20th Century, the technological evolution of equipment and techniques developed to explore the sea, associated with the two major

international conflicts, accelerated the review and formulation of new legislation that would regulate their use and the creation of international bodies to its governance.

Faced with growing demands, especially from economic order, efforts have multiplied to establish a legal regulation at gradual levels of jurisdiction with acceptable international consensus, which was achieved through the United Nations Convention on the Law of the Sea (UNCLOS). Enacted in Montego Bay, Jamaica, on December 10th, 1982, it had 116 signatory countries and made important advances in terms of the universalization of concepts, establishing qualitative and quantitative criteria for their application in practice.

In the 21st Century, the advance represented by UNCLOS for consolidating the sovereignty of Coastal and Archipelagic States in their jurisdictional waters is confronted by new challenges beyond the outer limits of the Exclusive Economic Zones (EEZ) of these States, in areas defined as high seas.

UNCLOS establishes in its Article 86 the definition of high seas as “all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State, or in the archipelagic waters of an archipelagic State.” (UNCLOS, 1982)ⁱⁱⁱ This immense area represents 2/3 of the total Earth’s surface covered by oceans and 50% of the planet's total area^{iv}, as shown in Figure 1.

3. Linked Oceans

Some natural phenomena and human activities in areas 200 nautical miles off the coast, referred to as the high seas under UNCLOS, significantly affect other regions of the ocean and activities conducted in jurisdictional waters. Unlike geographic areas on dry land, the absence of

physical barriers in the ocean makes it impossible to isolate completely one area or activity from others.

One example of that is the Atlantic Meridional Overturning Circulation (AMOC) phenomena, which is responsible for heat transfers from the South Atlantic to North Atlantic seas. Currents on the ocean's surface carry warm waters north, towards the North Pole, where the water then cools down, becomes denser, and sinks, flowing back southwards close to the Atlantic basin bottom.^v AMOC is a clear illustration of the interconnectedness of the Arctic and Antarctic regions and oceanic temperatures' sensitivity to climate change.

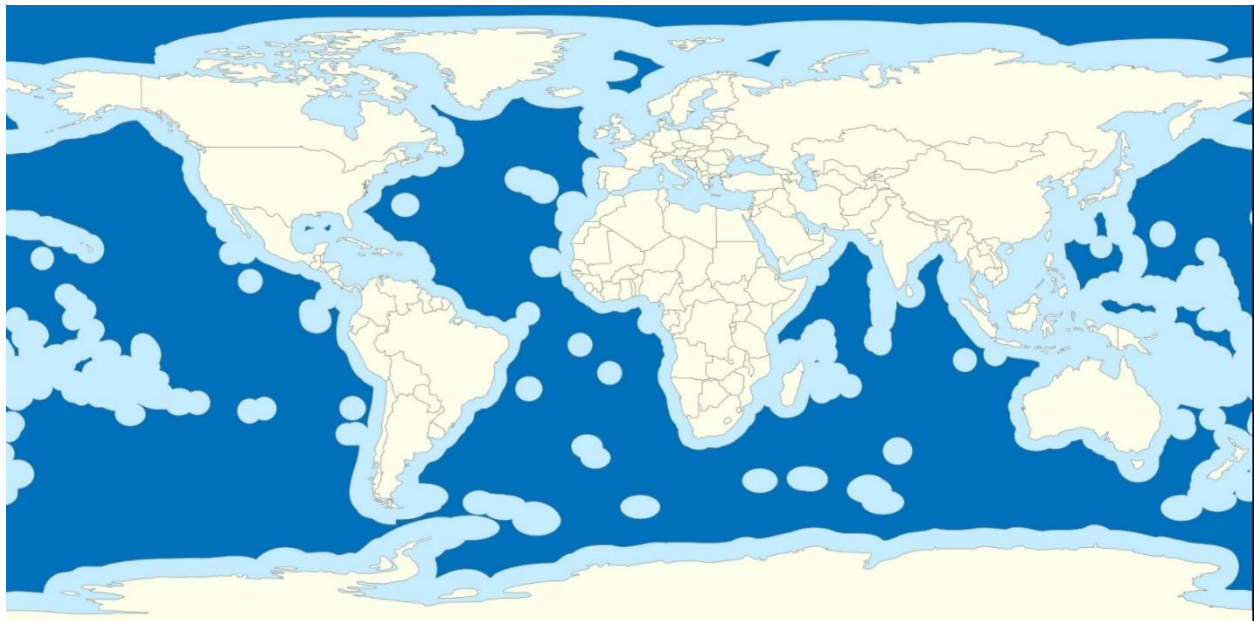


Figure 1: Areas classified by UNCLOS as high seas (in dark blue) and areas under national jurisdiction (territorial sea + exclusive economic zone) marked in light blue. (Source: https://www.iucn.org/sites/dev/files/high_seas_map_3.png).

Phenomena that occur in regions far from the coast directly influence the transport of nutrients in the oceans and play a key role in increasing the productivity of fishing regions.

Subtropical Mode Waters¹, during their formation process, represent a major mechanism for capturing CO² from the atmosphere and constitute reservoirs of nutrients that will be transported to distant regions, with the migration of these subsurface water masses to other locations, inserting additional nutrients that will contribute to the increase in primary productivity and afterward to the fish availability.^{vi}

Likewise, marine biology tells us that uncontrolled fishing in one region, especially if it occurs along the migratory routes for certain species; affects fish stocks in distant regions, by a cascading effect. Overfishing compromises the captured species' ability to reproduce leading to a long-term shoal reduction. This reduction number of one species leads to an unbalanced distribution of natural predators in other areas, and that, in turn, impacts capture amounts of secondary species, decreasing fish different stock in waters far from where the original overfishing took place.

The absence of physical barriers in the oceans, then, means that coastal States experience in their jurisdictional waters the economic and social impacts of events that happen out on the high seas.

4. Extra-continental actions on High Seas: a paradise of freedom and commitment's lack

UNCLOS guarantees on high seas the freedom of navigation and other universal rights such as scientific research, fishing, and the freedom to set up submarine cables and pipelines.

The only high seas crime described by UNCLOS is Piracy, defined in its article 101 as:

¹ Subtropical Mode Waters are bodies of water formed in areas of large extensions on the surface of the oceans during winter and which, from spring onwards, plunge and move to other regions towards the equator in the subsurface, maintaining their temperature and salinity values unchanged and transporting oxygen and nutrients to distant regions.

“(a) any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:

(i) on the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft;

(ii) against a ship, aircraft, persons or property in a place outside the jurisdiction of any State;

(b) any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft;

(c) any act of inciting or of intentionally facilitating an act described in subparagraph (a) or (b)”(UNCLOS, 1982).

Indeed, UNCLOS authorizes States to take actions on the high seas in order to combat only piracy and, at the same time, inadvertently allows the freedom of navigation to become a broad veil to hide actions silently harmful to the Coastal States.

Illegal, unreported, and unregulated (IUU) fishing constitutes one of these actions. Vessels conducting large-scale, indiscriminate fishing near the outer limits of coastal States’ EEZ have drawn the attention of several nations in the world.

Studies by Doumbouya et al.^{vii} indicate that 6 countries on the West Coast of Africa (Mauritania, Senegal, The Gambia, Guinea Bissau, Guinea, and Sierra Leone) lose US\$2.3 billion worth of annual earnings due to illegal, unreported, or unregulated (IUU) fishing.

The volume of fish caught illegally between 2010 and 2016 in this region amounts to 65% of total fish caught legally and threatens the food security of 7 million people who live in that

region and have fish as a staple in their diet. Monitoring, control, and surveillance measures were implemented in these coastal States' jurisdictional waters, but despite the myriad efforts aimed at curbing illegal practices, only 13.8 million dollars were recovered in 2016, the best annual result in that period.

High seas fishing involves high levels of investment and logistics capabilities due to the distances involved and the need for extended on-call assignments to catch the volume of fish that justifies the investment. Thus, illegal fishing on the high seas promotes slavery and precarious working conditions prompted by the constant push to reduce production costs. Likewise, these activities usually employ unskilled workers, resulting in crews without any knowledge about basic safety at sea or the use of life-saving equipment, and undercover many other illegal activities like corruption; money-laundering; customs, and fiscal frauds; trafficking in humans, drugs, and weapons.

To make high seas fishing attractive, some countries subsidize this activity, which ultimately stimulates overfishing. Sala et al.^{viii} study indicated that 4.2 billion dollars were used by countries in subsidies for high seas fishing and that 54% of the area where high seas fishing takes place would be unprofitable (or economically unfeasible) if the countries that maintained the referred fishing fleet operating in these areas withdrew their subsidies.

The same study also found that in 2016 the greatest fishing efforts observed were located on the high seas near the EEZ of Peru, Argentina, and Japan, as illustrated in Figure 2.

Most of the vessels employed in this fishery were Asian according to the Global Fishing Watch (GFW) database, as illustrated in Figure 3, mainly looking to capture squid in those waters far from their State's Flag jurisdictional waters.

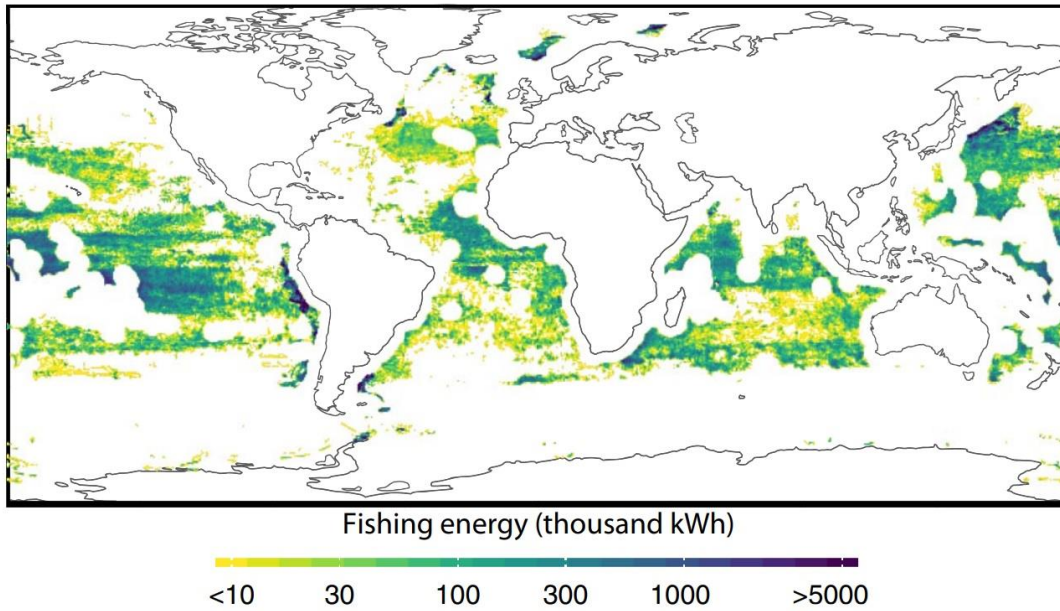


Figure 2: Global patterns of fishing effort in the high seas. Areas with greater fishing effort are marked in dark blue (Source: Sala et al^{ix}).

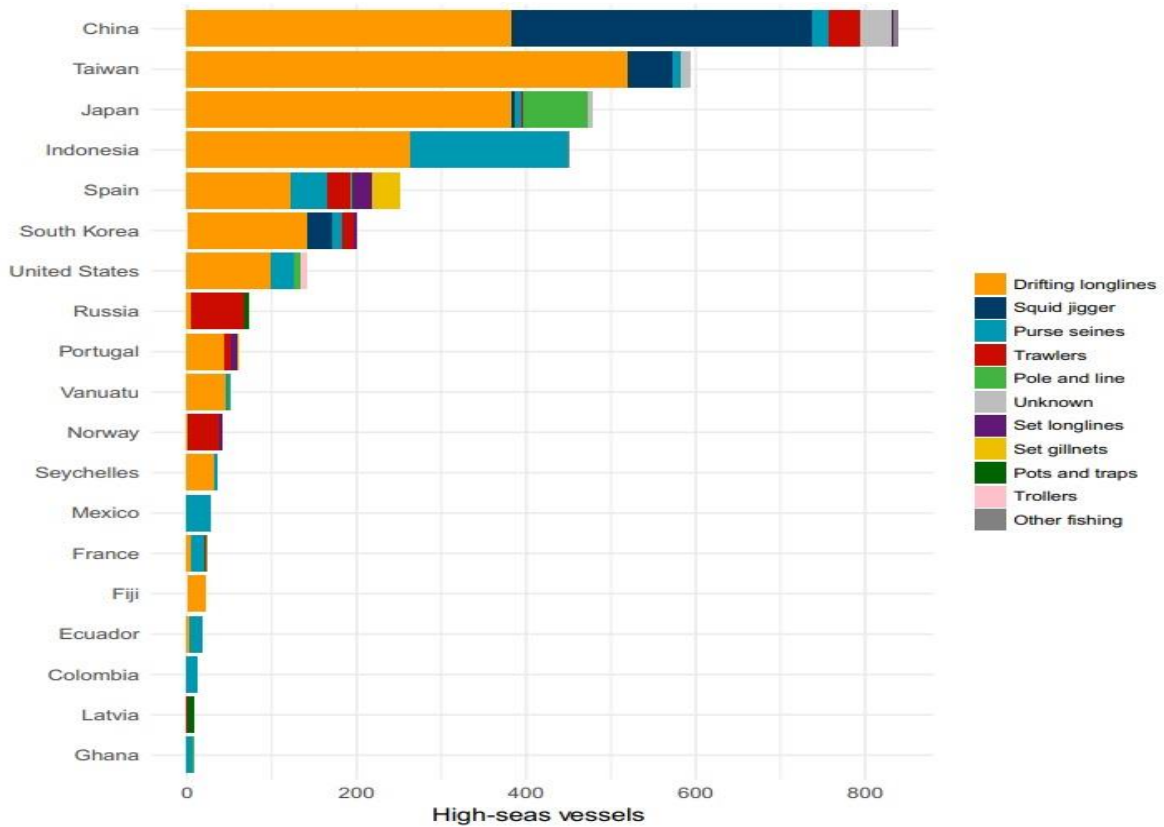


Figure 3: High seas vessels by flag state and gear type, as detected by GFW in 2016.^x

Recent studies indicate that fishing on the high seas has a greater contribution to the decrease in fish availability in the world compared to the fishing activities within the EEZ of Coastal States. Crespo & Dunn^{xi} identified, based on the Food and Agriculture Organization (FAO) of the United Nations database, that 28% of fish stocks under the jurisdiction of only one Coastal State suffer overfishing. On high seas, this index reaches 64%, which indicates the clear absence of protection and sustainable management for migratory species and those that inhabit areas that are not under the jurisdiction of a Coastal State.

IUU fishing trends to grow up due economic crisis caused by COVID-19 pandemic. Salarichs^{xii} highlighted that the low rates of economic growth, mainly in South America where the mean gross domestic product projected for 2020 was -9.2% than reached in 2010, contributes to the vulnerability people's growth expanding labor supply to illegal activities like IUU fishing and reduces defense activities budget, compromising efforts to face illegal activities, most notably at sea.

In addition to the direct damage caused by IUU fishing, Doumbouya et al.^{xiii} noted that when local fishermen from affected countries lost their source of employment because their boats' productivity dropped due to vanishing shoals and unfair competition from large vessels' predatory IUU practices, fishermen turned to illegal activities to make a living. They became the labor force for groups involved in the illegal transport of immigrants and fugitives, especially during the period when the Ebola epidemic hit countries like Guinea and Sierra Leone.

IUU fishing also plays a key role in the Piracy growth in Africa, as mentioned in the Somali piracy Case Study² that described the “justifications” for piracy peaked in 2011 in this region. Many pirates, such as the notorious Abshir Boyah and Mohamed Abdi Garaad, declared that they turned to piracy after foreign trawlers destroyed their livelihoods as fishers in the mid-1990s and because illegal dumping by foreign vessels was poisoning their fishing grounds.

At that time, the Somalian government did not have maritime surveillance and enforcement agencies and capabilities functioning, so the country’s waters were essentially unpoliced and offered a “no man’s land” for foreign fishing vessels. Food and Agriculture Organization of the United Nations (FAO) estimated that around 700 fishing vessels from both within the region (Kenya, Pakistan, Saudi Arabia, Sri Lanka, and Yemen) and outside it (Belize, France, Honduras, Japan, South Korea, Spain, and Taiwan) were engaged in unlicensed fishing in Somali waters.^{xiv}

Piracy is an old crime and nowadays affects not only the African eastern coast but also the Gulf of Guinea, compromising trade in the whole world and becoming close to the American continent in the 21st Century after the booster of actions occurred in the South Atlantic and the spread of IUU fishing. Its negative effects impact the trade relationship among Latin America and African nations by the growth of freight prices related to the high risks of attacks during the traffic, for instance throughout the Gulf of Guinea. This crime also affects Europe, which hosts most of the maritime trade companies.

Vessel movements have been tracked and corroborate fishing effort data published in Sala et al.^{xv} study, which monitored fishing activities at different times of the year in the South Atlantic and South Pacific, near the outer limits of Exclusive Economic Zones pertaining to Ecuador, Peru,

² Kemp, Ted. “The Link Between Illegal Fishing and Piracy.” CNBC (USA), September 19, 2014. Available at <https://www.cnbc.com/2014/09/18/flag-hopping-fishing-companies-drive-small-fishermen-to-piracy.html>

Colombia, Chile, and Argentina. In those areas, fishing vessels mostly capture squid and other endangered species, such as tuna and sharks, as shown in Figure 4.

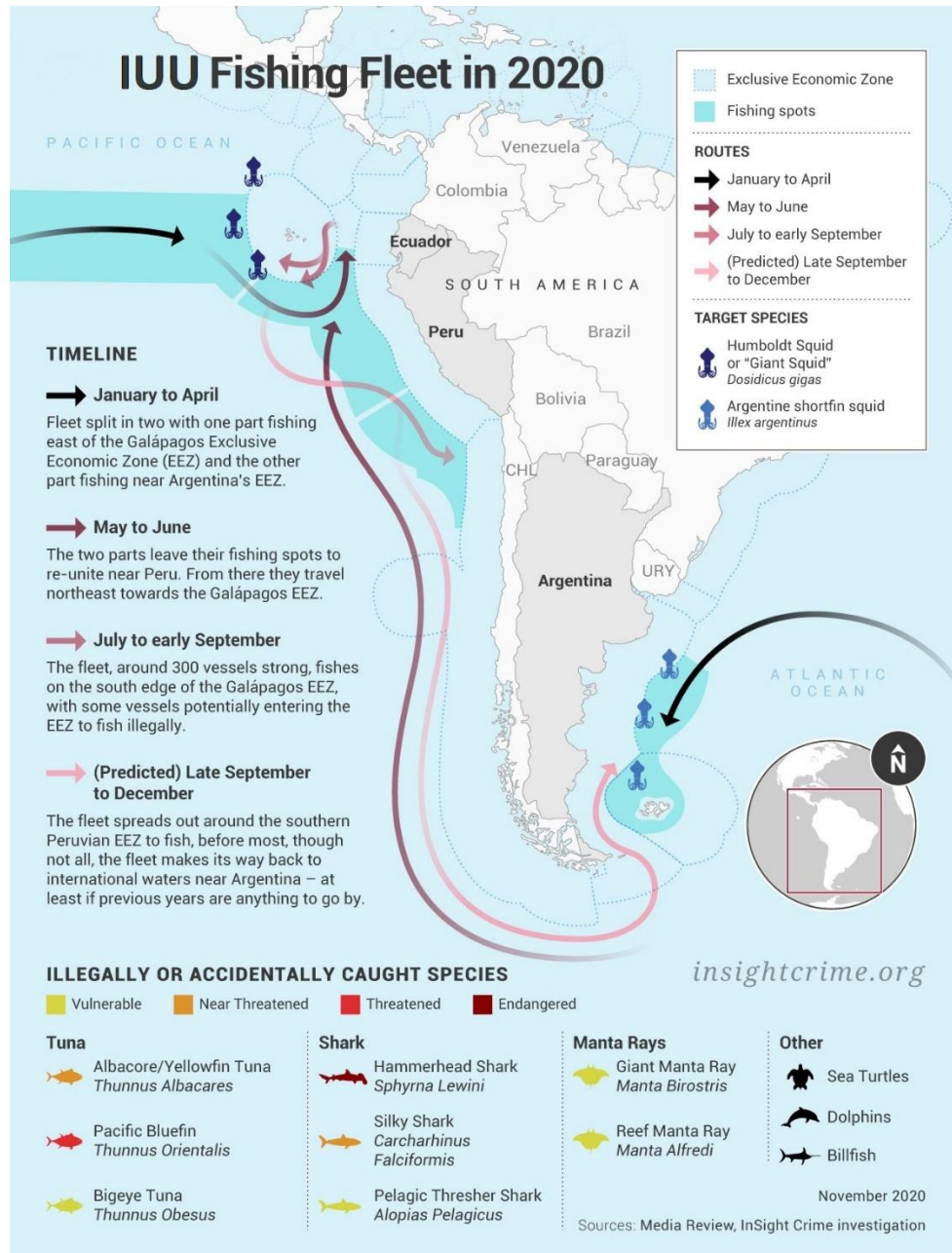


Figure 4: Movement diagram of vessels conducting IUU fishing in the South Pacific and the South Atlantic (Source: <https://insightcrime.org/news/analysis/china-fishing-fleet-response/>)

On May, 4th, 2020³, the Argentinian Navy Ship ARA “Bouchard” escorted the Chinese flag fishing ship “HONG PU 16” after it was caught illegally operating in Argentina's Exclusive Economic Zone in, as shown in Figure 5.



Figure 5: ARA “Bouchard” detected and captured a Chinese fishing vessel illegally fishing within the Argentinian Exclusive Economic Zone (EEZ). (Source: https://www.voanews.com/a/east-asia-pacific_chinas-fishing-fleet-growing-security-threat/6194395.html)

One month later, the Ecuadorian Navy issued an alert about the presence of around 300 foreign fishing vessels, mostly Chinese, in the vicinity of Ecuador's EEZ threatening ecologically sensitive areas such as the Galapagos Islands, and carried out naval patrol operations to prevent them from invading its jurisdictional waters (as shown in Figure 6).

³ <https://www.argentina.gob.ar/noticias/el-patrullero-oceanico-ara-bouchard-capturo-un-pesquero-chino>



Figure 6: Acting of an Ecuadorian Navy Ship close to a foreign fishing boat in the vicinity of the Ecuadorian Exclusive Economic Zone (EEZ). (Source: <https://www.armada.mil.ec/?p=48604>)

In 2018, the Chinese unveiled plans to build their own separate port west of Montevideo, including massive facilities to process the catch of some 500 fishing ships. The project secured the support of Uruguay's president but collapsed after drawing strong local opposition⁴.

The freedom observed in Uruguayan waters to Chinese transshipment and establishing convenience ports to legalize catches with unknown origin (fish laundering) changed completely from 2020 onward. Nowadays, Uruguay, Argentina, and Brazil consider establishing a regional action against IUU fishing by a Regional Fisheries Management Organization (RFMO) in line with the provisions of the UNCLOS Article 118 and the United Nations Fish Stocks Agreement (UNFSA)^{xvi}. This kind of organization already exists in other regions such as the South Pacific Regional Fisheries Management Organisation and the South East Atlantic Fisheries Organisation, which area of focus is shown in Figure 7, but is absent in the Southwestern Atlantic yet.

⁴ <https://chinadialogueocean.net/en/fisheries/9403-chinese-port-in-uruguay-shelved/>

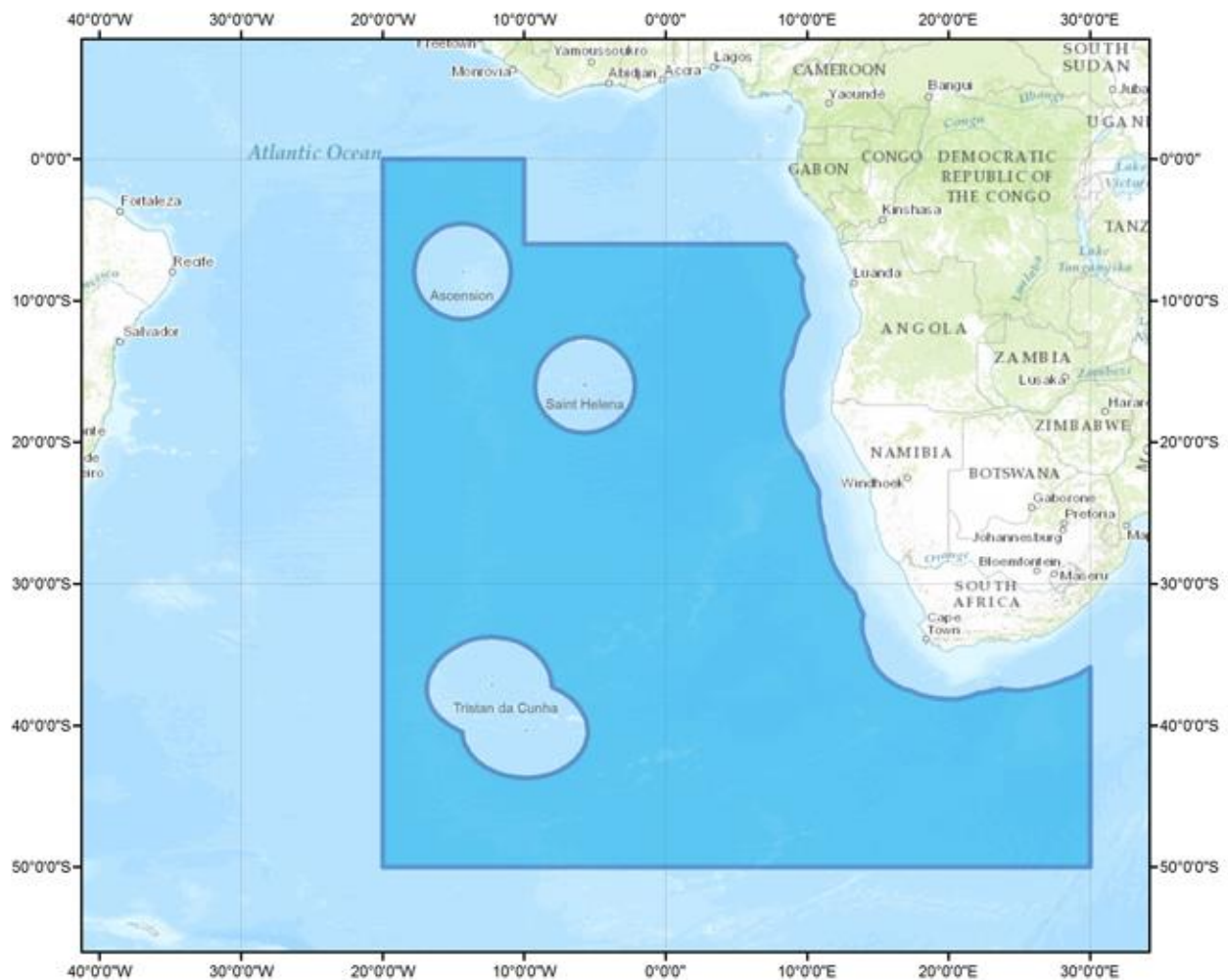


Figure 7: Area under the management of the South East Atlantic Fisheries Organisation (SEAFO). (Source: <http://www.seafo.org/>)

Therefore, the severity and breadth of IUU fishing require immediate crackdowns. Since most of these activities happen on the high seas, only the joint action of countries and international organizations can promote effective work to mitigate their negative effects.

In this sense, it is paramount important not only to establish international treaties and trade agreements in order to demarcate international areas of environmental protection; reduce the incentive for these fishing activities on the high seas; and create certifications for sustainable

production or capture; discouraging the purchase of fish from countries that carry on high seas fishing in regions far from their own coast.

It is also needs expanding information exchange among intelligence, defense, and security agencies; increase monitoring and control operations with the joint action of several countries; make inspections of large fishing vessels that enter ports for logistical support, unloading or refueling more effective, requiring documentation of origin and electronically auditable route records; and last but not least, recognize the IUU fishing as one of the transnational crimes to support facing this in an appropriate manner.

Only an international consensus and broad alliances could support facing IUU fishing and improving Maritime Safety.

5. Peace and Cooperation agreements could avoid Extra–continental Influence

The “Zone of Peace and Co-operation of the South Atlantic” (ZOPACAS) has gained particular relevance as a way for nations to support each other in tackling the effects of IUU fishing and contributing to maritime safety in the Atlantic Ocean.

Established through UN General Assembly Resolution A/RES/41/11 of October 27th, 1986, ZOPACAS was established for the purpose of strengthening cooperation for economic development and peace among the signatory nations from South America and West Africa, with a view to preserving the independence, sovereignty, and territorial integrity of these States^{xvii}.

It should be noted that ZOPACAS is in full alignment with UN efforts to “preserve the right of peoples to peace”, enshrined in UN General Assembly Resolution A/RES/39/11 dated November 12th, 1984. The concept of peace envisioned by ZOPACAS is not limited to the absence of war but reflects the definition of peace that Fried^{xviii} proposed: “Peace is based on several

mechanisms of cooperation that are dynamically connected. Only by honoring the connection between these enumerated mechanisms can their full impact on society be exercised: cooperation, freedom, independence, national sovereignty, equality, human rights, and the fair and equitable distribution of resources.” The broader umbrella of UN human rights initiatives also dovetails with the ZOPACAS commitment to maintaining a Peace Zone free of nuclear weapons, the statement on the need to ban Apartheid in South Africa, and the recognition of the independence of Namibia, at the time, formed part of a range of innovative UN human rights initiatives.

Despite the noble purpose of promoting peace in a broad sense, ZOPACAS had one negative vote, cast by the United States, and eight abstainers (the European NATO members France, Belgium, Germany, Italy, Luxembourg, Portugal, and the Netherlands, followed by Japan).

The United States and European powers behavior in that UN General Assembly was motivated by a weird general concern on the freedom of navigation guarantee in the South Atlantic but in fact, revealed a colonialist dissatisfaction with the ZOPACAS Declaration terms that mention clearly the intent to avoid extra-continental influence in the South Atlantic, as transcript below:

“3. Calls upon all States of all other regions, in particular the militarily significant States, scrupulously to respect the region of the South Atlantic as a zone of peace and co-operation, especially through the reduction and eventual elimination of their military presence there, the non-introduction of nuclear weapons or other weapons of mass destruction and the non-extension into the region of rivalries and conflicts that are foreign to it;” (UN A/RES/41/11 1986)

Nowadays we live under another extra-continental influence and the ZOPACAS became the oldest formal international instrument aiming to face its negative effects on the developing nations of the South Atlantic region.

At a 1994 meeting convened in Brasilia, the 24 States participating in ZOPACAS reaffirmed that peace, security, and development are inextricably linked. They issued a statement that alludes to the threats mentioned above and acknowledged that pollution from any source can threaten coastal and marine environments and jeopardize ecological balance and sustainability. In addition, they voiced their concerns about fishing methods and practices that over-exploit living marine resources, especially highly migratory species, both within and beyond Exclusive Economic Zones (Resolution A/RES/49/49 on December 2nd, 1994)^{xix}.

More recently, in September 2020, during a speech at the 75th United Nations General Assembly, the President of Brazil reinforced the country's commitment to the principles of peacekeeping, freedom, cooperation among nations, international security, and human rights guaranteed in the UN charter. He also highlighted Brazil's efforts to strengthen ZOPACAS as a mechanism in pursuit of South Atlantic nations' development. Then, on October 27th, 2020, Brazil hosted a virtual ZOPACAS meeting, to promote increased cooperation among the 24 signatory nations given the mounting threats posed by IUU fishing, drug trafficking, and acts of piracy, especially near the Gulf of Guinea. The meeting focused on mechanisms for increasing information exchanges among security and defense agencies and contributing to economic development and maritime safety in the South Atlantic.

Brazil is working to shorten the time between meetings and to consolidate the ZOPACAS, according to the Brazilian Navy Strategic Plan^{xx}, to avoid the interference of illegitimate interests aimed at exploiting abundant natural resources in South America, Western Africa, and Antarctica.

Maritime safety is a fundamental element to reinforce the ZOPACAS and is directly related to cooperation between nations to ensure their sovereignty and protect their natural resources and environment. Fostering coordinated actions and exchange of information is the better way to prevent offshore occurrences that may cause environmental impacts or reduce the availability of living resources in the jurisdictional waters of the South Atlantic Coastal States.

6. Conclusion

The oceans are the new frontier for human exploration as men search for new resources to guarantee survival. Similarly, the sustainable use of the oceans is a great challenge, but it is also vital for averting environmental imbalances and ensuring the health and well-being of future generations.

The oceans' natural continuity and lack of physical boundaries explain the urgent need for the international legal system to develop frameworks that can be applied to those areas beyond national jurisdiction.

The international law factors and remote areas characteristic of mostly IUU fishing practices mean that joint actions are the most effective to reinforce maritime safety and building countries' common understandings of this threat.

International initiatives and experiences like the ZOPACAS could be spread to the Organization of American States (OAS), that embody the values to drive that type of collective approach, in order to face common threats, both in the Atlantic and Pacific oceans, gravely affected by the extra-continental influence and the action of huge IUU fishing fleets flagged in countries far from the American continent.

Mankind's future and the right to live in peace, especially for those in developing nations, depends on how effectively we will leverage international alliances to protect and guarantee the sustainable use of the oceans, especially in areas beyond national jurisdiction.

Notes

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