

The Rise of Illegal Unreported Fishing and Transshipment In Indonesia: Why It's Still Happening

By: Alda Eunique and Mikaela Rafagabriola Edoloan

Staffs of Legal Research and Development ALSA LC UI Board of 2021

Reviewed by: Aristyo Rizka Darmawan, S.H., LL.M.¹

Preface

Indonesia is the largest archipelagic country globally, which means most of Indonesia's area consists of waters, covering 70% of Indonesia's territory.² Therefore, fishery resources have significant potential in helping the development of Indonesia's economy. However, Indonesia's abundant fishery resources also come with challenges. Indonesia's advantages regarding its fishery resources are in line with the rampant cases of illegal, unreported, and unregulated ("IUU") fishing and transshipment in Indonesia's Exclusive Economic Zone ("EEZ") region.³ Violations of the management of offshore fishery have cost Indonesia 1.9 trillion rupiahs each year, a significant disadvantage for Indonesia.⁴

The definition of IUU fishing, according to the Food and Agriculture Organization ("FAO"), includes activities that are carried out by vessels in the territorial sea of a State without permission or contrary to the laws and regulations in its jurisdiction or international obligations.⁵ Meanwhile, unreported fishing is fishing activities that have not been reported or have been misreported to the competent national authorities and are contrary to the State's

¹ Lecturer in International Law at Faculty of Law Universitas Indonesia and Program Director at Center for Sustainable Ocean Policy Faculty of Law Universitas Indonesia (CSOP FH UI), a research institute on the issues related to the sustainable management of the ocean and marine environment.

² West Java Province, "Indonesia is Maritime Country with the World's Largest Islands," <https://jabarprov.go.id/En/index.php/news/4597/2017/11/03/Indonesia-is-Maritime-Country-with-the-Worlds-Largest-Islands>, accessed on July 6th, 2021.

³ Indriati Kusumawardhani, "Kebijakan Penenggelaman Kapal Asing Pelaku Illegal Fishing sebagai Komitmen Pemerintah Indonesia dalam Penanganan dan Pemberantasan Illegal Fishing," *Opinio Juris* 26 (2020), p. 23.

⁴ Rudy Satriyo Mukantardjo, *et al.*, *Analisis dan Evaluasi Hukum tentang Pengadilan Perikanan*, (Jakarta: BPHN, 2009), p. 68.

⁵ Food and Agriculture Organization of the United Nations (FAO), *International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (Rome: FAO, 2001), p. 2.

national laws and regulations where it occurs.⁶ Hence, some countries deem unreported fishing as an administrative violation. On the other hand, unregulated fishing is defined as fishing activities that are done in a region by vessels without nationality or vessels flying the flag of a State that is not a party to that region in a manner that contravenes the conservation and management measures or the State responsibilities under international law.⁷

Besides IUU fishing, another maritime crime that threatens the fishing industry is transshipment. Transshipment is done by transferring the cargo of fish in the middle of high seas from collecting vessels to foreign vessels without reporting the accurate number of the catch to avoid a permit from the authorities and dodge port rules.⁸ Thus, it includes theft mode of fish and is considered as one of the primary missing links in determining where illegally captured fishes end up on the market.⁹ Further, transshipment is typically done by refrigerated transport vessels, known as “reefers.”¹⁰ Reefers arrive at a prearranged time and location, carrying fuel supplies, food, bait, a change of crew, then haul away the catch for foreign markets throughout the world.¹¹

These maritime crimes are continuing due to Indonesian fishermen’s incapability to utilize fishery resources in Indonesian EEZ waters, limited funds, facilities, and infrastructure for supervision, as well as nonoptimal surveillance results since foreign vessels with sophisticated communication technology, are capable of monitoring every movement of the patrol boats.¹² Another contributing factor to these practices is the rising need for fishery resources, particularly from countries who rampantly conduct illegal fishing, which leads

⁶ *Ibid.*

⁷ *Ibid.*

⁸ Elisabeth Septin Puspoayu, Cindy Yunita Sari, dan Virania Cahya Ramadhani, “Praktik Illegal Transshipment di Laut Lepas Berdasarkan Hukum Laut Internasional,” *Mimbar Hukum* 3 (2019), p. 75–77.

⁹ Martin Tsamenyi, *et al.*, “The European Council Regulation on Illegal, Unreported and Unregulated Fishing: An International Fisheries Law Perspective,” *The International Journal of Marine and Coastal Law* 25 (2010), p. 5–31; Stop Illegal Fishing, “Transshipment,” <https://stopillegalfishing.com/issues/transshipment/>, accessed on June 28th, 2021.

¹⁰ Stop Illegal Fishing, “Transshipment,” accessed on June 28th, 2021.

¹¹ National Oceanic and Atmospheric Administration, “Understanding Illegal Unreported and Unregulated Fishing,” <https://www.fisheries.noaa.gov/insight/understanding-illegal-unreported-and-unregulated-fishing>, accessed on June 28th, 2021.

¹² Simela Victor Muhamad, “Illegal Fishing di Perairan Indonesia: Permasalahan dan Upaya Penanganannya secara Bilateral di Kawasan,” *Politica* 3 (2012), p. 72.

them to expand into Indonesian maritime territory.¹³ Transshipment in particular is also caused by fuel, which is the most significant contributor to operational costs for fishing, accounting for approximately 50% of the total cost.¹⁴ Therefore, IUU fishing and transshipment are business strategies to reduce operational costs and obtain optimal profits.¹⁵ Consequently, according to the Indonesian Finance and Development Supervisory Agency (*Badan Pengawasan Keuangan dan Pembangunan* or “BKP”), IUU fishing and transshipment have caused Indonesia’s losses to reach around 20 trillion rupiahs each year, with 15 trillion rupiahs losses coming from transshipment.¹⁶

The Implications of IUU Fishing and Transshipment Practices

IUU fishing and transshipment cause negative implications in several areas. To start, the method used in inducing IUU fishing and transshipment across seas leads directly to environmental damage. Illegal fishing methods accompanied by the destruction of the marine environment inflicts negative impacts on marine biodiversity, including but not limited to marine habitats and ecosystems.¹⁷ Furthermore, IUU fishing and transshipment will accelerate the opportunity to exploit and overfish. As a result, the actual condition of fish supplies will be significantly depleted without any prevention or repression that can be taken because the actual fishing data cannot be obtained due to IUU fishing.¹⁸ If not resolved shortly, a more significant threat of loss in the global marine environmental collision will prevail.

¹³ *Ibid.*

¹⁴ Aldhanalia Pramesti Salsabila, “Pengoptimalan Satgas 115 dengan Model Koordinasi Satgas Pusat dan Daerah Sebagai Bentuk Pencegahan Illegal Transshipment di Indonesia,” *Lex Scientia Law Review* 2 (2018), p. 11.

¹⁵ *Ibid.*

¹⁶ Badan Pengawasan Keuangan dan Pembangunan, “Rp15 Triliun Kerugian Negara Akibat Transshipment,” <http://www.bpkp.go.id/berita/read/1457/11300/Rp-15-Triliun-Kerugian-Negara-Akibat-Transshipment>, accessed on August 25th, 2021.

¹⁷ Abdul Qodir Jaelani and Udiyo Basuki, “Illegal Unreported and Unregulated (IUU) Fishing: Upaya Mencegah dan Memberantas Illegal Fishing dalam Membangun Poros Maritim Indonesia,” *Supremasi Hukum* 3 (2014), p.181.

¹⁸ M Ambari, “Masih Terjadi, Ini Dampak Negatif dari Praktik IUU Fishing,” <https://www.mongabay.co.id/2020/03/12/masih-terjadi-ini-dampak-negatif-dari-praktik-iuu-fishing/>, accessed on July 27th, 2021.

Hereinafter, IUU fishing and transshipment remarkably correlate with economic decline in ensuring fishermen's welfare along with the country's state income. According to the Head of Research Agency, Marine and Fisheries Human Resources, losses from IUU fishing and transshipment in the Pacific Ocean region alone reach 4–7 million tons of fishery commodities per year.¹⁹ By this amount, economic losses are projected to be about USD 8.3 million per year or approximately 118 billion in Indonesian rupiah.²⁰ Therefore, recognizing how marine resources are a source of revenue for each country's economic development, both fishermen and the state will be impoverished if marine resources are destroyed, and irresponsible fishing practices will endanger the long-term viability of fisheries.²¹

The Status Quo and Current Problems Regarding IUU Fishing and Transshipment in Indonesia

Indonesia suffers from illegal fishing since its infrastructure and rigorous rules are yet to be implemented.²² There is also a lack of information among fishermen who do not comprehend which fishing zones they may and may not enter.²³ Consequently, maritime security authorities from surrounding nations have arrested a large number of Indonesian fishermen.²⁴ Furthermore, seeing a massive potential of marine resources in Indonesia, foreign vessels are also trying to earn income from the Indonesian seas illegally.²⁵ Based on data from the Task Force to Combat Illegal Fishing 115 (*Satuan Tugas Pemberantasan Penangkapan Secara Ilegal 115* or “**Satgas 115**”) in 2018, out of 106 vessels that were arrested for allegedly conducting unauthorized fishing were 38 Vietnamese vessels, 8

¹⁹ *Ibid.*

²⁰ *Ibid.*

²¹ Annis Susanti, *et.al.*, “Dampak Ekonomi Akibat IUU Fishing Perikanan Tangkap Pelagis Besar di WPPNRI 715,” *Sosial Ekonomi Kelautan Dan Perikanan* 15 (2020), p. 136.

²² Badan Riset dan Sumber Daya Manusia Kelautan dan Perikanan, “IUU Fishing dan Ancaman Kedepannya Bagi Indonesia,” accessed through <https://kkp.go.id/brsdm/artikel/5684-iuu-fishing-dan-ancaman-kedepannya-bagi-indonesia> on June 28th, 2021.

²³ *Ibid.*

²⁴ *Ibid.*

²⁵ *Ibid.*

Malaysian vessels, 5 Philippine vessels, and 1 Togo vessel.²⁶ Thereafter, this number increases throughout 2021. As of June 2021, the Ministry of Marine and Fisheries (“**MMAF**”) have captured 113 vessels for their involvement in IUU fishing, 77 from Indonesia, 23 from Vietnam, 9 from Malaysia, and 4 from the Philippines.²⁷

Despite various attempts to overcome them, IUU fishing and transshipment are still two of several classic problems in Indonesia and spread throughout the nation, including the North Natuna Sea, Celebes Sea, and the Strait of Malacca.²⁸ The overlapping rules mainly cause these problems since several existing regulations regulate these practices. Besides, the law enforcement institutions at sea, namely the Indonesian Navy, Water Police, MMAF, Ministry of Transportation, Ministry of Environment and Forestry, Ministry of Energy and Mineral Resources, Directorate General of Immigration, Directorate General of Customs and Excises, Police Republic of Indonesia, Attorney General, Local Government, and Directorate General of Labor Inspection, still lack coordination and surveillance, thus causing overlapping authorities.²⁹ Although each maritime institution in Indonesia has its functions and roles, other factors such as sectoral ego, limited facilities, and lack of supervision align with the IUU fishing and transshipment cases in Indonesia. According to data from the Indonesian Coast Guard (*Badan Keamanan Laut Republik Indonesia* or “**Bakamla RI**”),

²⁶ Ambaranie Nadia Kemala Movanita, “106 Kapal Pelaku Illegal Fishing Ditangkap Sepanjang 2018, Terbanyak dari Indonesia,” <https://ekonomi.kompas.com/read/2018/12/21/164146426/106-kapal-pelaku-illegal-fishing-ditangkap-sepanjang-2018-terbanyak-dari>, accessed on August 1st, 2021.

²⁷ Kementerian Kelautan dan Perikanan, “KKP Tangkap 19 Kapal Illegal Fishing Dalam Operasi Peringatan Hari Internasional Memerangi IUU Fishing,” <https://kkp.go.id/artikel/31226-kkp-tangkap-19-kapal-illegal-fishing-dalam-operasi-peringatan-hari-internasional-memerangi-iuu-fishing>, accessed on August 2nd, 2021.

²⁸ Sri Asih Roza Nova, “Illegal, Unreported and Unregulated Fishing: The Impacts and Policy for Its Completion in Coastal West of Sumatera,” *Hukum Internasional* 14 (2017), p. 237; Imam Prakoso, “IUU Fishing Di Laut Natuna Utara, Laut Sulawesi Dan Selat Malaka – Juni 2021,” <https://oceanjusticeinitiative.org/2021/07/02/iuu-fishing-di-natuna-sulawesi-selat-malaka-juni-2021/>, accessed on August 1st, 2021.

²⁹ Yetty Komalasari Dewi, Arie Afriansyah, and Aristyo Rizka Darmawan, “Comparative Law Enforcement Model at Sea: Lesson Learned for Indonesia,” *Indonesian Journal of International Law* 18 (2020), p. 98.

even since 2015, approximately 5.000 foreign vessels are still practicing IUU fishing in Indonesia's waters with the capacity of 1.000–1.200 tons.³⁰

The Regulation of IUU Fishing and Transshipment and Its Implementation in Indonesia

Indonesian authorities have issued several regulations to control IUU fishing and transshipment. First, **Law No. 17 of 1985** that ratifies the United Nations Convention on the Law of the Sea 1982 (“**UNCLOS 1982**”) as the international law basis to regulate Indonesia's sea territory, which includes the utilization of marine resources and nautical hallmarks. As a country that actively fights for UNCLOS 1982 international legal recognition and various implementations of its' derivative rules in national law, Indonesia then ratified United Nations Implementing Agreement (“**UNIA 1995**”). Based on the provisions of UNIA 1995, marine biodiversity conservation and fisheries management are mandatory to be regulated in regional fisheries organizations.³¹ Hence, we can infer that the Indonesia's government is responsible for enacting regulations that will protect our fish resources from harmful activities. Especially when UNCLOS 1982 has set forth **Article 63** and **Article 87**, which declare the freedom of fishing is limited by the obligation of the state to conserve and manage marine resources.³²

Second, **Law No. 45 of 2009** concerning Fisheries (“**Fisheries Act**”), which has been amended by **Law No. 11 of 2020** concerning Job Creation. **Article 41 paragraph (3)** of the **Fisheries Act** states that every fishing vessel must land the caught fish in the designated fishing port. Hereinafter, **paragraph (4)** of the same article and act implies that anyone who owns and/or operates a fishing vessel and/or fish transporting vessel that does not carry out fish unloading at the designated fishing port is subject to administrative sanctions, such as warnings, license suspensions, or license revocations. However, Indonesia's imposed sanctions against IUU fishing and transshipment are still defective due to the narrow scope. The formulated regulations do not oversee corporate criminal liability, special minimum

³⁰ Natasha Isabella Rossana William Putri, “Kebijakan Moratorium Kapal Eks–Asing dalam Menangani Illegal Unreported and Unregulated (Iuu) Fishing di Perairan Indonesia Periode 2014–2016,” *Journal of International Relations* 6 (2020), p. 128.

³¹ Elisabeth Septin Puspoayu, *et.al.*, “Praktik Illegal Transshipment di Laut Lepas Berdasarkan Hukum Laut Internasional,” *Mimbar Hukum* 31 (2019), p. 80.

³² United Nations, *United Nations Convention on Law of The Sea*, Art. 63 and Art. 87.

provisions, and criminal sanctions.³³ Hence, we can imply that the existing countermeasures to eradicate IUU fishing and transshipment are still ineffective.

Third, **MMAF Decree No. KEP.50/MEN/2012** concerning National Action Plan of Prevention and Countermeasures of Illegal, Unreported, and Unregulated Fishing 2012–2016. This national action plan aims to set a reference and benchmark for every organization's units in the scope of MMAF and other relevant ministries to prevent and overcome IUU fishing under their respective duties and functions.³⁴ Chapter V of this ministerial decree regulates the existence of Fisheries Courts and Coordination Forum of Fisheries Crime to impede and mitigate IUU fishing.³⁵ Although the formation of these Fisheries Courts across all provinces in Indonesia have also been regulated in **Fisheries Act**, these courts can only be found in eight provinces by 2017, namely Jakarta, North Sumatera, West Kalimantan, North Sulawesi, Kepulauan Riau, Maluku, West Papua, and Papua.³⁶

The problem is that the existence of both District Courts and Fisheries Courts are causing dualism and uncertainty of the law in resolving IUU fishing and transshipment cases.³⁷ Those issues are caused by the difference in the law enforcers, system, and the process of handling these maritime crime cases in the respective courts.³⁸ Another problem arises when the Fisheries Civil Service Investigator (*Penyidik Pegawai Negeri Sipil Perikanan* or "**PPNS Perikanan**") must bring the case to the province with the Fisheries Court once the case occurred in the province that is not facilitated with it, thus creating an over-costing issue for the PPNS *Perikanan*.³⁹ Regarding the execution of the court verdicts,

³³ Ayu Iza Elvany, "Kebijakan Formulatif Penanggulangan Tindak Pidana *Destructive Fishing* di Indonesia," *Justitia* 3 (2019), p. 212.

³⁴ Indonesia, Minister of Marine Affairs and Fisheries Decree No. KEP.50/MEN/2012 concerning the National Action Plan of Prevention and Countermeasures of Illegal, Unreported, and Unregulated Fishing 2012-2016, p. 2.

³⁵ *Ibid.*, p. 26.

³⁶ Afrianto Sagita, "Optimalisasi Pengadilan Perikanan dalam Penegakkan Hukum Tindak Pidana Perikanan di Perairan Indonesia," *Hukum dan Peradilan* 6 (2017), p. 217 & 232.

³⁷ *Ibid.*, p. 231.

³⁸ Badan Pembinaan Hukum Nasional, *Analisis dan Evaluasi Hukum Tentang Pengadilan Perikanan* (Jakarta: Tim BPHN, 2009), p. 89.

³⁹ Freshty Yulia Arthatiani, "The Role of Fisheries Civil Servant Investigators (PPNS Perikanan) in the Law Process of IUU Fishing in Indonesia," *Widyariset* 17 (April 2014), p. 10.

there lies an issue of authority, where the Minister of MMAF executes the verdicts more often than the PPNS *Perikanan*, such as depriving or sinking the perpetrator's vessels.⁴⁰ Hence, the execution of this national plan has not been utilized optimally. Nevertheless, the government still does its utmost to utilize the Fisheries Court as 49 cases were handled by PPNS *Perikanan* even in the middle of the COVID-19 pandemic throughout January until May 2020.⁴¹

Subsequently, a similar issue also happens with the Coordination Forum of Fisheries Crime. This forum is regulated in **MMAF Decree No. PER.18/MEN/2011**. Nonetheless, there have been no further amendments regarding its firm mechanism in any regulation.⁴² This forum could become the answer for Indonesia's problem upon overlapping authorities between law enforcer institutions at sea since they will only be in one coordination link to also endorse the role of Fisheries Courts. Notwithstanding, the forum fails to give tangible results to society despite being established in 33 provinces in Indonesia because there has been no synergy of the related institutions within this forum.⁴³

These regulations and the government's national plans reflect that there has been a political will in alleviating IUU fishing and transshipment in Indonesia. Unfortunately, it has not been enforced firmly and thoroughly. Moreover, the existing regulations also lack retribution and general deterrence due to the government's lack of assertiveness. The sanctions in several of the regulations are also merely administrative sanctions, notably in **MMAF Regulation No. Per.12/Men/2012** concerning Marine Industrial Fishing and **MMAF Regulation No. 57/PERMEN-KP/2014** concerning Catch Fisheries Business in the Fisheries Management Area of the Republic of Indonesia. Acknowledging the need to protect Indonesia's marine resources from IUU fishing and transshipment and emphasizing these

⁴⁰ Sherly Adam, "Koordinasi Kelembagaan dalam Peneggelaman Kapal Hasil Tindak Pidana Di Bidang Perikanan," *Terakreditasi Nasional* 26 (Januari - Maret 2020), p. 129.

⁴¹ Kementerian Kelautan dan Perikanan RI, "Di Forum Koordinasi Penanganan Tindak Pidana Perikanan, KKP Dorong Sinergi dan Inovasi Penanganan Kasus Di Masa Pandemi COVID-19," <https://kkp.go.id/djpsdkp/artikel/19880-di-forum-koordinasi-penanganan-tindak-pidana-perikanan-kkp-dorong-sinergi-dan-inovasi-penanganan-kasus-di-masa-pandemi-covid-19>, accessed on August 31st, 2021.

⁴² Sherly Adam, "Koordinasi Kelembagaan dalam Peneggelaman Kapal...", p. 129.

⁴³ Badan Pembinaan Hukum Nasional, *Laporan Akhir Analisis dan Evaluasi Hukum dalam Rangka Pemberantasan Kegiatan Perikanan Liar (IUU Fishing)* (Jakarta: Pusat Analisis dan Evaluasi Hukum Nasional Badan Pembinaan Hukum Nasional, 2016), p. 130.

practices as transnational crimes per se is not enough. Ensuring the effective execution of the existing regulations and national plans to combat these felonies is crucial.

Comparison of Other Countries' Law Enforcement Model at Sea to Indonesia's

This section will compare Indonesia's law enforcement model at sea to the United States of America ("USA") and Malaysia. The reason is that the USA currently has a multi-agency system, similar to Indonesia, and Malaysia used to suffer the same problem as Indonesia, which is the overlapping jurisdiction between institutions. Malaysia is also located in Southeast Asia, therefore its geographical condition is similar to Indonesia's. According to the size of EEZ and fishery resources, these countries are also equally vulnerable to IUU fishing.⁴⁴ Based on the Global Initiative Against Transnational Organized Crime, Indonesia's vulnerability to IUU fishing score is 3.92, the USA's is 3.96, and Malaysia's is 3.09.⁴⁵

In order to suit their geographical and geopolitics condition, each country has a specific law enforcement model.⁴⁶ Indonesia itself recently established the Indonesian Coast Guard or Bakamla RI through **Presidential Regulation No. 178 of 2014**.⁴⁷ Bakamla RI holds responsibility for maritime security in Indonesia by conducting security patrols in Indonesian waters along with the other previously mentioned institutions.⁴⁸ Bakamla RI also formulates steps Indonesia shall take to enforce the law and reduce IUU fishing.⁴⁹

The number of agencies tasked with law enforcement at sea leads to one of Indonesia's most prominent problems regarding the overlapping jurisdiction and the inadequacy of a clear line of discretion for the said institutions. In the regulations concerning law enforcement at sea, the subject can be more than one institution.⁵⁰ This situation leads to

⁴⁴ G. Macfadyen, G. Hosch, N. Kaysser, and L. Tagziria, *The IUU Fishing Index: January 2019* (Switzerland: Poseidon Aquatic Resource Management Limited and the Global Initiative Against Transnational Organized Crime, 2019), p. 112–114.

⁴⁵ *Ibid.*

⁴⁶ Dewi, Afriansyah, and Darmawan, "Comparative Law Enforcement Model at Sea," p. 83.

⁴⁷ *Ibid.*, p. 98.

⁴⁸ Indonesia, *Peraturan Presiden tentang Badan Keamanan Laut*, Perpres No. 178 Tahun 2014, Art. 2.

⁴⁹ Dewi, Afriansyah, and Darmawan, "Comparative Law Enforcement Model at Sea," p. 84.

⁵⁰ Eka Martiana Wulansari, "Penegakan Hukum di Laut dengan Sistem Single Agency Multi Tasks," *RechtsVinding* (2014), p. 3.

a different interpretation of the institution's authority due to institutional ego.⁵¹ Each of these institutions often operates independently according to their authority.⁵² Their autonomy opens room for miscoordination, which is ineffective in solving the existing problems of Indonesia's maritime security. Consequently, even when Indonesia already has Coordination Forums of Fisheries Crime, this matter lasts since the mechanism, coordination flow, and cooperation from the 11 institutions within this forum still needs improvement.

Like Indonesia, the USA has made the Coast Guard the main party in charge of law enforcement at sea instead of the Navy.⁵³ In 1976, the USA passed The Magnuson-Stevens Act ("MSA") which regulates precautions regarding IUU fishing.⁵⁴ One of them is ship certification which legitimizes that the vessel is free from IUU fishing and is given to vessels that are never involved in IUU fishing.⁵⁵

Furthermore, the USA also has the US Coast Guard Maritime Security and Safety Teams ("MSST") and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service ("NOAA Fisheries").⁵⁶ MSST and NOAA Fisheries work closely with the Department of State in combating IUU fishing and transshipment.⁵⁷ MSST is established to improve the USA's maritime security with the mission to protect vessels, ports, associated facilities, and fish cargo in its territorial sea from damage, crime, and sabotage.⁵⁸ Meanwhile, NOAA Fisheries focuses on partnerships with other fishing nations, implementing measures that restrict port access for vessels on the IUU fishing lists of

⁵¹ *Ibid.*

⁵² *Ibid.*

⁵³ Dewi, Afriansyah, and Darmawan, "Comparative Law Enforcement Model at Sea," p. 86.

⁵⁴ National Oceanic and Atmospheric Administration of the U.S. Department of Commerce, "Laws & Policies: Magnuson-Stevens Act" <https://www.fisheries.noaa.gov/topic/laws-policies>, accessed on July 27th, 2021.

⁵⁵ Dewi, Afriansyah, and Darmawan, "Comparative Law Enforcement Model at Sea," p. 85.

⁵⁶ *Ibid.*, p. 86.

⁵⁷ Office of Marine Conservation, "Illegal, Unreported, and Unregulated Fishing," <https://www.state.gov/key-topics-office-of-marine-conservation/illegal-unreported-and-unregulated-fishing/>, accessed on August 6th, 2021.

⁵⁸ *Ibid.*

international fisheries organizations with USA membership, and identifying countries whose vessels are involved in IUU fishing under the MSA.⁵⁹

To ensure law enforcement at sea, particularly regarding IUU fishing and transshipment, the USA implements a vessel monitoring system (“VMS”)—a satellite surveillance system to monitor the location and movement of commercial fishing vessels within USA maritime territory and treaty areas.⁶⁰ As a member of Regional Fisheries Management Organizations (“RFMOs”), the current VMS used by the USA is considered ideal and is an essential tool used by many countries to help combat IUU fishing.⁶¹

Indonesia itself has implemented VMS through **MMAF Regulation No. 42/PERMEN-KP/2015** by installing transmitters on vessels weighing over 30 Gross Tonnage.⁶² However, information about VMS for fishermen is still lacking, including socialization regarding the handling and maintenance of the transmitter.⁶³ Indonesia also struggles when it comes to purchasing and repairing VMS and maintaining its airtime because of the cost.⁶⁴ All in all, the use of VMS in Indonesia doesn't have a significant effect on the number of IUU fishing cases.⁶⁵ Compared to the efficiency of the USA's institutions and their adequate implementation of VMS, we can imply the USA has successfully optimized the coast guard's role in law enforcement at sea.

On the other hand, Malaysia used to have a similar problem to Indonesia. Malaysia had 12 authorized institutions on managing and patrolling the Malaysian Maritime Zones (“MMZ”), such as the Marine Operation Force of the Royal Malaysia Police, Department of

⁵⁹ NOAA Fisheries, “Understanding Illegal, Unreported, and Unregulated Fishing,” <https://www.fisheries.noaa.gov/insight/understanding-illegal-unreported-and-unregulated-fishing>, accessed on August 6th, 2021.

⁶⁰ NOAA Fisheries, “What is the vessel monitoring system?” <https://www.fisheries.noaa.gov/node/696>, accessed on August 6th, 2021.

⁶¹ Indian Ocean Tuna Commission (IOTC), *Vessel Monitoring Systems and their Role in Fisheries Management and Monitoring, Control and Surveillance* (India: IOTC, 2016), p. 12.

⁶² Badan Perencanaan Pembangunan Nasional, “VMS Perkuat Pengawasan Illegal Fishing,” <https://www.bappenas.go.id/id/berita-dan-siaran-pers/vms-perkuat-pengawasan-illegal-fishing/>, accessed on September 7th, 2021

⁶³ Yosep Hadinata, “Pelaksanaan Vessel Monitoring System (VMS) di Indonesia,” (Undergraduate Thesis Institut Pertanian Bogor, Bogor, 2010), p. 77.

⁶⁴ *Ibid.*

⁶⁵ *Ibid.*

Immigration, Royal Malaysian Navy, Royal Malaysian Air Force, Marine Department of Peninsular Malaysia, Marine Department of Sabah and Sarawak, Department of Fisheries, Royal Malaysian Customs Department, Department of Environment, Department of Lands and Mines, Mineral and Geoscience Department, and Maritime Enforcement Coordination Centre.⁶⁶ The existence of these 12 institutions with similar duties led to overlapping jurisdiction and functions. The situation was worsened by the inefficiency of various law enforcers at the Malaysian sea.⁶⁷

Consequently, Malaysia's government decided to establish a new agency to maintain law and order in the MMZ, which is the Malaysian Maritime Enforcement Agency ("MMEA").⁶⁸ MMEA's authority consists of the cleared role of those 12 institutions.⁶⁹ Therefore, MMEA, as the central agency in maintaining maritime security and safety in Malaysia, has eliminated Malaysia's institutional problems because of redundancies and overlapping territorial areas.⁷⁰ Malaysia's resources can also be optimized because its focus is given to a single agency in maritime security enforcement.⁷¹

Indonesia could note the USA's solid Coast Guard and advanced monitoring system and Malaysia's way to overcome the overlapping jurisdictions and functions of its law enforcement agencies at sea. Every country may have its maritime law enforcement mechanism. Nevertheless, it is important to note that no matter what model a country uses, there should be a strong, precise, and coordinated mechanism to ensure its maritime safety and security for years to come.

Conclusion

IUU fishing and transshipment are threats to Indonesia's fishing industry and have caused Indonesia to suffer a significant disadvantage. Illegal fishing methods along with exploitation and destruction of the marine environment will inflict long-term marine

⁶⁶ Eris Tajudin, "Study of Managerial Challenges Confronting a New Agency: The Case of the Malaysian Maritime Enforcement Agency," (MBA Professional Report of Naval Postgraduate School, California, 2015), p. 17.

⁶⁷ Dewi, Afriansyah, and Darmawan, "Comparative Law Enforcement Model at Sea," p. 91.

⁶⁸ Tajudin, "Study of Managerial Challenges Confronting a New Agency," p. 5.

⁶⁹ Dewi, Afriansyah, and Darmawan, "Comparative Law Enforcement Model at Sea," p. 92.

⁷⁰ Tajudin, "Study of Managerial Challenges Confronting a New Agency," p. 17.

⁷¹ *Ibid.*, p. 18.

environmental collisions. Furthermore, IUU fishing and transshipment are strongly linked to economic losses in the fishermen's welfare assurance and state revenue. These negative impacts are caused by the invalid and inaccurate data of fishing vessels, fishes caught, and the amount of income utilized to benefit certain parties illegally.

In Indonesia, there have been several existing regulations that govern IUU fishing and transshipment. On this basis, we can infer that IUU fishing and transshipment are strictly prohibited in Indonesia. Hereinafter, Indonesia normatively shows the commitment and political will to protect marine resources and nautical hallmarks. Despite various regulations set in place, they are yet to be implemented efficiently since IUU fishing and transshipment are still two of the classic problems in Indonesia.

The most significant contributing factors to these problems are the overlapping regulations and authorities along with the lack of coordination between law enforcement officers at Indonesian seas. Moreover, the national plans, Fisheries Courts, and Coordination Forums of Fisheries Crime have not been utilized optimally. There is still an absence in the regulation regarding their clear and thorough mechanism. In order to solve this problem, Indonesia can reflect on other countries like the USA and Malaysia, where their maritime law enforcement mechanism is suited to their geographical and geopolitics condition. However, it is still solid and coordinated to ensure their maritime safety and security. Hence, considering the severe disadvantages of IUU fishing and transshipment, the government needs to intensify its role and seriousness in combating IUU fishing and transshipment.

Suggestions

Firstly, since Indonesia lacks optimal coordination, Indonesia can implement a single agency system with strong coordination to ensure Indonesia's maritime security and safety instead of only providing a forum for coordination which has been proven relatively inefficient. Besides, integrating the existing institutions into one agency will benefit Indonesia as it will be easier to coordinate and control because the command is held in one hand. Therefore, overlapping jurisdictions can be avoided in order to mitigate further inefficiency.

Secondly, Indonesia's authorities need to increase the direct monitoring of all governmental and non-governmental institutions in Indonesian waters. This effort is crucial to overcome the susceptibility of IUU fishing and transshipment occurrences in Indonesia,

especially in border areas that are often unnoticed yet prone to violations. Furthermore, Indonesia may utilize its VMS to detect IUU fishing and transshipment as recommended by RFMOs that have also been used by numerous countries, including the USA, Japan, Korea, Taiwan, and Ghana. Active participation of Indonesia's authorities is pivotal as it reflects the government's responsibility in protecting our marine environment and upholding sovereignty.

Thirdly, Indonesia needs to further develop international cooperation with neighboring countries that are ironically perpetrators of IUU fishing cases in Indonesia, such as Malaysia, Philippines, Thailand, China, Vietnam, and Papua New Guinea,⁷² along with ten best-performing countries according to the IUU Fishing Index by the Global Initiative Against Transnational Organized Crime. Consequently, Indonesia could gain firm commitment from the international countries to stop these maritime crimes and start combating them cooperatively. It is also needed to help Indonesia advance the maritime crimes surveillance facilities and infrastructure, including the VMS. By doing so, IUU fishing and transshipment in Indonesian and international waters can be prevented and mitigated.

⁷² Ema Septaria, "IUU Fishing In Indonesia, Are Asean Member States Responsible for?" *International Journal of Business, Economics and Law* 11 (2016), p. 76.