

## CONFLICTS OVER ILLEGAL, UNREPORTED AND UNREGULATED FISHING (IUU FISHING) IN THE SULAWESI SEAS

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### Abstract

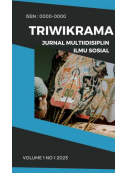
This article analyses the phenomenon of Illegal, Unreported and Unregulated (IUU) fishing in the seas of Sulawesi, a strategic region with abundant potential fisheries resources. The research uses a qualitative method with a literature review approach to explore the characteristics, economic and social impacts, and transboundary management efforts between Indonesia, Malaysia and the Philippines. The results showed that IUU fishing in Sulawesi waters is highly complex and involves various modus operandi, such as the use of foreign vessels with false flags, destructive fishing, and violation of fishing areas. The economic losses are significant, estimated at 30 trillion rupiah per year, resulting in depleted

fish stocks, reduced income for local fishermen and threats to food security. Efforts are being made through multilateral approaches, such as the Trilateral Maritime Patrol, which integrates the maritime surveillance of the three countries. However, major challenges remain, including differences in law enforcement capabilities, overlapping regulations and potential collusion between IUU fishers and law enforcement officials.

**Keywords:** IUU Fishing, Seas of Sulawesi, Trilateral Maritime Patrol

### 1. INTRODUCTION

As one of the archipelago states, Indonesia's geographical condition is dominated by water areas, which has the potential to support a highly abundant fishery resource base. Indonesia's geographical condition as an archipelago state is characterized by the existence of more than 17,000 islands distributed along the equator, with a total sea area of approximately 5.8 million km<sup>2</sup> (Umar, 2020). This makes Indonesia the country with the largest maritime area in the world. Indonesia's strategic geographical position presents both challenges and opportunities in the management of its natural resources, including fisheries resources. In Indonesia, the fisheries sector plays a multifaceted role, contributing not only to food security but also serving as a potential driver of economic growth. The fisheries sector plays a pivotal role in supporting Indonesia's national development. It fulfills as much as 25% of the world's fisheries demand, with an export value that reached USD 6.24 billion in 2022 (Christiana, Pairunan, & Ibrahim, 2024).



However, concurrently, the Indonesian fisheries sector is also susceptible to illicit activities, including overfishing and illegal, unreported and unregulated (IUU) fishing. The term "IUU fishing" is a broad one, encompassing a wide range of fishing activities. IUU fishing is observed across the spectrum of fisheries, occurring in both international and domestic waters. It encompasses all aspects and stages of fish capture and utilization and is frequently linked to organized crime (FAO, 2024). Indonesia has one of the highest rates of IUU fishing globally, largely due to inadequate maritime surveillance and control (MCS) in the Exclusive Economic Zone (EEZ) (Leonardo & Deeb, 2022). Consequently, the Indonesian government considers the eradication of IUU fishing to be of paramount importance, to safeguard the country's fisheries resources and stimulate economic growth. IUU fishing can result in several adverse consequences, including economic losses, environmental degradation for coastal communities and a decline in fish stocks. As indicated by extant data, IUU fishing results in Indonesia sustaining losses amounting to up to IDR 101 trillion annually (Leonardo & Deeb, 2022).

One of the area most susceptible to illicit, unreported, and unregulated (IUU) fishing activities is the marine environment of Sulawesi. This is because Sulawesi, which has the largest marine area of any island and is home to a highly significant marine ecosystem situated between Indonesia, Malaysia, and the Philippines, has become a focal point of attention due to the ongoing and intensifying issue of IUU fishing. Sulawesi waters, as part of the Sulu-Sulawesi Seascape, are particularly susceptible to IUU fishing activities due to several critical factors. The region is home to a rich diversity of marine life and boasts fish stocks of significant commercial value (Schlieman, 2023). However, the region's fisheries governance is weak, there is a lack of monitoring and law enforcement capacity, and the environment is degraded, which collectively makes this region a major target for IUU fishing practices. The transboundary nature of the region, which involves several countries, further complicates the issue, necessitating robust regional collaboration to address it effectively.

## 2. METHODS

This research employs a qualitative methodology with a library research approach to examine the phenomenon of illegal, unreported, and unregulated fishing in Sulawesi waters. The primary data sources were obtained through official publications from government institutions, including the Ministry of Indonesia Maritime Affairs and Fisheries (KKP), reports from national institutions such as the Indonesian Marine Security Agency (BAKAMLA RI), and international institutions such as the Food and Agriculture Organization (FAO). Additionally, policy documents related to the handling of IUU Fishing were consulted. The data collection techniques employed involved systematic searches and reviews of journals, scientific articles, official reports, laws and regulations, and other literature sources, including the review of various documents or records that were deemed relevant to the research topic (Fadli, 2021).

The data was analyzed descriptively and analytically using an inductive approach. This entailed the collection of empirical data, followed by the identification of patterns, characteristics and relationships between phenomena related to IUU fishing in the Sulawesi region. The analysis

process entailed the reduction of data, its classification, interpretation, and the drawing of conclusions, with consideration of the theoretical frameworks of geopolitics, resource management, and maritime security. The validity of the data was guaranteed through the process of source triangulation (Fadli, 2021), which entailed a comparison of information drawn from a variety of official sources, thus ensuring the consistency and credibility of the data employed in this study.

### 3. THEORY

This article employs three pertinent theoretical frameworks to examine the conflict over IUU fishing in Sulawesi seas: maritime security theory, geopolitical theory, and international political economy theory.

#### a. Maritime Security Theory

Christian Buerger posits that maritime security encompasses four core concepts: (1) sea power, which emphasizes the strategic role of the navy in safeguarding state sovereignty and maintaining maritime transport routes to facilitate trade and economic growth; (2) The concept of marine safety, which is concerned with the protection of ships and marine infrastructure, with the overarching objective of ensuring the safety of maritime workers and the preservation of the marine environment. Furthermore, the marine economy (blue economy) dimension emphasizes the significance of the sea as an economic resource (Wiranto, 2020).

The tenets of maritime security theory emphasize the necessity of maintaining security and safety in marine areas, including the imperative of overcoming non-traditional threats such as IUU fishing. In the context of Sulawesi waters, this theory is pertinent as IUU fishing activities not only impact fisheries resources, but can also pose a security threat to neighbouring countries. It is possible that IUU fishing activities involving foreign and organized vessels may serve as a conduit for other illicit activities, such as smuggling, human trafficking, and transnational crime. Such activities have the potential to disrupt stability and security in Sulawesi waters. The application of maritime security theory enables an analysis of the necessity for law enforcement and regional cooperation in order to maintain marine security and prevent the threats posed by IUU fishing.

#### b. International political economy theory

International Political Economy (IPE) emphasizes the interaction between economic and political factors in the international system. IPE examines the relationship between the state and the market, the state and civil society such as non-governmental organizations, and firms or a range of business groups. These relationships are then reduced to a discussion of various crucial issues such as the production of goods and services and trade policy, export control regimes and other issues. IPE also discusses the methods used by the state to achieve its interests, the interdependent relationships between the state and international regimes (Dr Rusdiyanta, 2022).

In the context of IUU fishing in Sulawesi waters, this theory is relevant because this illegal activity not only affects ecological and environmental aspects, but also has significant economic and social consequences. IUU fishing activities in Sulawesi waters are certainly causing huge economic losses to Indonesia. This results in lost economic opportunities for local fishermen and threatens the sustainability of the national fishing industry. In addition, the social impacts felt by coastal communities, such as declining fish stocks and food insecurity, are also important concerns in international political economy theory. This theory helps to analyses how IUU fishing activities in Sulawesi waters, which involve cross-border economic and political interests, affect economic and social dynamics at local, national and regional levels. Understanding the interaction between these economic and political factors is important in formulating a comprehensive strategy to combat IUU fishing in the region.

c. Geopolitics

Geopolitics is a complex approach that examines the dynamic relationship between geographic space, political power, and human interaction. Geopolitics is not merely a science; it is a discipline that analyzes the interactions between actors (both state and non-state) with regard to the use of power and control of territory and resources (Kris Wijoyo Soepandji, 2019). The discussion of geopolitics is comprised of three key elements, including:

1. The interplay of power within a specific geographical area
2. The shift of actors from states to increasingly influential non-state actors, and
3. A key focus is the control and utilization of strategic resources.

The analysis of IUU fishing in Sulawesi waters demonstrates how geopolitical theory can elucidate the complex nature of power struggles in maritime space, particularly in relation to illegal fishing practices. A variety of actors, including foreign fishermen, fisheries syndicates, local governments, and marine security institutions, engage in a competitive struggle for control over fisheries resources in the Sulawesi region. Geopolitical aspects can be observed in the following ways: The exploitation of marine resources, the power dynamics between countries in controlling maritime zones, and the economic interests that transcend territorial sovereignty are key factors to consider.

## 4. RESULTS AND DISCUSSION

### Characteristics of IUU Fishing in Sulawesi Waters

Sulawesi waters are part of the Republic of Indonesia's Fisheries Management Areas (WPPNRI) 713, 714, and 716, which have a capture fisheries potential reaching 1.5 million tons per year (Akbar, 2022). The strategic location of Sulawesi, situated directly adjacent to the Philippines and Malaysia, coupled with the region's abundant fisheries resources, renders it a primary target for IUU fishing perpetrators (Muhamad SV, 2016). This practice not only endangers the fragile equilibrium of marine ecosystems but also gives rise to disputes between countries, local communities, and a multitude of stakeholders in the region.

The various forms of IUU fishing violations in Sulawesi waters exhibit distinct patterns based on the characteristics of the region. In Tolo Bay, the majority of violations are instances of vessels becoming grounded. In Tomini Bay, the primary concern is destructive fishing practices that jeopardize the long-term viability of the marine ecosystem. In Bone Bay and mining areas, the predominant issues pertain to violations of the Marine Spatial Utilization Activities Conformity Agreement (PKKPRL) and the potential for water pollution, which could have a detrimental impact on fisheries resources (DPR RI, 2024).

One of the primary patterns of IUU fishing is the involvement of foreign vessels that engage in unauthorized fishing in Indonesian waters, particularly in Sulawesi. These vessels often employ the use of false flags to circumvent detection by maritime authorities (Leonardo & Deeb, 2022). A press release from the Ministry of Maritime Affairs and Fisheries (KKP) dated November 27, 2023, indicates that there has been a significant increase in the prevalence of IUU fishing in Sulawesi waters. The release reports the apprehension of 212 vessels, including 16 foreign vessels comprising 8 Malaysian, 7 Philippine, and 1 Vietnamese vessels (KKP RI, 2023). In the most recent case, the KKP was able to apprehend a Philippine-flagged vessel named FB. California. At 0200 hours, an Indonesian vessel was apprehended in the Indonesian Exclusive Economic Zone (EEZ) at coordinates 04°55.589'N-124°55. The vessel was located at 871'E, with two crew members on board and a cargo of 10 kg of dried Lemadang fish and 2 kg of dried squid. Its operational mode involved the use of a pump boat and hand line fishing gear without official licensing documents. The vessel will be legally processed through the Tahuna PSDKP Base in accordance with the direction of the Minister of Maritime Affairs and Fisheries Sakti Wahyu Trenggono, with the objective of eradicating the practice of IUU Fishing in border areas (KKP RI, 2023).

Moreover, local fishers are complicit in IUU fishing practices through the use of destructive fishing techniques. In accordance with the Minister of Maritime Affairs and Fisheries Decree No. 114/KEPMEN-KP/SJ/2019 on the National Action Plan for Monitoring and Combating Destructive Fishing Activities 2019-2023, destructive fishing is defined as a fishing activity that employs materials, tools, or methods that damage fish resources and the environment. These include the use of explosives, toxic materials, trawls, and other fishing gear that is not environmentally friendly (KKP RI, 2019). The KKP has identified three principal categories of destructive fishing practices that are prevalent in Indonesian waters. These include the use of explosives, fish poison (potassium cyanide), and fish stun (Septiani, 2022). From 2013 to 2018, at least 470 cases of the use of explosives and poison were reported by Fisheries Supervisors at UPT PSDKP and the Maritime Affairs and Fisheries Office of South Sulawesi province (KKP RI, 2019). This case represents the second highest incidence of the practice in Indonesia over the five-year period in question. The utilization of these fishing techniques is not only illicit but also detrimental to the marine ecosystem, posing a significant threat to the sustainability of fish resources in the region.



### **The economic loss and social impact of IUU Fishing**

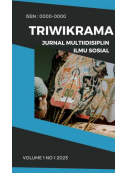
The social and economic consequences of IUU fishing in Indonesia have resulted in considerable economic losses. As reported by the FAO, the economic loss incurred by Indonesia as a result of IUU fishing is estimated to be approximately 30 trillion rupiah annually. This has led to a significant reduction in economic opportunities for local fishers and poses a threat to the sustainability of the national fisheries industry (Rapang et al., 2019). Furthermore, the exploitation of fish resources in Indonesia's Exclusive Economic Zone (EEZ) waters by approximately 10,000 foreign vessels has resulted in the illegal harvesting of over 3 million tons of fish, leading to a decline in fish stocks and subsequent harm to the local economy (Rapang et al., 2019). A study conducted in WPPNRI 715 on IUU fishing revealed a significant economic loss due to the utilization of pelagic capture fisheries resources. This resulted in a loss of economic rent, amounting to IDR 3.6 trillion per year (Susanti, Fahrudin, & Kusumastanto, 2020).

From a political standpoint, the economic losses of 30 trillion rupiah per year and the loss of potential economic rents of 3.6 trillion rupiah per year could potentially diminish the state's capacity to intervene and develop the marine sector. Such circumstances have the potential to precipitate economic instability in coastal regions, which in turn can give rise to social tensions and erode public confidence in the government's capacity to manage marine resources. A reduction in state revenue from the fisheries sector may result in a decrease in budgetary allocations for infrastructure development, education, and the welfare of fishing communities. Moreover, IUU fishing practices can serve as an entry point for corruption, thereby undermining the efficacy of the law enforcement system (Supeno, Bagio, & Irawan, 2024). In the event of significant economic losses, there is a considerable risk of collusion between business actors, law enforcement officials, and government officials. This condition has the potential to erode the government's credibility in the eyes of the international community, particularly in the context of marine governance and commitment to the conservation of fisheries resources.

The social consequences of IUU fishing are also acutely felt, particularly within fishing communities in Sulawesi. As a consequence of the reduction in fish stocks resulting from illegal exploitation, local fishermen are experiencing difficulties in meeting their basic needs, which is leading to an increase in food insecurity within the community. Furthermore, IUU fishing engenders social injustice, whereby local fishers are compelled to compete with foreign vessels that operate without a license, which ultimately diminishes their income and welfare. This has ramifications that extend beyond the economic sphere, as it also has a disruptive effect on the social and cultural structures of coastal communities that are dependent on marine resources.

### **Efforts and Challenges of Cross-Border Monitoring (Indonesia, Malaysia and the Philippines)**

The transboundary nature of Sulawesi waters introduces a geopolitical dimension to the issue of illegal, unreported, and unregulated (IUU) fishing. The region's geographical position, bordering Indonesia, Malaysia, and the Philippines, makes it a meeting point for the interests of three sovereign states, each of which has overlapping maritime claims. Furthermore, discrepancies in the interpretation of each country's national legislation pertaining to the

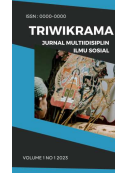


eradication of IUU fishing represent a significant obstacle to the resolution of this issue. The Indonesian government employs a rigorous and comprehensive approach to addressing IUU fishing. In accordance with Law No. 45/2009, those found to be in violation are subject to significant penalties, including imprisonment for up to five years and fines reaching IDR 2 billion. In cases of egregious violations, the government has resorted to extreme measures, such as the sinking of foreign vessels engaged in illegal fishing activities within Indonesian waters. Furthermore, Indonesia is dedicated to enhancing the stewardship of fishery resources through the formulation of a Management Plan and National Action Plan to combat IUU fishing, as well as the reinforcement of Monitoring, Control, and Surveillance (MCS) mechanisms to guarantee the sustainability of marine resources (Febriani & Atthahara, 2022).

In the Philippines, the legal framework for law enforcement related to IUU fishing is established through the implementation of strict regulations set forth in Republic Act No. 10654, which serves as an amendment to Republic Act No. 8550 (Philippine Fisheries Code). This legal framework is designed to regulate the prevention, suppression, and elimination of IUU fishing. The implementation of the MCS system is a key component of the enforcement of this legislation, with the objective of ensuring the sustainable utilization of fisheries resources. All Philippine fishing vessels, regardless of whether they are operating in national or international waters, are subject to monitoring in order to prevent violations. Those who engage in serious violations, such as fishing without a license, using prohibited fishing gear, or operating in restricted areas, are subject to stringent penalties, including substantial fines and imprisonment. Furthermore, the Philippines is empowered to impose port state measures that mandate foreign vessels to adhere to rigorous regulations upon entering ports, thereby reinforcing the global effort to combat IUU fishing.

In Malaysia, the approach to IUU fishing is more cooperative and diplomatic. This is evidenced by the establishment of an IUU Fishing Task Force, which involves various agencies and addresses the issue in an integrated manner. Despite the challenges Malaysia faces in fisheries management, the country is prioritizing the operationalization of a special task force led by the Ministry of Home Affairs, with support from the Malaysian Maritime Enforcement Agency, Immigration Department, and Ministry of Foreign Affairs. Furthermore, Malaysia is striving to reinforce its law enforcement capabilities and guarantee that its actions are aligned with international obligations, including collaboration with international organizations in combating IUU fishing (Febriani & Atthahara, 2022).

In accordance with the regulations and orientation of each country with respect to IUU fishing, Indonesia, Malaysia, and the Philippines reached an agreement on July 14, 2018, regarding a Trilateral Cooperative Framework. The objective of this agreement is to enhance maritime security surveillance, with one of the initiatives being conducted in the Sulawesi waters. This agreement establishes standard operating procedures (SOP) for joint maritime patrols, which were officially signed on August 2, 2018, in Bali (Rantung, 2021). In addition to addressing concerns such as piracy and sea-based armed robbery, the Trilateral Maritime Patrol program represents a strategic response to the rising incidence of illicit activities, including IUU fishing, in

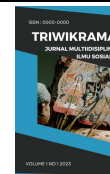


the region. This collaborative approach entails the integration of surveillance networks from the three countries, facilitating a unified and effective strategy for maintaining regional security. A significant aspect of the program is the exchange of information between the countries, which serves as the primary foundation for decision-making in patrol operations. It is anticipated that this model will evolve from the current state of information sharing to a more integrated surveillance model with a joint control center.

The Maritime Command Centers (MCCs) serve a vital function as information aggregators, analyzers, and disseminators to patrol teams on the ground. In the event of an emergency, the MCC in a given location, such as Tawau, will relay the pertinent information to other MCCs, for example in Tarakan and Bungao, who will then forward it to the Indomalphi Quick Reaction Team. The team is comprised of helicopters, surveillance aircraft, and ships from the three countries, which are tasked with conducting surveillance and ambushes. As indicated in the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) report, the incidence of criminal activity in the Sulu-Sulawesi waters declined significantly between 2016 and early 2019 (Rantung, 2021).

However, the discrepancies in the capabilities of law enforcement agencies across the three countries present a significant challenge in effectively addressing the issue of IUU fishing. In an assessment of maritime security conditions, conducted by Stable Seas and comprising nine main parameters, including international cooperation, rule of law, maritime enforcement, coastal welfare, blue economy, fisheries, piracy and robbery at sea, illicit trades, and maritime mixed migration, the three countries (Indonesia-Malaysia and the Philippines) were found to occupy the third position out of eleven regional countries with the Marine Security Index (MSI) indicator (BAKAMLA RI, 2022). Those countries with less robust surveillance capabilities, such as the Philippines, are susceptible to incursions by foreign vessels engaged in illegal fishing activities. Furthermore, the absence of harmonization between the fisheries regulations of Indonesia, Malaysia, and the Philippines complicates the process of identifying and prosecuting perpetrators of IUU fishing. If this condition persists, the uncontrolled exploitation of marine resources will threaten the sustainability of the ecosystem, result in economic losses for coastal communities, and exacerbate geopolitical tensions in the Sulawesi region. Furthermore, collusion between fishermen and law enforcement officials represents a significant challenge. In some instances, these officials have been known to accept bribes in exchange for turning a blind eye to illegal activities, thereby failing to maintain adequate law enforcement. Such occurrences are not uncommon in various regions, where law enforcement officers have been known to refrain from taking firm action against violations that occur, thus creating an environment conducive to the continued flourishing of IUU fishing practices.



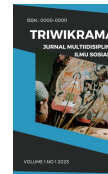


## 5. CONCLUSION

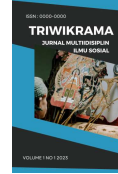
This research illuminates the intricate nuances of the IUU Fishing problem in Sulawesi waters, underscoring that it is not merely a fisheries issue. Instead, it encompasses multifaceted dimensions, including maritime security, geopolitics, and international political economy. This research employs an in-depth qualitative approach to identify that illegal fishing practices in the region are a reflection of a complex cross-border struggle of interests, involving the dynamics of relations between Indonesia, Malaysia, and the Philippines. The Trilateral Maritime Patrol represents a promising approach to reducing illegal activities, yet it continues to confront considerable obstacles. These include discrepancies in law enforcement capabilities, incomplete harmonization of regulations, and susceptibility to corruption. The consequences of IUU fishing extend beyond mere economic repercussions; they also jeopardize the long-term viability of marine ecosystems, disrupt the social fabric of coastal communities, and potentially give rise to geopolitical tensions. The principal recommendations are as follows: there is a need to reinforce regional cooperation, enhance monitoring capacity, align fisheries regulations, and adopt a comprehensive approach that incorporates security, economic, and socio-cultural considerations. It is imperative that the government develops a sustainable strategy that not only prioritizes law enforcement but also incorporates initiatives that foster the development of coastal communities.

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