Maritime Security Strategy Against Illegal Fishing in Riau Indonesia

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Abstract
Riau is a province prone to illegal fishing activities which are harmful to the state. This is due to the lack of optimisation of its marine potential, which then became exploited by foreign fishermen. This research will discuss the strategy employed by the Marine and Fisheries Department of Riau (Dinas Kelautan dan Perikanan/DKP) in combating illegal fishing in Riau waters. This paper argues that the strategy is to engage with local communities, increase technical and human capital, and perform patrols by engaging with stakeholders such as PSDKP, Polair, and TNI AL. This research uses the descriptive qualitative method, and the data is collected through interviews (via Zoom meeting) with DKP Riau, to discover the right strategies in combating illegal fishing in Riau to promote maritime security. This research discloses that the necessary strategies are to increase the number of workers, facilities, and infrastructures for maritime surveillance to engage with local communities, in this case, the Monitoring Community Group (Kelompok Masyarakat Pengawas/Pokmaswas), by supporting the government in monitoring and deterring threats towards Indonesian marine resources; to implement policies for prosecution; and to increase maritime patrols like synergy between DKP Riau and other government agencies for the process of monitoring and arresting carried out due to the lack of facilities owned by DKP Riau. The joint patrols for inspecting marine and fishery resources are carried out in collaboration with DKP, Satpol PP, TNI AL, and Polair.

Keywords: Illegal fishing, Maritime Security, Pokmaswas, Riau

INTRODUCTION

The province of Riau is a diplomatic region as it is located in the international trade route of Malacca Strait, resulting in high activity of fishing vessels, both local and foreign. Marine and fishery potential of Riau consists of 21,478 km² with a coastline of 2,713 km, and 57,607 fishermen. Fisheries Management Area (Wilayah Pengelolaan Perikanan/WPP) 571 which covers the Malacca Strait and Andaman Sea, has a sustainability power of 425,444 tons, with 36,809 tons allocated to Riau. Meanwhile, WPP 711 (Karimata Straits, Natuna Sea, and South China Sea) has a sustainability power of 767,126 tons with 32,742 tons allocated to Riau. Up to 2020, utilisation rates of WPP 571 and 711 potentials, which the potensials include aquaculture, capture fisheries, and marine spatial planning, have only reached 11.31% (Marine and Fisheries Departemen of Riau Indonesia, 2022 [1]). This shows that Riau has abundant potential of marine resources, but further utilisation and cultivation is necessary to generate income for the state and also benefit the people of Riau. However, the waters of Riau is also rife with latent threats against maritime security, such as piracy, violation of IUU Fishing, armed attacks, and many others. There is a high amount of criminal activity in general. The government and law enforcement hold the power to give commands in eradicating all forms of threats against Indonesian maritime security. With its strategic position and rich marine resources, Riau continues to face maritime threats, particularly illegal fishing.

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Indonesia currently focuses its efforts on handling threats against marine and fisheries security, particularly Illegal, Unreported, and Unregulated Fishing (IUU Fishing). Such threats have become a global issue which is categorised as a transnational organised crime, as it involves multiple perpetrators from various countries. IUU Fishing is the formal term coined by the Food and Agriculture Organization (FAO) in the Code of Conduct for Responsible Fisheries (CCRF). In short, illegal fishing is understood as fishing activity conducted illegally, against existing policies, and fishing activities that are not reported to the authorities in charge of fishery (Sinulangga, 2016).

Illegal fishing in Riau waters is conducted by vessels of Southeast Asian countries and China. The act of illegal fishing in Indonesian seas is known to have caused losses as much as 101 trillions each year. The occurrence of illegal fishing is because local fishermen mostly utilised only 0 to 5 miles of the sea, instead of maximising the potential, due to the small fishing boats they used resulting in narrow fishing coverage. Furthermore, there is no fishing port in Riau, which means there is nowhere for fishermen to land fish, making fishermen sell their catch in the middle of the sea instead (unreported). Parts of Riau vulnerable to illegal fishing are the Malacca Strait and the surrounding waters (Rani, 2019), which borders neighbouring countries such as Vietnam, Malaysia, Myanmar, Thailand, and others. If permanent access is granted for these waters, it will greatly impact local fishermen as the number of available fish will decline.

The measures taken by the Department of Surveillance and Control of Marine and Fishery Resources (Pengawasan Sumberdaya Kelautan dan Perikanan/PSDKP) are relatively ineffective in solving this problem, as data shows that illegal fishing cases continue to occur each year. PSDKP found several restrictions in conducting monitoring, i.e. human capital, facilities and infrastructures, and costs. Therefore, examination should be escalated on the quantity and quality of workers, facilities and infrastructures, cooperation with neighbouring countries and related institutions, as well as law enforcement.

Strategy is the capacity to enforce authority as an instrument of intimidation. Strategy or tactics can commonly be described as “the art of science of shaping means so as to promote ends in any conflict”. In analytical analysis, “the art to shape” refers to the military, while “the field of conflict” is the international structure, and “ends” is the political aim of actors, which tend to be broad and display the existing international situation (Rendi, 2012). According to Clausewitz, strategy can be put into three categories, (1) People and politics, including individuals, communities, substance and personalities, politics and behaviour; (2) Preparation for War, consisting of financing and supplies, institution, military planning, information and intelligence, doctrine and substance of strategy, as well as technology; (3) War Proper, including military activity, guidance, geography, shifts, and opponents (Rendi, 2012). Based on
Clausewitz’s categories, a strategy that could be considered suitable for this research is People and Politics, since Indonesian policy to combat illegal fishing in Riau was to conduct a collaboration between Indonesian Naval Forces (TNI AL), Coordinating Agency for Maritime Security (Badan Koordinasi Keamanan Laut/BAKORKAMLA), and PSDKP Batam, in accordance with the laws and regulations.

To understand the maritime security concepts presented by Christian Bueger, there are 3 things that should be considered, the first is "semiotics" to map the different meanings by exploring the correlation between maritime security and other concepts. The second is the “securitization” framework which provides the means to understand how different threats are included in maritime security. The third is the security practice theory, to understand what actions are undertaken in the name of maritime security (Bueger, 2015). Maritime security, or maritime safety, in this research is a concept in conducting and enforcing maritime law in certain aspects, such as territorial sovereignty, national identity, to politics and economy (Barry Buzan, 1998). This concept is also used to understand national efforts to defend their maritime security against threats from other countries, as well as efforts to prevent violation of law in various maritime activities. Therefore, in this study, the case of illegal fishing is considered as a threat to Indonesian regional sovereignty.

This research argues that to combat illegal fishing the necessary steps to take include: coordinating with the local community, non-state actors, coastal community and fishermen; strengthening defence equipments; improving human capital and working facilities and infrastructures; implementing strict law enforcement by imposing appropriate punishments for the violations committed; and conducting patrols or inspection, detection, arrests, reporting, and sanctions.

**RESEARCH METHODS**

The method used in this research is the descriptive qualitative approach, which analyses the descriptive focus and data placements according to each of the backgrounds. Qualitative research is a primary method used by researchers to improve data collection technique, and to implement recursive data analysis (Sugiyono, 2015). A research using qualitative and descriptive methods aims to explain the true reality of an entity so that rational data can be gained. This research employs interviews and literature study to collect data. Reference is obtained by collecting data and information sources on related subjects.

The data basis in this research takes place in Riau, and was conducted through online means, which include interviews with the Marine and Fisheries Department of Riau (DKP Riau). Meanwhile, literature study is obtained from documents provided by DKP Riau. Once the necessary data is collected, descriptive analysis is conducted. Descriptive analysis is a process to examine collected data, and to elaborate on that, so that readers may understand the findings. Data analysis method used in this study employs the theory of Miles and Huberman, which comprises data acquisition, data shrinkage, data display and inference.

**RESULT AND DISCUSSION**

**Illegal Fishing in Riau**

Countries in Southeast Asia along with China dominate illegal fishing in Indonesian waters. An area that is highly prone to illegal fishing around Riau, Indonesia, is the Malacca Strait and surrounding waters (Rani, 2019). This is why DKP Riau attempts to solve this issue by arresting and prosecuting illegal fishers conducting fish thefts in Riau waters.

[https://ijhess.com/index.php/ijhess/]
In January 2022, DKP had caught two fisher boats conducting illegal fishing in Riau.\(^1\) Illegal fishing includes acts as follows:

1. Ownership, management, transportation, or use of fish trapping equipment which affects the sustainability of fish stocks in WPP areas.
2. Ownership or use of fishing vessel with Indonesian flags, which conducts fish trappings in WPP areas as well as in the high seas without a Fish Carrier Licence (*Surat Izin Kapal Pengangkut Ikan/SIKPI*).
3. Ownership or use of vessels with foreign flags, which conduct fish trappings in Exclusive Economic Zone without a SIKPI.
4. Ownership or use of fish carrier vessels in WPP areas, which conduct fish delivery or related activities, without a SIKPI.
5. Violation of trade permit regulations in marine and fisheries sector.

The data collected from interviews conducted in January 2022 with DKP Riau are shown in the following table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>8 Cases</td>
</tr>
<tr>
<td>2019</td>
<td>9 Cases</td>
</tr>
<tr>
<td>2020</td>
<td>8 Cases</td>
</tr>
<tr>
<td>2021</td>
<td>6 Cases</td>
</tr>
</tbody>
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**Table 1. Summary of collected data**

In Riau, cases of illegal fishing in 2018 which occurred 8 times shown a lack of fishing permit documents; and conduct of fishing a species of longtail shad or Terubuk fish (*Tenualosa Macrura*) which is regulated in Ministerial Decree No. 59/MEN/2011 on the Establishment of Limited Protection Status for the Species of Terubuk. In 2019, 9 cases occurred in which fishers were caught without SIKPI Andon. In 2020, there were 3 cases including a SIKPI and SIUP (business permit) from North Sumatra which had expired; and fish trapping in WPP with illegal trapping equipment without any permit. In 2021, there were 6 cases which include fish trapping in WPP with illegal trapping equipment without any permit.

Illegal fishing that often occurs in Riau is added by the use of trawl by foreign vessels, which clearly harms Indonesia. The use of trawl nets in illegal fishing is dangerous to marine life, and damages marine ecosystems in Riau. Foreign vessels with illegal fishing activities in Malacca Straits include Malaysia, Vietnam, Myanmar, and other neighbouring countries that directly border Indonesia.

**Strategy Against Illegal Fishing**

According to Till (2004), the way to eradicate threats or criminal intimidation in the maritime area of Indonesian waters, sea power is highly needed. Riau needs to strengthen maritime security cooperation, which in this case requires assistance from the central government for the local government in dealing with illegal fishing activities. One of them is a sincere and strategic cooperation by way of joint patrols to maintain maritime security.

\(^1\) Interview with Marine and Fisheries Department of Riau (January, 2022).
Enforcing Policies

In order to combat illegal fishing, the government must be firm with the existing maritime policies. This means zero tolerance for any violation of illegal fishing. The policy basis for illegal fishing that can be implemented in Riau are as follows.
1. Law No. 11/2020 on Job Creation.
2. Law No. 23/2014 on Local Government.
5. Government Regulation No. 27/2021 on Implementation of Maritime Affairs and Fisheries.
6. Marine and Fisheries Ministerial Decree No. 19/2020 on Prohibition of Import, Cultivation, Distribution, and Export of Dangerous and/or Harmful Fish Species.
10. Marine and Fisheries Ministerial Decree No. 31/2021 on Administrative Sanction in Marine and Fisheries Sector.
11. Regional Regulation No. 5/2017 on Business Licence for Capture Fisheries.

DKP Riau takes action against perpetrators of illegal fishing by implementing existing policies. Such action can minimise the crime of illegal fishing to promote maritime security. Law enforcement is not enough to eradicate this crime down to its roots. PSDKP also conducts a series of diplomatic methods, by implementing Marine and Fisheries Ministerial Decree No. 114/KEPMEN-KP/SJ/2019 on National Action Plan for Supervision and Countermeasures Against Destructive Fishing Activities in 2019-2023. Various elements are engaged to contribute in eradicating destructive fishing, such as the law enforcement, i.e. Polri and TNI AL, as well as Local Government. Several concepts to raise awareness was conducted, aiming to stop the practice of destructive fishing.

Human Capital, Work Technicality, and Infrastructure

DKP Riau also needs to increase the number of human capital along with the facilities and infrastructure for its office. Currently, staff of PSDKP include 6 PPNS, 3 Special Police, and 10 units of Patrolling Posts. DKP Riau struggles to conduct arrests and patrols with the small number of staff and the lack of instruments for sea monitoring. This hinders them in pursuing and capturing foreign vessels optimally. This is because foreign vessels tend to have more modern specifications compared to patrol ships owned by DKP Riau, which consist of one patrol speed boat that can be considered quite old to pursue illegal fishers. The patrol boat had been operated since 2007, which shows the condition for patrolling and prosecution by DKP Riau is not sufficient and is not optimum compared to the wide Riau waters.

The Ministry of Marine Affairs and Fisheries improves the quality of its human capital. The consolidation of human capital should correspond with the complexity of the relatively wide Indonesian waters. The basic matter to be addressed in order to limit future challenges and improve the productivity of Indonesian fisheries does not only involve prevention of illegal fishing, but also the improvement of facilities and infrastructures for Indonesian fishermen, which still requires support from central government.

To arrest perpetrators of illegal fishing, a tool or instrument to facilitate them is needed. The current technology allows the use of advanced devices to promote prosperity. Advanced vessel monitoring devices such as the Vessel Monitoring System (VMS) is part of the efforts from
Indonesian government to deal with illegal fishing in Riau Islands. Other technology includes the Global Fishing Watch (GFW), which was maximised with the positive and revolutionary attitude by Minister Susi to protect Indonesian seas. With such upgrades, Ministry of Marine Affairs and Fisheries can find illegal fish capture which impacts the fish quantity, and increase fishery GDP beyond national economic growth.

Ditjen PSDKP continues to conduct steps to consolidate monitoring infrastructure and to improve monitoring institutions. This is carried out by accommodating fishery surveillance vessels armed with appropriate weapons to support sea monitoring authorities. In personnel monitoring and supervision, Ditjen PSDKP has recruited 104 fishery observers, who are positioned in 14 Technology Organising Units (Unit Penyelenggara Teknologi/UPT) of PSDKP. Some stages to increase UPT quantity have also been conducted to expand the coverage of area and monitoring objects. Thus, in monitoring the wide Riau seas, increasing human capital supported by provision of infrastructure such as patrol boats is necessary to optimise maritime security.

Involvement of Pokmaswas

Directorate-General of Surveillance and Control of Marine and Fishery Resources (PSDKP) maintains a social institution, namely the Monitoring Community Group (Kelompok Masyarakat Pengawas/Pokmaswas) which configures the participation of surrounding communities, particularly fishermen and coastline communities, to accommodate the government in combating and protecting against threats to the resources in Indonesian seas. The main responsibility of Pokmaswas is to inspect, review, and protect marine and fishery resources according to the capability and insights of the local population, which tend to be more knowledgeable on local environmental conditions.

Pokmaswas is a formal institution whose legality is decided based on the Decision Letter of Provincial Marine and Fisheries Agency of the region (Nasution, 2018). With the low number of personnel in surveillance, Pokmaswas is presented to help the government in monitoring marine and fisheries violations. In this case, DKP Riau explained that some of the local people passed coaching to become supervisors in Riau. The number Pokmaswas in 2020 in Riau consists of 86 active groups which guard the waters of Bengkalis (8 groups), Indragiri Hilir (14 groups), Indragiri Hulu (3 groups), Kampar (14 groups), Meranti Islands (5 groups), Kuantan Singingi (10 groups), Pelalawan (17 groups), Rokan Hilir (4 groups), Rokan Hulu (3 groups), Siak (2 groups), Dumai (5 groups), Pekanbaru (1 group).

In accordance with the Marine and Fisheries Ministerial Decree No. Kep. 58/Men/2001 on Community-Based Monitoring System (Sismawas), the Ministry of Marine Affairs and Fisheries, assisted by PSDKP immediately worked to provide communication devices to 150 groups of Pokmaswas. The accommodation of communication devices include one cellphone unit with a sim card. Contributing and assisting Pokmaswas is a way to support and promote successful surveillance. Pokmaswas is more dynamic in relaying information to officials on duty should an unexpected incident regarding illegal fishing occur in Riau Islands.

In its implementation, each Pokmaswas only has one cellphone to notify supervisors of violations or other problems related to fishing. The report can be carried out through the “SMS Pokmaswas portal”, or directly to officers found at sea or on land. The contents of information on violations reported by Pokmaswas include the location of violation, time period of the incident, pattern of the violation, identity of the violator, eyewitnesses to the violation, and development of the violation and submission. (PSDKP KKP, 2017).

The duty of Pokmaswas is to monitor if there are indications of activities that may harm the waters and the community, one of which is illegal fishing. In this case, Pokmaswas does not make arrests, take action, and so on, but only reports violations and harmful acts to the sea to PSDKP, Polair, TNI AL. Pokmaswas plays an important role in the supervision of criminal acts in the Riau waters. The average operational result of DKP Riau comes from a Pokmaswas
report. Seeing the optimal operation of supervision through Pokmaswas, the Ministry of Marine Affairs and Fisheries along with DKP conduct coaching once a year. In addition to coaching, DKP Riau and Pokmaswas regularly communicate online to discuss problems that are often encountered in the field.

With the existence of Pokmaswas, DKP can obtain information and details on violations at sea more quickly. Pokmaswas consists of local community members, which allow them to directly monitor and view information that is happening in their area. Pokmaswas can minimise violations in Riau waters. With the existence of Pokmaswas in Riau, it can help the government minimise illegal fishing violations.

**Synergy between Institutions**

A synergy with other institutions is necessary to conduct monitoring operations in Riau waters. DKP Riau works in partnership with other government agencies for a more optimum surveillance and arrests, due to the lack of infrastructures available to DKP Riau. Joint patrols for marine and fisheries resources are conducted in partnership with Marine and Fishery Agency, Satpol PP, TNI AL, and Polair.

Synergy between the Ministry of Marine Affairs and Fisheries, TNI AL, and Polri, is needed to protect fishermen, maintain sea potential, and defend state sovereignty for national interests. In order to give a deterrent effect on all perpetrators of illegal fishing in Indonesian waters, the Ministry of Marine Affairs and Fisheries along with TNI AL and Polri had agreed on the regulation to end fishing crimes. PSDKP Directorate General, Asep Burhanudin commented that the partnership between the Ministry of Marine Affairs and Fisheries, TNI AL, and Polri, is a form of government synergy in protecting the sea from various acts of crime.

On Tuesday, 3 November 2020, in the Batam PSDKP Station, investigators from the Ministry of Marine Affairs and Fisheries pocketed evidence and arrested crews of illegal fishing vessels from the Bakamla. Two foreign fishing vessels from Vietnam, TG 9583 TS and KM TG 9489 TS along with their 25 crews were handed over to Fisheries PPNS in the Batam PSDKP Station by captain KN Pulau Nipah 321.

Several agencies supervise illegal fishing in the Riau Islands, namely the law enforcement apparatus at sea. Institutions that carry out supervision include the TNI AL, PSDKP Indonesia, Bakamla, and PSDKP Batam. With the existence of several law enforcement agencies that have the authority to enforce the law at sea, the measures to combat illegal fishing also expands the scope of inspections in areas prone to illegal fishing, especially in the Riau Islands. In addition, there is the involvement of the local community and community initiatives to inform if there are suspicious fishermen.

This is a form of contribution between law enforcement institutions. The Bakamla team carried out detention, but authority for investigation remained with the Ministry of Marine Affairs and Fisheries, so the ship would be legally processed by the Ministry. This is a form of synergy from Bakamla when exterminating illegal fishing with the Ministry or with other correlated institutions.

The Directorate General of PSDKP is making efforts with other law enforcement agencies to ensure effective monitoring of marine resources. One of the results of this effort is proper harmonisation with the Attorney General's Office and the Fisheries Court which have demonstrated the ability to speed up procedures for resolving illegal fishing cases.

Aside from supervision, investigations into fisheries crimes are also carried out in collaboration with other agencies such as the Marine and Fisheries Agency, Belawan PSDKP Station, Ministry of Marine Affairs and Fisheries, and Monitoring Coordinator PPNS of Riau Police. The signing of a cooperation agreement in monitoring marine and fishery resources was conducted between the Marine and Fisheries Agency and the PSDKP Belawan Station. DKP Riau and other agencies will enforce the Regional Regulation No. 5/2017 on Business Permits for Capture Fisheries. This is about the operation of checking legal permits of operating fishing
vessels. DKP is not provided with weapons to deal with people who resist when they are prosecuted, it is Polair who can handle cases like this.

**CONCLUSION**

The government instructed DKP Riau to resolve the problem of illegal fishing by catching and following up on illegal or foreign fishermen who carry out illegal fishing activities in Riau waters. The maritime security strategy in dealing with illegal fishing by the DKP Riau consists of implementing policies related to maritime security by providing strict sanctions to minimise illegal fishing crimes and protect marine resources, increase human resources present in the field, the lack of personnel in necessary institutions should be filled with additional human resources and technical equipment such as infrastructure, and more attention must be paid to enable the pursuit and capture of foreign fishing vessels to be carried out optimally.

The next strategy in overcoming illegal fishing is to involve the local community, namely the Pokmaswas, which is defined as the implementation of community support, especially fishermen and coastal communities, for government efforts in protecting and eradicating threats to marine resources in Indonesia. DKP also synergizes with other agencies with the aim of supervising the Riau sea from perpetrators of illegal fishing. The next strategy is the synergy between DKP Riau and other government agencies for the process of monitoring and arresting carried out due to the lack of facilities owned by DKP Riau. The joint patrols for inspecting marine and fishery resources are carried out in collaboration with DKP, Satpol PP, TNI AL, and Polair.

**REFERENCES**


