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# Illegal Fishing and the Challenges of Maritime Co-ordination in Brunei's EEZ

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Royal Brunei Navy and Universiti Brunei Darussalam

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# *Illegal Fishing and the Challenges of Maritime Co-ordination in Brunei's EEZ*

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## **Abstract:**

The South China Sea is a significant maritime region both strategically and economically. Its valuable resources provide major economic benefits for the countries of the surrounding region. Maintaining the maritime security of Brunei's territorial waters and Exclusive Economic Zone (EEZ) against illegal activity is key to ensuring the long-term viability of its benefits for the country. This paper considers the effectiveness of maritime co-ordination and information sharing in combatting illegal fishing activities within Brunei Darussalam's EEZ and the challenges it faces.

**Keywords:** Brunei; EEZ; illegal fishing; IUU; maritime co-ordination; information sharing

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# *Illegal Fishing and the Challenges of Maritime Co-ordination in Brunei's EEZ*

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## **Introduction**

Brunei Darussalam is situated on the north-western shores of Borneo with a population of just over 428,000. Its land territory is 5,765 square km and its maritime area is approximately 36,600 square km, which is six times the size of its landmass. Brunei's Exclusive Economic Zone (EEZ) stretches up to 200 nautical miles from its 161 km long coastline (see Figure 1). It not only provides the country's major revenue source from oil and gas but also forms part of the rich South China Sea fishing grounds. Brunei's share of this lucrative market has a potential worth of around BND\$2 billion (including aquaculture and seafood processing) (OBG 2017). However, illegal fishing encompassing several types of fishing activities, namely illegal, unreported and unregulated (IUU) poses an ongoing threat to Brunei's fishing industry.

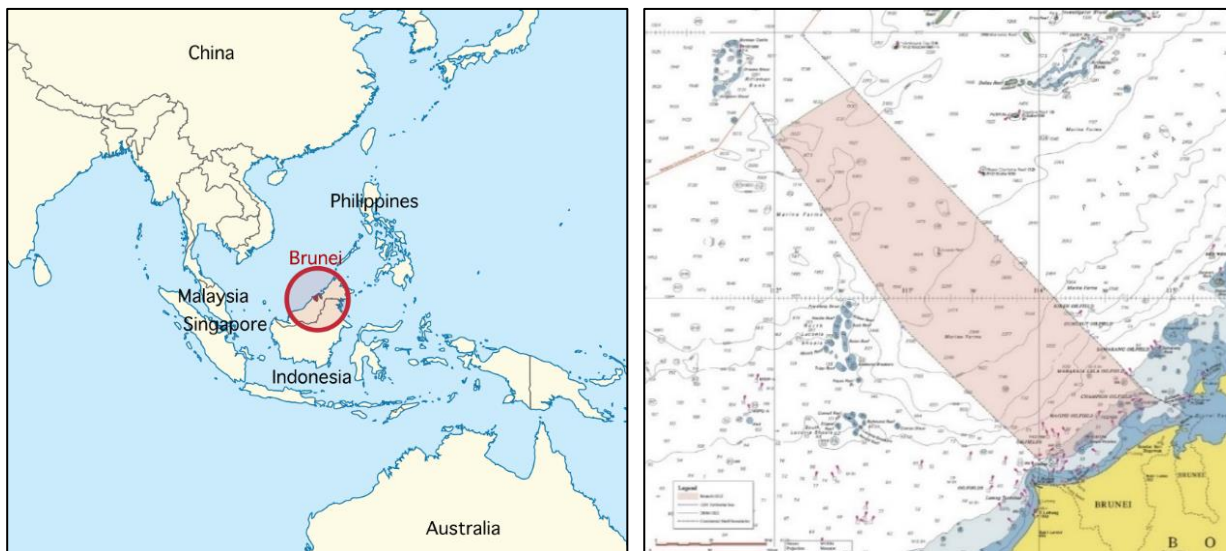


Figure 1. Brunei Darussalam's EEZ.

*Source:* Survey Department, Brunei Ministry of Development.



Worldwide, it is estimated that IUU fishing is responsible for the loss of up to 26 million tons of fish each year which is equivalent to economic value of around US\$23 billion (FAO 2018). The Food and Agriculture Organization of the United Nations (FAO) divides the world's oceans and seas into several major fishing areas for the purposes of data collection on fish catches. It identifies the South China Sea which is part of the Western Central Pacific area as a heavily exploited region (FAO 2018). Fish stocks in the region are falling at an alarming rate placing marine ecosystems under increasing pressure (World Ocean Review 2013; Palomares, et al. 2020; Carnegie, P. J., et al. 2021: 1–28).

The fishing industry in Brunei is overseen by the Department of Fisheries (DoF) under the control of the Ministry of Primary Resources and Tourism (MPRT). DoF's current mission is to "accelerate growth of fisheries industry output through use of high technology, increase productivity as well as targeting the export market by increasing local investment and foreign direct investment" (MPRT 2020). This is part of a national strategy to grow national gross domestic production, export and economic diversification (MPRT 2017: 2-9). Illegal fishing activities are charged and prosecuted under the Brunei's Fisheries Act (Laws of Brunei 1972, Chapter 61). Brunei is also one of the countries in Southeast Asia to adopt the Regional Plan of Action (RPOA) in order to promote responsible fishing practices which includes combating IUU fishing (Edeson et al. 2010). The task of enforcing illegal fishing laws over the full extent of Brunei's EEZ primarily falls to the Royal Brunei Navy (RBN). The Police Marine (POLMAR) also conduct maritime patrols but this is effectively limited up to 6 nautical miles from the coastline under the auspices of Fisheries Act 1973. The role of maintaining surveillance and control over illegal fishing is part of the RBN's operational tasks (DWP 2004). However, given its primary function of maritime security and protecting Brunei's lucrative oil and gas offshore facilities, there is a risk of overstressing RBN's limited assets (Pramod 2017). The RBN undertakes domestic patrols and participates in good-will deployments and regional bilateral and multilateral exercises. In recent years, it has upgraded its assets and capabilities but it only has eight deployable warships and this is often reduced by ships undergoing routine maintenance (MoD 2011: 10-21).

Maintaining the maritime security of Brunei territorial waters and EEZ against illegal activity is key to ensuring their long-term viability and benefits for the country. While other maritime transnational crimes do pose ongoing threats, Brunei Darussalam's EEZ is most

susceptible to illegal fishing activities with the majority of foreign illegal vessels from Vietnam and Malaysia (RBN 2019; Edeson et al. 2010; Masli 2011). The full extent of the problem remains difficult to gauge given limited statistical data but conservative estimates put potential revenue lost to Brunei from illegal fishing at more than BND\$26 million between 2009 and 2019 (DoF 2019). In 2015, it was estimated that in the previous 6 years only about 9 percent of illegal fishing cases had been apprehended (Bandial 2015).

Evidently, the threat of illegal fishing is significant and dealing with it is not straightforward. As a transnational criminal activity, IUU fishing is no respecter of borders and there are multiple factors, interests and contexts to consider. The following paper investigates the extent to which current maritime co-ordination and information sharing provisions are effective in combatting illegal fishing activities within Brunei Darussalam's EEZ and the challenges they face.

## **Methodology**

The paper adopts a mixed methods approach in the collection of both quantitative and qualitative data. It seeks to build a nuanced picture of the challenges of maritime co-ordination and information sharing in dealing with transnational IUU activities in Brunei's EEZ. Data collection included semi-structured interviews, statistical data and information from various official sources and news media reports. The statistical data on the incidence of illegal fishing activities detected, apprehended and the number of foreign fishing vessels sighted within Brunei's EEZ in the last three years formed a base-line for the investigation. A review of relevant academic literature also provided an interpretative framework to analyse the collected data on the effectiveness of Brunei's maritime security agencies in dealing with the issue of IUU fishing.

A set of semi-structured interviews were conducted with operational-related representatives from the RBN, DoF, and POLMAR who agreed to interview on a voluntarily basis. Interviews were conducted at their respective offices in accordance with ethical standards and relevant security clearance. Respondents shared their views and engagement history with IUU fishing matters in Brunei. Respondents had work experience of between fifteen to thirty years. They are coded RBN1, DoF1, DoF2, DoF3 and POLMAR1 respectively. Direct quote responses were redacted in this paper for security reasons but permission was received to indicate general

impressions. They provide insight on the experience and perceptions of information sharing between relevant agencies, namely Joint Force Headquarters (JFHQ) of Royal Brunei Armed Forces (RBAF), RBN, DoF, National Maritime Coordination Centre (NMCC) and POLMAR.

### **Limitations**

The study of this paper is limited to Brunei's national maritime security agencies. Further study is required to include Brunei's immediate neighbouring countries and maritime security agencies to build a more complete comparative picture of this transnational issue. In particular, the establishment of Information Fusion Centre (IFC) in Singapore is an initiative designed to enhance maritime security through information sharing and co-ordination between Republic of Singapore Navy (RSN) and its partners that includes RBN. This platform aims to ease the process of collaboration between navies in combating transnational crime especially in ASEAN countries. It forms an important hub to harmonise objectives to combat transnational criminal activities. RBN's commitment to IFC indicates Brunei's undertaking to combat IUU fishing and protect its maritime borders and resources.

### **Situating IUU in Brunei**

This section reviews current maritime security and approaches to combatting of illegal fishing. It draws out key thematic factors for analysis and consideration.

Fisheries are critical to ASEAN food security (Carnegie et al. 2016). As Williams (2013: 258-283) notes, it is vital for the region to focus on the issue of IUU. There are currently three multilateral provisions, namely the Regional Program of Action on IUU Fishing; ASEAN – Southeast Asia Fisheries Development Centre Strategic Partnership and the Coral Triangle Initiative. They do offer formal institutional platforms for dealing with fisheries-based security issues but most countries give a low priority when it comes to fishery issues (Williams 2013).

Having said this, in February 2010, Brunei formed the NMCC under the umbrella of the Prime Minister's Office (PMO). The Centre is responsible for sharing maritime security-related information and coordination amongst the relevant maritime security agencies related to Brunei's

EEZ, coast and rivers (Borneo Post 2012). The purpose of its establishment was to spearhead and provide oversight on maritime-related security issues with the support of relevant agencies. The common process and respective roles in an event of apprehending a suspected foreign illegal fishing vessel is as follows:

- **RBN:** a ship conducting patrol that spots a foreign fishing vessel engaged in illegal fishing activity will conduct search and board operations to look for further evidence. The fishing vessel will be towed or accompanied to the port to be handed over to POLMAR for further investigation before court prosecution.
- **JFHQ:** RBN will inform JFHQ prior to apprehending an illegal fishing vessel for approval and initial coordination with other agencies, particularly POLMAR and NMCC.
- **POLMAR:** The apprehended fishing vessel will be handed over to POLMAR for further investigation prior to prosecution.
- **NMCC:** JFHQ will notify NMCC for management and analysis of information.
- **DoF:** The relevant personnel from DoF will be notified for collaboration of investigation process with POLMAR.

Although the NMCC's was established to play a leading role in sharing maritime security-related information and spearheading coordination, the RBN remains primarily responsible for data collection in conjunction with IFC and provides the major asset presence in Brunei's EEZ (RBN 2019; Pramod 2017).

Regionally, a majority of ASEAN countries have formed coastguards or similar enforcement agencies to monitor and regulate maritime sovereignty against illegal activities (Hollingsbee 2019). Indonesia formed the Indonesian Sea and Coast Guard in January 1973 and later established the Indonesian Maritime Security Agency (*Badan Keamanan Laut Republik Indonesia* - BAKAMLA) in December 2014 (Setiawan 2014). Since both organisations have similar roles and functions in combatting maritime threats, the Indonesian government already plans to merge the two under the BAKAMLA umbrella (Kembara 2020). The Indonesian Maritime Information Centre (IMIC) also launched recently to facilitate the sharing of information with IFC

(Nirmala and Long 2020). According to Fabrica (2017: 25-87), collective efforts and promoting maritime security is vital but domestic politics also influence security preferences. Chapsos et al (2019) further note, the importance of cultural and political dimensions in combatting IUU fishing. The involvement of local fishermen in the sharing of information and their cooperation with government agencies forms an important part of combatting IUU fishing.

By identifying a set of thematic factors, namely lack of priority; coordination and information sharing deficit and operational overload allows the following section to analyse the collected data in a systematic manner.

### Collected Data Analysis and Findings

Firstly, it is important to note that there is a complex range of IUU activities (see Figure 2). These diverse activities make preventing and reducing IUU cases a difficult task.

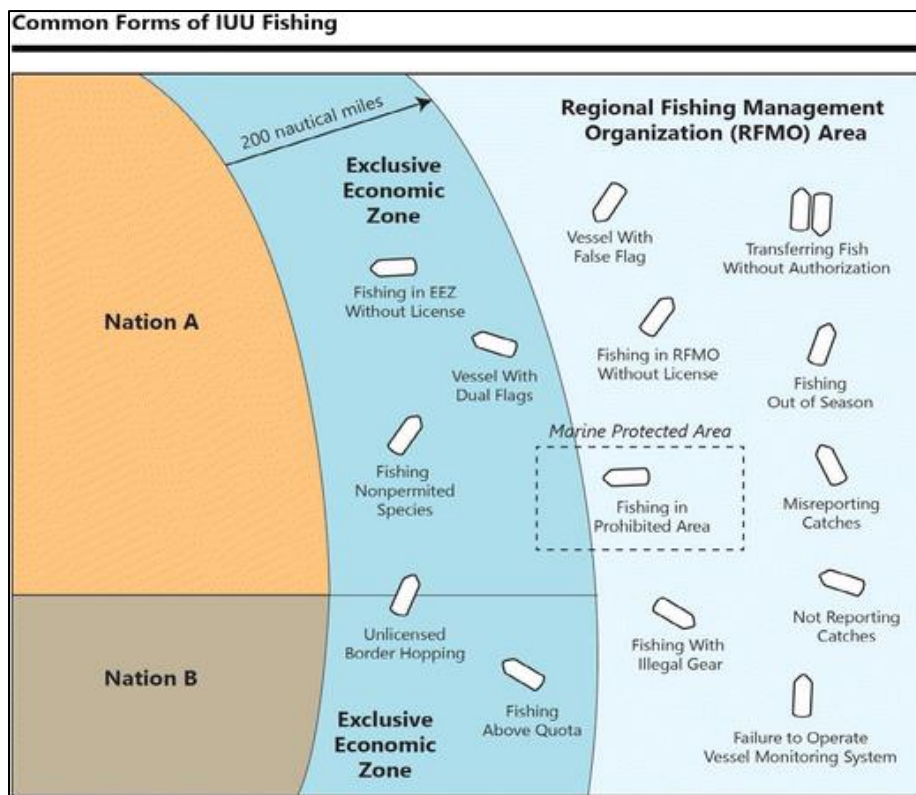


Figure 2: Common forms of IUU fishing (Source: US NIC 2016:6)

### *Statistics on Sightings and Apprehended Fishing Vessels*

The following statistics were collected from DoF, RBN, and POLMAR.

Table 1: DoF statistics for the last 3 years.

Year	Sighted Vessels	Apprehended Vessels
2017	44	8
2018	3	3
2019	3	3

Table 2: RBN statistics for the last 3 years.

Year	Sighted Vessels	Apprehended Vessels	Boarded Vessels
2017	14	8	14
2018	5	3	4
2019	34	3	5

Table 3: POLMAR statistics for the last 3 years.

Year	Apprehended Vessels
2017	8
2018	2
2019	3

Maritime security co-ordination and information sharing also includes three additional departments, namely Maritime and Port Authority; Royal Brunei Customs and Excise; Immigration and National Registration. Meetings are held on a monthly basis under the auspices of the Maritime Security Working Committee (MSWC) with National Security Committee (NSC) oversight. Respondents were all aware of the implication of IUU activities to the sustainability of

fishery resources and the impact on the economy. They noted that in addition to foreign fishing vessels, local fishermen are also part of the IUU fishing problem. The use of explosives and anchoring near oil platforms can jeopardise the safety of oilfields and pipelines. Respondents noted that currently the NMCC has yet to fully realise its role as the country's lead agency for sharing maritime security-related information and response coordination.

POLMAR1 indicated that although NMCC collects data and shares the information, its role is still limited in leading other relevant agencies towards coordinated intelligence-based patrols and surveillance. Furthermore, POLMAR1 highlighted that conducting patrols and surveillance with available assets along rivers and coastal areas under 6 nautical miles places limitations on POLMAR's ability to detect the full scale of IUU fishing activities.

RBN1 also drew attention to the fact that ship running hour periods impact the ability to comprehensively cover all areas at risk. It was suggested that a more integrated radio communication system for joint operations would enhance enforcement reach.

DoF1, DoF2 and DoF3 indicated that human resource capacity is an important aspect of improving enforcement. It was suggested that bolstering the Legal and Enforcement Unit which deals directly with the Fisheries Order 2009 is a potentially useful plan towards achieving Brunei's vision of "a diversified, competitive and sustainable economy." (MPRT 2020) According to DoF1 and DoF2, the Ministry of Primary Resources and Tourism (MPRT) is responsible for overseeing DoF and the growth of fisheries industry as part of Brunei Vision 2035. As such, there is a strategic interest in promoting maritime co-ordination and information sharing to ensure the vision is met.

### ***Monitoring, Control and Surveillance (MCS)***

Brunei's domestic legislative framework for IUU is framed by Brunei's Fisheries Order 2009 and Fisheries Limits Act (No. 5 of 1983). When compared to the benchmarks set by the Regional Plan of Action (RPOA) on IUU fishing, certain strengths and weaknesses are discernible as shown below (see Table 4). The data shown in the table is only selected under the heading of MCS.

Table 4: Benchmark comparison of RPOA and Brunei Darussalam legislative measures

<b>Monitoring, Control and Surveillance</b>	
<b>Strengths</b>	<b>Weaknesses</b>
Broad powers to board and inspect and enforce fisheries laws.	Limited measures to implement observer and vessel monitoring programs for local and foreign fishing vessels. Sanctions insufficient to act as an effective deterrent to illegal fishing.

*Source:* Edeson et al. (2010: 61)

The above Table 4 indicates that MCS is a crucial part of measures to deter and prevent illegal fishing. Effective MCS also requires supplemental training.

### **Findings**

Data collection indicate that RBN is involved in the majority of apprehended vessels in Brunei’s EEZ and remains the most active national maritime agency in terms of conducting board, search and arrest of illegal fishing vessels. The findings suggest a potential risk of too heavy a reliance on RBN and an overstretching of its assets. They also indicate that POLMAR faces operational capacity and enforcement reach challenges. Moreover, the different ways data is collected by various agencies places limits on systematic information sharing and coordination between agencies. These findings suggest that the NMCC has a vital role to play in reducing the inter-agency collaboration deficit.

According to Miller et al. (2004), effective deterrence of IUU fishing is premised on the ability to conduct surveillance and interception of irresponsible fishing by maritime patrols. Nonetheless, budget constraints and priorities impact the ability of agencies to prevent illegal fishing activities. The different roles carried out by the respective national maritime agencies are also constrained by enforcement capacity limitations and the ability to conduct extensive on-site deterrence operations. The findings indicate that a more robust and comprehensive surveillance, co-ordination and information sharing efforts may prove beneficial. This could involve a dedicated department to manage data collection and share information on IUU fishing activities and enhanced enforcement and sanctions at sea, coast, rivers, commercial ports, and fish landings sites.



Further investment in state of the art technology such as coastal surveillance radar and agency capacity building also has the potential to improve apprehension and enforcement reach to create an effective deterrent environment. Effective implementation of the law, stricter sanctions and raising public awareness will also assist in preventing IUU fishing.

Brunei is committed to diversifying its economy and reducing over-reliance on the oil and gas industry. Brunei Halal Industry, Bio-Innovation Corridor (BIC) and Brunei-Guangxi Economic Corridor (BGEC) are major projects contributing to the government's economic strategy. Effectively combatting IUU fishing activities can contribute to this strategy if it is prioritised. Drawing lessons from existing frameworks of other regional countries such as Indonesia, Singapore or Australia and developing closer ties with them on the issue is a potential way forward. This may include the establishment of a dedicated coastguard division tasked with combatting transnational crimes. The use of mobile phone applications for more systematic reporting management could prove beneficial especially if it involves the community at large. Brunei has a very high rate of mobile use and could take advantage of digital public reporting (Othman 2019). Moreover, increasing public education on fishing laws and promoting regulated fishing will eventually pay dividends for the whole nation in the long-term.

## **Conclusion**

Illegal fishing is a threat to the sustainability of fishing industries worldwide. As mentioned, the South China Sea is a lucrative ground for fishing activities and Brunei's EEZ is no exception. As this paper has shown, the RBN is playing a prominent role in regulating fishing activities, particularly conducting maritime patrols to prevent illegal fishing. The paper's findings indicate that Brunei's maritime agencies face various challenges that place limitations on the current effectiveness of maritime co-ordination and information sharing. Expanding the roles and capabilities of Brunei's other national maritime agencies in regards IUU activities could mitigate overstress on RBN assets and facilitate more effective counter measures against IUU activities.

Countering IUU fishing activities in Brunei Darussalam's EEZ is not straightforward. It will involve enhanced engagement from the full range of its maritime security agencies. Increasing cooperative information sharing and skillful deployment and coordination of limited assets is a

way forward. In the future, the expectation is that the NMCC will play a more prominent role as the lead agency in the management of information sharing and coordinating intelligence and maritime tasks. Moreover, prioritising the use of digital technology and increasing public awareness campaigns are potential bridges of maritime information gaps. Lastly, the establishment of a dedicated maritime security enforcement agency is also a possible option for countering maritime transnational crimes in Brunei's EEZ.

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