

Maritime Crime from a Criminological Perspective: Criminal Opportunity and Guardianship in Illegal Fishing and Piracy in Indonesia

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ABSTRACT

This study examined illegal fishing and piracy in Indonesian waters from a criminological perspective by focusing on criminal opportunity, guardianship, and social control. Qualitative document analysis was conducted using scholarly literature, official reports, policy documents, and relevant regulations. Legal rules were treated as part of formal social control rather than as the main objects of doctrinal interpretation. The analysis showed that maritime crime persisted because vast maritime space, offender mobility, valuable resources and commercial targets, dense shipping routes, and uneven surveillance created recurring opportunities for offending. Fragmented institutional authority also weakened guardianship because multiple enforcement bodies did not always produce integrated detection and response. Regional patrol cooperation strengthened control over piracy, although offenders remained capable of adapting to changing surveillance and jurisdictional boundaries. The findings indicated that maritime crime control required more than legal adequacy and punitive enforcement. Reducing opportunity structures, strengthening capable guardianship, and improving institutional coordination were central to prevention.



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INTRODUCTION

Indonesia has a vast maritime territory and lies along major international shipping routes. This geography provides substantial economic and strategic advantages, yet it also creates spaces that are difficult to supervise evenly. Illegal fishing and piracy are two forms of crime that make this problem particularly visible. They differ in their offender patterns, targets, and consequences, but both exploit open maritime space, high mobility, and the limited capacity of the state to maintain continuous oversight across its waters. For that reason, viewing maritime crime only through the presence or absence of criminal rules leaves important dimensions of the problem unexplained.

The losses associated with illegal, unreported, and unregulated fishing extend beyond lost state revenue. The practice is also linked to pressure on fish stocks, unequal competition with legally operating fishers, and social consequences for communities whose livelihoods depend on coastal and marine resources. The literature used in this article estimates global losses from IUU fishing at between US\$10 billion and US\$23.5 billion annually, while Indonesian official documents also frame the problem as an economic, ecological, and social threat (Sari, 2021; Mahkamah Agung Republik Indonesia, 2025). From a criminological perspective, the high economic value of resources that can be extracted from the sea creates incentives that cannot be separated from the opportunity structure surrounding the offence.

Piracy and armed robbery at sea present a different pattern. Commercial vessels, crews, cargo, and heavily travelled shipping lanes constitute mobile targets. The Malacca and Singapore Straits are frequently identified as critical areas because of the intensity of international shipping and because security in these waters requires coordination among more than one state. Earlier studies have largely emphasized jurisdiction, the definition of piracy, or the distinction between offences committed on the

high seas and those occurring within national waters (Buntoro, 2018; Pratiwi, 2018). For criminology, location remains important, but not simply because it determines which legal provision applies. Location shapes opportunity, the level of surveillance, the speed of response, and the possibility that offenders can move from one control space to another.

Research on illegal fishing and piracy in Indonesia still often places the state at the centre of analysis through enforcement policies, jurisdiction, or regulatory effectiveness. Kristanto (2023), for example, discusses the vessel-sinking policy within the framework of law enforcement and national defence. Kurniasanti and Setiyono (2020) examine piracy from the perspective of international criminal law. Other studies address universal jurisdiction, maritime diplomacy, and coordinated patrols in the Malacca Strait (Mas'amah, 2021; Pangestu & Rosyidin, 2018; Suproboningrum & Kurniawan, 2018). These studies provide an important foundation, but they leave room for maritime crime to be read more directly through criminal opportunity and guardianship.

This article therefore shifts the analytical focus from whether adequate rules exist to how offending becomes possible and why existing control arrangements do not always close those opportunities. Criminal opportunity is used to identify the conditions that make illegal fishing and piracy feasible at levels of risk offenders may consider acceptable. Guardianship is used to examine surveillance, patrols, detection, information exchange, and institutional response capacity. Social control is understood more broadly as the ways in which the state and regional cooperation attempt to restrict offender mobility and reduce opportunities. Through this approach, the article seeks to explain the criminological pattern linking maritime space, opportunities for crime, and limitations of surveillance in Indonesia.

RESEARCH METHODS

This study uses qualitative document analysis based on secondary data. The material examined consists of scholarly articles on illegal fishing, piracy, maritime security, and surveillance cooperation, supplemented by official reports and policy documents used in the original manuscript. The Fisheries Law, the Indonesian Criminal Code, and the 1982 United Nations Convention on the Law of the Sea remain relevant because they shape the institutional context of surveillance and enforcement. However, this study does not employ normative legal research. Legal provisions are not compared in order to determine normative adequacy or construct what the law ought to be. They are instead treated as one component of formal social control that directs or limits the conduct of offenders and maritime enforcement institutions.

The analysis groups the material into three categories. The first concerns conditions that create criminal opportunity, including geography, the economic value of targets, vessel mobility, shipping density, and difficulties of detection. The second concerns forms of guardianship, including patrols, fisheries surveillance, vessel monitoring, and interagency coordination. The third concerns barriers to social control arising from fragmented authority, limited resources, and differences across jurisdictional spaces. The analysis does not assume that illegal fishing and piracy are equivalent offences. Each is examined separately before being compared for common patterns and differences relevant to maritime crime control.

RESULTS AND DISCUSSION

1. Illegal Fishing as Criminal Opportunity and Social Harm

Illegal fishing can be understood as an offence that develops at the intersection of highly valuable resources and surveillance that is not always present in the same place and at the same time. The sea creates conditions different from those found on land. Vessels can operate far from surveillance centres, fishing activity takes place across enormous areas, and violations cannot always be detected through the physical presence of officers. Under these conditions, opportunities for offending are shaped not only by offender motivation but also by perceptions of the likelihood of detection. The greater the distance between offender activity and effective guardianship, the greater the space in which violations can occur.

Indonesia's vessel-sinking policy illustrates an attempt to increase the perceived risk attached to illegal fishing. In the original manuscript, the policy was primarily treated as a legal-enforcement instrument under fisheries legislation. From a criminological perspective, the same policy may be read as a deterrent signal intended to alter offenders' calculations of cost and risk. Kristanto (2023) shows

that the policy also carried dimensions of defence and sovereignty. Its symbolic and punitive effects are significant, but enforcement after an offence has occurred does not automatically remove the opportunity structure that allows a vessel to enter an area, fish illegally, and leave before being detected.

The data and literature discussed in the study repeatedly point to surveillance constraints. The size of Indonesian waters is not matched by the number of patrol vessels available. Surveillance also involves several institutions with different mandates, including the Ministry of Marine Affairs and Fisheries, the Indonesian Maritime Security Agency, the Indonesian Navy, and the Water Police. Under such conditions, the number of agencies is not necessarily equivalent to stronger guardianship. Dispersed surveillance can produce gaps when information, authority, and operational response do not move at the same speed. Illegal fishing therefore cannot be explained adequately through weak legal norms or insufficiently severe sanctions alone.

The social-harm dimension further broadens the way illegal fishing is understood. Victims do not always appear as identifiable individuals confronting an offender directly. Harm may be distributed across the state, legal fishers, coastal communities, and ecosystems that sustain long-term economic activity. Tampubolon, Putri, and Darmawan (2024) even place certain illegal-fishing practices within discussions of transnational organized crime. Their cross-border character suggests that offender profit may be connected to economic networks beyond the place where fish are caught. Crime therefore does not end with the vessel that is seized. It may involve a longer chain of activity, from access to vessels and fishing equipment to the distribution of catches.

This criminological reading changes the policy focus. The central question is not only whether the state has legal authority to act, but also at what point opportunities can be reduced before offending generates profit. Vessel information systems, integrated data, and rapid response become important because they work at the stage of opportunity reduction. Criminal enforcement remains necessary, but the effectiveness of control is also determined by how consistently guardianship is present within routine maritime activity.

2. Piracy as Situational Crime in Maritime Space

Piracy involves a crime situation different from illegal fishing. The primary targets are not fish resources but vessels, cargo, or crew members who may experience violence, detention, or theft. UNCLOS distinguishes piracy on the high seas from armed robbery at sea within state jurisdiction. This distinction remains relevant to criminological analysis because a change of location also changes the form of guardianship. On the high seas, control depends on inter-state cooperation and the capacity of vessels or authorities to respond to incidents occurring far from centres of power. In national waters, the coastal state exercises more direct authority, but territorial scale and traffic intensity continue to shape the practical capacity for surveillance.

The Malacca and Singapore Straits clearly illustrate the relationship between space, routine activity, and opportunity. The route carries a large volume of commercial shipping and has substantial economic value. Heavy traffic increases the number of potential targets, while the characteristics of the waterways and their proximity to several jurisdictions make effective control dependent on sustained coordination. Pangestu and Rosyidin (2018) show that the effectiveness of the Malacca Strait Patrol has faced limitations. Suproboningrum and Kurniawan (2018) emphasize the importance of maritime diplomacy in the coordinated patrols of Indonesia, Malaysia, and Singapore. Together, these studies show that guardianship at sea is not simply a matter of the number of patrol vessels, but also of whether several states can maintain compatible and sustained modes of cooperation.

Piracy offenders may also adapt their methods to changes in surveillance. When patrol activity increases in one location, criminal opportunities may shift to times, routes, or targets perceived as less protected. This adaptive quality means that situational control must continually respond to changing offender behaviour. Piracy therefore should not be treated as a random event produced simply by the presence of dangerous offenders. Crime occurs within situations that provide targets, access, possibilities for escape, and particular levels of guardianship.

Victims of piracy are more visible than those affected by illegal fishing. Crew members may face threats, violence, loss of property, or disruptions to occupational safety. Shipowners bear financial losses, while insecurity along shipping routes can have wider consequences for trade. A victimization perspective is important because it demonstrates that maritime security is not solely a question of state sovereignty. Piracy control is also concerned with protecting people who work and travel within

maritime space. Legal discussions that focus too heavily on jurisdiction may obscure both victim experience and the situational patterns that precede the offence.

Coordinated patrols, information exchange, and cross-area monitoring can be understood as efforts to strengthen capable guardianship. Their effectiveness depends on consistency. Interrupted patrol coverage or delayed information gives offenders room to exploit gaps in control. In heavily travelled maritime areas, opportunity reduction therefore requires surveillance that follows the routine movement of targets rather than static protection of a single geographical point.

3. Fragmented Guardianship and the Limits of Social Control

The strongest similarity between illegal fishing and piracy lies in the problem of guardianship. The original manuscript identified limited patrol capacity, overlapping authority, and the need for integrated monitoring. Read criminologically, these issues extend beyond institutional design. Fragmentation determines whether control is actually experienced by offenders in the field. A maritime area may be governed by several agencies with formal authority and still exhibit weak guardianship when that authority is not connected to information, physical presence, and the capacity to act at the moment offending occurs.

The Indonesian Maritime Security Agency, the Indonesian Navy, the Water Police, the Ministry of Marine Affairs and Fisheries, and other surveillance units perform functions that are not identical. Difference itself is not the problem. The difficulty arises when functional boundaries produce delays in response or when surveillance data cannot be used quickly by the institution with authority to intervene. In highly mobile crime settings, a delay of only a few hours may mean that a vessel has already moved into another area. The relevant measure of guardianship is therefore not the number of institutions involved, but the ability of the system to produce rapid detection, communication, and intervention.

Regional cooperation against piracy demonstrates a more complex form of social control. The Malacca Strait Patrol combines sea patrols, air patrols, and information exchange. This mechanism strengthens guardianship without eliminating the sovereignty of participating states. Offenders, however, operate according to conditions in the field rather than the administrative divisions recognized by states. A tension therefore emerges between crime space and bureaucratic space. Offending can move continuously, whereas formal control often operates according to jurisdictional boundaries.

Illegal fishing presents a similar problem through vessel movement and cross-border economic chains. Enforcement against a detected vessel may interrupt one event, but the same opportunity can reappear if controls over entry patterns, vessel movement, and the distribution of catches do not change. Law enforcement is therefore one component of social control rather than its entirety. Prevention requires the capacity to identify patterns before the offence is completed.

The comparison suggests that maritime crime in Indonesia is better understood as an interaction between opportunity and guardianship. Illegal fishing develops where the value of marine resources, the scale of maritime space, and detection constraints create exploitable opportunities. Piracy develops where mobile targets move through environments with uneven levels of protection. Both show that control based only on harsher sanctions will remain limited when the underlying opportunity structure is relatively stable. Strengthening surveillance, integrating information, and improving coordination across institutions are more closely aligned with the criminological objective of reducing crime opportunities before formal criminal proceedings begin. Table 1 summarizes the principal criminological differences between illegal fishing and piracy across opportunity, victimization, guardianship, and control.

Table 1 Criminological Comparison of Illegal Fishing and Piracy

Dimension	Illegal Fishing	Piracy / Armed Robbery at Sea
Criminal opportunity	High-value marine resources, extensive fishing areas, and surveillance that is not continuously present.	Dense shipping routes, mobile targets, and varying levels of vessel protection.
Primary target	Fish resources and economic gains derived from catches.	Vessels, cargo, property, and crew members.
Social harm / victimization	Economic losses, pressure on legal fishers and coastal communities, and ecological harm.	Violence or threats against crews, property loss, shipowner losses, and disruption to shipping.

Dimension	Illegal Fishing	Piracy / Armed Robbery at Sea
Guardianship	Fisheries patrols, maritime surveillance, vessel monitoring, and interagency coordination.	National and coordinated patrols, route surveillance, and regional information exchange.
Control problem	Limited patrol assets, extensive waters, fragmented authority, and responses that are not always integrated.	Offender mobility, movement across areas, adaptive methods, and the need for cross-border coordination.

Source: processed from the research materials, 2026.

CONCLUSION

Illegal fishing and piracy in Indonesian waters cannot be explained adequately as problems of insufficient regulation or weak implementation alone. Both offences emerge within opportunity structures shaped by the vastness of maritime space, vessel mobility, the economic value of targets, the density of shipping activity, and offenders' ability to adjust their conduct to patterns of surveillance. In illegal fishing, opportunity is closely related to the difficulty of maintaining even surveillance across national waters and to the economic rewards associated with exploited resources. In piracy, opportunity arises from mobile targets and uneven levels of protection along shipping routes.

Guardianship is the point at which these two forms of crime converge. Indonesia has enforcement agencies, patrol systems, monitoring instruments, and regional cooperation mechanisms, but their effectiveness is shaped by coordination, information integration, response speed, and the distribution of authority. A large number of institutions does not automatically produce strong social control when surveillance remains fragmented. Maritime crime control therefore needs to place opportunity reduction and capable guardianship at the centre of policy. Law enforcement remains important, but its impact will be limited if the opportunity structures used by offenders are not reduced at the same time.

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