Alternative Dispute Resolution in Marine Pollution: Advancing Ecological Justice through the Polluter Pays Principle

This study seeks to elucidate the challenges associated with compensation in marine pollution disputes through the lens of the Alternative Dispute Resolution (ADR) model. Governed by UUPPLH Number 32 of 2009, polluters are mandated to provide compensation for both affected parties and environmental restoration. However, the implementation of the ADR model in practice has seen polluters compensating only the affected communities, notably fishermen. This research endeavors to develop an ADR legal framework that encapsulates ecological justice, ensuring fairness for both society and the environment. The methodology employed in this study is non-doctrinal legal research, which involves analyzing legal phenomena within their social and cultural context. Findings from this research indicate that pollution disputes in the waters in Cilacap were resolved using the ADR model, with a disproportionate focus on compensating fishing communities. This results in environmental damage due to minimal environmental ADR legal framework grounded in the Polluter Pays principle. Such a framework should encompass legal provisions for environmental prevention, mitigation, and restoration. From a structural perspective, it is imperative to foster integration and connectivity between the community and ministries responsible for addressing marine environmental pollution, to facilitate effective environmental mitigation and restoration efforts. Additionally, in the realm of legal culture, there is a crucial need to cultivate legal awareness among the public regarding environmental conservation and management. This awareness should permeate all levels of society, including business entities, legislative bodies, the government, and law enforcement agencies. A robust legal system is essential for making ADR an equitable mechanism for resolving disputes, benefiting both victims of pollution and the environment.

Keywords: Alternative dispute resolution; polluter pays principle; legal framework; ecological justice.

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INTRODUCTION

Indonesia's coastal and marine regions are exceptionally susceptible to a variety of pollution threats, ranging from domestic human activities (such as marine debris) and industrial outputs (notably from fishery processing) to marine transportation incidents, including oil spills. Pollution
in these environments involves the direct or indirect introduction of harmful substances by humans, leading to negative impacts on ecosystems, habitats, and marine life. Such adverse effects contribute to a decline in the overall quality of coastal environments, adversely affecting human health and disrupting marine-related activities, including fishing.

The coastal and marine zones of Cilacap Regency, located in Central Java, Indonesia, are particularly at risk of experiencing pollution. Given its proximity to a major oil refinery and port, the region faces heightened risks from pollutants like oil and asphalt. The area is also a bustling maritime corridor, frequented by both large vessels and fishing boats, thereby increasing potential for marine and coastal pollution. Moreover, over the past two decades, tanker ships from foreign nations, carrying crude oil, have experienced several sinkings in the waters around Cilacap, causing significant oil leaks and further exacerbating marine pollution.

The pollution in the Cilacap Sea area has led to severe environmental degradation and significant losses for the community, sparking disputes between ship owners and local residents. In Indonesia, the issue of compensation for pollution damage is addressed in Law Number 32 of 2009 concerning Environmental Protection and Management. Article 69 of this law explicitly states, “Everyone is prohibited from engaging in actions that cause pollution or environmental damage.” Moreover, based on this prohibition against environmental harm and pollution, Law No. 32 of 2009 prescribes sanctions for those responsible for environmental destruction and pollution.

The information provided here is based on an interview with Sardjono, Head of the Indonesian Fishermen’s Association (Himpunan Nelayan Seluruh Indonesia, HNSI) in Cilacap, conducted in 2022. According to Article 87, Paragraph (1) of Law Number 32 of 2009 concerning Environmental Protection and Management, civil sanctions are specified as follows: “Every person responsible for a business and/or activity who commits an unlawful act by causing pollution and/or environmental destruction, resulting in harm to others or the environment, is obliged to compensate for the damage and/or restore the environment or take certain actions.” This article embodies a crucial principle for environmental protection, known as the Polluter Pays Principle.

In accordance with the environmental law principle, the Polluter Pays Principle not only mandates the offender to compensate the victims (right of defense or abwehrfunktion) but also requires the polluter to fund environmental restoration efforts to return the environment to its previous state (right of performance or leistungsfunktion). The responsibility for rectifying environmental damage lies with the parties who cause it.

Article 85 of Law Number 32 of 2009 concerning Environmental Protection and Management governs the resolution of environmental disputes outside of court, based on the principle that

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the polluter pays. This approach aims to negotiate the form and amount of compensation and to recommend specific actions to prevent the occurrence or reoccurrence of adverse impacts.

The preference for resolving environmental disputes through mechanisms outside of court in Indonesia arises from the high costs and complexities associated with litigation due to court bureaucracy. Alternative Dispute Resolution (ADR) systems are favored for their adaptability and responsiveness to the needs of the disputing parties. However, despite the advantages of the ADR model, it also presents challenges, notably the parties' lack of commitment to environmental restoration.5

The failure of parties to restore polluted environments significantly hampers the efficacy of the ADR model in achieving environmental justice, which encompasses fairness to both humans and the environment. Consequently, the protection of the environment must be prioritized, recognizing the availability of natural resources as a fundamental right in environmental disputes. This recognition should be pursued through both litigation and alternative dispute resolution methods.6

Regarding environmental protection, the issue of compensation for environmental restoration demands the attention of all relevant stakeholders. The resolution of disputes in Cilacap's waters illustrates a concerning trend: cases are deemed resolved when victims or the community receive compensation, despite the statutory principle of the polluter pays. According to this principle, polluters are obligated not only to compensate affected parties but also to undertake the restoration of the damaged environment.

Efforts to provide compensation for environmental restoration face significant challenges due to inadequate legal instruments and the limited authority of law enforcement officials. Additionally, conflicts among economic, social, and environmental interests persist within the legal culture. Moreover, environmental and natural resource management is often prioritized for investment interests, viewed predominantly through an economic lens rather than from ecological and sustainability perspectives. This approach complicates the pursuit of ecological justice.

Research on the ADR Model in addressing marine pollution and the polluter pays principle has been conducted by scholars such as Churchill,7 Misbah,8 Hilson,9 Teague,10 and Hamman.11 These studies explore the application of the ADR model in resolving environmental disputes, highlighting the challenges encountered and the application of the polluter pays principle in compensatory payments for pollution dispute resolutions. These studies provide valuable insights for ongoing research in Indonesia.

7 Churchill.
9 Hilson, “The Polluter Pays Principle in the Privy Council: Fishermen and Friends of the Sea (Appellant) v the Minister of Planning, Housing and the Environment (Respondent) (Trinidad and Tobago) [2017] UKPC 37.”
The novelty of this research lies in its focus on resolving environmental disputes using the ADR model, grounded in the polluter pays principle. This involves community deliberation to determine compensation for communal losses and payments for environmental restoration. The effectiveness of this ADR model hinges on the readiness of the legal system, encompassing legal substance (laws and regulations governing environmental restoration compensation), legal structures (environmental-related institutions connected to society), and legal culture (awareness and commitment to environmental protection among the community, government and business actors. This comprehensive approach aims to enhance the management and protection of natural resources.

RESEARCH METHODS

This study employs a non-doctrinal legal research methodology, incorporating qualitative analysis and adopting a socio-legal approach. According to Milovanovic, this constitutes a form of sociological jurisprudence that examines legal phenomena within the social and cultural context where the law operates. While maintaining a foundation in normative principles, this research delves into the essence of law as manifested in environmental legislation. It explores norms presented in statutory regulations or other legal provisions, connecting these to realities observed in the field.

Primary data for this study were collected mainly from the Indonesian Fishermen's Association (HNSI) and the Cilacap Regency Environmental Agency (BLH), through observations and interviews. In-depth interviews were conducted with officials from both organizations, and the data thus obtained were subjected to qualitative analysis through data triangulation. Morris L. Cohen and Kent C. Olson highlight the significance of this research approach in understanding the application and impact of law within society.

ANALYSIS AND DISCUSSION

Resolution of Marine Pollution Disputes Resolution in Cilacap through the ADR Model

Marine pollution incidents in Cilacap's waters, spanning from 2000 to 2020 due to oil spills, led to disputes between the polluters (Ship Owners) and the local fishermen. A notable case highlighted the implementation of dispute resolution through non-litigious means, specifically the Alternative Dispute Resolution (ADR) method, as detailed in Table 1 below:

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<table>
<thead>
<tr>
<th>No</th>
<th>Year</th>
<th>Location</th>
<th>Incident</th>
<th>Dispute Resolution Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2000</td>
<td>Cilacap-Central Java</td>
<td>The MT King Fisher ship, carrying 600,000 barrels of crude oil, ran aground, spilling 4,000 barrels (640,000 liters) of oil, contaminating the 38 km stretch of Cilacap Bay</td>
<td>Non-litigation or ADR</td>
</tr>
<tr>
<td>2</td>
<td>2000</td>
<td>Cilacap-Central Java</td>
<td>The KM HHC ship, carrying 9,000 bulk asphalt, sank</td>
<td>Non-litigation or ADR</td>
</tr>
<tr>
<td>3</td>
<td>2004</td>
<td>Cilacap-Central Java</td>
<td>The MT Lucky Lady ship, carrying 4,000 barrels of Seria crude oil (light oil 300 API), ran aground, spilling 5,300 cubic meters</td>
<td>Non-litigation or ADR</td>
</tr>
<tr>
<td>4</td>
<td>2008</td>
<td>Cilacap-Central Java</td>
<td>The Palu Sipat tanker leaked, spilling 18,500 kiloliters of Middle Fuel Oil (MFO)</td>
<td>Non-litigation or ADR</td>
</tr>
<tr>
<td>5</td>
<td>2010</td>
<td>Cilacap-Central Java</td>
<td>The Alisa XVII tanker, involved in a Middle Fuel Oil (MFO) spill in the waters of Cilacap Turtle Bay</td>
<td>Non-litigation or ADR</td>
</tr>
<tr>
<td>6</td>
<td>2011</td>
<td>Cilacap-Central Java</td>
<td>The Alenza XXVII, 30 km offshore Cilacap, while unloading Arabic oil, experienced a Light Crude Oil (ALC) leak</td>
<td>Non-litigation or ADR</td>
</tr>
<tr>
<td>7</td>
<td>2011</td>
<td>Cilacap-Central Java</td>
<td>The MT Medellin Atlas, during the loading and unloading of Arabian Light Crude Oil (ALC), had a leaking drain pipe</td>
<td>Non-litigation or ADR</td>
</tr>
<tr>
<td>8</td>
<td>2015</td>
<td>Cilacap-Central Java</td>
<td>The MT Martha Petrol ship, loading Marine Fuel Oil (MFO) 180 (24,000 kiloliters) and MFO 380 (5,000 kiloliters), experienced a pipe leak, spilling oil into the sea along the coast of Cilacap</td>
<td>Non-litigation or ADR</td>
</tr>
<tr>
<td>9</td>
<td>2015</td>
<td>Cilacap-Central Java</td>
<td>Leakage at the SPM (Single Point Mooring) of Pertamina Crude Oil Unloading Facility, casubg marine pollution</td>
<td>Non-litigation or ADR</td>
</tr>
<tr>
<td>10</td>
<td>2019</td>
<td>Cilacap-Central Java</td>
<td>Leakage at the SPM (Single Point Mooring) of Pertamina Crude Oil Unloading Facility, causing marine pollution</td>
<td>Non-litigation or ADR</td>
</tr>
</tbody>
</table>

Data compiled from research conducted in (2004) and (2022) with HNSI and DLH

From these data, it becomes evident that the resolution of pollution disputes from 2000 to 2020 was predominantly managed through the ADR model, specifically via negotiation. In these ten instances, the Indonesian Fishermen Association (HNSI) played a pivotal role as the negotiator.
addressing compensation matters for the fishermen or victims of pollution, with the polluting entities being the ship owners or the Ship Insurance Parties responsible for the maritime accidents.

Negotiation is a bilateral communication process aimed at forging an agreement when the involved parties have either similar or divergent interests. Over time, negotiation has evolved into a preferred alternative for dispute resolution outside of courtrooms, bypassing the need for third parties such as mediators, arbitrators, or judges.\footnote{Larry Crump and A. Ian Glendon, “Towards a Paradigm of Multiparty Negotiation,” \textit{International Negotiation} 8, no. 2 (2020): 197–234, \url{https://doi.org/10.1163/15718060322576112}.}

ADR has emerged as the settlement model of choice for both the victims, represented by the Joint Team for Pollution Management in Cilacap (TGPPC), and the polluters, in this context, represented by the insurance companies P and I. The negotiation team has highlighted that in instances of pollution, the primary focus is on ensuring prompt compensation for the fishermen.

This approach underscores the principle that the victims, particularly the fishermen, should be prioritized in compensation negotiations. As a result, the negotiation model has garnered approval and preference among the pollution victims for its capacity to facilitate swift compensation, thereby achieving a mutually beneficial resolution. This contrasts with the litigation process, which is often more protracted, illustrating a distinct advantage of the negotiation model in addressing pollution disputes.

The Alternative Dispute Resolution (ADR) process is duly outlined in Law No. 32 of 2009, which articulates that “the settlement of environmental disputes may be resolved either through judicial proceedings or out-of-court mechanisms, based on the voluntary agreement of the parties involved.” This legal framework underpins the dispute resolution endeavors between the HNSI and ship owners (or their representing insurance entities) through negotiation or deliberation. This approach facilitates reaching a consensus among parties via a dynamic, varied, and nuanced interaction and communication process.\footnote{Bregje Van Veelen, “Negotiating Energy Democracy in Practice: Governance Processes in Community Energy Projects,” \textit{Environmental Politics} 27, no. 4 (2018): 644–65, \url{https://doi.org/10.1080/09644016.2018.1427824}.}

In these negotiations, the TGPPC Team, acting as the claimant, engages in amicable discussions with the ship owner or insurance company. Initially, it is imperative for the parties to acknowledge the extent of damages resulting from the oil spill into the ocean. Typically, the damages attributed to such pollution incidents encompass:

1. The loss of the ship due to damage or sinking.
2. The loss of oil cargo as a result of the spill.
3. The expenses incurred in cleaning the marine environment.
4. Direct economic losses stemming from reduced marine fisheries production.
5. Long-term economic losses affecting the region.
6. Intangible losses, which are challenging to quantify monetarily, such as the destruction of millions of eggs and chicks, unrealized profits, and the adverse impact on tourism.

Losses categorized under items 1 and 2 are borne by the ship owners, whereas items 3 to 6 represent the detriments endured by the community and the Government. During the negotiation phase, a comprehensive compensation claim is constructed. An illustrative claim for compensation following the wreck of the MT King Fisher is as follows:

\begin{itemize}
\item [1.] The loss of the ship due to damage or sinking.
\item [2.] The loss of oil cargo as a result of the spill.
\item [3.] The expenses incurred in cleaning the marine environment.
\item [4.] Direct economic losses stemming from reduced marine fisheries production.
\item [5.] Long-term economic losses affecting the region.
\item [6.] Intangible losses, which are challenging to quantify monetarily, such as the destruction of millions of eggs and chicks, unrealized profits, and the adverse impact on tourism.
\end{itemize}
Table 2: Claims for Marine Pollution Compensation by the MT. King Fisher

<table>
<thead>
<tr>
<th>No.</th>
<th>Sub Sector</th>
<th>Initial Claim (IDR)</th>
<th>Revised Claim (IDR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Environment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pertamina</td>
<td>56,914,916,777.-</td>
<td>16,406,00888,066.-</td>
</tr>
<tr>
<td></td>
<td>Port Administrator’s Office (Adpel)</td>
<td>697,000,000.-</td>
<td>500,000,000.-</td>
</tr>
<tr>
<td></td>
<td><strong>Fishery</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Immediate loss</td>
<td>142,078,132,300.-</td>
<td>82,866,250,000.-</td>
</tr>
<tr>
<td></td>
<td>Long-Term Loss</td>
<td>69,584,340,000.-</td>
<td>Reserved for HNSI</td>
</tr>
<tr>
<td></td>
<td><strong>Other Sectors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Port Administrator’s Office (Adpel)</td>
<td>67,850,000.-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Subdistrict head</td>
<td>57,937,500.-</td>
<td>15,500,000.-</td>
</tr>
<tr>
<td></td>
<td>Environment</td>
<td>4,500,000.-</td>
<td>4,500,000.-</td>
</tr>
<tr>
<td></td>
<td>Fisheries Service</td>
<td>8,700,000.-</td>
<td>8,700,000.-</td>
</tr>
<tr>
<td></td>
<td>Operational Team II</td>
<td>50,000,000.-</td>
<td>28,350,000.-</td>
</tr>
<tr>
<td></td>
<td>Operational Police Station</td>
<td>22,050,000.-</td>
<td>5,000,000.-</td>
</tr>
<tr>
<td></td>
<td>Project Management Office (PMO)</td>
<td>66,000,000.-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Operational NGO</td>
<td>3,218,250,000.-</td>
<td>4,500,000</td>
</tr>
<tr>
<td></td>
<td>recovery cost</td>
<td>-</td>
<td>19,966,760,713</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>272,769,676,577</td>
<td>119,800,563,079</td>
</tr>
</tbody>
</table>

Source: Calculation based on data from research conducted in (2004) and (2022) with HNSI and DLH

According to the above table, the negotiation process addresses various claims, with direct losses incurred by fishermen, particularly from the fishery sector, being a primary focus. The HNSI’s demand for a rationalized claim amount to Rp82,866,250,000, which encompasses the costs for ship repairs and cash compensation for the fishermen. Following a negotiation that involved cooperative compromises from each party, it is mutually agreed that the compensation to be provided by the ship owner (through insurance) would be Rp18,000,000,000.

A similar incident involved the resolution of a dispute following pollution caused by the MT Martha Petrol tanker in 2015. In this case, fishermen negotiated directly with PT. Pertamina for compensation due to oil pollution in the Cilacap Sea. The compensation was calculated based on direct losses incurred as fishermen were unable to sail during the pollution event. These losses were quantified by multiplying the number of days the fishermen were prevented from sailing by the number of fishermen registered with the Indonesian Fishermen Association (HNSI). The Cilacap Regency branch of HNSI requested compensation of Rp40.7 billion from PT. Pertamina Cilacap for the damages caused by the oil spill.

HNSI Cilacap argued that the incident significantly harmed the fishermen. The details of the compensation claim are outlined in the table below:
### Table 3. Claims for Marine Pollution Compensation by the MT. Martha Petrol Tanker

<table>
<thead>
<tr>
<th>No</th>
<th>Sub-sector</th>
<th>Claim (IDR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Cleaning the Cilacap marine area.</td>
<td>4,160,000,000</td>
</tr>
<tr>
<td></td>
<td>2. Compensation for environmental damage leading to reduced fish catches</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Fishery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Compensation for HNSI member fishermen: 13,900 people x 15 days x 100,000</td>
<td>20,850,000,000</td>
</tr>
<tr>
<td></td>
<td>4. Compensation for fishing gear</td>
<td>7,420,000,000</td>
</tr>
<tr>
<td></td>
<td>5. 21,200 nets x 350,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Compensation for cleaning fishing boats:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- moored boats: 382 x 1,500,000</td>
<td>764,000,000</td>
</tr>
<tr>
<td></td>
<td>- Compreng boats: 878 x 1,500,000</td>
<td>1,317,000,000</td>
</tr>
<tr>
<td></td>
<td>Fiber jukung boats</td>
<td>5,230,000,000</td>
</tr>
<tr>
<td></td>
<td>Wooden jukung boat: 1,984 x 500,000</td>
<td>992,000,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40,733,000,000</td>
</tr>
</tbody>
</table>

Source: Calculation based on data from research conducted in (2004) and (2022) with HNSI and DLH (2022).\(^{16}\)

Compensation for environmental restoration was addressed in the lawsuit but excluded from the compensation negotiation process. This omission has led to a diminished ability to effectively restore the environment and implement adequate preventive measures.

Environmental management efforts have been limited to actions by the fishermen and Pertamina, with the fishermen being compensated daily by the polluter. A measure taken to mitigate the spread of oil pollution is the deployment of an oil boom along the coast of Teluk Penyu. Although an oil boom serves to contain an oil spill within a specific area, preventing it from spreading further, the quantity deployed is insufficient given the scale of the pollution, which involves 4,000 barrels of spilled oil. Another strategy for managing the environmental impact is the use of chemical oil dispersant. However, this approach fails to address the underlying environmental issues, as it only offers a superficial appearance of effectiveness on the sea surface, while exacerbating pollution beneath the sea surface by causing the oil to sink into the seabed.

The process of negotiating compensation for marine pollution has been notably inadequate in addressing payments for environmental restoration. This inadequacy is underscored by the stipulation that compensating fishermen obliges the government to provide the polluting vessel with a written assurance of unfettered departure from Cilacap and the freedom to sail to other ports, coupled with a guarantee from the Prosecutor’s Office against criminal prosecution of the ship’s captain or crew.

The information presented highlights a serious neglect of environmental recovery in the negotiation of compensation claims. It also reflects a broader lack of engagement from the government, community, and oil industry stakeholders in prioritizing environmental interests.

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\(^{16}\) Triana Nita. This research was funded by the Directorate General of Higher Education, Research and Technology 2004 and funded by the Ministry of Religion (2022)
Furthermore, the Government has not effectively enforced the ‘Polluter pays’ principle as outlined in the Environmental Protection and Management Law. This principle mandates the polluter to compensate the government for the control and restoration of the environment, aiming for its return to the original condition, a standard that has not been met.

Compensation Challenges in Environmental Recovery through Non-Litigation Dispute Resolution (ADR)

According to Caputo, negotiators can employ two main techniques: competitive and cooperative negotiation. In competitive negotiations, the negotiator views the counterpart as an adversary, employing tactics such as threats, challenges, high demands, minimal concessions, and disregarding the interests of the other party. Conversely, cooperative negotiations consider the counterpart as a partner, aiming to collaboratively reach an agreement rather than viewing them as an enemy or competitor.

The Negotiation team representing the pollution victims, along with representatives from HNSI, engaged in cooperative negotiations and reached an agreement for the polluter to compensate HNSI. This negotiation is commendable for its success in establishing an agreement and drafting a peace deed that includes some compensation for the affected fishermen.

However, the achievement of a peace deed has not entirely safeguard broader victims of environmental pollution. The compensation details fail to address environmental management and restoration. Moreover, the negotiation outcomes have not demonstrated adherence to Government Regulation Number 19 of 1999 concerning Marine Pollution and Destruction Control. This regulation explicitly outlines the responsibility for marine pollution, stating that the costs associated with controlling and restoring the marine environment from pollution impacts must be covered by business entities responsible for the pollution.

The challenge of securing compensation for environmental restoration arises from the legal system’s shortcomings in resolving disputes through ADR models. There are several dimensions to this issue: Regulatory Framework. There is a lack of practical regulations guiding the execution of such compensation; Institutional Structure. The ADR model has not been effectively integrated among communities, business entities, and governmental environmental institutions; and Legal Culture. Awareness of the critical importance of environmental protection is insufficient. Communities, businesses, and relevant governmental bodies perceive the success of ADR in resolving disputes primarily in terms of compensatory payments to affected fishing communities.

The enforcement of the ‘polluter pays’ principle mandates that polluters are responsible for funding both the prevention and remediation of marine pollution resulting from their operations. However, if the negotiation team’s agreement solely requires the polluter to provide financial compensation to the community, without an obligation for environmental restoration, the community victims of pollution are deprived of their fundamental right to a healthy environment, as stipulated in Article 28 H paragraph (1) of the 1945 Constitution.

Companies ordered to pay material compensation to victims, through monetary payments, do not thereby conclude their responsibility if they have not fulfilled their duty towards environmental

restoration. Polluters must give precedence to the management and restoration of marine environment affected by pollution. The sea must be preserved for future generations (sustainability), ensuring it does not lead to health and economic issues for those dependent on it, particularly around Cilacap Beach, Central Java, Indonesia.

The compensation that polluters are required to pay for addressing pollution, environmental damage, and restoration includes:

1. Costs of Environmental Countermeasures: These are expenses related to halting ongoing pollution and mitigating environmental damage. The total costs for environmental management depend on the extent of the current pollution and damage, encompassing the actual expenditures incurred.

2. Costs of Environmental Recovery: These costs are associated with restoring the environment to its original state before the occurrence of pollution. They are calculated based on the type of environmental medium affected. Additionally, costs for rectifying environmental damage involve expenses aimed at returning the environment to its prior condition, including the procurement cost of materials needed to rehabilitate damaged ecosystems.

According to Soekanto,\(^\text{18}\) factors affecting law enforcement include legal substance, law enforcement itself, facilities and infrastructure, societal, and cultural aspects. Challenges in enforcing the Polluter Pays Principle arise from the legal substance, particularly the lack of detailed technical regulations for compensation, and from the legal structure, notably the scarcity of facilities and infrastructure essential for implementing this principle.

Furthermore, the legal structure’s impact on enforcing the Polluter Pays Principle is evident in the limitations of law enforcement officials to effectively prevent and remediate environmental pollution. Beyond these factors, non-legal interventions also play a role, with economic factors and a community culture that prioritizes economic gains over environmental values influencing law enforcement efforts.

**Constructing a Legal Framework for Dispute Resolution Based on the Polluter Pays Principle**

According to legal system theory, Lawrence Friedman\(^\text{19}\) posits that the enforcement of legal principles hinges on the functionality of the components within the legal framework, namely legal substance, legal structure, and legal culture. Consequently, the implementation of the Polluter Pays Principle as a guiding legal principle in cases of marine pollution within the ADR model in Indonesia critically relies on the evolution of these three legal system components:

Legal Substance: This acts as a cornerstone in law enforcement, serving as a pivotal guide for legal practitioners in executing their duties. The legal framework concerning the Polluter Pays Principle in Indonesia, as outlined in laws and regulations, includes:

1. Law No. 32 of 2019 concerning Environmental Protection and Management,
2. Law No. 32 of 2014 concerning Marine Affairs,

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\(^\text{18}\) Soerjono Soekanto, *Faktor Faktor Yang Mempengaruhi Penegakan Hukum* (Jakarta: Jakarta Rajawali Pers, 2013).

3. Government Regulation No. 19 of 1999 concerning Control of Marine Pollution,

The crux of these regulations mandates that polluters must provide compensation for both the restoration of the polluted environment and for the communities impacted by the pollution.

Marine Pollution Regulations: Specifically, Law No. 32 of 2014 concerning Maritime Affairs and Government Regulation No. 19 of 1999 concerning Marine Pollution stipulate that marine pollution resulting from ships transporting crude oil necessitates the polluters to undertake measures for preventing and remedying the contaminated marine environment. This obligation encompasses compensatory payments aimed at reinstating the functionality of the affected marine ecosystem, while also respecting the cultural values of the local marine communities.

Despite the presence of existing laws and regulations, Indonesia still faces the need for technical regulations regarding compensation payments for environmental control, mitigation and restoration. Technical guidelines for corporate contributions towards environmental sustainability could take inspiration from the Organization for Economic Cooperation and Development (OECD).

The OECD has issued recommendations titled “Guiding Principles Concerning the International Economic Aspects of Environmental Policies.” These principles endorse the Polluter Pays Principle, alongside addressing economic and trade implications of environmental policies. They assert that polluters should be responsible for the costs associated with pollution prevention and control measures. This approach aims to promote the rational management of environmental resources and prevent policy distortions.

At its core, the OECD advocates that polluters are obligated to cover the expenses associated with the implementation of measures determined by public authorities to maintain the environment is an “acceptable state.” In other words, the cost of these measures should be reflected in the price of goods and services that contribute to pollution, whether during production and or consumption.”

The OECD Principles offer a contemporary interpretation of the Polluter Pays Principle. Traditionally, this principle mandates that polluters are liable for compensating any damage resulting from environmental pollution. In the modern context, the principle is preemptively applied, integrating into the operations of companies through obligatory environmental management efforts. This approach signifies that the internalization of environmental costs is essentially a modern expansion of the Polluter Pays Principle, embedding it directly into business practices.

The OECD endorses the Polluter Pays Principle not merely as a cornerstone for effective national environmental policy but also as a tenet fostering international coherence. Recognizing that the costs associated with preventing and controlling pollution are crucial to addressing significant environmental challenges, the OECD’s sub-committee of economic experts concluded in its inaugural session that internalizing the external effects related to the environment adheres to an economic efficiency principle. This principle underpins pollution control policies by advocating that, wherever feasible, “the polluter should bear the costs”; however, it acknowledges that exceptions to this may arise, necessitating clear definition and analysis.

According to OECD recommendations, the primary role of the Polluter Pays Principle is to delineate the allocation of “costs of pollution prevention and control measures, thereby promoting the judicious use of scarce environmental resources and preventing distortions in international
trade and investment.” It is stipulated that the polluter is responsible for covering the expense associated with executing measures “decided by public authorities to ensure that the environment is in an acceptable state” (OECD 1972).

The implementation of the Polluter Pays Principle typically employs two distinct policy strategies: command-and-control and market-based approaches. Command-and-control strategies encompass performance and technology standards, whereas market-based instruments feature pollution taxes, tradable pollution permits, and product labelling. Additionally, the removal of subsidies plays a crucial role in applying the Polluter Pays Principle.20

Efforts towards pollution control also encompass various other costs, including the opportunity costs incurred from enacting anti-pollution policies, expenses related to measurement, monitoring, and management, research and development costs for pollution control technologies, contributions towards modernizing outdated agencies, and efforts to improve the living conditions of those affected by pollution, thereby enhancing their quality of life.21

Based on the OECD’s guidelines concerning the Polluter Pays Principle, in instances of marine pollution by tankers, polluters are mandated to compensate for environmental harm. This includes covering expenses related to the prevention, control, and restoration of the environment. This requirement applies not only to polluters subject to remedial actions as dictated by court rulings but also to those bound by resolutions reached through ADR.

Hence, polluters are tasked with the responsibility to prevent, address, and rehabilitate polluted maritime and coastal zones. Polluters can augment their efforts to restore marine and coastal waters through guaranteed funds allocated for environmental prevention and restoration. These funds, sourced from taxes and mandatory insurance payments made prior to pollution incidents, are deposited with the government to serve as a financial guarantee for response and rehabilitation in the event of pollution incident and/or subsequent environmental harm resulting from economic activities.

However, the act of depositing guarantee funds does not absolve a company from exercising caution in its operations. Regardless of whether guarantee funds have been deposited, companies remain obligated to prevent, mitigate, and rectify environmental pollution. Implementing such a proactive control system is crucial for minimizing the impact of pollution in the event of an accident or spill at sea.

The application of the Polluter Pays Principle, augmented by subsidies from companies and additional financial mechanisms along with pollution levies, is also prevalent in developed countries like France and the Netherlands. These nations, as members of the OECD, exemplify stringent and consistent enforcement of the Polluter Pays Principle within their legal frameworks. Specifically, in the Netherlands, the approach to calculating costs associated with water and air pollution establishes a legal mandate that such expenses are not covered by general funds but are sourced directly from companies, thereby embodying the essence of the Polluter Pays Principle.

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Additionally, implementing a planned control strategy will mitigate the impact of pollution in the event of an accident or leakage at sea. The OECD, in its study, has articulated that companies later identified as polluters may face lawsuits for compensation based on strict liability principles. Moreover, firms responsible for marine pollution are obligated to undertake remediation efforts and finance all such preventive and remediation actions through company guarantee funds or insurance.

In terms of legal framework, the government is tasked with establishing detailed technical regulations for payments, in line with recommendations from the OECD. Well-crafted technical regulations will facilitate the resolution of disputes over environmental compensation when pollution incidents occur. Technically, compensation payments for environmental damage are directed to the government, which bears the constitutional responsibility for environmental conservation and management. With respect to marine environment, government initiatives to prevent, address, and recover from marine pollution include both preventive and repressive measures.22

Beyond legal specifics, the enforcement of the polluter pays principle necessitates a robust and environmental proactive legal infrastructure. The pollution incidents in the sea waters of Cilacap highlight the existing weaknesses in institutions related to environmental management and restoration. There is a pressing need to enhance the government’s role following the settlement agreement between the HNSI fishers and the shipping company. After compensating the HNSI victims, companies should not overlook their obligations to the government for environmental management and restoration. Furthermore, the settlement agreement could serve as a model for the government, through the relevant ministry that issues permits, to implement environmental ratings. Vessels frequently involved in incidents and non-compliant with payments for environmental mitigation and restoration in the Cilacap waters should be assigned poor ratings and face administrative sanctions in the licensing process.

The Company Performance Rating Program in Environmental Management, as outlined in Minister of Environment Regulation No. 3 of 2014 (Permen LH 3/2014), categorizes compliance into three levels: a) blue, for those responsible for business and activities who made efforts to manage the environment effectively; b) red, for those whose environmental management efforts do not meet the required standards; c) black, for those who have intentionally neglected their duties, resulting in pollution.

To effectively enforce the polluter pays principle, there must be a cohesive institutional framework that transcends the sectoral interests of various ministries, including those focused on oil, marine, and forestry sectors, as well as the Ministry of Environment and Forestry.23 The interagency collaboration and responsibilities in addressing marine pollution are delineated in Government Regulation Number 19 of 1999 concerning Control of Marine Pollution and Destruction. This regulation mandates that the Government, through its various ministries, oversees the mechanisms for mitigating marine pollution, addressing issues such as oil spills, marine debris, dumping, industrial waste pollution, and accidents involving ships carrying non-oil mineral resources at sea.

Efforts to prevent and manage pollution require the integration of various parties and ministerial sectors. Pollution control in coastal and marine areas necessitates a comprehensive

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approach, engaging multiple stakeholders. The Ministry of Maritime Affairs and Fisheries, through the Directorate for the Utilization of Coastal and Small Islands, is tasked with actively managing marine pollution and coordinating with relevant ministries or institutions. This involves exchanging information, data, and strategies on pollution control efforts, both current and planned, among experts, practitioners, stakeholders, and policymakers. Additionally, the Ministry of Maritime Affairs and Fisheries is instrumental in regional and bilateral cooperation with other nations to collectively safeguard marine health. The ultimate goal for all stakeholders is to develop strategies and offer policy recommendations for addressing pollution in coastal and marine areas.

The effectiveness of pollution management mechanism hinges on the concerted efforts of various related sectors fulfilling their responsibilities in accordance with their designated roles and functions. Addressing marine pollution, particularly in the case of ship accidents leading to sea pollution, necessitates collaboration among the Ministry of Marine and Fisheries, the Ministry of the Environment, and the Ministry of Forestry. The established procedures for incident management are as follows: (1) Receipt of report from the agencies/institutions/communities to the Ministry of Marine Affairs and Fisheries (KKP) c.q. Directorate of Utilization of Coastal and Small Islands regarding shipping accidents/oil spills; (2) Deployment of a Material and Information Collection Team for data gathering; (3) Estimation of loss impacts through internal coordination among all echelon 1 units within the Ministry of Marine Affairs and Fisheries; (4) Preparation of Compensation Claim Documentation; (5) Provision of cleaning and rehabilitation support; (6) Submission of compensation claims and enforcement documents to the Ministry of Environment and Forestry, which heads the National Team, as per Presidential Regulation No. 109/2006 concerning Oil Spill Emergency Management at Sea.

In the ADR model, the enforcement of the polluter pays principle, beyond strengthening legal substance and structure, requires the support of the legal cultures of government officials, company leaders/polluters, and the broader community who are concerned about the environment. Legal culture encompasses the overarching factors that enable the legal system to be effectively integrated and respected within society. The successful implementation of any law, or in this context, government policy, is significantly influenced by the legal culture of its practitioners.

The indifference of government officials, companies as polluters, and the community as victims of pollution towards the environment represents a significant impediment to the enforcement of the polluter pays principle. This lack of environmental legal culture ultimately fails to secure ecological justice. As demonstrated in the findings of this study on environmental dispute resolution, fundamental principles of legal morality concerning the environment have not been adequately applied in addressing environmental cases. 24

Peace agreements, or deeds resulting from dispute resolutions through the ADR model, disappointingly lack an orientation towards environmental sustainability and fail to deliver a sense of justice for the environment. Economic considerations, low levels of education, insufficient skills, and employment challenges lead to the resolution of environmental disputes being primarily economy-focused, catering to human needs. This approach, termed anthropocentrism

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in environmental theory, positions humans as the center of the universe, implying that the world exists solely for human benefit. This anthropocentric outlook promotes the notion that humans are the supreme rulers of nature, leading to the exploitation of natural resources to satisfy human desires and lifestyles without regard for nature’s preservation, as maximizing human profit becomes the primary objective of worldly activities. This perspective aligns closely with capitalist economic principles, where the relentless exploitation of natural resources, irrespective of environmental consequences or the effort to minimize pollution risks, is justified by the pursuit of profit, potentially escalating production costs.

Unchecked, the capitalist production process poses a clear threat to the natural environment, a situation that has deteriorated during Indonesia’s reform era. This period perpetuated the view of nature (and ecosystems) merely as economic commodities, valued monetarily, with legislation crafted to support this viewpoint. Consequently, environmental degradation intensifies, compromising natural resources and human livelihoods alike.

The anthropocentric perspective, deeply ingrained within broader society, necessitates a comprehensive strategy that harmonizes human activity with environmental integrity. This strategy is often identified as the ecocentric approach. In this framework, humans are not considered separate from their environment; rather, there exists a symbiotic relationship where both entities form an inseparable whole. Consequently, any development aimed at enhancing human welfare must be counterbalanced with efforts to maintain or enhance environmental quality and functionality.

The significance of environmental consciousness is intrinsically linked to the core aspects of environmental law awareness. A heightened sense of environmental responsibility directly influences adherence to environmental legislation, encompassing both conservation or management statutes. Fundamentally, it is imperative for humans to cultivate a profound legal consciousness due to their inherent sociological and biological connection with their surroundings.

Community legal awareness constitutes a segment of the broader legal culture. It is often misconceived that legal culture solely encompasses community legal awareness; however, it extends to include legal consciousness of all societal sectors, from business entities and legislative bodies to governmental and law enforcement officers. The emphasis on environmental law awareness across all domains is crucial, as the parties most knowledgeable about the law and responsible for its enforcement are often those who transgress it. This discrepancy underscores a pervasive issue of low legal awareness among individuals who should otherwise serve as exemplars of lawful conduct for the community.

Community legal awareness pertains to the societal response to legal mandates. It encompasses the public’s familiarity with, understanding of, adherence to, and respect for legal statutes. Merely acknowledging the existence of a law indicates a lower level of legal awareness compared to comprehending its implications. Legal awareness spans various life aspects, with its depth varying based on the application of the aforementioned factors. Moreover, legal awareness is shaped by each individual’s perspective on the law.

Indonesians, given their historical sociocultural and biological ties to their environment, should exhibit a heightened awareness of environmental law concerning conservation and management. Nonetheless, factors such as economic, social, and cultural influences continue to affect legal consciousness. Consequently, strategic initiatives are crucial to enhance legal awareness, focusing on the mentality, policies, and environmental ethos of the Indonesian populace. Collaboration in this endeavor is vital, as increasing legal awareness aligns with the community’s values.

Individuals, whether as community members, business operators, law enforcers, or policymakers, must progressively cultivate an awareness of environmental law—from mere recognition to compliance and respect for existing environmental legislation. This heightened awareness, particularly in resolving maritime pollution disputes, can have a positive environmental impact. In negotiation, for instance, communities affected by pollution should prioritize dual objectives: securing compensation for affected fishers or funding for mitigating and rehabilitating the marine ecosystem, ensuring its sustainability for future generation.

Business entities fulfill their responsibilities by exercising caution in ship operations, adhering to compensation payments for pollution incidents, including compensations to fishermen, and funding environmental mitigation and restoration efforts. Concurrently, the government enhances the rigor of the environmental licensing process and adopts strict measures against ships operating without adherence to proper procedures. Furthermore, the government actively engages in addressing environmental pollution by considering current and future environmental conditions.

The legal consciousness of stakeholders, including government officials, companies, and communities, with a focus on environmental integrity, plays a pivotal role in the resolution of environmental cases. This involves a comprehensive evaluation of the wide-ranging impacts resulting from polluting activities and enterprises. Negotiators and government authorities collaborate to ensure that polluters not only face accountability but also contribute to environmental restoration efforts.

CONCLUSION

In Cilacap Regency, Central Java, Indonesia, the resolution of marine pollution disputes through the Alternative Dispute Resolution (ADR) model presents a mixed outcome. On the one hand, it facilitates a peaceful agreement, notably by compensating the adversely affected fishing community. However, on the flip side, the agreement often overlooks the crucial aspects of funding for environmental improvement and prevention measures. There is a pressing need to develop an ADR legal framework grounded in the polluter pays principle. Specifically, the resolution process should mandate that polluters compensate for environmental management and restoration, with payments directed to the government. Furthermore, polluters should also cover potential costs, including activity costs represented by guarantee fees, insurance, or taxes, as part of their financial responsibilities. Meanwhile, from a structural standpoint, communities involved

in negotiations, such as the Indonesian Fishermen’s Association (HNSI), collaborate closely to establish a cohesive network and coordination. This effort aims to enhance pollution prevention, restoration and control in partnership with the Ministry of Maritime Affairs and Fisheries, the Directorate of Coastal and Small Island Utilization, the Ministry of Environment, the Ministry of Forestry, the Maritime Security Agency (Bakamla), and other relevant entities. This collaborative approach is vital for enforcing civil law demands for resolving marine pollution disputes and for ensuring the procedural right to contest payments for environmental restoration. In addition, this ADR model culturally necessitates fostering a legal consciousness that cherishes environmental preservation among all stakeholders, including the public, government, and business sectors. Such environmental awareness is instrumental in guiding the deliberation or negotiations concerning compensation claims. Effective discussions or negotiations regarding compensation should compel polluters to provide restitution to pollution victims and finance environmental restoration efforts.

REFERENCES


