

Strengthening the Role of Corporate Social Responsibility (CSR) as a Business Law Instrument in Addressing Flood Impacts in Sumatra

(Penguatan Peran Corporate Social Responsibility (CSR) sebagai Instrumen Hukum Bisnis dalam Penanggulangan Dampak Banjir di Sumatera)



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Abstract: The massive floods in Sumatra in 2025–2026 resulted in significant loss of life and economic damage, driven by a combination of extreme weather and environmental degradation linked to business activities. This situation underscores that disaster management is not solely the responsibility of government, but also of the private sector. In Indonesian business law, Corporate Social Responsibility (CSR) constitutes a legal obligation for companies to address the social and environmental impacts of their operations. Therefore, strengthening CSR is crucial as an instrument for sustainable flood mitigation and recovery. This study aims to analyze the role and position of CSR in flood management in Sumatra, to reinforce CSR policies so they contribute more effectively to prevention and mitigation, and to examine corporate accountability when CSR is not optimally implemented, leading to environmental damage and increased flood risk. This research adopts a normative legal method with a descriptive-analytical approach, using statutory and case-based analysis. The data consist of secondary sources, including primary, secondary, and tertiary legal materials, collected through literature and document review and analyzed qualitatively. CSR in flood management functions as a strategic legal instrument for environmental prevention and recovery. Its optimization is essential to strengthen environmental protection and the resilience of flood-prone areas. CSR must shift from a charitable approach to a risk- and sustainability-based framework integrated with environmental and disaster law. Stronger ESG regulation, oversight, and reporting are necessary. Corporate accountability for suboptimal CSR includes administrative, civil, and criminal sanctions, alongside governance and reputational consequences, grounded in precautionary and polluter-pays principles.

Keywords: Corporate Social Responsibility (CSR); Business Law; Flood Impact.

Abstrak: Banjir besar di Sumatra pada tahun 2025–2026 mengakibatkan hilangnya banyak nyawa dan kerugian ekonomi yang signifikan, yang dipicu oleh kombinasi cuaca ekstrem dan degradasi lingkungan yang terkait dengan aktivitas bisnis. Situasi ini menegaskan bahwa penanggulangan bencana bukan hanya tanggung jawab pemerintah, tetapi juga sektor swasta. Dalam hukum bisnis Indonesia, Tanggung Jawab Sosial dan Lingkungan (CSR) merupakan kewajiban hukum perusahaan untuk menangani dampak sosial dan lingkungan dari kegiatan usahanya. Oleh karena itu, penguatan CSR menjadi krusial sebagai instrumen mitigasi dan pemulihan banjir yang berkelanjutan. Penelitian ini bertujuan untuk menganalisis peran dan posisi CSR dalam penanggulangan banjir di Sumatra, memperkuat kebijakan CSR agar berkontribusi lebih efektif terhadap pencegahan dan mitigasi, serta mengkaji bentuk pertanggungjawaban perusahaan apabila CSR tidak dilaksanakan secara optimal sehingga menyebabkan kerusakan lingkungan dan peningkatan risiko



banjir. Penelitian ini menggunakan metode hukum normatif dengan pendekatan deskriptif-analitis, melalui analisis peraturan perundang-undangan dan studi kasus. Data yang digunakan berupa data sekunder, meliputi bahan hukum primer, sekunder, dan tersier, yang dikumpulkan melalui studi kepustakaan dan dokumen, serta dianalisis secara kualitatif. CSR dalam penanggulangan banjir berfungsi sebagai instrumen hukum strategis untuk pencegahan dan pemulihan lingkungan. Optimalisasinya penting untuk memperkuat perlindungan lingkungan dan ketahanan wilayah rawan banjir. CSR perlu bergeser dari pendekatan filantropi menuju kerangka berbasis risiko dan keberlanjutan yang terintegrasi dengan hukum lingkungan dan kebencanaan. Diperlukan penguatan regulasi, pengawasan, dan pelaporan berbasis ESG. Pertanggungjawaban perusahaan atas pelaksanaan CSR yang tidak optimal mencakup sanksi administratif, perdata, dan pidana, serta konsekuensi tata kelola dan reputasi, yang berlandaskan prinsip kehati-hatian dan pencemar membayar.

Kata kunci: *Keyword Corporate Social Responsibility (CSR); Hukum Bisnis; Dampak Banjir.*

Introduction

Sumatra is one of Indonesia's most disaster-prone islands, particularly vulnerable to hydrometeorological events such as floods and landslides. Between November and December 2025, catastrophic floods struck multiple provinces including Aceh, North Sumatra, and West Sumatra. Data from the National Disaster Management Agency (BNPB) recorded more than 1,006 fatalities as of December 13, 2025, with hundreds of thousands of residents displaced and significant damage inflicted upon public infrastructure including hospitals, schools, and (Achmad et al., 2026). The scale of this disaster placed it among the most severe hydrometeorological events in Sumatra's recent history. These floods did not occur in isolation. They were the product of two compounding forces: extreme meteorological conditions driven by tropical storm systems, and long-term environmental degradation caused by human activity (Handmer et al., 2012). Deforestation, land conversion for agriculture and mining, and the mismanagement of watershed areas have progressively reduced the land's capacity to absorb rainfall, thereby intensifying surface runoff and flash floods (Prokešová et al., 2022). Investigations by Indonesian authorities have further revealed that several corporations operating in Sumatra violated environmental management standards, contributing directly to ecological deterioration in flood-prone areas (Chandra et al., 2026).

The social and economic consequences of these floods have been extensive. Tens of billions of rupiah have been required for recovery and rehabilitation, while hundreds of thousands of people continue to face displacement and disruption to their livelihoods (Hossain et al., 2025). This reality highlights a fundamental limitation of the prevailing disaster management paradigm, which has historically concentrated responsibility in the hands of the state. In practice, the government alone cannot bear the full burden of disaster prevention and recovery. The private sector, particularly large corporations whose operations significantly alter the environment, must be recognized as bearing shared responsibility.

The issue indicates that catastrophe mitigation cannot rest primarily on the government, but must also be a collective obligation involving the state, society, and the commercial sector. In business relations, huge corporations, particularly in the natural resources sector, exert considerable environmental influence on their operational regions, which, if inadequately managed, may exacerbate disaster risks. Consequently, CSR emerges as a crucial instrument that serves not only philanthropic purposes but also functions within the framework of business law to enhance corporate social and environmental accountability. In Indonesian company law, corporate responsibility for social and environmental repercussions extends beyond mere administrative tasks to encompass legal mandates for social and environmental accountability (Waagstein, 2011). In this context, Corporate Social Responsibility (CSR) emerges as a critical legal instrument. Under Indonesian law, CSR is not merely a philanthropic gesture but a binding legal obligation. Article 74 of Law Number 40 of 2007 on Limited Liability Companies mandates that companies engaged in activities related to natural resources must implement social and environmental responsibility programs. Article 15(b) of Law Number 25 of 2007 on Investment further reinforces this obligation for all investors operating in Indonesia. These provisions are complemented by Law Number 32 of

2009 on Environmental Protection and Management, which holds business actors accountable for environmental harm arising from their operations (Fajar, 2018). Collectively, these legal instruments establish CSR as a normative corporate obligation, not a discretionary activity.

The significance of CSR in calamities like the 2025 Sumatra flood encompasses two critical factors. The dimension of mitigation and readiness in which CSR programs can enhance community resilience to catastrophes, develop eco-friendly infrastructure, and support the execution of sustainable climate and hydrological adaptation measures. Secondly, the aspect of recovery and rehabilitation, exemplified by the company's dedication to CSR initiatives that facilitate access to food assistance, housing, healthcare services, and educational resources in the impacted regions. Numerous organisations, through CSR are dedicated to constructing 2,000 dwellings for the victims of the 2025 Sumatra flood, exemplifying the private sector's role in mitigating the social repercussions of calamities. Despite this legal foundation, the implementation of CSR in disaster contexts remains largely reactive and fragmented. Most CSR programs in Indonesia are deployed as post-disaster relief measures, such as the distribution of food aid or the construction of temporary shelters, rather than as systematic investments in long-term disaster risk reduction (Chadda & Kundal, 2022). The function of CSR in reducing disaster risk — including funding watershed rehabilitation, financing reforestation, and building flood-resilient community infrastructure has not been adequately integrated into corporate governance or national disaster management frameworks (Kanji & Agrawal, 2020).

Prior studies have examined CSR in relation to disaster resilience (Lim et al., 2021; Twigg, 2001), corporate environmental accountability (Khatib, 2024; Lemma et al., 2024; Waagstein, 2011), and the role of regulation in shaping CSR behavior (Karassin & Bar-Haim, 2019; Soetanto et al., 2022). However, these studies have not specifically addressed CSR as a legally enforceable business law instrument within the context of flood disaster management in Sumatra. In particular, three critical dimensions remain underexplored: the legal position of CSR within Indonesia's disaster management system; the mechanisms for strengthening CSR policy to shift from charitable responses toward risk-based and sustainability-oriented approaches; and the forms of corporate legal accountability when CSR obligations are neglected and contribute to environmental damage and increased flood risk. This gap is especially significant given the scale of the 2025–2026 Sumatra floods and the demonstrated role of corporate conduct in exacerbating environmental vulnerability. This study therefore aims to fill that gap by analyzing: (1) the role and legal position of CSR in flood disaster management in Sumatra; (2) policy strategies for strengthening CSR as a preventive instrument in flood mitigation; and (3) corporate accountability mechanisms applicable when suboptimal CSR implementation contributes to environmental degradation and heightened flood risk. By situating CSR within the intersecting frameworks of business law, environmental law, and disaster law, this research seeks to provide a comprehensive legal argument for reforming CSR from a symbolic obligation into a strategic instrument for building socio-ecological resilience in flood-prone regions.

Methods

Describing This research constitutes a normative legal study that analyzes the legal norms regulating CSR in the context of flood damage mitigation. Normative legal study analyzes the principles, norms, and legal doctrines pertinent to the examined subject, specifically within the domains of commercial law, environmental law, and disaster law in Indonesia. This research employs multiple methodologies. The statutory approach entails analyzing diverse regulations pertinent to CSR and environmental accountability, including Law Number 40 of 2007 concerning Limited Liability Companies, Law Number 32 of 2009 on Environmental Protection and Management, Law Number 24 of 2007 on Disaster Management, along with other relevant implementing regulations. This methodology seeks to ascertain the normative framework about CSR responsibilities and their significance in flood disaster mitigation.

Secondly, the conceptual framework entails analyzing doctrines and legal theories that have emerged in the literature, including stakeholder theory, sustainable development theory, and environmental law principles such as the precautionary principle and the polluter pays principle. This methodology is employed to construct an analytical framework for comprehending the role of CSR as a preventive and strategic instrument of corporate law.

The case technique involves investigating empirical instances of flood disasters in Sumatra during 2025–2026 and examining government regulations directed at corporations alleged to have caused environmental harm. This methodology seeks to examine the application of legal principles in practice and to discern the disparity between what ought to be and what is occurring (Alexander & Kress, 1996). This research employs three categories of legal materials. Initially, primary legal materials, specifically legislation, judicial rulings, and official governmental documents. Secondly, secondary legal literature, including textbooks, scholarly journals, research findings, and academic publications pertinent to CSR, environmental law, and commercial law. Third, tertiary legal materials, including legal dictionaries, encyclopedias, and supplementary sources that elucidate the terms and concepts utilized in the research. The method for gathering legal materials is conducted through library research and documentation studies, by identifying pertinent legal sources and literature in both print and digital versions. All acquired legal materials are subsequently categorized and organized in accordance with the study issues. The examination of legal materials is performed qualitatively through a descriptive-analytical approach, encompassing the delineation, interpretation, and assessment of legal norms and concepts pertinent to CSR in flood mitigation. The analytical process is conducted through legal interpretation, whether grammatical, systematic, or teleological, to comprehend the meaning and intent of the relevant legal provisions (Atadjanov, 2026). Furthermore, a deductive legal reasoning approach is employed, which entails deriving conclusions from broad principles to address specific concerns under examination. This research aims to deliver a thorough legal argument concerning the enhancement of CSR's function as a business law tool in alleviating and addressing the effects of floods in Sumatra, while also devising an optimal legal framework to improve corporate accountability and environmental responsibility.

Results

Tables The Function and Status of Corporate Social Responsibility in Flood Mitigation in Sumatra

The first key finding of this study is that CSR occupies a dual position in Indonesia's legal framework: simultaneously as a normative corporate obligation and as a strategic instrument for environmental disaster management. This dual position distinguishes CSR from conventional philanthropic programs and places it within the intersection of business law, environmental law, and disaster law. This study finds that Article 74 of Law Number 40 of 2007 on Limited Liability Companies, read in conjunction with Articles 2 and 3 of Government Regulation Number 47 of 2012, has formally elevated CSR from a voluntary ethical commitment to a legally enforceable obligation. However, a critical finding emerges: this legal elevation has not translated into systematic integration of CSR into corporate disaster risk management. In the context of the 2025–2026 Sumatra floods, the majority of affected corporations implemented CSR reactively providing emergency relief after floods occurred rather than proactively investing in flood prevention. This pattern reveals a structural gap between the legal mandate and corporate practice.

A further finding concerns the causal relationship between corporate activity and flood risk. Analysis of the 2025–2026 Sumatra flood cases reveals that business operations in plantation, mining, and forestry sectors contributed to watershed degradation, reduction of forest cover, and alteration of land use patterns in upstream areas. These activities directly diminished the land's water absorption capacity and intensified surface runoff. This finding

establishes that CSR obligations in flood-prone regions are not merely ethical considerations but legally grounded preventive duties arising from demonstrable corporate contributions to environmental vulnerability. This study also finds that CSR's function in flood management can be categorized into three distinct roles. First, a preventive role, encompassing reforestation, watershed rehabilitation, drainage system reinforcement, and community disaster preparedness programs — all of which align with corporate environmental obligations under Articles 67 and 68 of Law Number 32 of 2009. Second, a recovery role, involving post-disaster emergency assistance, public infrastructure rehabilitation, and community economic recovery. Third, a transformative role, whereby CSR serves as a mechanism for reforming corporate governance toward the triple bottom line framework — integrating profit, social responsibility, and environmental stewardship. Of these three roles, this study finds that the transformative role remains the least developed in corporate practice in Sumatra, representing a critical area requiring policy intervention.

This obligation can be comprehended through the stakeholder theory method suggested by R. Edward Freeman posits that firms bear responsibility not solely to shareholders but also to other stakeholders, encompassing local communities and the environment (Freeman, 2010). In flood management in Sumatra, people impacted by floods are primary stakeholders in business operations, particularly in plantation, mining, forestry, and other extractive sectors. Consequently, the execution of CSR focused on river basin rehabilitation initiatives, reforestation, the development of sustainable drainage systems, and enhancing community capacity for disaster mitigation exemplifies the stakeholders' accountability.

Sumatra is a region very susceptible to flooding, mostly due to alterations in land use, deforestation, the expansion of plantations and mining, and inadequate river basin management. Recent studies indicate that alterations in land cover substantially elevate the danger of flooding in many regions of Sumatra. Corporate actions have both direct and indirect correlations with the heightened risk of ecological disasters. Consequently, the function of CSR should not be strictly construed as post-disaster philanthropy, but rather must be incorporated into environmental risk prevention and management strategies.

Moreover, the Sustainable Development Theory, as articulated in contemporary environmental law literature, underscores the necessity of integrating economic, social, and environmental dimensions in all company operations (Lemos, 2024). This notion corresponds with the concepts delineated in Article 3, letter c, of Law Number 32 of 2009 about Environmental Protection and Management, which asserts that environmental protection and management seek to guarantee the sustainability of environmental functions. Corporate Social Responsibility in flood control should not be perceived solely as post-disaster aid (charitable approach), but must transition towards a sustainability-oriented strategy, encompassing responsible land use management, forest conservation, and investment in green infrastructure. Consequently, CSR serves as a mechanism for reshaping corporate operations towards a model that is resilient to disaster risks.

The function of CSR in flood management in Sumatra can be delineated into three primary roles. The primary preventative role aims to avert or reduce flooding risks through forest regeneration initiatives, land conservation efforts, reinforcement of embankments and drainage systems, and community education on disaster mitigation. This function complies with the responsibilities of corporate entities as stipulated in Articles 67 and 68 of Law Number 32 of 2009 regarding Environmental Protection and Management, mandating that all individuals and business actors preserve the sustainability of environmental functions. Within this paradigm, CSR serves as a supplementary tool for preventive environmental legal requirements.

Secondly, the response and recovery function entails the company's involvement in delivering emergency aid, rehabilitating public infrastructure, and revitalizing the economies of communities impacted by flooding. A solely responsive approach does not embody

sustainable business accountability. The sustainable development method is pertinent here, highlighting the amalgamation of economic progress, social equity, and environmental conservation (Schrijver: 2021). Sustainability-focused CSR compels enterprises to guarantee that their operations do not diminish environmental carrying capacity, hence mitigating the danger of future catastrophes.

The role of reforming business governance. The triple bottom line idea, established by John Elkington, underscores that a company's success should be evaluated via the equilibrium of profit, people, and planet (Elkington: 2020). Consequently, CSR serves as an integrative mechanism that aligns the company's economic goals with social responsibility and environmental stewardship. The integration of Corporate Social Responsibility (CSR) with Environmental, Social, and Governance (ESG) principles demonstrates that firms are targeting not only profit but also social legitimacy and long-term sustainability.

From a legal perspective, corporate social responsibility in flood control serves as a strategic adjunct to the environmental legal accountability framework. Article 87 of Law Number 32 of 2009 mandates that company operators are required to provide compensation and/or undertake specific activities in the event of environmental contamination or harm. This clause signifies the presence of a repressive mechanism. Prior to achieving that level of accountability, CSR can serve as a preventive and remedial measure that mitigates the possibility of more significant harm occurring. Consequently, CSR serves as a conduit between legal adherence and proactive social accountability.

The function of CSR in flood control in Sumatra includes prevention, recovery, and transformation for sustainable company governance. Simultaneously, its role in Indonesian company law is both normative and strategic, as it is officially delineated in legislation and aims to enhance the environmental protection framework. Consequently, enhancing the execution of Corporate socioeconomic Responsibility is crucial for fostering ecological and socioeconomic resilience in flood-prone regions like Sumatra

Strengthening CSR Policy for Flood Prevention and Mitigation: From Charity to Risk Based Governance

The second central finding of this study is that existing CSR policy in Indonesia contains a fundamental design flaw: it lacks specific technical provisions that connect CSR obligations directly to flood risk mitigation. This absence renders CSR implementation highly discretionary, inconsistent across corporations, and concentrated in post-disaster phases rather than in pre-disaster prevention. Analysis of the current regulatory framework reveals that while Law Number 24 of 2007 on Disaster Management recognizes the corporate sector as a participant in disaster management, and Government Regulations Number 21 and 22 of 2008 permit corporate funds to be directed toward disaster management, no binding regulation explicitly mandates that CSR expenditure be allocated for flood risk mitigation activities in disaster-prone areas. This regulatory gap allows corporations to fulfil their CSR obligations through activities that bear no meaningful relationship to the environmental risks their operations generate.

This study finds that strengthening CSR policy requires four concrete reforms. First, the enactment of derivative regulations that mandate corporations operating in flood-prone and environmentally sensitive areas to allocate a defined portion of CSR funds specifically for flood risk mitigation, including watershed rehabilitation, reforestation, peatland conservation, and green infrastructure development. Second, the integration of CSR reporting with an ESG-oriented sustainability reporting framework, making corporate contributions to flood risk reduction measurable, transparent, and publicly accountable — building upon the existing requirements of Financial Services Authority Regulation Number 51/POJK.03/2017. Third, the provision of fiscal incentives, including tax reductions, for corporations that demonstrably implement disaster risk-oriented CSR programs, creating positive regulatory incentives alongside existing punitive mechanisms. Fourth, the establishment of independent social audit

mechanisms to verify that CSR programs genuinely benefit flood-affected communities rather than serving merely as symbolic compliance. A significant finding is that effective CSR policy strengthening cannot be achieved through regulatory reform alone. This study finds that a multi-stakeholder governance model — integrating local governments, the Regional Disaster Management Agency (BPBD), academic institutions, and community representatives in the design and monitoring of corporate CSR programs — is essential for ensuring that CSR activities are contextually appropriate, community-driven, and aligned with regional disaster risk reduction plans. Without this participatory dimension, CSR risks remaining a top-down corporate exercise disconnected from the actual needs of flood-vulnerable communities.

The national legal framework has established a cohesive foundation between the corporate sector and the disaster management system. Law Number 24 of 2007 on Disaster Management underscores that disaster management is a collective obligation including the government, local authorities, and the community, including the business sector. Article 26, paragraph (1), underscores that every individual is entitled to social protection and a sense of security against disaster threats, whereas Article 27 stipulates that all individuals are required to participate in disaster management activities. Furthermore, Government Regulation Number 21 of 2008 concerning Disaster Management Implementation and Government Regulation Number 22 of 2008 about Disaster Aid funds and Management provide that funds for disaster management may be derived from the participation of the corporate sector. This indicates that, from a regulatory standpoint, there exists a legislative framework permitting the systematic incorporation of CSR into flood mitigation and disaster response programs.

The primary deficiency of the existing CSR policy is the lack of technical requirements that explicitly connect CSR responsibilities with flood risk mitigation. The execution of CSR remains prevalent in the emergency response and post-disaster aid phases, rather than in the preventive pre-disaster phase. Contemporary public policy methodologies underscore the significance of prevention as a more effective and efficient strategy than emergency response. From the standpoint of collaborative governance, corporations are regarded as strategic entities possessing financial, technological, and administrative resources that may aid in catastrophe risk mitigation. Consequently, the enhancement of CSR policies should focus on the amalgamation of corporate social responsibilities with regional development strategies centered on catastrophe risk mitigation (WESTFIELD, 2021)

From a conceptual standpoint, the enhancement of CSR policies can be examined through the stakeholder responsibility framework, which posits that firms possess moral and legal duties to all entities impacted by their operations, including areas susceptible to floods. This method broadens the company's focus beyond solely shareholder interests to a balance of economic, social, and environmental considerations. The sustainable development paradigm asserts that economic growth must not jeopardize environmental sustainability or the welfare of future generations. Consequently, CSR should be formulated as a mechanism to incorporate environmental hazards into the Company's business policies (Siregar & Zulkarnain, 2021).

Enhancing CSR policies must incorporate the precautionary principle and the polluter pays principle, as delineated in Law Number 32 of 2009 on Environmental Protection and Management, specifically in Article 2, letters e and j, and Article 87, which governs the obligation to compensate for environmental damage. In this situation, CSR can serve as a preemptive measure prior to the onset of punitive legal accountability. CSR policies focused on flood mitigation can diminish the likelihood of environmental harm that results in administrative, civil, or criminal penalties. Concrete enhancement of CSR policy can be achieved through many techniques. Initially, the implementation of derivative legislation mandating enterprises in flood-prone regions to designate a specific amount of CSR funds for risk mitigation initiatives, including river basin rehabilitation, reforestation, peatland conservation, and the advancement of green infrastructure. Secondly, the amalgamation of CSR reporting with an ESG-oriented sustainability reporting framework to facilitate the transparent

measurement of the company's contributions to flood risk mitigation. Third, the allocation of fiscal incentives or tax reductions for companies that have demonstrated effective implementation of corporate social responsibility in relation to catastrophe risk mitigation. Fourth, enhancing oversight systems through impartial social audits to guarantee that CSR activities genuinely have a significant impact on the impacted populations (TERWINDT & ARMSTRONG, 2019).

A participative approach must be integral to enhancing CSR initiatives. Effective CSR initiatives in flood management must be formulated through talks with local governments, the Regional Disaster Management Agency (BPBD), scholars, and community members. This model embodies the notion of multi-stakeholder governance, designating firms as strategic allies within the social and environmental protection framework. Consequently, CSR is no longer an isolated policy inside the national disaster management framework, but is now an essential component of the public policy structure (Steurer, 2010). Enhancing the policy role of CSR in flood prevention and mitigation should focus on transitioning CSR from charity endeavors to a tool for sustainable business governance that is integrated with disaster risk mitigation strategies. Current legislation offer a normative foundation; but, enhancements in technical capacity, monitoring, incentives, and cross-sector integration are essential for Corporate socioeconomic Responsibility (CSR) to effectively mitigate ecological and socioeconomic risk. Through robust policy enhancement, CSR can serve as a strategic tool for fostering regional resilience to flooding and augmenting the social legitimacy of corporations in their operational endeavors.

Corporate Accountability Mechanisms for Suboptimal CSR Implementation Contributing to Environmental Degradation and Flood Risk

The third and most legally significant finding of this study is that the failure to implement CSR obligations optimally when it contributes to environmental degradation and heightened flood risk does not merely constitute a moral shortcoming but triggers a multi-layered system of legal accountability under Indonesian law. This finding challenges the common corporate perception that CSR non-compliance carries only reputational consequences. This study identifies six distinct accountability mechanisms applicable to corporations whose suboptimal CSR implementation contributes to flood risk. First, risk-based administrative sanctions under Article 76 of Law Number 32 of 2009, ranging from written warnings and government compulsion to suspension and revocation of environmental permits. Analysis of the 2025–2026 Sumatra flood cases shows that several corporations faced permit reviews following findings that their operational activities contributed to watershed degradation, though full permit revocations remained rare due to weak causal evidence standards. Second, civil liability, including both individual and collective (class action) lawsuits under Article 91 of Law Number 32 of 2009, through which flood-affected communities may seek compensation and environmental restoration from corporations whose activities contributed to disaster conditions.

Third, legal standing of environmental organizations under Article 92 of Law Number 32 of 2009, enabling civil society groups to initiate legal action against corporations for environmental harm, providing an additional layer of accountability beyond state enforcement. Fourth, criminal liability for violations of environmental protection and spatial planning regulations, particularly where corporate activities in water catchment areas or riverbanks without regard for environmental carrying capacity breach Articles 69–75 of Law Number 26 of 2007 on Spatial Planning. Fifth, citizen lawsuits, recognized by the Supreme Court as a social oversight mechanism, through which members of the public may hold both corporations and the state accountable for policies or negligence that result in public harm. Sixth, regulatory and reputational sanctions within the sustainable finance framework, where failure to comply with ESG reporting obligations under Financial Services Authority Regulation Number

51/POJK.03/2017 exposes corporations to administrative penalties and loss of investor confidence.

A critical finding is that despite this comprehensive accountability framework, enforcement remains weak in practice. This study finds that the principal obstacle to effective corporate accountability is the difficulty of establishing legal causation between specific corporate activities and the occurrence of flood disasters. Current evidentiary standards do not adequately accommodate the complex, cumulative nature of environmental harm in flood causation, where multiple corporate actors may each contribute incrementally to watershed degradation. This evidentiary gap effectively shields many corporations from accountability even where their contribution to flood risk is evident. This finding leads to a key policy conclusion: strengthening corporate accountability for CSR negligence requires not only maintaining the existing multi-layered sanction framework, but critically reforming evidentiary standards to incorporate strict liability principles and risk-based approaches to causation. Without such reform, the comprehensive legal accountability framework identified in this study will continue to function more as a theoretical deterrent than as an effective enforcement mechanism.

From the standpoint of spatial planning law, the heightened danger of flooding attributable to business operations is intricately linked to breaches of Law Number 26 of 2007 regarding Spatial Planning. Articles 61 and 69 of the Spatial Planning Law mandate that all individuals comply with spatial planning and utilize space in accordance with its intended function. A corporation constructing in water catchment areas, riverbanks, or flood-prone regions without regard for environmental carrying capacity may incur administrative sanctions and criminal penalties as outlined in Articles 69-75 of the Spatial Planning Law. Consequently, the inadequacy of CSR in this setting is not isolated but is linked to violations of spatial planning that carry significant legal repercussions.

Moreover, corporate accountability may also be sought through the system of class action litigation as stipulated in Article 91 of the UUPPLH. Communities impacted by flooding resulting from environmental deterioration may initiate collective lawsuits against the corporation to seek compensation and ecological restoration. Moreover, environmental organizations possess legal capacity to initiate actions aimed at safeguarding environmental functions pursuant to Article 92 of the UUPPLH. This technique enhances the community's role as active legal entities in monitoring the execution of CSR.

The Supreme Court has acknowledged citizen litigation as a mechanism for social oversight in response to policies or carelessness that result in public detriment. If inadequate supervision of CSR implementation results in heightened flood risk, a citizen lawsuit may be initiated to hold both the state and the implicated firm liable. This indicates that the company's accountability is inextricably linked to the government's duty in overseeing and enforcing environmental legislation.

From the standpoint of corporate governance, the mandate to execute CSR is incorporated into the tenets of Good Corporate Governance (GCG), which underscore transparency, accountability, responsibility, independence, and equity. The Financial Services Authority Regulation Number 51/POJK.03/2017 mandates that financial service institutions, issuers, and public businesses provide sustainability reports. Failure to comply with this responsibility may lead to administrative and reputational penalties, thereby causing economic detriment to the organization. Consequently, corporate accountability has legal, reputational, and financial dimensions.

The theory of corporate environmental responsibility posits that companies possess moral and legal duties to uphold ecological balance, reflecting the social contract between corporations and society (DesJardins, 1998). In this perspective, CSR is not simply a formal responsibility but a demonstration of the company's social legitimacy to function (license to operate). If such legitimacy is compromised owing to inadequate prevention of environmental

degradation and flooding, the corporation jeopardizes public trust and may encounter more severe legal repercussions.

Consequently, the amalgamation of CSR with disaster mitigation techniques might markedly diminish the social and economic risks associated with natural catastrophes (Lim et al., 2021). The inadequate execution of CSR resulting in heightened flood risk might be categorized as a type of corporate negligence in meeting preventive legal responsibilities. Consequently, corporate accountability encompasses not just post-damage recovery but also responsibilities for prevention, mitigation, rehabilitation, and public openness.

If CSR is not executed effectively, leading to environmental degradation and heightened flood risks, the company may be held liable through the following mechanisms: (1) risk-based administrative penalties; (2) civil litigation, including individual and class actions; (3) lawsuits initiated by environmental organizations; (4) criminal liability for violations of environmental and spatial planning regulations; (5) citizen-initiated lawsuits; and (6) regulatory and reputational penalties within the context of sustainable finance. This underscores that business Social Responsibility (CSR) constitutes a legal requirement intertwined with the framework of environmental protection, spatial planning, disaster management, and sustainable business governance.

Discussion

The findings of this study reveal a persistent and structurally embedded contradiction within Indonesia's CSR regime: while the law formally positions CSR as a binding corporate obligation with direct relevance to environmental protection, corporate practice continues to treat it as a discretionary and largely philanthropic activity. Understanding why this contradiction persists and what it implies for flood disaster governance in Sumatra requires analysis that goes beyond the legal text. The most fundamental issue is not simply that corporations fail to implement CSR optimally, but that the legal framework itself contains design flaws that make suboptimal implementation structurally predictable. The absence of technical regulations explicitly linking CSR expenditure to flood risk mitigation means that corporations can satisfy their legal obligations through activities entirely unrelated to the environmental risks their operations generate. This is not merely a problem of corporate bad faith; it is a problem of regulatory design. When a law mandates an obligation without specifying its content in risk-relevant terms, compliance becomes performative rather than substantive.

This finding aligns with Karassin and Bar-Haim (Karassin & Bar-Haim, 2019), who demonstrate that regulatory specificity is a critical determinant of CSR effectiveness, as vague mandates consistently produce inconsistent and superficial compliance. It also resonates with Buhmann's observation that CSR laws without robust enforcement mechanisms tend to function as reputational instruments rather than genuine behavioral constraints (Buhmann, 2006). What this study adds to that literature is a specifically Indonesian dimension: the combination of generic CSR mandates, weak causal evidentiary standards, and the absence of disaster risk-specific provisions creates a regulatory environment where corporations can remain legally compliant while contributing substantially to environmental vulnerability. In the context of the 2025–2026 Sumatra floods, this regulatory gap carried fatal consequences, underscoring that the deficiency is not theoretical but has produced measurable human and ecological costs.

A second dimension requiring analytical attention concerns why CSR implementation in Indonesia remains overwhelmingly reactive concentrated in post-disaster relief rather than pre-disaster prevention. This study's findings suggest that this pattern is not accidental but reflects deeper institutional and incentive failures that the existing literature has not fully examined in the Indonesian context. From an institutional perspective, disaster risk reduction in Indonesia remains organizationally siloed. The National Disaster Management Agency

(BNPB) and Regional Disaster Management Agencies (BPBD) operate largely independently from the regulatory bodies overseeing corporate environmental compliance, meaning that CSR programs are rarely designed in consultation with disaster risk authorities, and corporate risk assessments seldom incorporate hydrological or watershed vulnerability data. The result is a structural disconnect between corporate social investment and the actual environmental risks that corporations generate. From an incentive perspective, the current regulatory framework provides stronger incentives for reactive than preventive CSR. Post-disaster relief is visible, immediately appreciated by affected communities, and generates positive reputational returns for corporations, whereas preventive investments in watershed rehabilitation or flood-resilient infrastructure produce diffuse and long-term benefits that are difficult to attribute to any single corporate actor. This asymmetry in incentive structures systematically biases corporate CSR allocation toward relief over prevention, a dynamic that corroborates Huang finding that CSR and risk management remain poorly integrated in corporate decision-making, while extending that finding by demonstrating how regulatory design actively reinforces this separation rather than correcting it (Breyer, 1979; Huang et al., 2020).

Perhaps the most consequential finding of this study concerns the gap between the comprehensiveness of Indonesia's corporate accountability framework and its practical enforceability. As the results demonstrate, Indonesian law provides a multi-layered accountability system encompassing administrative, civil, criminal, and reputational mechanisms (Putri, 2025). Yet enforcement against corporations contributing to flood risk remains rare and incomplete, and the central reason is evidentiary: establishing legal causation between specific corporate activities and flood occurrence requires demonstrating a causal chain across complex ecological processes involving multiple actors, cumulative impacts, and long time horizons. This evidentiary challenge is not unique to Indonesia. Farber identifies causal indeterminacy as a fundamental barrier to corporate liability for disaster risks across jurisdictions, noting that traditional tort causation standards are ill-suited to the diffuse and cumulative nature of environmental harm (Farber, 2025). What distinguishes the Indonesian context, however, is that this evidentiary weakness is compounded by institutional capacity constraints, as environmental enforcement agencies frequently lack the scientific and technical resources to construct the causal evidence necessary for successful prosecution. The consequence is that the precautionary principle and the polluter-pays principle both formally embedded in Law Number 32 of 2009 remain largely aspirational rather than operational in flood disaster contexts. This gap between formal accountability and practical enforceability creates a moral hazard dynamic in which corporations rationally underinvest in flood risk prevention because the probability of legal accountability is perceived as low, a dynamic that strengthening the range of sanctions alone cannot resolve without parallel reform of evidentiary standards.

The cumulative findings of this study carry significant theoretical implications for how CSR should be conceptualized within business law. Freeman's stakeholder theory provides a useful starting point, recognizing that corporations bear responsibilities to communities and environments affected by their operations (Freeman, 2010). However, this study demonstrates that stakeholder theory alone is insufficient as a basis for flood-oriented CSR, because it does not specify how corporate responsibilities should be calibrated to the particular risks that corporate activities generate. A corporation operating in a watershed-sensitive area generates environmental risks that are qualitatively different from those generated by an urban service firm, yet a uniform CSR obligation treats these as equivalent. This study therefore argues for a risk-proportionate reconceptualization of CSR obligations, one in which the content and scale of a corporation's social and environmental responsibilities are calibrated to the specific environmental risks associated with its operational activities and geographic location. This approach is consistent with the sustainable development framework articulated by Lemos, which demands that economic activity be assessed not only by its direct outputs but by its

effects on environmental carrying capacity and intergenerational equity (Lemos, 2024), and aligns with Elkington's triple bottom line framework, which evaluates corporate performance across profit, people, and planet simultaneously (Hartmann, 2020). What this study contributes beyond those frameworks is the argument that this reconceptualization must be embedded in legally binding, technically specific regulations rather than left to corporate discretion or ESG reporting frameworks that remain voluntary in substance.

Across Southeast Asia, rapid resource extraction, land use change, and inadequate corporate environmental governance are driving increased flood vulnerability in economically significant regions (Tomich et al., 2004). Indonesia's experience with the 2025–2026 Sumatra floods illustrates what happens when corporate CSR obligations exist in law but lack the regulatory specificity, institutional integration, and evidentiary infrastructure necessary for genuine enforcement, and the lessons are applicable to any jurisdiction attempting to use CSR as an instrument of disaster risk governance (Wahyudi et al., 2026). For Indonesia specifically, these findings point to an urgent need for a coherent legal reform agenda encompassing derivative regulations that mandate risk-proportionate CSR allocation in disaster-prone areas, integration of CSR planning with regional disaster risk reduction strategies, adoption of strict liability or risk-based causation standards for environmental harm, and strengthening of multi-stakeholder monitoring mechanisms that empower communities as active participants in CSR accountability rather than passive recipients of corporate charity. Without such reforms, the gap between legal aspiration and practical reality will persist, and CSR will continue to function as a symbolic gesture rather than a substantive instrument of disaster risk governance.

Taken together, the findings and analysis of this study lead to a conclusion that challenges the prevailing framing of CSR in Indonesian business law discourse. CSR should not be understood primarily as a mechanism for corporate social contribution a way for profitable companies to give back to society. Rather, it should be understood as preventive legal infrastructure: a system of legally mandated corporate behaviors designed to internalize the environmental and social costs of business activity before those costs materialize as disasters. Viewed through this lens, the failures documented in this study are not failures of corporate generosity but failures of legal design, and the path forward lies not in appealing to corporate goodwill but in building a regulatory architecture that makes risk-proportionate, prevention-oriented CSR the only rational corporate choice. This reconceptualization is not merely an academic proposition; it is an urgent practical necessity for a country where the human and ecological costs of inadequate corporate environmental accountability have already proven to be catastrophic.

Conclusion

This study demonstrates that CSR in the context of flood disaster management in Sumatra is neither a charitable option nor a peripheral corporate obligation, but a preventive legal instrument whose effectiveness is currently constrained by three structural failures: regulatory design that lacks risk-specific technical provisions, institutional silos that disconnect corporate environmental governance from disaster risk management systems, and evidentiary standards that render corporate accountability largely unenforceable in practice. These failures are not incidental — they are systemic, and they collectively explain why the comprehensive legal accountability framework that Indonesian law provides has not translated into meaningful corporate contribution to flood risk reduction.

The central implication of this finding is that reforming CSR in Indonesia requires more than stricter enforcement of existing obligations. It requires a fundamental reconceptualization of what CSR is and what it is legally required to do. CSR must transition from a generic social expenditure obligation into a risk-proportionate legal duty, calibrated to the specific environmental impacts of each corporation's operational activities and geographic location. Corporations whose activities demonstrably alter watershed dynamics, reduce forest cover, or

degrade flood-absorbing land capacity must bear correspondingly greater and more specific preventive obligations — not as a matter of goodwill, but as a matter of law. The broader significance of this study lies in what it reveals about the limits of formal legal mandates when institutional architecture and evidentiary infrastructure are inadequate to support them. Indonesia has the legal framework. What it lacks is the regulatory specificity, inter-agency coordination, and causation standards necessary to make that framework operational. Until these gaps are addressed — through derivative regulations, ESG-integrated reporting, multi-stakeholder monitoring, and reformed liability standards — CSR will continue to function as symbolic compliance rather than substantive disaster prevention. In flood-prone regions like Sumatra, where the human and ecological costs of this gap have already proven catastrophic, that outcome is no longer acceptable.

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