

## **ENVIRONMENTAL VULNERABILITY AND THE APPLICATION OF GREEN CRIMINOLOGY IN BANGLADESH: EXAMINING LEGAL GAPS AND SOCIAL JUSTICE**

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### ***Abstract***

*Green criminology provides a critical framework for understanding environmental harm as both a legal and social injustice, especially in regions disproportionately affected by climate change. In the context of Bangladesh—where ecological degradation intersects with poverty, displacement, and state inaction—this study examines how existing environmental laws and regulatory mechanisms fall short of protecting vulnerable communities and ecosystems. Using a qualitative methodology grounded in criminological and legal analysis, the paper interrogates the structural weaknesses in Bangladesh's environmental governance, highlighting enforcement gaps, policy ambiguities, and the marginalization of affected populations in decision-making processes. Rooted in the principles of green criminology, this model envisions a justice system that goes beyond punitive responses to embrace sustainability, inclusiveness, and ecological accountability. The study ultimately demonstrates how criminological theory can inform a more holistic and equitable approach to environmental law in Bangladesh.*

**Keywords:** *Green Criminology, Environmental Justice, Bangladesh, Climate Vulnerability, Legal Gaps, Environmental Vulnerability.*

## KERENTANAN LINGKUNGAN DAN PENERAPAN GREEN CRIMINOLOGY DI BANGLADESH: MENELAAH KESENJANGAN HUKUM DAN KEADILAN SOSIAL

### **Intisari**

Green criminology menyediakan kerangka kritis untuk memahami kerusakan lingkungan sebagai ketidakadilan yang bersifat hukum sekaligus sosial, khususnya di wilayah-wilayah yang terdampak perubahan iklim secara tidak proporsional. Dalam konteks Bangladesh—di mana degradasi ekologis beririsan dengan kemiskinan, perpindahan penduduk, dan kelalaian negara—kajian ini menelaah bagaimana hukum lingkungan dan mekanisme regulasi yang ada belum mampu melindungi komunitas rentan dan ekosistem secara efektif. Dengan menggunakan metodologi kualitatif yang berlandaskan analisis kriminologis dan hukum, artikel ini mengkaji kelemahan struktural dalam tata kelola lingkungan di Bangladesh, dengan menyoroti kesenjangan penegakan hukum, ambiguitas kebijakan, serta marginalisasi kelompok terdampak dalam proses pengambilan keputusan. Berakar pada prinsip-prinsip green criminology, model ini membayangkan sistem keadilan yang melampaui respons yang semata-mata bersifat represif dengan mengedepankan keberlanjutan, inklusivitas, dan akuntabilitas ekologis. Studi ini pada akhirnya menunjukkan bagaimana teori kriminologi dapat berkontribusi pada pendekatan hukum lingkungan yang lebih holistik dan berkeadilan di Bangladesh.

**Kata Kunci:** *Green Criminology, Keadilan Lingkungan, Bangladesh, Kerentanan Iklim, Kesenjangan Hukum, Kerentanan Lingkungan.*

## A. Introduction

In contemporary times, communities with well-established or developing economic and industrial structures face a number of environmental challenges, including air and water pollution, acid rain, global warming and so on.<sup>1</sup> These environmental issues result in the degradation of natural ecologies and the loss of biodiversity, while also hostilely affecting human health through illnesses such as headaches, allergies, skin diseases, increased cancer rates, and a rise in abortions and autism. These consequences are well-documented outcomes of environmental crimes universally.<sup>2</sup>

Bangladesh presents an insistent case for examining environmental crime due to its exceptional geographical, socio-economic, and climatic vulnerabilities that are situated in a low-lying delta region, the country is highly susceptible to natural calamities such as tropical cyclones, floods, and riverbank erosion.<sup>3</sup> Furthermore, climate change and environmental challenges are prolonging pervasive poverty at the end. From a criminological perspective, it is imperious to implement green criminology in Bangladesh since many environmental difficulties, including pollution, deforestation, and climate penalties, go unnoticed and excessively impact disadvantaged people.<sup>4</sup>

Green criminology highlights ecological destruction as social injustice and institutional violence, while traditional criminology frequently overlooks these adverse long-term problems.<sup>5</sup> This strategy is crucial for ensuring environmental justice, improved prevention, and legislative changes that jointly address social and environmental issues. Environmental crime exhibits complicated questions from a criminological perspective about how these crimes are perpetrated, quantified, and described as well as how they might be avoided, controlled, and penalized. Environmental crimes are often perceived as unusual in criminology because the damage is hard to measure,

1 Carmen G. Gonzales, "Environmental Justice, Human Rights, and the Global South," *Santa Clara Journal of International Law* 13, no. 1: 151–95.

2 Annette Prüss-Ustün et al., *Preventing Disease through Healthy Environments, a Global Assessment of the Burden of Disease from Environmental Risks* (Geneva: WHO Document Production Services, 2016).

3 Martin Parry et al., eds., *Climate Change 2007: Impacts, Adaptation and Vulnerability* (New York: Cambridge University Press, 2007).

4 Avi Brisman, Nigel South, and Rob White, eds., *Environmental Crime and Social Conflict Contemporary and Emerging Issues*, 1st ed. (Abingdon: Routledge, 2017).

5 Paul B. Stretesky and Michael J. Lynch, *Exploring Green Criminology Toward a Green Criminological Revolution*, 1st ed. (Routledge, 2016).

the criminals act clandestinely, the victims are not identified, and it is difficult to find evidence or decide who has legal control.<sup>6</sup> These characteristics make it more difficult to conceptualize and combat environmental crime, which is also frequently varying in scope and form.

Historically, various scientific disciplines studying environmental crime have converged on the need for integrated theoretical frameworks. Updating and expanding criminological theories through interdisciplinary engagement is essential—not only to explain human victimization but also to account for the broader societal and ecological impacts. This paper employs an interdisciplinary approach, drawing on law, environmental, sociology, and development studies to capture the multifaceted nature of environmental crime in Bangladesh. Such a framework allows for a more comprehensive understanding of how environmental harm occurs, how it affects vulnerable populations, and how existing legal mechanisms can be strengthened.<sup>7</sup>

The use of green criminology is particularly critical for Bangladesh. The nation's experience displays how deprived populations are extremely affected by environmental crime and climate change, uncovering flaws in public knowledge, governance, and enforcement. By inspecting the direct relationship between environmental crimes and Bangladesh's climate vulnerability—an essential but frequently disregarded topic in the body of accessible academic literature.<sup>8</sup> Few studies have used a criminological perspective to assess the socio-legal aspects of environmental crimes and their wider social implications, despite the fact that prior research has shown environmental deterioration and policy responses.

This study aims to apply green criminology to critically examine Bangladesh's environmental challenges and enhance theoretical and practical understanding of environmental crime in a climate-vulnerable developing country. It seeks to serve as a resource for scholars and policymakers working

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6 Rob White, *Environmental Harm An Eco-Justice Perspective* (UK: Bristol University Press, 2014).

7 Yingyi Situ and David Emmons, *Environmental Crime: The Criminal Justice System's Role in Protecting the Environment* (Thousand Oaks: SAGE Publications, Inc., 2012).

8 Commander S. Navaneetha Krishnan, L.S. Ganesh, and C. Rajendran, "Entrepreneurial Interventions for Crisis Management: Lessons from the Covid-19 Pandemic's Impact on Entrepreneurial Ventures," *International Journal of Disaster Risk Reduction* 72 (April 2022): 102830, <https://doi.org/10.1016/j.ijdrr.2022.102830>.

at the intersection of development, environmental studies, and criminology.

## B. Theoretical Framework

Green criminology is a lively, multidisciplinary branch of criminology that studies integrity, control, and environmental harm. It extended in reaction to classical criminology's shortcomings in undertaking ecological degradation, particularly in situations where environmental harms are not inevitably acknowledged as crimes under international or national law. In order to explore the relationship between ecological harm, justice, and power structures, this theoretical approach integrates viewpoints from the fields of law, environmental science, political ecology, sociology, and moral philosophy.

According to White (2013), green criminology develops the definition of harm to comprehend environmentally harmful practices that harm both humans and non-human animals, going beyond legal frameworks.<sup>9</sup> It emphasizes eco-justice, a framework that includes the rights of nature and disputes anthropocentric legal systems that put human interests ahead of ecological balance. In the Global South, where state and corporate interests frequently collide to manipulate natural resources, leaving poor populations vulnerable to ecological injustice and pollution, this approach is especially significant.

Green criminology, according to South and Brisman (2013), is an “umbrella term” that incorporates a variety of theoretical and ideological strings, such as ecological justice, critical criminology, and radical environmentalism.<sup>10</sup> These threads examine the criminalization and non-criminalization of environmental harm, posturing the question of whether broader structural prejudices in governance and the legal system are reproduced in the denial to criminalize some forms of environmental degradation.

“Green criminology critiques the limited scope of mainstream criminology, which inclines to focus on legally defined crimes enforced by state authorities.”<sup>11</sup> Green criminology, on the other hand, looks at

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9 White, “*Environmental Harm*”, 67.

10 Avi Brisman and Nigel South, *Routledge International Handbook of Green Criminology*, 2nd ed. (UK: Routledge, 2022).

11 Streeter and Lynch, “*Green Criminology*”, 56.

more expansive ideas of harm, both legal and extra-legal, and emphasizes how state and corporate players sometimes go unnoticed when producing environmental damage. This requires investigating regulatory capture, state-corporate criminality, and the involvement of legal institutions in continuing environmental injustice.

Within the field, there is a significant discussion interpreting the definition and extent of “green crime.” To guarantee effective execution and accountability, some academics support a legalist strategy that directs only on environmental law infractions. Others support a social harm approach, which includes any action that harms the environment, regardless of whether it is considered a crime. While the latter holds more thoughtful structural inequities that legal systems frequently ignore, the former pushes clearer policy implementation.<sup>12</sup>

Additionally, the field manages disagreements between eco-centric and anthropocentric perspectives. The main focus of anthropocentric viewpoints on environmental crime is on how it influences human welfare, including through pollution, health hazards, and relocation. Eco-centric viewpoints, on the other hand, support the moral and legal consideration of ecosystems, animals, and biodiversity as well as the integral worth of non-human nature.<sup>13</sup> Integrating both viewpoints is essential in a place like Bangladesh where environmental degradation and human vulnerability to climate change are severe.

Green criminology also recognizes the importance of alternative justice systems. Scholars in this discipline examine administrative, civil, and regulatory techniques in addition to the activity of civil society and non-governmental groups, rather than merely depending on criminal law. In certain situations, these processes may be more successful, particularly when official institutions are clumsy, fraudulent, or complicit in environmental damage.<sup>14</sup>

Green criminology, in summary, delivers a multidisciplinary framework for comprehending and addressing environmental problems. It pushes the limits of traditional criminology by emphasizing policy participation,

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12 Reece Walters, *Eco Crime and Genetically Modified Food*, 1st ed. (UK: Routledge, 2012).

13 Brisman and South, “Green Criminology”, 130.

14 White, “Environmental Harm”, 67.

systemic critique, and ecological justice. Green criminology offers a crucial perspective for examining environmental governance and justice for nations like Bangladesh, which are dealing with serious climate-related vulnerabilities, regulatory shortcomings, and socioeconomic inequalities.

### C. Contemporary Environmental Challenges in Bangladesh

Most people agree that one of the biggest risks to human civilization today is climate change,<sup>15</sup> especially for nations in the Global South. One noticeable illustration of a country battling increasing environmental issues while having few supplies is Bangladesh. Bangladesh is frequently listed as one of the nation's most vulnerable to climate change because of its low-lying deltaic terrain, dense population, and climate-sensitive works. Development toward the Sustainable Development Goals (SDGs), particularly those affecting poverty reduction, food security, health, water, and housing, is already being damaged by the long-term effects of climate change, which are undoing development gains.<sup>16</sup>

Bangladesh's geophysical landscapes and environmental deterioration directly subsidize its vulnerability to frequent and more severe natural catastrophes, including floods, cyclones, droughts, sea level rise, riverbank erosion, waterlogging, and saline intrusion. The poorest and most marginalized people in the nation are extremely impacted by these disasters because they frequently live in high-risk areas and lack the ability to empty or adapt.<sup>17</sup> Rising sea levels and saline intrusion, which deteriorate agricultural fields, taint drinking water, and drive communities to transfer, increase the vulnerability of coastal regions in particular.<sup>18</sup>

Over the years, cyclones have become more frequent and intense, causing extensive damage. For instance, millions of people were impacted by Cyclones

15 Germanwatch. *Global Climate Risk Index 2023*. Bonn: Germanwatch, 2023. <https://www.germanwatch.org/en/cri>.

16 IPCC. *Climate Change 2023: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press, 2023. <https://www.ipcc.ch/report/ar6/wg2/>.

17 M. R. Islam, M. T. Ahmed, and M. M. Hasan. "Vulnerabilities of the Coastal Communities to Climate Change in Bangladesh: A Literature Review." *Environmental Research* 188 (2020): 109807. <https://doi.org/10.1016/j.envres.2020.109807>.

18 Dasgupta, Susmita, Benoit Laplante, Craig Meisner, David Wheeler, and Jianping Yan. "The impact of sea level rise on developing countries: a comparative analysis." *Climatic change* 93, no. 3 (2009): 379-388.

Sidr (2007) and Aila (2009), which decimated Bangladesh's southern shore and caused long-term harm to the ecosystem and livelihoods.<sup>19</sup> With almost 2.5 million and 1.1 million people relocated, respectively, Cyclone Amphan (2020) and the most recent Cyclone Remal (2024) further demonstrated the continued vulnerability of coastal areas.<sup>20</sup> Many people are forced into chronic poverty as a result of these catastrophes' terrible interruptions to social services, infrastructure, and agriculture.<sup>21</sup>

**Figure 1:** Major Disasters in Bangladesh Associated with Climate Change (1991–2024)

	<b>Disaster Name</b>	<b>Destruction Experienced by Bangladesh</b>
	Cyclone	Approximately 138,000 deaths; massive destruction.
	Flood	Affected ~30 million people; significant agricultural and infrastructural damage.
	Cyclone Sidr	Over 3,000 deaths; extensive damage to coastal regions.
	Cyclone Amphan	Displaced ~2.5 million people; substantial economic losses.
	Flood	Severe flooding in northeastern regions; widespread displacement.
	Cyclone Remal	Approximately 1.1 million displacements; significant flooding.

**Source:** Internal Displacement Monitoring Centre (IDMC).

Food insecurity has intensified, and crop production has decreased in the northwest due to frequent droughts and diminishing groundwater levels. The northeast and central regions have seen an increase in riverbank erosion and flash floods, which frequently submerge entire communities, damage infrastructure, and result in permanent displacement.<sup>22</sup> The Bangladesh Climate and Disaster Risk Atlas states that more than 20% of people reside in territories that are extremely vulnerable to various climate disasters.<sup>23</sup>

An estimated 45 centimeters of sea level rise could submerge up to 15%

19 Bimal K. Paul and Sohini Dutt, "Hazard Warnings and Responses to Evacuation Orders: The Case of Bangladesh's Cyclone Sidr," *Geographical Review* 100 (2010): 336–55, <https://doi.org/10.1111/j.1931-0846.2010.00040.x>.

20 Council, Norwegian Refugee. "Internal Displacement Monitoring Centre-IDMC." *Global Report on Internal Displacement*. Accessed August 10 (2019): 2020.

21 Rabiul Islam and Greg Walkderden, "How Do Links between Households and NGOs Promote Disaster Resilience and Recovery?: A Case Study of Linking Social Networks on the Bangladeshi Coast," *Natural Hazards* 78 (2015): 1707–27, <https://doi.org/10.1007/s11069-015-1797-4>.

22 Sevil Orhan-Özen, "The Effect of Motivation on Student Achievement," in *The Factors Effecting Student Achievement* (Cham: Springer, 2017), 35–56.

23 Ministry of Environment, Forest and Climate Change (MoEFCC). *Bangladesh Climate and Disaster Risk Atlas*. Dhaka: Government of Bangladesh, 2023.

of the nation's land, requiring more than 35 million people to relocate across 20 coastal districts.<sup>24</sup> Cities like Dhaka and Khulna, where climate migrants combat hazardous living conditions in informal settlements, are already seeing rapid and unplanned urbanization due to such mass relocation.<sup>25</sup> This rural-to-urban and cross-border migration also aggravates competition for limited urban resources and creates socio-environmental tensions.<sup>26</sup>

Bangladesh has employed a number of risk reduction and adaptation measures, yet the rate of environmental deterioration still exceeds these initiatives. Uncontrolled land conversion, wetland loss, and deforestation have weakened ecosystems' natural buffering ability, increasing the severity of disasters.<sup>27</sup> Unsustainable development practices have intensified flood events and soil erosion, including hill cutting, encroachment on floodplains, and industrial development into ecologically vulnerable zones.<sup>28</sup>

The issue of urban environmental degradation is equally concerning in Bangladesh. The capital, Dhaka, is often one of the world's most polluted cities. In many places, airborne lead levels are more than 100 times higher than WHO safety limits, which has a serious negative influence on public health, particularly for children.<sup>29</sup> The problem of environmental deterioration in urban areas is equally alarming. Dhaka, the capital, is frequently classified among the most polluted cities in the world. Lead levels in the air are more than 100 times higher than WHO safety standards in many sites, which have a major damaging impact on public health, especially for children.<sup>30</sup>

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24 World Bank. *Groundswell Part 2: Acting on Internal Climate Migration*. Washington, DC: The World Bank, 2021. <https://www.worldbank.org/en/news/feature/2021/09/13/groundswell-part-2-acting-on-internal-climate-migration>.

25 Edmund C. Penning-Rowson, Parvin Sultana, and Paul M. Thompson, "The 'Last Resort'? Population Movement in Response to Climate-Related Hazards in Bangladesh," *Environmental Science & Policy* 27, no. 1 (2013): 44–59, <https://doi.org/10.1016/j.envsci.2012.03.009>.

26 Richard Black et al., "Migration as Adaptation," *Nature* 478 (2011): 447–49.

27 Maximilian Huber, Konstantinos Athanasiadis, and Brigitte Helmreich, "Phosphorus Removal Potential at Sewage Treatment Plants in Bavaria – a Case Study," *Environmental Challenges* 1, no. 100008 (2020), <https://doi.org/10.1016/j.envc.2020.100008>.

28 Liye Wang et al., "Optimizing Distribution of Urban Land on the Basis of Urban Land Use Intensity at Prefectural City Scale in Mainland China," *Land Use Policy* 115 (2022).

29 United Nations Environment Programme (UNEP) and Climate and Clean Air Coalition (CCAC), "Air Pollution in Asia and the Pacific: Science-Based Solutions," <https://www.ccacoalition.org/resources/air-pollution-asia-and-pacific-science-based-solutions-summary-full-report>.

30 Mohammad Monirul Hasan and Mohammad Shahidul Alam, "Environmental Degradation and Its Impact on Urban Life in Dhaka City," *Environment and Urbanization ASIA* 10, no. 2 (2019): 175–88, <https://doi.org/10.1177/0975425319856623>.

One of the biggest arsenic pollution worries in the world is also centered in Bangladesh. Tens of millions of people in rural regions have been crushed by widespread arsenic poisoning as a result of extreme groundwater extraction without sufficient recharging.<sup>31</sup> Even with early international attention, the issue is still not well treated, which could have long-term health impacts on future generations.

Aquatic biodiversity, particularly that of freshwater fish species, has been brutally decreased by the reduction of freshwater resources. Rivers and canals are nonetheless spoiled by hospital waste, untouched industrial effluents, and agricultural pesticides. The biggest mangrove forest in the world and an essential carbon sink, the Sundarbans, is compromised by encroachment, rising salinity, and upstream river modification.<sup>32</sup> The loss of freshwater resources has substantially decreased aquatic biodiversity, especially that of freshwater fish species. However, untouched industrial effluents, agricultural chemicals, and hospital waste still infect rivers and canals. The Sundarbans, the world's largest mangrove forest and a necessary carbon sink are under threat from ruthless river modification, encroachment, and increasing salinity.<sup>33</sup>

Bangladesh's biodiversity is under attack like never before. Many plant and animal species are now destroyed or in danger of developing so due to the loss of wetlands, forest cover, and animal habitats. According to recent studies, the nation is far from reaching the ecological balancing benchmark of 25% forest cover.<sup>34</sup> Hotspots for biodiversity have been further reduced by the conversion of wetlands for farming and real estate development.<sup>35</sup>

A bothering environmental difference is exposed by international comparisons. Developing countries like Bangladesh are undergoing environmental degradation in the name of industrial progress, whereas

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31 Touzani et al., "Mapping the Pollution Plume Using the Self-Potential Geophysical Method: Case of Oum Azza Landfill, Rabat, Morocco," *Water* 13, no. 7 (2022): 961.

32 Toth, Charles, and Grzegorz Józków, "Remote Sensing Platforms and Sensors: A Survey," *ISPRS Journal of Photogrammetry and Remote Sensing* 115 (2016): 22–36.

33 M. S. Islam and M. A. Wahid, "Landslide Disaster Risk in Hilly Regions of Bangladesh: Causes, Impacts, and Mitigation," *International Journal of Disaster Risk Reduction* 50 (2020).

34 Nurrochmat et al., "Policy Forum: Reconciling Palm Oil Targets and Reduced Deforestation: Landswap and Agrarian Reform in Indonesia," *Forest Policy and Economics* 119 (n.d.), <https://doi.org/10.1016/j.foreco.2020.102291>.

35 Hossan et al., "Boiler Explosion in Bangladesh: Causes, Consequences and Precautions," *Proceedings of the 2019 International Conference on Management Science and Industrial Engineering*, n.d.

industrialized countries are sighted environmental recovery, including the renewal of forests, better air and water quality, and the reinstatement of species. Despite Bangladesh's modest economic advances, this disparity has led to a paradox where environmental indicators have gotten worse.<sup>36</sup> International differences indicate a troubling environmental gap. While industrialized nations are experiencing environmental recovery, including the restoration of forests, upgraded air and water quality, and the refurbishment of species, developing nations, such as Bangladesh, are observing environmental deterioration in the name of industrial advancement. This incongruity has created a paradox where environmental indicators have gotten worse despite Bangladesh's trivial economic progress.

In conclusion, natural catastrophes, human displacement, and ecosystem poverty have all been exacerbated by climate change in Bangladesh. A dangerous intersection where ecological stressors exacerbate social and economic inequality is created by the nation's geographic susceptibility, fast urbanization, and insufficient environmental governance institutions. More than just technocratic patches are needed to address these issues; significant structural reforms, cross-sectoral cooperation, and justice-oriented environmental governance are required to decrease vulnerability and improve sustainable development for all.

#### **D. Legal Protection against Environmental Pollution in Bangladesh**

The Bangladesh Environment Conservation Act (BECA), 1995, and the Environment Conservation Rules (ECR), 1997, serve as the chief pillars of the country's official legal framework for environmental protection. These means give the Department of Environment (DoE) regulatory authority and support important ideas like the “polluter pays” and precautionary principles. The DoE has the ability to monitor pollution levels, grant Environmental Clearance Certificates, and penalize offenders. To protect fragile ecosystems, the Act also allows for the label of Ecologically Critical Areas (ECAs).

However, institutional mistakes, regulatory alarm, and low levels of

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<sup>36</sup> United Nations Development Programme (UNDP), “Human Development Report 2021/2022: Uncertain Times, Unsettled Lives – Shaping Our Future in a Transforming World,” United Nations Development Programme, <https://hdr.undp.org/>.

judicial and public participation continue to inhibit the practical application of these laws. Even though procedural rights like access to environmental information, involvement in environmental decision-making, and legal medications are bordered in the legal texts, impacted people and groups frequently find it difficult to successfully workout these rights. Financial limitations, a lack of institutional methods for access to justice, and legal illiteracy are the causes of this.

Although there are still precautions on public annoyance and health troubles in older legal documents like the Criminal Procedure Code and the Penal Code of 1860, these are seldom implemented in environmental circumstances. Furthermore, although being created by the Environment Court Act of 2000, environmental courts are unsuccessful due to their small geographic scope, lack of technical know-how, and ineffective procedures.

Some beneficial effects of judicial activism in environmental issues, such as the seminal case of BELA v. Bangladesh (2001), incorporate decisions banning pollution from brick kilns, river encroachment, and hill cutting. However, a logical quantity of environmental jurisprudence has not yet developed, and such interventions continue to be unsuitable. Additionally, corruption, political meddling, and a lack of transparency frequently cooperate with the enforcement of governments, especially in industrial sectors with significant political or economic clout. This has resulted in a regulatory culture that views environmental harm as a low-priority problem and frequently tolerates non-compliance.

Strengthening legal enforcement, developing institutional coordination, and enhancing environmental justice are imperative given the extent of environmental degradation and Bangladesh's susceptibility to climate change. This involves modernizing out-of-date legal provisions, educating the judiciary and law enforcement personnel on environmental law, increasing the number of environmental courts available, and empowering citizens through legal aid and public interest lawsuits. Furthermore, the government ought to bring domestic environmental regulations closer to Article 18A of the Constitution, which expects the state to preserve and enhance biodiversity and the environment. Bangladesh's environmental regulations run the risk of being well-organized on paper but ineffectual in reality if significant reform

is not executed.

### E. Results and Discussion

Despite having a comprehensive legal framework, Bangladesh's environmental governance is denoted by institutional ineffectiveness and systemic regulatory failure. A pattern of institutional fragmentation, lax enforcement, political interference, and socioeconomic inequality regularly threatens substantive environmental justice. The fragmented structure of regulatory entities is one of the most urgent issues. Organizations with contradictory responsibilities and insufficient coordination include the Department of Environment (DoE), the Ministry of Environment, Forests, and Climate Change, and several local government bodies.<sup>37</sup> Accountability is shattered, and bureaucratic uncertainty is delivered by this institutional fragmentation.

In practice, the DoE frequently shortages the institutional autonomy, procedural capability, and political support compulsory to impose environmental regulations, while having the legal authority to supervise environmental compliance under the Bangladesh Environment Conservation Act (1995).<sup>38</sup> Often, enforcement strategies are politically controlled and selective. It is uncommon for powerful industrial or political actors to be held responsible. The regulatory machinery is further damaged by inadequate funding, weak technical infrastructure, and a shortage of personnel. High-pollution industries, including textiles, leather tanning, and shipbreaking, frequently release contaminations into the atmosphere and coarse effluents into rivers without deteriorating serious legal consequences.<sup>39</sup> Despite being required by law, Environmental Impact Assessments (EIAs) are frequently included in a hasty and induced manner that lacks impartiality and scientific rigour.<sup>40</sup>

37 Aminuzzaman Salahuddin M, "Environment Policy of Bangladesh: A Case Study of an Ambitious Policy with Implementation Snag," 59 2010: 1–18.

38 Rosencranz, Armin, and Kanika Jamwal, "Common but Differentiated Responsibilities and Respective Capabilities: Did This Principle Ever Exist?," *Environmental Policy and Law* 50, nos. 4–5 (2021): 291–97.

39 World Bank, "Strengthening Environmental Governance and Compliance Systems in Bangladesh," 2025.

40 Mohammad Mahmudul Hossain, "Environmental Impact Assessment in Bangladesh: Towards a More Effective Legal Framework," *Bangladesh Journal of Environmental Law* 12, no. 1 (2012): 23–41.

Furthermore, industrial actors can prevent restrictions due to exploitation in the environmental licensing and scrutiny systems. This compromises the government system's efficacy and legitimacy.

Such enforcement failures are not separated or incidental, as green criminology underlines; rather, they are a reflection of broader political-economic dynamics like structural inequality and regulatory capture. When oversight organizations act in the best interests of the businesses they are supposed to monitor, a phenomenon known as regulatory capture takes place. This is frequently given about by elite cooperation and economic dependence.<sup>41</sup> Industries that make substantial contributions to Bangladesh's GDP and export earnings, especially the clothing and heavy industries, are usually ignored from environmental accountability or subject to lax inspection.<sup>42</sup> As a result, environmental regulations are overseen randomly, leading to a "politics of exemption" that standardizes corporate environmental crime within the context of state government.

Environmental injustice is further established by the judiciary's restricted ability to adopt these shortcomings. Although the courts have occasionally been stirred by historic interventions by groups like the Bangladesh Environmental Lawyers Association (BELA), judicial engagement in environmental problems is still sporadic and unfair.<sup>43</sup> Marginalized groups are incapable of obtaining environmental justice due to structural barriers, such as a lack of public knowledge, complicated procedures, lengthy adjudication times, and insufficient legal assistance.<sup>44</sup> Although Article 18A of the Constitution requires the state to safeguard the environment, judicial conservatism and a lack of persistent civil society pressure have made its implementation mainly symbolic.

The marginalization of those most compressed by environmental

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41 Kemp, Deanna, and John R. Owen, "Public-Private Inquiries: Institutional Intermediaries and the Transparency Nexus in Global Resource Development," *Global Environmental Politics* 21, no. 2 (2021): 143–58.

42 Tirthankar Kumar Roy, "Environmental Compliance in Bangladesh's RMG Sector: Politics, Profits, and Pollution," *South Asian Economic Journal* 19, no. 1 (2018): 1–20, <https://doi.org/10.1177/1391561418763712>.

43 Saira Sadeque, "Environmental Litigation in Bangladesh: The Role of BELA and the Judiciary," *South Asian Environmental Law Review* 4, no. 2 (2006): 101–23.

44 United Nations Development Programme (UNDP), "Strengthening Access to Justice for Environmental Protection in Bangladesh," 2019, <https://www.undp.org/bangladesh/publications>.

deterioration is also concerning. When it comes to environmental decision-making, groups including slum dwellers, ethnic communities, riverbank settlers, and workers in the informal sector are rarely consulted.<sup>45</sup> <sup>46</sup> Due to a combination of factors, such as inadequate legal literacy, a lack of financial resources, and sociopolitical marginalization, many people are effectively powerless on issues that directly affect their livings and health. These kinds of injury and exclusion are prime instances of what structural violence, as defined by green criminology, is: the normalized, frequently unnoticed suffering that disadvantaged communities endure as a result of institutional negligence and environmental deterioration.<sup>47</sup> In addition to being a result of development, environmental damage also serves as a mechanism for inequality, perpetuating and strengthening socioeconomic hierarchies.

Lastly, these difficulties are made worse by the official criminal justice system's inability to recognize environmental harm. Instead of being prosecuted as crimes, crimes like industrial removal, illegal deforestation, and infringement on wetlands are usually supervised as administrative infractions with small penalties or warnings.<sup>48</sup> The urgency of ecological devastation is minimized by this administrative framing, which also ignores it from the range of criminal responsibility. The idea that these damages are accidental or non-criminal is strengthened by the fact that environmental crimes are typically not included in official crime statistics.

According to Green Criminology, Bangladesh's environmental governance has failed for reasons other than a lack of enforcement or obsolete legislation. It is a reflection of a larger constellation of political compromise, regulatory capture, and institutional failure that systematically marginalizes vulnerable people while favouring economic elites. In this situation, environmental law operates less as a tool of justice and more as

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45 Kabir Humayun and G. A. Parvin, "Marginal Voices in Climate Change Governance: A Case Study of Riverbank Communities in Bangladesh," *International Journal of Climate Change Strategies and Management* 3, no. 4 (2011): 380–95, <https://doi.org/10.1108/1756869111175662>.

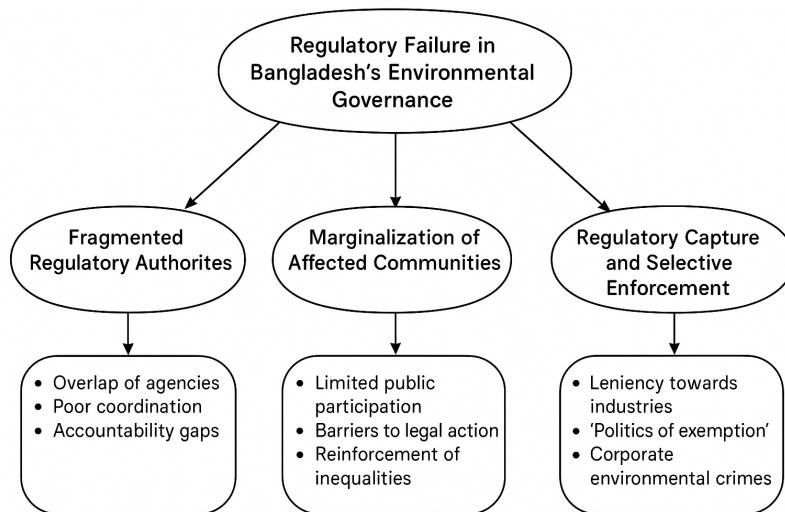
46 S.H. Chowdhury, "Public Participation in Environmental Governance: Challenges and Prospects in Bangladesh," *Asia-Pacific Journal of Environmental Law* 23, no. 1 (2020): 67–89, <https://doi.org/10.4337/apjel.2020.01.04>.

47 Stretesky and Lynch, "Green Criminology", 78.

48 Ragunathan, Aarthee, and Ezhilmaran Devarasan, "Data Hiding the Truth for the Last Few Years: A Panel Data Analysis of Crimes against Women," *Journal of Criminological Research, Policy and Practice* 5, no. 2 (2019): 132–43.

a symbolic gesture. To address this catastrophe, a fundamental shift toward comprehensive, fair, and justice-centred environmental governance is needed, not purely technical improvement.

**Figure 2:** Key Dimensions of Regulatory Failure in Bangladesh's Environmental Governance



**Source:** Adapted by the author based on analysis developed in the current study.

## F. Conclusion

This paper critically scrutinizes the governing shortcomings entrenched in Bangladesh's environmental governance through the analytical framework of green criminology. Environmental harm is nonetheless widespread, little enforced, and mostly accepted despite a clearly defined legal framework. Pollution, ecological degradation, and socio-environmental inequality endure because of deeper political-economic and structural dynamics rather than merely being the product of ineffective institutions or a lack of legislation. Environmental regulations are now mainly ineffectual due to regulatory fragmentation, the selective application of environmental legislation, and long-standing patterns of corruption and regulatory capture.<sup>49</sup>

According to Green Criminology, this situation is a classic example of state-corporate environmental crime in which institutions designed to safeguard

49 Rosencranz, Armin, and Jamwal, "Differentiated Responsibilities", 291.

the environment instead contribute to its deterioration through cooperation with powerful economic entities.<sup>50</sup> While the social and ecological costs are incurred by underprivileged and powerless groups, the “politics of exemption” guarantees that environmental crimes perpetrated by dominant industries are hidden or dismissed as simple administrative oversights.<sup>51</sup> This supports what Lynch and Stretesky later referred to as structural violence, which is the institutionalized, normalized suffering brought on by institutionalized injustice and neglect.<sup>52</sup> The limitations of legal formality in providing environmental justice in Bangladesh are also highlighted in the paper. Due to procedural complexity, institutional timidity, and the inaccessibility of legal remedies for vulnerable communities, judicial interventions continue to be episodic and symbolic.<sup>53</sup> Furthermore, procedural injustice is made worse by the lack of significant community involvement in environmental decision-making processes, which silences and disempowers impacted groups like Indigenous communities, the urban poor, and informal labourers.<sup>54</sup>

This study adds to an expanding corpus of work that reframes environmental harm as a socio-political and criminological issue rather than just a technical or administrative one.<sup>55</sup> A fundamental framework for comprehending the structural production and maintenance of environmental injustice is provided by green criminology, which emphasizes the dynamics of inequality, exclusion, and institutional complicity. The report emphasizes the necessity of a drastic restructuring of environmental governance in Bangladesh—one that is accountable, participatory, and justice-oriented—in order to overcome the current situation. Without addressing the underlying power imbalances and regulatory biases that influence the current environmental outcomes, technical solutions or piecemeal reforms are unlikely to be adequate. Important steps toward a more sustainable and equitable future include mainstreaming ecological justice into national development plans, empowering impacted

50 White, “Environmental harm”, 83.

51 Roy, “Environmental Compliance in Bangladesh’s RMG Sector,” 12.

52 Lynch and Stretesky, “Exploring Green Criminology”, 78.

53 United Nations Development Programme (UNDP), “Strengthening Access to Justice for Environmental Protection in Bangladesh. ”, 17.

54 S. H. Chowdhury, “Public Participation in Environmental Governance: Challenges and Prospects in Bangladesh,” *Asia-Pacific Journal of Environmental Law* 23, no. 1 (2020): 67–89.

55 M. Hall, R. Walters, and T. Wyatt, *Greening Criminology in the 21st Century: Contemporary Debates and Future Directions in the Study of Environmental Harm* (London, 2013).

communities, guaranteeing transparency in enforcement, and bolstering judicial activism.

Fundamentally, environmental degradation in Bangladesh is a justice issue that is intricately linked to institutional power, inequality politics, and selective application of the law. It is not just an environmental or legal problem. Green criminology serves as a reminder that in order to properly comprehend and address environmental harm, we need to consider who gains, who loses, and who stays silent.

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