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ENVIRONMENTAL RACISM AND STRUCTURAL INJUSTICE: A COMPARATIVE STUDY OF LEGAL ACCOUNTABILITY

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ABSTRACT

Environmental racism refers to the disproportionate burden of environmental harm placed on marginalized communities, often structured by caste, race, ethnicity, or indigeneity. Despite growing global awareness of environmental injustice, these patterns remain deeply embedded in legal, political, and economic systems. This study investigates international expressions of environmental racism through case studies from the United States, Canada, and Nigeria with a critical lens examining persistent structural inequities in India's environmental governance. These cases reveal consistent patterns in which marginalized populations are subjected to hazardous industrial activity, inadequate public services, and regulatory neglect. From the siting of polluting industries in the tribal and marginalized regions of India and Canada, to the water crisis in Flint, Michigan, and oil extraction in the Niger Delta, environmental racism manifests through both historical marginalization and contemporary governance failures.

The paper adopts a sociolegal framework to assess the role of domestic and international legal instruments in responding to these injustices. Laws such as Forest Rights Act of India, the Civil Rights Act of the United States, and the United Nations Declaration on the Rights of Indigenous Peoples are examined regarding their scope, implementation, and limitations. While these frameworks articulate important rights and protections, they fall short in practice where enforcement is uneven, participatory mechanisms are weak, and regulatory bodies are vulnerable to political or corporate capture.

Addressing environmental racism requires moving beyond procedural formalities toward a substantive vision of environmental justice. This includes mandating equity within environmental impact assessments, ensuring inclusive justice for affected communities by strengthening governance. The study argues for a transformative legal and institutional approach that prioritizes structural change through a comprehensive framework. Comparative insights underscore the need for legal systems to recognize and provide remedial mechanisms addressing the social and spatial distribution of environmental harm, and to support community-led efforts toward ecological justice.

Key Words: *Environmental Racism, Caste and Environment, Regulatory Injustice, Indigenous Rights, Environmental Justice*

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THEORETICAL AND LEGAL FOUNDATIONS OF ENVIRONMENTAL RACISM

"Environmental justice embraces the principle that all people and communities are entitled to equal protection of environmental and public health laws and regulations."

-Robert D. Bullard (Father of Environmental Justice)

INTRODUCTION

The notion of environmental racism has developed as a significant analytical framework for understanding the unequal distribution of environmental burdens across lines of race, caste, ethnicity, and indigeneity. It extends beyond the mere geographical placement of polluting industries or waste facilities to encompass the broader structural and institutional processes that systematically expose marginalized communities to heightened ecological risks while simultaneously limiting their access to protection and redress. This thought was initially conceptualized in the United States during the 1980s, most notably in relation to the disproportionate exposure of African-American communities to hazardous waste sites. The term has since been broadened to capture global and regional contexts where entrenched social hierarchies intersect with ecological vulnerability.[1] In South Asia, and India specifically, caste functions analogously to race, producing entrenched inequalities that shape exposure to environmental risks.[2]

Environmental justice frameworks advocate for equitable access to clean air, water, and resources for all. Environmental racism on the other hand, highlights how these injustices are patterned systematically along identity-based lines. While environmental justice emphasizes outcomes, environmental racism emphasizes the structures and processes that create unequal outcomes in the first place. Justice must encompass distributive, procedural, and recognitional dimensions;[3] failing to address identity-linked harm reduces environmental law to a procedural exercise without addressing deep-rooted inequities.[4]

A sociolegal approach is necessary to understand the issue at hand. Environmental harm is not only a question of ecological degradation but also a reflection of governance failures, weak enforcement, and selective accountability. Legal institutions, while formally neutral, often reproduce inequalities through selective inaction or capture by corporate and political interests.[5] Thus, it is essential to analyse why legal frameworks such as environmental impact assessments, pollution control statutes, or rights-based protections often fail to safeguard marginalized groups despite their normative commitments.

The domestic and international legal frameworks that attempt to address environmental inequality ought to be examined to understand the persisting inequality in the garb of environmental racism. The Forest Rights Act, 2006[6], and constitutional guarantees articulate a right to equality[7] and a clean environment[8], yet implementation has been uneven. In the United States, the Civil Rights Act[9] underpins environmental justice claims by linking racial discrimination with environmental decision-making. Globally, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the Sustainable Development Goals (SDGs) provide normative guidance but lack binding enforcement mechanisms.[10]

[1] Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Westview Press, Boulder, 1990) at 17 (1st ed.); also pp. 4–5 (3rd ed. 2000).
[2] Paul Mohai & Robin Saha, "Which Came First, People or Pollution? Assessing the Disparate Siting and Post-Siting Demographic Change Hypotheses of Environmental Injustice" 10 Environmental Research Letters 115008 at 6–7 (2015)
[3] Englard, Izhak, Corrective and Distributive Justice, Oxford University Press (2009).
[4] David Schlosberg, Defining Environmental Justice: Theories, Movements, and Nature (Oxford University Press, Oxford, 2007) at 3–6.
[5] Ludvig Beckman, "Democratic Inclusion, Law, and Causes" 21 (3) Ratio Juris 348–364 (2008).
[6] The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, (Act 2 of 2007).
[7] The Constitution of India, art. 14.
[8] The Constitution of India, art. 21.
[9] Civil Rights Act, 1964 (US)
[10] James K. Boyce, The Case for Environmental Justice (Cambridge University Press, Cambridge, 2020) at 2–4.

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ENVIRONMENTAL JUSTICE VS ENVIRONMENTAL RACISM

The conceptual foundations of justice are crucial to understanding environmental racism. Classical and modern theories provide normative benchmarks for evaluating systemic inequalities. Aristotle's distributive theory of justice emphasizes that benefits and burdens should be allocated fairly.[11] However, marginalized groups disproportionately bear burdens such as pollution and waste, without receiving any benefits, an outcome that directly undermines distributive justice.

John Rawls' theory of justice as fairness suggests that behind a "veil of ignorance," no rational actor would design a regulatory system that systematically places toxic industries in poor or marginalized neighbourhoods.[12] However, it is clearly seen that Black communities in the United States, Dalit settlements in India, and Indigenous territories globally are targeted because resistance is weakest.[13] Such patterns reflect the failure of environmental governance to embody Rawlsian fairness.

Amartya Sen's capabilities approach provides that formal rights mean little without the real freedom to exercise them.[14] Marginalized communities often lack the capability to secure environmental protections due to weak enforcement and entrenched hierarchies. Fishing hamlets in Tamil Nadu, for instance, continued to face pollution until litigation compelled regulatory action.[15] Similarly, Dalit settlements in North Chennai endured toxic fly ash dumping, showing how structural inequality erodes the capacity to claim rights.[16]

The concept of environmental racism, first articulated in the United States in the 1980s, captures these inequities.[17] Race, class, gender, and indigeneity intersect to determine who suffers ecological harm.[18] In India, caste plays a parallel role, with Dalit, Adivasi, and working-class communities disproportionately exposed to environmental hazards. Cases like Ennore's fly ash[19], CRZ violations in coastal hamlets[20], and the Bhopal Gas Disaster highlight this structural injustice.[21]

Thus, through Aristotle's distributive justice, Rawls' fairness, and Sen's capabilities, the theoretical foundation reveals that environmental racism is not accidental but structurally embedded. Legal frameworks, while articulating rights, often fail in enforcement, enabling disproportionate harm to persist. This underlines the need for transformative legal responses that prioritize equity, capability, and substantive justice.

LEGAL FRAMEWORK

Legal frameworks across national and international domains provide the normative foundation for addressing environmental racism and related injustices. While their scope appears expansive, their practical implementation is uneven, often limited by institutional weaknesses, political capture, or lack of enforceability.

[11] Aristotle, Nicomachean Ethics, Book V, ch. 3, 1131a–1131b, trans. Terence Irwin (Hackett Publishing, Indianapolis, 1985).
[12] John Rawls, A Theory of Justice (Harvard University Press, Cambridge, 1971).
[13] Robert D. Bullard, Dumping in Dixie: Race, Class, and Environmental Quality (Westview Press, Boulder, 1990).
[14] Amartya Sen, Development as Freedom (Oxford University Press, Oxford, 1999).
[15] Meenava Thanthai K.R. Selvaraj Kumar v. The Director, Ministry of Environment & Ors., O.A. 234 of 2017 (SZ), National Green Tribunal, Judgment dated July 8, 2022.
[16] Meenava Thanthai K.R. Selvaraj Kumar v. The State of Tamil Nadu & Ors., O.A. 8 of 2016 (SZ), National Green Tribunal, Judgment dated Dec. 14, 2020.
[17] Robert D. Bullard, 'Overcoming racism in environmental decision making', Environment: Science and Policy for Sustainable Development 1994, Volume 36, Issue 4, Pg. 10–44.
[18] Paul Mohai & Robin Saha, "Which Came First, People or Pollution? Assessing the Disparate Siting and Post-Siting Demographic Change Hypotheses of Environmental Injustice" 10 *Environmental Research Letters* 115008 (2015).
[19] Meenava Thanthai K.R. Selvaraj Kumar v. The State of Tamil Nadu & Ors., O.A. 8 of 2016 (SZ), National Green Tribunal, Judgment dated Dec. 14, 2020.
[20] Meenava Thanthai K.R. Selvaraj Kumar v. The Director, Ministry of Environment & Ors., O.A. 234 of 2017 (SZ), National Green Tribunal, Judgment dated July 8, 2022.
[21] MC Mehta v. Union of India, AIR 1987 SC 1087; S. Sriramachari, "The Bhopal Gas Tragedy: An Environmental Disaster" 86(7) Current Science 905–920 (2004).

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Environmental racism is not always articulated in racial terms in India, but caste and indigeneity perform an analogous role in determining whose environments are expendable. The Forest Rights Act was meant to correct the historical marginalization of forest-dwelling communities.[22] The legal battles surrounding its application reveal how ecological risks and industrial exploitation are disproportionately concentrated in various regions of marginalized communities. The several localised instances shall further be explored in the next chapter.

It is a well laid principle that the transfer of tribal land from the Scheduled Areas to private mining companies is unconstitutional.[23] It ought to be noted that while this landmark judgment despite not verbatim mentioning the displacement of tribals when mining activities resulting in pollution are undertaken sanctioned by the states as 'racism' per se, the structural reality of the case mirrors the dire state of affairs faced by marginal communities. While this does not necessarily seem discrimination based on the race, caste, community etc; it is merely the tip of the ice berg to what came into the knowledge of the legal sphere. There are several instances where pollution is seen persisting in areas occupied by members of the marginalised communities.

As recently as 2013, the *Vedanta case* offered further clarification on the enduring issue of strategic pollution in regions where dissenting voices are systematically suppressed.[24] Here, the state sought to permit bauxite mining in the Niyamgiri Hills, a site sacred to the Dongria Kondh tribe. The Supreme Court directed that the final decision must rest with the Gram Sabhas of affected villages under the Forest Rights Act.[25] While celebrated as a victory for tribal autonomy, the very need for litigation has revealed a racialized geography of harm, that is, a multinational corporation has chosen an ecologically sensitive area inhabited by the indigenous community for its extractive operations, assuming that resistance would be minimal. Mining proposals of this scale are rarely directed toward upper-caste or urban-majority regions, which will further be corroborated in the upcoming chapter.

The broader pattern extends beyond these two cases. Industrial projects in forested belts disproportionately affect Scheduled Tribes, who constitute only 8.6% of India's population but represent over 40% of those displaced by development projects.[26] An instance in 2019 wherein the Supreme Court issued an eviction order (which was later stayed) against forest dwellers under the Forest Rights Act[27], just underscores how fragile the statutory rights remain.

By contrast, wealthier or politically influential communities rarely face mass dispossession or pollution under the guise of conservation or development. This imbalance reflects clearly that ecological harm is geographically and socially mapped onto communities already marginalized by caste, indigeneity, and poverty.

In the United States, the Civil Rights Act, 1964 has been implemented and while not explicitly an environmental statute, the law has been instrumental in grounding environmental justice claims. Title VI prohibits discrimination by race, colour or national origin.[28] This provision has been used by affected communities to challenge disproportionate siting of hazardous facilities in African-American and minority neighbourhoods.[29] The Environmental Protection Agency's guidance on Title VI complaints has made it possible to argue that environmental

[22] The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, (Act 2 of 2007).
[23] AIR 1997 SC 3297
[24] Orissa Mining Corporation v. Ministry of Environment and Forest, Writ Petition (Civil) No. 180 of 2011.
[25] Orissa Mining Corporation v. Ministry of Environment and Forest, Writ Petition (Civil) No. 180 of 2011. (Para 49)
[26] Walter Fernandes, "Sixty Years of Development and Displacement in India" 45(50) Economic and Political Weekly 3519–3528 (2008).
[27] Wildlife First v. Union of India, Writ Petition (Civil) No. 109/2008
[28] Civil Rights Act, 1964, Title VI (US).
[29] Grey Moran, "EPA Civil Rights Work Stalls Under Trump as Communities Wait for Justice", April 10, 2025, https://sentientmedia.org/epa-civil-rights-stalls-under-trump/.

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decisions resulting in disparate racial impacts can constitute unlawful discrimination.[30]

However, the courts have narrowed the doctrine by requiring proof of intentional discrimination, rather than disparate impact alone.[31] Moreover, administrative enforcement has often been slow, leaving communities exposed for years while cases wind through bureaucratic processes.[32] The Act thus illustrates how civil rights frameworks can be leveraged for environmental protection but also reveals the difficulty of translating anti-discrimination principles into proactive environmental governance.

At the international level, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), 2007 provides a comprehensive articulation of Indigenous rights to land, resources, culture, and free, prior, and informed consent (FPIC).[33] It explicitly recognizes that Indigenous peoples must not be subjected to hazardous activities that threaten their survival, thereby addressing a key dimension of environmental racism.[34] However, as a declaration, UNDRIP is non-binding and relies on state willingness to implement its provisions. Even where endorsed, enforcement remains inconsistent, as extractive projects can often proceed without genuine FPIC. UNDRIP thus serves as a powerful normative tool for advocacy but lacks coercive force in altering state or corporate behaviour.

ENVIRONMENTAL RACISM IN INDIA: REGIONAL PATTERNS AND JUDICIAL INTERVENTIONS

"Poverty is not just a lack of money; it is not having the capability to realize one's full potential as a human being."

- *Amartya Sen (Nobel Prize in Economics)*

Environmental racism in India does not manifest through race in the Western sense, but through caste, class, and indigeneity, which determine whose lands are exploited and whose health is sacrificed in the name of industrial development. The siting of polluting industries, extractive projects, and hazardous facilities in marginalized regions reveals a persistent structural bias. Dalit fishing hamlets, tribal villages, and working-class neighbourhoods are treated as expendable zones of sacrifice. This chapter examines prominent regional cases that illustrate this pattern of structural environmental injustice.

The Singrauli region, straddling Madhya Pradesh and Uttar Pradesh, has emerged as a thermal power and coal mining hub, yet tribal groups such as the Baigas face chronic mercury contamination, fly ash breaches, and unsafe water.[35] Despite National Green Tribunal interventions, enforcement of safeguards remains weak, exposing how marginalized communities bear disproportionate risks.[36] Similarly, Korba district in Chhattisgarh, declared a critically polluted area, continues to suffer from coal-related air and fly ash pollution that disproportionately impacts Scheduled Tribe and Scheduled Caste populations living adjacent to industrial belts.[37]

Ennore in Tamil Nadu highlights how coastal Dalit and fishing communities endure years of toxic fly ash dumping from power plants.[38] Regulatory inaction and violations of environmental norms have allowed unchecked damage to wetlands, health, and livelihoods.[39] The Baghjan oil blowout in Assam further

[30] Lylla Younes, "A new salvo in the fight to protect the 'holy grail' of environmental justice", September 20, 2024, https://grist.org/justice/fight-to-protect-title-vi-epa-holy-grail-environmental-justice/.
[31] Alexander v. Sandoval, 532 U.S. 275 (2001).
[32] U.S. Commission on Civil Rights, Environmental Justice: Examining the Environmental Protection Agency's Compliance and Enforcement of Title VI and Executive Order 12,898 (2016).
[33] United Nations Declaration on the Rights of Indigenous Peoples, GA Res. 61/295, UN Doc. A/RES/61/295 (Sept. 13, 2007). Full text available at: https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html
[34] Art. 29(2), UNDRIP
[35] Pankaj Kumar Mishra v. Union of India, O.A. No. 162/2015
[36] Pankaj Kumar Mishra v. Union of India, O.A. No. 862/2022
[37] Dr. Umakant Shrivastava, Dr. Deepak Kumar Soni, Prof. Manish Mishra, Environmental Pollution in Korba Region of Chhattisgarh due to Fly Ash Generation and it's remedies with Technological Evolution, International Journal for Multidisciplinary Research (IJFMR), Volume 6, Issue 3, May-June 2024.
[38] SV Krishna Chaitanya, "5.7 million metric tonnes of fly ash in Ennore backwaters, flood plains", New Indian Express, April 11th 2022, https://www.newindianexpress.com/cities/chennai/2022/Apr/11/57-million-metric-tonnes-of-fly-ash-in-ennore-backwaters-flood-plains-2440528.html
[39] Meenava Thanthai K.R. Selvaraj Kumar v. The State of Tamil Nadu & Ors., O.A. 8 of 2016 (SZ), National Green Tribunal, Judgment dated Dec. 14, 2020.

exemplifies environmental racism, where indigenous communities near Dibru-Saikhowa National Park were displaced and exposed to toxic emissions, while their concerns during project approvals were ignored.[40]

The Sterlite Copper Plant in Thoothukudi, Tamil Nadu stands as another emblematic instance wherein decades of protests by local working-class and marginalized communities against water contamination and health hazards culminated in 2018 with police firing that killed 13 demonstrators.[41] While the plant has been ordered shut, legal appeals continue, reflecting the imbalance of power between corporate entities and vulnerable populations.

NGT AND PATTERNS OF ENVIRONMENTAL RACISM

The jurisprudence of the National Green Tribunal (NGT) demonstrates that environmental burdens in India are disproportionately borne by marginalized communities. Although the Tribunal itself does not employ the terminology of "environmental racism," several cases nonetheless reveal recurring patterns of structural injustice, wherein violations are overlooked or inadequately addressed until judicial intervention is sought, and the communities most affected are those already marked by economic or social disadvantage.

In *O.A. 234/2017*[42], the petitioner represented a fishing community welfare association challenging the activities of a seafood export unit that had commenced operations within the Coastal Regulation Zone (CRZ) without clearance. Untreated effluents were discharged into the Buckingham Canal and adjoining coastal waters, degrading marine biodiversity and undermining the livelihoods of fishing hamlets in Thiruvallur District. The Tribunal's findings confirmed violations of CRZ norms and imposed an environmental compensation of ₹12 lakhs. Although the judgment recognized the importance of protecting both ecology and livelihood, regulatory enforcement had been conspicuously absent until the matter was brought before the NGT. Here, the community's vulnerability was not explicitly linked to caste but to socio-economic dependence on fragile marine resources, a hallmark of environmental racism wherein communities with little political voice bear disproportionate environmental risks.

O.A. 8/2016[43] presented a more direct intersection of caste and environmental harm. The case concerned the North Chennai Thermal Power Station, which for years had been discharging fly ash into the Kosasthalaiyar River, Ennore Creek, and surrounding wetlands. The petitioner highlighted that Kuruvimedu, an entirely Dalit settlement, had borne the brunt of this pollution, with fishing grounds and salt pans destroyed. The Tribunal's order explicitly acknowledged the Dalit identity of the settlement, an unusual but significant recognition of how social identity shaped vulnerability. A Joint Committee confirmed repeated leakages and encroachments, and the Tribunal directed removal of the ash, restoration of wetlands, and monitoring compliance.

These cases illustrate a patterned geography of neglect. Industries are sited or allowed to operate unlawfully in areas where resistance is least likely, whether coastal fishing hamlets or Dalit habitations. Regulatory bodies displayed inertia in both cases, intervening only after prolonged damage and community mobilization. Remedies, though eventually granted, came after livelihoods had already been decimated. The path of least resistance[44] is followed in these cases where environmental burdens are imposed on marginalized groups

[40] Anupam Chakravartty, "NGT committee renders entire Baghjan oil field illegal", November 3rd 2020, https://www.downtoearth.org.in/environment/ngt-committee-renders-entire-baghjan-oil-field-illegal-74077

[41] Shrishti Chauhan, "Sterlite Copper Case (2018)", International Journal of Advances in Engineering and Management (IJAEM) Volume 4, Issue 7 July 2022, pp: 1440-1443.

[42] Meenava Thanthai K.R. Selvaraj Kumar v. The State of Tamil Nadu & Ors., O.A. 8 of 2016 (SZ), National Green Tribunal, Judgment dated Dec. 14, 2020.

[43] Meenava Thanthai K.R. Selvaraj Kumar v. The Director, Ministry of Environment & Ors., O.A. 234 of 2017 (SZ), National Green Tribunal, Judgment dated July 8, 2022.

[44] Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Westview Press, Boulder, 1990) at 17 (1st ed.); also pp. 4–5 (3rd ed. 2000).

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because they lack the political and institutional power to prevent them.

The Singrauli–Sonbhadra industrial belt, straddling Madhya Pradesh and Uttar Pradesh, is often described as the "energy capital of India" due to its concentration of thermal power plants and coal mines.[45] Yet, beneath this narrative of industrial progress and development, there lies a deeply unequal distribution of environmental burdens. For decades, tribal and marginalized communities in this region have borne the brunt of unchecked industrial activity. The people are exposed to mercury contamination, coal dust, and fly ash, while regulatory interventions have remained weak, delayed, or ineffective.[46]

In *O.A. 162/2015*[47] serious allegations of mercury contamination, improper fly ash disposal, and widespread pollution of the Rihand Reservoir were raised. Scientific studies had already documented elevated levels of mercury in the blood of local residents, posing severe risks of neurological and developmental disorders.

The applicant invoked violations of the right to clean environment[48] and health[49] under Art. 21 of the Constitution[50] and prior NGT directions in *Ashwani Kumar Dubey v. Union of India*[51] and *Jagat Narain Vishwakarma v. Union of India.*[52] However, the Tribunal dismissed the case on procedural grounds, citing limitation and misjoinder of causes of action.[53] While acknowledging Singrauli as a "critically polluted area," the Tribunal avoided substantive adjudication, redirecting the applicant to pending cases. This outcome illustrates how rigid proceduralism can obstruct justice in contexts where environmental harm disproportionately affects marginalized communities.

The NGT revisited this issue in *O.A. 862/2022*[54], focusing on violations of the Central Pollution Control Boards's guidelines released in 2019. on fly ash transportation. Fly ash, carried in open trucks, caused severe dust pollution in roads and settlements, aggravating respiratory ailments among local populations. A Joint Committee confirmed the violations, recommending closed trucks, moisture treatment of ash, and CCTV-based monitoring. The NGT adopted these recommendations but again stopped short of imposing strict penalties or structural reforms. The persistence of the same violations over nearly a decade reflects regulatory inertia and the Tribunal's limited enforcement capacity.

The Singrauli–Sonbhadra story is not an isolated regulatory failure but a structural pattern of environmental racism. Communities inhabiting this industrial corridor are largely Adivasis, Dalits, and rural poor who have historically been treated as expendable in the pursuit of energy security.[55] It ought to be reiterated that Adivasis, though only 8.6% of India's population, account for over 40% of those displaced by development projects.[56] Reports by Non-government Organizations such as Down to Earth[57] and Greenpeace India[58] further document how Singrauli's ecological costs such as respiratory diseases, contaminated water, loss of agricultural productivity etc., are overwhelmingly borne by marginalized groups with little political leverage.

The repeated litigation over Singrauli highlights three structural features of environmental racism in India. First, regulatory capture and weak state enforcement allow industries to

[45] https://sonbhadra.nic.in/about-district/
[46] Dr. Sudhir Yadav, Sushma Upadhyay, Dr. SK Tripathi, Dr. Rajiv Prakash. Heavy metal pollution and health hazards around Singrauli region India. International Journal of Applied Research, Vol. 3, Issue 5, Pg. 05-08, 2017.
[47] Pankaj Kumar Mishra v. Union of India, O.A. No. 162/2015
[48] Ashok v. Union of India, (1997) 5 SCC 10
[49] State of Punjab v. Mohinder Singh Chawla, (1997) 2 SCC 83
[50] The Constitution of India, art. 21.
[51] Ashwani Kumar Dubey v. Union of India, O.A. No. 276/2013
[52] Jagat Narain Vishwakarma v. Union of India, O.A. No. 20/2014
[53] The National Green Tribunal Act, 2010, (Act 19 of 2010), s. 14(3).
[54] Pankaj Kumar Mishra v. Union of India, O.A. No. 862/2022.
[55] Shreyash Dwivedi, Roosen Kumar, and Anamika Sharma, "Challenges of Development-Induced Hazards on Tribal Livelihood in Singrauli, Madhya Pradesh: An Empirical Study", National Institute of Disaster Management, Disaster & Development, Vol. 13, Issue 01, January to June 2024, Pg. 141-152, https://nidm.gov.in/journal/PDF/Journal/NIDMJOURNAL_JanJun2024/NIDMJOURNAL_JanJun20248.pdf
[56] Walter Fernandes, "Sixty Years of Development and Displacement in India" 45(50) Economic and Political Weekly 3519–3528 (2008).
[57] https://www.downtoearth.org.in/environment/indias-minamata-39334
[58] https://www.greenpeace.org/static/planet4-india-stateless/2018/06/Singrauli-The-Coal-Curse-Fact-finding-report-Singrauli-Report.pdf

externalize environmental costs onto vulnerable populations. Second, procedural rigidities, such as limitation and misjoinder rules, displace substantive concerns, effectively silencing communities who lack resources for continuous legal battles. Third, remedies, when granted, are incremental and reactive, offering compliance-based solutions without addressing the systemic marginalization that makes regions like Singrauli permanent "sacrifice-zones."

These regional instances demonstrate that environmental degradation is not randomly distributed but systematically concentrated in spaces inhabited by marginalized communities. Whether through unchecked industrial siting, weak regulatory enforcement, or judicial delays, Dalit fishing hamlets, Adivasi villages, and working-class neighbourhoods are repeatedly treated as sacrifice-zones. The NGT while offering partial relief, often intervenes only after significant harm has occurred, reflecting a reactive rather than preventive orientation. This pattern resonates with the global discourse on environmental racism. There exist structural hierarchies which determine who is exposed to ecological risks and who is shielded from them. By foregrounding caste, indigeneity, and socio-economic vulnerability, these regional instances in India underscore that environmental racism is not a foreign import but an entrenched reality in the country's developmental and regulatory landscape. Recognizing these dynamics is essential to rethinking environmental governance in ways that prioritize equity and dismantle the systemic privileging of some communities over others.

INTERNATIONAL PERSPECTIVES: COMPARATIVE CASE STUDIES FROM THE UNITED STATES, CANADA, AND NIGERIA

"The environment is man's first right. Without a safe environment, man cannot exist to claim other rights, be they political, social, or economic."

- *Ken Saro-Wiwa (Niger Delta Activist)*

Environmental racism is a global phenomenon, manifesting in different contexts through the disproportionate siting of polluting industries, unequal access to clean resources, and systematic neglect of marginalized communities. Although the specific markers of marginality vary, such as race in the United States, indigeneity and ethnicity in Canada, and resource-dependent minorities in Nigeria, the structural logic remains consistent, similar to India. The vulnerable populations bear the highest environmental burdens while powerful actors benefit from development and resource extraction. By examining three emblematic cases, the Flint Water Crisis in the United States, environmental racism in Nova Scotia and other parts of Canada, and the Niger Delta crisis in Nigeria, this chapter situates environmental racism in comparative perspective, highlighting shared patterns of structural injustice and governance failure.

UNITED STATES: THE FLINT WATER CRISIS

The Flint Water Crisis is one of the most well-documented instances of environmental racism in the United States. In April 2014, the city of Flint, Michigan, shifted its water source from treated Detroit Water and Sewerage Department water to the Flint River as a cost-saving measure. Almost immediately, residents who were predominantly African American with low-income reported foul-smelling, discoloured, and contaminated water. Scientific testing later confirmed dangerous levels of lead contamination, linked to corrosion from the river water interacting with old lead pipes.[59]

The crisis reflected multiple structural failures. First, regulatory bodies failed to enforce basic standards of the Safe Drinking Water Act and the Lead and Copper Rule, ignoring repeated warnings from scientists and the community.[60] Second, decision-making was driven by austerity politics, where financial considerations trumped public health.[61] The Michigan Civil

[59] Michigan Civil Rights Commission, The Flint Water Crisis: Systemic Racism Through the Lens of Flint (2017).
[60] U.S. Environmental Protection Agency, Office of Inspector General Report on EPA's Management Weaknesses Delayed Response to Flint Water Crisis (2018)
[61] Anna Clark, *The Poisoned City: Flint's Water and the American Urban Tragedy* (Metropolitan Books, New York, 2018).

Rights Commission concluded that "systemic racism" was a root cause of the disaster, as similar neglect would not likely have occurred in a wealthier or predominantly white community.[62]

The impacts were devastating, resulting in thousands of children who were exposed to irreversible neurological harm[63], public trust in government eroded, and residents endured years of litigation and activism for redress.[64] Flint illustrates the 'path of least resistance' principle wherein hazardous decisions were imposed on a politically and economically marginalized population least able to resist them.[65] While civil rights provisions such as Title VI of the Civil Rights Act theoretically protect against such discriminatory outcomes, judicial constraints[66] and slow administrative enforcement limited their utility. Flint therefore exemplifies how environmental racism persists despite a formal rights framework, rooted in systemic inequities that shape governance responses.[67]

CANADA: AFRICVILLE AND INDIGENOUS COMMUNITIES

In Canada, environmental racism has historically affected both Black and Indigenous communities, often through the siting of toxic facilities in marginalized neighbourhoods.[68] The case of Africville, a Black settlement in Nova Scotia, is particularly emblematic. Established in the 1800s by freed Black Loyalists and their descendants[69], Africville was systematically deprived of basic services such as running water, sewage, and paved roads, even as waste disposal sites, slaughterhouses, and an infectious disease hospital were located nearby.[70] In the 1960s, Africville was razed under the guise of urban renewal, and its residents were forcibly relocated without adequate compensation.[71] Scholars and community activists have since identified Africville as a clear case of environmental racism, where municipal neglect and targeted siting of hazards reinforced racial marginalization.[72]

Indigenous communities across Canada have faced disproportionate exposure to pollution from extractive projects in the contemporary world.[73] In Ontario and Alberta, mercury contamination and oil sands development have disproportionately impacted Indigenous peoples' health and subsistence practices.[74] Reports note that despite Canada's international human rights commitments, including endorsement of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), extractive projects often proceed without genuine Free, Prior, and Informed Consent (FPIC).[75] The Environmental Racism Prevention Act sought to mandate government action to address the issue, though its passage remains uncertain.[76]

Canada demonstrates how colonial legacies and contemporary economic interests converge to marginalize racialized groups. The Africville case highlights historical systemic racism, while ongoing Indigenous struggles reflect the continued failure of environmental

[62] Michigan Civil Rights Commission, The Flint Water Crisis: Systemic Racism Through the Lens of Flint (2017).
[63] Mona Hanna-Attisha, et al., "Elevated Blood Lead Levels in Children Associated With the Flint Drinking Water Crisis: A Spatial Analysis of Risk and Public Health Response" 106(2) American Journal of Public Health 283–290 (2016)
[64] Anna Clark, The Poisoned City: Flint's Water and the American Urban Tragedy (Metropolitan Books, New York, 2018).
[65] Robert D. Bullard, Dumping in Dixie: Race, Class, and Environmental Quality (Westview Press, Boulder, 1990).
[66] Alexander v. Sandoval, 532 U.S. 275 (2001).
[67] U.S. Commission on Civil Rights, *Environmental Justice: Examining the Environmental Protection Agency's Compliance and Enforcement of Title VI and Executive Order 12,898* (2016).
[68] Ingrid R.G. Waldron, There's Something in the Water: Environmental Racism in Indigenous & Black Communities (Fernwood Publishing, Halifax, 2018).
[69] Donald H. Clairmont & Dennis W. Magill, Africville: The Life and Death of a Canadian Black Community (Canadian Scholars' Press, Toronto, 1999).
[70] Mathew McRae, The Story of Africville, April 6th 2023, https://humanrights.ca/story/story-africville
[71] Jennifer Nelson, Razing Africville: A Geography of Racism (University of Toronto Press, Toronto, 2008).
[72] Ingrid R.G. Waldron, There's Something in the Water: Environmental Racism in Indigenous & Black Communities (Fernwood Publishing, Halifax, 2018)
[73] Winona LaDuke, All Our Relations: Native Struggles for Land and Life (South End Press, Cambridge, MA, 1999)
[74] Anastasia M. Shkilnyk, A Poison Stronger than Love: The Destruction of an Ojibwa Community (Yale University Press, New Haven, 1985); Nancy Macdonald, "Canada's First Nations Are Running Out of Clean Water," Maclean's (2015).
[75] United Nations General Assembly, United Nations Declaration on the Rights of Indigenous Peoples, G.A. Res. 61/295, U.N. Doc. A/RES/61/295.
[76] National Strategy Respecting Environmental Racism and Environmental Justice Act, 2024 (Canada)

governance to protect vulnerable communities from disproportionate harms.

NIGERIA: THE NIGER DELTA CRISIS

The Niger Delta represents one of the starkest examples of environmental racism in the Global South. Since the discovery of oil in the 1950s, the region has experienced massive ecological devastation due to oil spills, gas flaring, and unregulated extraction[77] by multinational corporations in collaboration with state actors.[78] The Ogoni and other minority ethnic communities have disproportionately borne the brunt of this degradation, losing farmland, fisheries, and clean water.[79]

The case of Ken Saro-Wiwa and the Movement for the Survival of the Ogoni People (MOSOP) brought international attention to the issue in the 1990s, highlighting how corporate actors like Shell operated with impunity while local communities faced violent repression for protesting environmental destruction.[80] Despite periodic court rulings, including settlements abroad, meaningful remediation in the Delta remains elusive.[81] Reports estimate that oil spills in the Niger Delta exceed those of the Exxon Valdez disaster every year, yet compensation and cleanup have been minimal.[82]

From a structural perspective, the Niger Delta exemplifies environmental racism in two ways. First, the Nigerian state has prioritized oil revenues over the health and survival of minority ethnic groups in the Delta. Second, multinational corporations exploit the region's political marginality and weak governance to externalize environmental costs. Much like Flint or Africville, the Niger Delta illustrates how environmental hazards are concentrated where political resistance is weakest and communities are viewed as expendable.

The comparative analysis of the United States, Canada, and Nigeria reveals common threads in the operation of environmental racism. In Flint, systemic racism and austerity policies combined to expose a predominantly Black community to toxic water. In Canada, both historical cases like Africville and contemporary Indigenous struggles demonstrate how marginalized racial and ethnic groups are made to bear environmental burdens while being denied equal protection. In the Niger Delta, corporate exploitation and state complicity have entrenched decades of ecological destruction in minority ethnic territories.

With reference to this context, the pattern is strikingly similar as environmental harm is not randomly distributed but mapped onto vulnerable communities defined by race, indigeneity, or socio-economic status. Furthermore, legal frameworks exist ranging from civil rights law in the USA to UNDRIP in Canada and Nigeria, but enforcement remains inconsistent, selective, or captured by powerful interests. These cases collectively illustrate that environmental racism is a global structural problem, requiring transformative approaches that move beyond procedural compliance toward substantive equity and ecological justice.

CONCLUSION AND PATHWAYS TOWARD TRANSFORMATIVE LEGAL ACCOUNTABILITY

"Injustice anywhere is a threat to justice everywhere."

- *Martin Luther King Jr. (Civil Rights Activist)*

Environmental racism is not an incidental or isolated outcome but a structural feature of governance, development, and law. Across India, the United States, Canada, and Nigeria, environmental burdens are consistently mapped onto vulnerable communities defined

[77] Ike Okonta & Oronto Douglas, Where Vultures Feast: Shell, Human Rights, and Oil in the Niger Delta (Verso, London, 2001)
[78] Human Rights Watch, The Price of Oil: Corporate Responsibility and Human Rights Violations in Nigeria's Oil Producing Communities (New York, 1999)
[79] United Nations Environment Programme, Environmental Assessment of Ogoniland (UNEP, Nairobi, 2011).
[80] Ike Okonta & Oronto Douglas, Where Vultures Feast: Shell, Human Rights, and Oil in the Niger Delta (Verso, London, 2001)
[81] Amnesty International, Nigeria: Petroleum, Pollution and Poverty in the Niger Delta (Amnesty International, London, 2009)
[82] Amnesty International & Centre for Environment, Human Rights and Development (CEHRD), The True "Tragedy": Delays and Failures in Tackling Oil Spills in the Niger Delta (Amnesty International, London, 2011).

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by caste, race, indigeneity, or socio-economic status. These communities are made to inhabit "sacrifice-zones," where toxic exposure, regulatory neglect, and corporate exploitation converge, while privileged groups remain insulated from such risks. This pattern reveals that environmental racism is neither accidental nor temporary; it is embedded in systemic hierarchies of power and reproduced by institutional frameworks that claim neutrality but, in practice, perpetuate inequality.[83]

STRUCTURAL INJUSTICE AS A GLOBAL PATTERN

The cases examined in India are ranging from the Ennore fly ash crisis affecting Dalit settlements[84], to the CRZ violations impacting fisherfolk in Chennai[85], to industrial disasters such as Bhopal Gas Tragedy[86] and the Singrauli-Sonbhadra contamination[87]. These instances highlight how environmental harms are disproportionately borne by marginalized communities. The NGT has on occasion, recognized these inequalities, yet remedies are often reactive, limited to compensation or compliance orders issued only after prolonged litigation. Preventive regulation, meaningful community participation, and strict enforcement remain absent, reflecting a systemic bias in which marginalized groups shoulder ecological risks without the institutional power to resist them.

The international comparisons reveal similar patterns of structural injustice with marginalised communities in the forefront. In Flint, Michigan, a predominantly Black city was subjected to cost-saving decisions that poisoned its drinking water despite repeated warnings.[88] In Canada, the history of Africville[89] and the ongoing struggles of Indigenous communities exposed to toxic industries and extractive projects[90] underscore how racialized neglect is embedded in governance. In the Niger Delta, multinational corporations operating with state complicity have produced decades of ecological devastation, disproportionately impacting the Ogoni and other minority ethnic groups.[91] These cases confirm that environmental racism is not confined to any one geography and it is a transnational phenomenon rooted in structural injustice.

THE LIMITS OF LEGAL FRAMEWORK

Through the various instances highlighted through the course of this paper, it is evident that while statutes and international instruments articulate rights and protections, they frequently fail in practice. The Forest Rights Act of India articulates indigenous rights to land but has been undermined by weak enforcement and large-scale displacement.[92] The Civil Rights Act in the United States prohibits discrimination in federally funded programs, yet judicial rulings have narrowed its utility for communities facing disparate impact.[93] International frameworks like the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) affirm FPIC and protection from hazardous activities, but they remain non-binding and dependent on state willingness.[94] The cumulative effect is that legal systems become instruments of symbolic compliance rather than engines of structural change.

TRANSFORMATIVE LEGAL ACCOUNTABILITY: NEED OF THE HOUR

A comparative analysis of the case studies across India, USA, Canada and Nigeria indicate

[83] Robert D. Bullard, Dumping in Dixie: Race, Class, and Environmental Quality (Westview Press, Boulder, 1990).
[84] Meenava Thanthai K.R. Selvaraj Kumar v. Ministry of Environment, Forest and Climate Change, O.A. No. 234/2017
[85] Meenava Thanthai K.R. Selvaraj Kumar v. The State of Tamil Nadu & Ors., O.A. 8 of 2016 (SZ), National Green Tribunal, Judgment dated Dec. 14, 2020.
[86] MC Mehta v. Union of India, AIR 1987 SC 1087; S. Sriramachari, "The Bhopal Gas Tragedy: An Environmental Disaster" 86(7) Current Science 905–920 (2004).
[87] Pankaj Kumar Mishra v. Union of India, O.A. No. 162/2015; Pankaj Kumar Mishra v. Union of India, O.A. No. 862/2022
[88] Michigan Civil Rights Commission, The Flint Water Crisis: Systemic Racism Through the Lens of Flint (2017).
[89] Donald H. Clairmont & Dennis W. Magill, Africville: The Life and Death of a Canadian Black Community (Canadian Scholars' Press, Toronto, 1999).
[90] Anastasia M. Shkilnyk, A Poison Stronger than Love: The Destruction of an Ojibwa Community (Yale University Press, New Haven, 1985).
[91] United Nations Environment Programme, Environmental Assessment of Ogoniland (UNEP, Nairobi, 2011).
[92] Orissa Mining Corporation v. Ministry of Environment and Forest, Writ Petition (Civil) No. 180 of 2011.
[93] Alexander v. Sandoval, 532 U.S. 275 (2001).
[94] United Nations General Assembly, United Nations Declaration on the Rights of Indigenous Peoples, G.A. Res. 61/295, U.N. Doc. A/RES/61/295 (Sept. 13, 2007).

the need for a transformative approach that prioritises structural equity over procedural formality.

Firstly, distributive equity must be embedded into environmental decision-making. Aristotle's distributive justice highlights that burdens must not fall disproportionately on the least advantaged.[95] Environmental impact assessments should therefore incorporate equity audits to evaluate how risks are mapped onto caste, race, or indigeneity.

Secondly, participatory justice must move beyond tokenism toward genuine empowerment. Rawls' principle of fairness suggests no rational actor would consent to a regulatory system that places hazards in marginalized neighbourhoods.[96] Embedding FPIC in domestic law, and strengthening Gram Sabhas in India, would ensure that marginalized voices decisively shape development outcomes.

Thirdly, accountability mechanisms must be strengthened to resist regulatory capture. Sen's capabilities approach emphasizes that formal rights mean little without the substantive capacity to realize them.[97] Independent monitoring bodies, citizen-led audits, and preventive interventions by tribunals are necessary to expand community capabilities to secure environmental protections.

While the specific tags of marginalization are different such as race in the United States, caste and indigeneity in India, indigeneity in Canada, ethnicity in Nigeria, it ought to be noted that the structural logic of environmental racism is consistent. The idea of 'path of least resistance' by Bullard resonates globally as hazards are located where communities have the least political leverage.[98] Recognizing this consistency underscores the potential for transnational solidarity. From indigenous resistance in Canada to the Movement for the Survival of Ogoni People in Nigeria and grassroots mobilizations in India, communities share a common demand, that the right to a healthy environment not depend on social identity or economic status.

Addressing environmental racism requires moving beyond symbolic protections into the realm of substantive structural change. Laws must not only declare rights but actively dismantle the hierarchies that expose marginalized communities to disproportionate harm. A transformative vision of environmental governance would integrate distributive, participatory, and restorative justice at its core. Only by embedding equity into the very architecture of law and institutions can societies confront the reality that some populations have long been treated as expendable in the pursuit of development. Recognizing, remedying, and preventing this structural injustice is the essential pathway toward ecological justice.

[95] Aristotle, Nicomachean Ethics, Book V, ch. 3, 1131a–1131b, trans. Terence Irwin (Hackett Publishing, Indianapolis, 1985).
[96] John Rawls, A Theory of Justice (Harvard University Press, Cambridge, 1971).
[97] Amartya Sen, Development as Freedom (Oxford University Press, Oxford, 1999).
[98] Robert D. Bullard, *Dumping in Dixie: Race, Class, and Environmental Quality* (Westview Press, Boulder, 1990) at 17 (1st ed.); also pp. 4–5 (3rd ed. 2000).



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