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# From Sacred Groves to Green Courts: Reimagining Environmental Law and Justice in India

**Prof. (Dr.) Namrata Arora**, **Ritika Kukreja**

VSLLS, Vivekananda Institute of Professional Studies -TC

PhD Research Scholar, School of Law, Maharaja Agrasen University, Solan, HimachalPradesh

**Abstract**

India's relationship with nature goes beyond administrative functions because it involves ethical considerations and cultural elements and fundamental political aspects. The path of India's environmental governance system shows its progress from the ecological awareness found in ancient texts to the establishment of dedicated organizations such as the National Green Tribunal (NGT) which I will demonstrate throughout this paper. The subsequent sections of the text show how India has developed its environmental protection system by evolving from basic traditional conservation methods to a comprehensive legal framework that addresses the increasing challenges brought on by industrial development and urban growth and climate change impacts.

The study analyzes the main environmental laws through their structural framework which includes the Environment Protection Act 1986 and the Water and Air Acts and the Forest Conservation Act and the constitutional framework established by Articles 48-A and 51-A(g) of the Constitution. The judiciary plays an active role through Public Interest Litigation (PIL) cases and major judicial decisions which include M.C. Mehta's legal cases that define the 'right to life' as encompassing the entitlement to a clean environment.

The paper uses Central Pollution Control Board (CPCB) data NGT annual reports Forest Survey of India (FSI) data and the MoEFCC environmental clearance portal to create empirical proof of a governance paradox which remains difficult to understand because between 2010 and 2023 NGT ecological litigation increased by more than 290% while air quality in India's major cities stayed in decline and project approval rates exceeded 90% during most years and forest cover increase was mostly countered by forest loss in vital ecologically sensitive territories. The conclusion I reach cautiously but with some conviction is that India's environmental governance system does not have enough resources because its fundamental structure exists to gain legitimacy instead of protecting environmental resources although the evidence for this claim exists with institutional biases which the subsequent analysis uses to explain.

## I. Introduction

*Environmental clearances are hardly dismissed in a flat way. The conditions imposed are sometimes strict ones yet there is practically no monitoring of compliance once permission to be given. The tribunal can command, the question is always whether some one is observing whether the order is obeyed.*

*Practitioner Environmental law, Delhi (as cited in Kohli and Menon, 2016, p. 114)*

The sacred groves of India, devrai in Maharashtra, orans in Rajasthan, and kavu in Kerala are monuments of a lost ecological ethic, which still survives in a living form. Thousands of years ago these conserved forest areas were not only conserved on legal mandate but rather by religious respect, custom and community care. They were a world view where nature was not something to be exploited but being sacred and something to be preserved (Gadgil and Guha, 1992). It is not necessary to romanticise these arrangements or there is a strong danger of doing so especially when they are invoked in order to draw arguments about the contemporary governance in order to acknowledge that this indigenous conservation ethic, inherent in a wide range of cultural and religious traditions throughout the subcontinent, ensured a biodiversity and ecological balance well before the emergence of modern environmental law, and which without the institutional apparatus which we now know as essential.

The path of environmental governance in India has developed through various stages, and its process toward legal establishment has not resulted in improved practices from previous methods. The commercial extraction-based colonial forest policies led to the destruction of indigenous conservation practices, which resulted in the loss of traditional rights for forest-dependent communities (Guha, 1989).

The post-independence era brought its own complications: rapid industrialisation, urban expansion, Green Revolution agriculture, and large-scale infrastructure projects that prioritised economic growth over ecological sustainability, not always cynically but often without adequate reckoning with the costs borne by those least able to bear them. Understanding how we arrived at the current situation requires sitting with that history rather than merely noting it.

The argument developed here is not that India's environmental law is illusory; it is not but that the legal system has been established through multiple methods which develop procedural details instead of enforcing actual laws. The gap between what the law requires and what governance actually delivers is wide enough and sufficiently consistent across decades and across governments of different political persuasions to constitute a distinct political problem rather than merely an administrative one. The study investigates this tension through its historical and doctrinal and institutional and empirical aspects while I attempt to avoid solving it through perfect resolution.

## II. Methodological Reflections

This paper adopts a mixed-method research design integrating doctrinal legal analysis, historical-comparative scholarship, and quantitative empirical inquiry. The dimension examines primary sources, constitutional provisions, central and state legislation, judicial decisions, and NGT orders, principally to map the architecture of the legal regime rather than adjudicate interpretive disputes internal to it. The historical-comparative dimension draws on foundational works in Indian environmental history, above all Gadgil and Guha, to situate legal developments within longer trajectories of ecological change and colonial disruption that law alone cannot resolve.

The empirical analysis draws on five categories of secondary data:

1. CPCB annual reports and real-time AQI datasets (2010–2023)
2. NGT annual reports and case-disposal statistics (2011–2023)
3. FSI State of Forest Reports (2001–2023)
4. MoEFCC Environmental Clearance data (2007–2023)
5. Global Burden of Disease Study data on pollution-attributable mortality (2010–2019).

A content analysis of 120 representative NGT orders issued between 2015 and 2023sampled across issue type, regional bench, and disposal statusfurther anchors the institutional analysis.

## III. Historical and Cultural Ecology: From Sacred Groves to Colonial Disruption

### 3.1 Traditional Ecological Consciousness

Indian environmental ethics have existed since before written laws began to exist. The statement needs careful handling because it resembles a romanticism preface. The research results obtained by Gadgil and Mukerjee through their fieldwork and textual analysis work which they conducted during several decades show actual conservation methods which exist within social systems and religious restrictions and caste-based work patterns and village council power which enables resource management without government assistance. Ancient texts (Vedas, Upanishads, Buddhist Jatakas, and Jain scriptures) articulated sophisticated understandings of ecological interdependence in the particular sense of being actionable rather than merely philosophical. The question about whether practice followed the text requirements remains unaddressed.

The Sacred groves and forest patches which people protected as holy sites for deities and spirits functioned as natural biodiversity reserves because they preserved native plant species and provided ecological corridors through agricultural areas (Gadgil & Vartak, 1975). A nationwide survey conducted by the Ministry of

Environment estimated that approximately 14,000 sacred groves still survive across India which cover 33,000 hectares and exist mainly in Kerala Maharashtra Himachal Pradesh and Meghalaya.

### 3.2 Colonial Disruption and the Eclipse of Indigenous Conservation

The British colonial rule brought ecological disruption to India because it interfered with the natural ecological systems which existed before the British colonization. The Indian Forest Act of 1865 marks the beginning point which the law established to formalize the process of displacement from native lands. The changes to colonial forest policy which occurred in 1878 and 1927 did not improve indigenous conservation practices but instead eliminated them. The state reclaimed forest areas as its own main based on their economic worth which resulted in three different categories: Reserved Forests for prime timber, Protected Forests for less valuable species, and Village Forests as a residual category whose name perhaps inadvertently acknowledged what it had displaced (Guha, 1989).

By independence in 1947, India had inherited a governance system designed for extraction rather than conservation. What becomes apparent when tracing the subsequent legislative history is that the legislative enthusiasm of the 1970s and 1980s did not simply overcome this inheritance. In significant respects, I would argue, it was reproduced.The extent of extraction at this stage is worth stopping. It is approximated that about 200 million cubic feet of timber in the Indian forests were extracted by British colonial activities every year around the period of 1880 to 1947 towards the railway sleepers, shipbuilding and export (Gadgil and Guha, 1992). This number is subject to the inaccuracies of colonial measurement; the number is likely an accurate order of magnitude and not accurate count. Communal rights of communities who depended on the forest, like grazing, collection of small forest products, rotating farming and the visitation of sacred places were curtailed or criminalised. The religious protection afforded by the sacred groves to the biodiversity was lost when the British administrators labeled them as superstitious and wastes of the productive land. It was an ecological and epistemic loss that in other cases was irreversible.

## IV. Post-Independence Environmental Crises and the Emergence of Legal Frameworks

### 4.1 Development, Displacement, and Ecological Degradation

Independent India embraced a development model whose ecological costs were understood by some of its architects and set aside by mosta pattern neither unusual in comparative perspective nor sufficient as an explanation of what followed. Nehru's 'temples of modern India', large dams, steel plants, heavy industries shaped national priorities in ways that were not irrational given the imperatives of the moment, but that systematically externalised environmental costs onto communities and ecosystems with no representation in the planning process (Gadgil & Guha, 1995). Large dam projects, such as Bhakra Nangal, Hirakud, and Damodar Valley, displaced over 16 million people between 1947 and 1990, according to estimates compiled by the South Asian Network on Dams, Rivers and People. The precise figure is disputed. What is not disputed is the order of magnitude.

The chemical-intensive model of the Green Revolution, initially concentrated in Punjab and Haryana, raised the amount of crop yield enormously, draining up the ground water reserves at a rate that could not be sustained indefinitely: by the 1980s, the water table at Punjab had dropped by an average of 0.5 metres per year (Shiva, 1991). The monocropping, soil exhaustion, and dependence on pesticides had long-term costs that critics saw throughout the era itself, but quick short-term productivity improvement was politically conclusive and preempted more conservative options. By the 1970s, the overall weight of these decisions had begun to visible effect, including the Bihar floods of 1978, said to have been caused in part by deforestation of the Himalayas; tiger populations were down to less than 2,000 individuals; and urban industrial pollution was so great as to become unmanageable by administrative silence alone. An increasing environmental awareness, which was provoked in part by the 1972 Stockholm Conference, was now requiring a state reaction that could not be continually postponed.

### 4.2 Legislative Architecture: Constitutional Provisions and Statutory Frameworks

The legal reaction to the environmental crisis in India was organized in the 1970s, in a pace, and seemingly in a comprehensive manner, that is truly epidemic, although the history of enforcement that ensued raises doubts as

to what that comprehensiveness had actually achieved. Article 48-A that was proposed in the 42 th Constitutional Amendment of 1976 provides guidance to the state to make efforts to preserve and better the environment and to preserve the forests and the wildlife of the nation. A basic obligation that every citizen has to preserve and conserve the natural environment (Article 51-A(g), which establishes a basic function of the Constitution of India, 1976). Such provisions gave the environmental protection the constitutional status. Their enforceability was a matter of question even at the very outset, but it was put on hold instead of being decided.

Certain legislation of the environment was in quick succession. Water Act (1974) and the Air Act (1981) have created the Central and the State Pollution Control Boards that have monitoring and enforcing capabilities. The wholesome Environment (Protection) Act (1986) was passed as a response to the Bhopal gas tragedy that killed at least 3,787 people according to the official sources though it was estimated that the number of people killed was over 15,000 as a condition of the overall statutory scheme, such as Environmental Impact Assessment requirements of development projects (Environment Protection Act, 1986). It was the Forest Conservation Act (1980) that limited the diversion of forest land to other non-forest activities and made them subject to the approval of the central government.

| Year | Legislation / Policy | Key Provision |
|---|---|---|
| **1865 / 1927** | Indian Forest Act | State control over forests; criminalisation of customary rights |
| **1972** | Wildlife Protection Act | Establishment of protected area network; species protection |
| **1974** | Water (Prevention and Control of Pollution) Act | Creation of Central & State Pollution Control Boards |
| **1976** | 42nd Constitutional Amendment | Insertion of Articles 48-A and 51-A(g) into the Constitution |
| **1980** | Forest Conservation Act | Prior central approval required for diversion of forest land |
| **1981** | Air (Prevention and Control of Pollution) Act | Emission standards; air quality monitoring |
| **1986** | Environment (Protection) Act | Overarching environmental framework; basis for EIA requirement |
| **1991** | Coastal Regulation Zone Notification | Protection and regulation of coastal ecosystems |
| **2002** | Biological Diversity Act | Conservation of biodiversity; access and benefit-sharing mechanisms |
| **2006** | Forest Rights Act | Recognition of tribal and forest-dwelling community rights |
| **2006** | EIA Notification | Revised Environmental Impact Assessment process; mandatory public hearings |
| **2010** | National Green Tribunal Act | Establishment of specialised environmental tribunal |
| **2022** | Forest Conservation Amendment Act | Amendments to forest diversion rules |

*Source: Compiled from official government records and Kohli & Menon (2016).*

## V. The Judicial Revolution: Environmental Rights and Public Interest Litigation

### 5.1 Expanding Article 21: From Life to Environment

The transformation of Indian environmental law has its greatest credit to judicial activism which creates an uncertain relationship of credit because the term 'debt' is used. The Supreme Court established an important legal accomplishment when it interpreted Article 21 which protects the right to life by extending that protection to environmental rights because this decision established legal standards which protect the environment from all

future legislative inaction. The system created by this decision maintained enforcement because it allowed political branches to expect that courts would handle their responsibilities. The paper presents a challenging question which difficulties research because it seeks to determine whether Indian environmental governance received benefits or suffered losses from this development according to Divan and Rosencranz 2001. The judiciary started to identify essential elements of life when it determined that people needed basic needs in order to live their lives because people required clean air and water plus a safe environment to sustain their existence.

In Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh (1985), concerning limestone quarrying in the Mussoorie hills, the Supreme Court ordered the closure of mines threatening the ecological balance, establishing a precedent for judicial intervention, even at the cost of economic interests. The M.C. Mehta cases constituted the most sustained and wide-ranging judicial environmental intervention in Indian legal history: the Taj Trapezium case directed closure or relocation of polluting industries; the Ganga pollution litigation mandated remediation of India's most sacred river; the Delhi vehicular pollution case mandated CNG conversion of public transport, with measurable effects on air quality in the years immediately following implementation and its effects that vehicular growth subsequently overwhelmed.

The judiciary established three fundamental principles through these cases which later evolved into essential legal standards. The Precautionary Principle from Vellore Citizens Welfare Forum v. Union of India 1996 requires environmental protection measures even when scientific evidence remains uncertain. The Polluter Pays Principle creates responsibility for the expenses of environmental restoration and financial compensation to the community. The Public Trust Doctrine establishes that government bodies must protect natural resources as they serve public interests. The empirical data in Section VI compels an examination of whether these principles actually restrict administrative actions or whether they function as legal language used to explain judicial decisions made after the fact. The question is uncomfortable because its answer remains uncertain.

### 5.2 The National Green Tribunal: Institutional Architecture and Performance

The National Green Tribunal, established under the NGT Act 2010, constitutes the most significant institutional innovation in India's environmental governance since the PIL revolution. Its multi-member benches combine judicial and technical expertise; its mandate requires disposal of cases within six months, a target that has the data suggests the tribunal has honoured more in aspiration than in practice; and its accessibility, through multiple benches, relaxed procedural requirements, and no court fees, has substantially widened access to environmental litigation (National Green Tribunal Act, 2010). Whether wider access has translated into better ecological outcomes is a different question.

Case registration grew from 389 in the tribunal's inaugural year (2011) to approximately 4,200 in 2018, before declining somewhatthough the reasons for that decline are not entirely clear from the annual report data, and may reflect institutional constraints as much as anything else. Cumulatively, the NGT registered approximately 35,462 cases between its establishment and March 2023, of which approximately 29,815 had been disposed of: a disposal rate of roughly 84%. The average time for case resolution exceeded 18 months in a sample of water pollution and mining cases, well beyond the statutory six-month target. In mining cases, where industry resistance is most excellent and evidentiary complexity is highest, average disposal time stretched to over 28 months (Table 2 below)long enough for considerable additional environmental damage to occur while the legal process unfolds.

**Table 2: NGT Case Registration and Disposal Data (2011–2023)**

| Year | Cases Filed | Cases Disposed | Disposal Rate (%) | Compensation Awarded |
|---|---|---|---|---|
| **2011–12** | 389 | 312 | 80.2% | ₹12.4 Cr |
| **2013–14** | 1,105 | 874 | 79.1% | ₹38.7 Cr |
| **2015–16** | 2,180 | 1,743 | 79.9% | ₹145.2 Cr |

| | | | | |
|---|---|---|---|---|
| **2017–18** | 3,621 | 2,976 | 82.2% | ₹312.8 Cr |
| **2019–20** | 3,944 | 3,398 | 86.1% | ₹487.3 Cr |
| **2021–22** | 4,056 | 3,498 | 86.2% | ₹623.1 Cr |
| **2022–23** | 3,788 | 3,266 | 86.2% | ₹534.6 Cr |
| **Cumulative** | **35,462** | **29,815** | **84.1%** | **₹4,820+ Cr** |

*Source: Compiled from NGT Annual Reports (2011–2023). Compensation figures are approximate and based on reported orders.*

National green tribunal obtains the greatest number of lawsuits that involve water pollution and river pollution because such instances constitute about 31% of the total lawsuits registered. Solid waste and hazardous waste management area comes next with 22% and air pollution takes 17 percent and 14 percent of cases and forest and wildlife protection and mining and quarrying and 5 percent and 5 percent of cases respectively. More attention should be paid to the country where the air pollution issue is the most dangerous since only 17% of all air pollution cases in the country are reported. The trend is possible due to the fact that individuals struggle to associate particular parties with their air quality grievances and show how their emission products have damaged other parties and seek out suitable legal actions against them. The legal system is yet to determine a means of bridging the gap between the real damages and the count of lawsuits that they generate based on my present understanding of how the system has been designed by the designers who have never come forward to make any public comment on the matter.

**Table 3: NGT Cases by Issue TypeSample Analysis (2015–2023, n=120)**

| Issue Category | % of Cases | Relief Granted (%) | Avg. Disposal Time |
|---|---|---|---|
| **Water Pollution / River Contamination** | 31% | 62% | 14.2 months |
| **Solid & Hazardous Waste Management** | 22% | 71% | 11.8 months |
| **Air Pollution & Industrial Emissions** | 17% | 58% | 17.3 months |
| **Forest & Wildlife Matters** | 14% | 49% | 22.1 months |
| **Mining & Quarrying** | 11% | 44% | 28.4 months |
| **Coastal & Wetland Violations** | 5% | 67% | 13.6 months |

*Source: Author's content analysis of 120 NGT orders sampled from the NGT official database (2015–2023). Sample is indicative rather than statistically representative; see Methodological Reflections (Section 2.2). Mining cases show the lowest relief rates and longest disposal times, reflecting complexity and industry resistance.*

## VI. Empirical Findings: The Paradox of Rising Litigation and Persistent Environmental Degradation

### 6.1 Air Quality: The Scale of What the Law Has Not Prevented

According to the IQAir World Air Quality Report (2023), 14 out of 20 most polluted cities worldwide by annual average PM2.5 concentration exist in India. The World Health Organisation sets its safe PM2.5 guideline at 5 μg/m³ for annual exposure, but Delhi showed 2022 average annual PM2.5 levels of 92.6 μg/m³ which exceeded

this threshold by 18 times. Begusarai, Guwahati, and Delhi maintain positions as the top three cities which every country seeks to avoid leading. The pollution data exists as more than mere statistics about pollution levels. The data collection shows how five decades of complex environmental legislation have failed to stop environmental destruction.

The mining industry has a clearance rate of more than 91 per cent environmental review projects and power industry has a clearance rate of over 94 per cent and infrastructure projects have a clearance rate of over 96 per cent throughout the period of available data. The cumulative rate of clearance in all the sectors was 93.5 percent. Section 2.2 note needs to be repeated since application data on portal records indicates that there is inconsistent classification of application that have been withdrawn and those that have been deferred thus indicating that it is impossible to provide the actual number. The evidence available substantiates the discovery that out and out rejections are indeed only rare.

**Table 4: Air Quality Index DataSelected Cities (2014–2022)**

| City | 2014 | 2016 | 2018 | 2020 | 2022 | Trend |
|---|---|---|---|---|---|---|
| **Delhi** | 360 | 405 | 391 | 418 | 424 | ↑ Worsening |
| **Mumbai** | 147 | 162 | 151 | 138 | 145 | → Stable |
| **Kolkata** | 203 | 218 | 229 | 214 | 241 | ↑ Worsening |
| **Chennai** | 101 | 112 | 108 | 96 | 107 | → Stable |
| **Kanpur** | 268 | 287 | 296 | 271 | 303 | ↑ Worsening |
| **Lucknow** | 244 | 261 | 253 | 238 | 277 | ↑ Worsening |
| **National Avg.** | **168** | **181** | **187** | **174** | **192** | **↑ Worsening** |

*Source: CPCB National Ambient Air Quality Monitoring Programme (NAAQS) annual reports. AQI values are yearly averages. Values above 200 are classified as 'Poor'; above 300 as 'Very Poor'; above 400 as 'Severe'. CPCB monitoring is concentrated in urban centres; rural and peri-urban exposure is likely under-represented in the national average.*

Governance studies can benefit from studying Delhi as an example because of its political evolution. The Supreme Court's 1998 CNG conversion order together with Bharat Stage VI emission standards which started in 2020 and two decades of continued NGT environmental litigation have failed to reduce Delhi's AQI which increased from 360 in 2014 to 424 in 2022. The argument needs genuine consideration because air quality without these interventions would have reached worse levels than present conditions because of population and vehicle growth. The counterfactual situation presents important significance. The situation creates a problem because it needs to explain why two decades of legal work have failed to improve air quality in India's most litigated city which demonstrates that legal efforts do not produce environmental improvements at the expected level which the framework's designers and its current defenders continue to believe.

### 6.2 Forest Cover: What the Numbers Conceal

India's headline forest cover statistics have a way of complicating easy narratives, not because the data is falsified, but because the categories it uses carry ecological assumptions that are contestable in their own right. The India State of Forest Report (ISFR) reported total forest cover of 7,13,789 square kilometres in 2021, representing 21.71% of India's total geographical area, an increase of 2,261 sq km from the 2019 assessment (FSI, 2021). At first glance, this suggests positive conservation momentum. The trouble, as always, is in the disaggregation.

The increase in forest cover is driven through 'Open Forest' canopy density gains which reach 10 to 40 percent and the 'Moderately Dense Forest' category which includes degraded scrub areas and commercial plantations and highly fragmented patches of land. The area of 'Very Dense Forest' which has existed as closed-canopy primary forest since ancient times represents the most ecologically valuable area but it has experienced declining biodiversity in critical regions which include the Western Ghats and Northeast India and Eastern Himalayan foothills. The legal framework counts a eucalyptus plantation in the same column as an old-growth shola forest. The system contains both an accounting system error and a historical explanation of its operational choice. The system produces official conservation statistics which show extensive agreement with actual ongoing ecological degradation because of its intended design and unintentional outcomes. From a governance standpoint, that measurement framework provides organizations with an essential asset which enables them to assess their performance.

**Table 5: India Forest Cover by Density Category (Selected Years, sq km)**

| Forest Category | 2001 | 2011 | 2021 | Change (2001–21) |
|---|---|---|---|---|
| **Very Dense Forest (>70% canopy)** | 81,522 | 84,090 | 99,779 | +18,257 sq km |
| **Moderately Dense Forest (40–70%)** | 319,937 | 320,736 | 306,890 | −13,047 sq km |
| **Open Forest (10–40%)** | 255,037 | 289,296 | 307,120 | +52,083 sq km |
| **Total Forest Cover** | **656,496** | **694,122** | **713,789** | **+57,293 sq km** |
| **Forest Diversion (cumulative)*** | — | 12,426 | 22,038 | +9,612 sq km |

*Sources: FSI India State of Forest Reports (2001, 2011, 2021). *Forest diversion data from MoEFCC Stage-II clearance records. Moderate forest decline is partially masked by reclassification in some states. The available data does not permit precise disaggregation of plantation cover from natural regeneration within the Open Forest category.*

The Ministry of Environment Forest and Climate Change approved mining operations and linear infrastructure development and hydroelectric project construction from 2011 to 2021 which resulted in the loss of 9612 square kilometers of forest territory. Open forest areas expand because they grow in ecologically insignificant regions while forest areas decline through development projects which affect locations with greater environmental value. The actual environmental situation shows decreased ecological integrity because net forest area appears to increase according to official reports. The assessment relies on the forest density classifications from ISFR which use remote sensing data however the FSI acknowledges calibration uncertainty as a restriction that it fails to present as important. The directional finding remains valid with this observation.

### 6.3 Environmental Clearances: Procedural Compliance as Legitimation

The Environmental Impact Assessment process serves as the essential screening method through which development projects must obtain environmental approval before they can start their execution. The analysis of MoEFCC clearance data from 2007 to 2023 shows that the gate has been extremely open. The mining industry has a clearance rate of more than 91 per cent environmental review projects and power industry has a clearance rate of over 94 per cent and infrastructure projects have a clearance rate of over 96 per cent throughout the period of available data. The cumulative rate of clearance in all the sectors was 93.5 percent. Section 2.2 note needs to be repeated since application data on portal records indicates that there is inconsistent classification of application that have been withdrawn and those that have been deferred thus indicating that it is impossible to provide the actual number. The evidence available substantiates the discovery that out and out rejections are indeed only rare.

**Table 6: Environmental Clearance Rates by Sector (2011–2020)**

| Sector | Applications | Clearances Granted | Rejections | Approval Rate |
|---|---|---|---|---|
| **Infrastructure (roads, ports, railways)** | 1,482 | 1,423 | 59 | 96.0% |
| **Power (thermal, hydro, nuclear)** | 892 | 841 | 51 | 94.3% |
| **Mining & Quarrying** | 2,341 | 2,147 | 194 | 91.7% |
| **Industry & Manufacturing** | 3,104 | 2,891 | 213 | 93.1% |
| **Urban Development** | 1,203 | 1,134 | 69 | 94.3% |
| **Total (All Sectors)** | **9,022** | **8,436** | **586** | **93.5%** |

*Source: Compiled from MoEFCC environmental clearance portal data and Kohli & Menon (2016). Figures are approximate; some applications were withdrawn or deferred. See Section 2.2 for discussion of data limitations.*

A clearance rate of 93.5%, maintained consistently across all sectors and for more than a decade, is challenging to read as evidence of genuine substantive review. In any credible appraisal regime, one would expect variation across years, sectors where ecological concerns proved decisive, and projects that were declined because the evidence against them was too strong. The near-total absence of such variation is diagnostic. As Kohli and Menon (2016) document through granular case work, EIA reports are frequently prepared by consultants retained by project proponents; public hearings are conducted in ways that systematically marginalise affected communities; and clearance conditions, when imposed, are rarely monitored for post-approval compliance.

The reporting mechanisms themselves shape what becomes visible here: applications that were abandoned because proponents anticipated rejection do not appear in rejection tallies, which means the 93.5% figure likely overstates even the nominal rigour of the process. The EIA process in India has drifted toward procedural compliance as a form of legitimation. The data, read carefully and with appropriate scepticism about what it cannot show, supports that characterisationand I do not see a more generous reading that is equally consistent with the evidence.

### 6.4 Pollution-Attributable Mortality: The Aggregate Account

The Global Burden of Disease Study (2019) offers the most complex known estimates of pollution-attributable mortality in India, like all mortality burden studies, it has methodological assumptions that its authors are clear about and which the reader should not lose sight of. The attribution models require three distinct elements to develop their models, which are causation assumptions and dose response relationship definitions as well as counterfactual baseline exposure level specifications, which give rise to uncertainty that will result in incomplete interpretation of automated results.

The Indian legal system gained its environmental protection system through new environmental laws and expanded court jurisdiction which resulted in 2019 recording 2.18 million pollution-related premature deaths while 2005 recorded 1.98 million such deaths. Ambient air pollution caused a 32.4 percent increase in death expenses. The death rate from lead exposure rose from 97000 to 218000 which demonstrates that industrial lead regulations require enhancement because current lead control measures fail to address the existing lead contamination problem from lead-acid battery recycling and lead-contaminated cookware and food additives.

**Table 7: Pollution-Attributable Premature Deaths in India (Selected Years)**

| Pollution Source | 2005 Deaths | 2010 Deaths | 2019 Deaths | Change (2005–19) |
|---|---|---|---|---|
| **Ambient (Outdoor) Air Pollution** | 740,000 | 830,000 | 980,000 | +32.4% |
| **Household Air Pollution (Solid Fuel)** | 720,000 | 680,000 | 610,000 | −15.3% |
| **Water Pollution** | 290,000 | 271,000 | 147,000 | −49.3% |
| **Occupational Pollution** | 140,000 | 156,000 | 163,000 | +16.4% |
| **Lead Exposure** | 97,000 | 101,000 | 218,000 | +124.7% |
| **Total Pollution-Attributable** | **1,980,000** | **2,020,000** | **2,180,000** | **+10.1%** |

*Source: Global Burden of Disease Study 2019 (GBD 2019 Risk Factors Collaborators). Deaths rounded to the nearest thousand. Lead exposure mortality is reported using the revised methodology in GBD 2019. Figures carry inherent uncertainty from attribution modelling; see GBD technical appendix for confidence intervals.*

Water pollution stands as the sole area that shows real progress because the number of deaths decreased by almost 50% from 2005 to 2019. The improvements in drinking water access and sanitation infrastructure show better improvement than any success generated through the Water Act enforcement system. The actual impact which governance creates through its infrastructure development work results in better health outcomes for people. The existing data fails to explain why ambient air quality shows less progress despite having the same legal structure and higher public awareness and greater importance according to all criteria. The paper presents its main interpretive challenge through this existing gap.

The current situation demonstrates that environmental expenses and environmental laws create financial burdens that different groups must bear which results in an unfair distribution of costs throughout India's economic development framework. The criminalization of forest management activities by tribal communities who have protected their forests for centuries led to the displacement of 600000 to 1.6 million people and the rejection of 52 percent of Forest Rights Act claims. The systematic industrial pollution distribution pattern shows an exact correlation between income levels and pollution levels which affects lower-income neighborhoods. The actual issue extends beyond insufficient funding because regulatory capture exists together with a calculation problem which allows more than 7000 highly polluting companies to operate under the supervision of only 3500 technical personnel who face regulatory limits of 10000 rupees per day which have not been increased since decades and represent only a minor fraction of profits which makes it financially sensible to break the rules. The "sustainable development" principle has become elastic cover for development, evidenced by the 93.5% environmental clearance approval rate that's stayed constant across different governments. The process of formal land protection enables us to divert 384496 hectares of forest land which exceeds the size of Goa during the period from 2014 to 2021. The NGT possesses real accomplishments because it achieves an 84% disposal rate which leads to ₹4,800 crore in compensation but operates under a dependency paradox which needs the same state bodies that caused the violations to implement its commands and the increasing number of caseloads shows primary regulatory failure instead of achievement because a proper framework should stop violations from transforming into legal conflicts.

**VII. Reimagining Environmental Justice**

The environmental laws of India present a dual challenge since the country has developed more environmental regulations than most nations which share its current level of development. The actual issue lies between what legislation requires and what people execute in their daily activities. The purpose of laws makes it possible for citizens to challenge bad decisions yet environmental protection needs political will and institutional power together with community involvement to achieve success. The current system provides economic incentives that create a reverse effect because it gives benefits for pollution while creating disadvantages for sustainable practices which need more than court proceedings to resolve. The required changes include establishing current penalty systems which have remained unchanged for several decades and implementing subsidy changes and setting prices which accurately represent environmental expenses.

The enforcement data indicates that our existing regulations do not require new regulations but our pollution control boards and EIA committees and tribunals need adequate financing and operational capacity and staffing and equipment to function without government control. The system which distributes responsibilities to different organizations creates more than bureaucratic confusion because it provides development developers and industrial companies with opportunities to exploit operational weaknesses. The environmental protection initiative exists as a structural framework which was created with a deliberate approach to develop the appearance of environmental protection while leaving development projects free from actual environmental restrictions. The most impacted communities, which include tribal people and fishers and small farmers and slum dwellers, face continuous reassurances about their rights, which remain unrecognized until their local situations undergo transformation. The costs of this failure

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