



Environmental Justice and Human Rights: The Impact of Industrial Pollution on Indigenous Tribes in India

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ABSTRACT

This research paper examines the critical nature of environmental justice and human rights, focusing on the tremendous impact industrial pollution has upon India's indigenous tribes. In fact, despite a good legal framework that is robust in protecting environmental and indigenous rights, the problem persists, facing many challenges when laws are enforced. This paper tries to explore the major provisions of law, relevant case laws, and international conventions while describing systemic barriers and how they impact indigenous communities in terms of legal fragmentation, socio-economic vulnerabilities, and cultural marginalization. Obviously, landmark cases like *M.C. Mehta v. Union of India* and *Samatha v. State of Andhra Pradesh* depict judicial activism in respect of environmental protection and advocacy towards the rights of marginalized populations. The research findings thus show that while judicial interventions have gone a long way in recognizing the rights of indigenous peoples, compliance with such judgments is generally thwarted by corruption, lack of legal awareness, and inadequate regulatory frameworks. Thus, the paper therefore further emphasizes the immediate necessity of radical reforms in the legal framework, increased public participation in environmental issues, and adoption of the principle of FPIC¹ to empower indigenous tribes. Bringing light to the routine continuing problems as well as the ways leading towards justice, this study further contributes to the dialogue of environmental governance which, in respect for the rights of indigenous communities, takes a more equal and sustainable approach in India. More generally, this paper calls for collective action from all stakeholders involved to seriously take up these, at times largely neglected issues, and ensure environmental justice becomes accessible and available to vulnerable populations.

Keywords: Environmental Justice, Indigenous Tribes, Industrial Pollution, Human Rights, Legal Framework, India, M.C. Mehta Case, Free, Prior, and Informed Consent (FPIC), Environmental Protection Act, Forest Rights Act, Land Rights, Sustainable Development, Pollution Control, Public Interest Litigation (PIL), Socio-economic Vulnerabilities, Case Law, Environmental Degradation, Corporate Accountability, Judicial Interventions, International Conventions on Indigenous Rights

Introduction

Environmental justice² refers to the fair and reasonable treatment of all people irrespective of their race, ethnicity, or economics with regard to the implementation of environmental laws, regulations, and policies. It addresses and attempts to correct and prevent unequal impacts of environmental degradation on marginalized communities, mainly indigenous groups, who, in turn, suffer the most from industrial pollutions and other environmental degradations. In India, rapid industrialization is changing the economic map.³ Here, the battle between development and the rights of aboriginal tribes has taken a very loud and prominent note.

The indigenous tribe for around 8.6% of the population in India. This amounts to different cultures, traditions, and lifestyles more deeply rooted in their ancestral lands with natural resources. These communities often live in rich areas of biodiversity and natural resources, hence targeted areas for industrial exploitation such as mining, logging, and energy production.⁴ The entry of industries into the tribal grounds denies them an environmental integrity of their regions as well as cultural heritage and social structure of indigenous communities.⁵ Their land, cultural, and health rights are deprived because of colonization legacies coupled with weak legal protections that make several indigenous tribes prone to land dispossession, loss of cultural roots, and hazards to their health by the dangers of industrial pollution.

This is thus an environmental justice issue for industrial pollution mainly targets disadvantaged communities that do not enjoy the capacity to speak out for their rights nor bring about law changes. Toxic emissions and water pollution and degradation of lands often lead to disastrous health and well-

¹ free, prior and informed consent (FPIC)

² <http://ereserve.library.utah.edu/Annual/HUM/6102/Endres/hum6102env.pdf>

³ <https://www.tandfonline.com/doi/full/10.1080/23311843.2016.1193110>

⁴ <https://www.sciencedirect.com/science/article/abs/pii/S0301479717309477>

⁵ Robert D. Bullard, "The Environmental Justice Framework: A Strategy for Addressing Unequal Protection." Paper presented at Resources for the Future Conference on Risk Management, Annapolis, MD (November, 1992).

being effects on the indigenous population, aggravating respiratory diseases, waterborne illnesses, and other health complications. Such impacts do not only threaten an individual's health but also threaten traditional livelihoods based on land and natural resources. Such impacts further perpetuate poverty and social inequality within such communities.

This paper is engaged with the analysis of legal frameworks and case laws relating to environmental justice and rights of indigenous tribes in India. It will be critical about the existing legislation in terms of Environmental Protection Act, Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, and other international conventions which aim to give protection to indigenous rights. The following analysis will prove how poor law enforcement is the weakest link that poses one of the significant barriers to environmental justice for the indigenous tribes in delivering a reduced impact of industrial pollution.⁶

Among the mentioned legal instruments, law enforcement is the weakest link. India has made significant advances on paper in terms of environmental legislation, but its practice remains blighted by systemic corruption, local community ignorance, and underdeveloped capacity of the regulatory apparatus. Agencies for environmental law enforcement often suffer from resource constraints, political influence, and imperfect public accountability, preventing effective monitoring of industrial development and protection of vulnerable groups.

Public Interest Litigation has rapidly gained ground as a mighty tool to take care of Indian environment-related concerns by allowing individuals and groups to approach courts for redress in the interest of the public. There are landmark cases like *M.C. Mehta v. Union of India*, which have evolved the jurisprudence in the field of environmental control and have given a message that it is the responsibility of courts also to confer rights on the marginalized communities. Nevertheless, despite these advancements, the miseries of the indigenous tribe are still on the agenda, which calls for a critical study of this judicial context.

On the other hand, this paper discusses the necessity of implementing the principle of FPIC into the legal machinery governing industrial projects affecting the tribal lands. FPIC is an international law that grants indigenous peoples the power to decide on a development project within their ancestral lands. Respecting indigenous people rights will not only preserve their rights but also allow their voices to flow into the decision-making processes, thus yielding more equitable and sustainable results.⁷

Another essential factor that drives an indigenous tribe to utilize law in articulating their claims and advocating environmental justice is the socio-economic context within which the indigenous tribes operate. Indeed, poverty, lack of education, and restrictive economic opportunities, among other socio-economic factors affect the majority of Indian indigenous groups and would undermine effective participation in advocacy and legal battles. Addressing these socio-economic challenges will be the first step in empowering indigenous populations and, by extension, increasing their strength against the adverse impacts of industrial pollution.

This research paper is structured to give a comprehensive understanding of the challenge and opportunity in achieving environmental justice for Indian indigenous tribes. The following sections will analyse key legal frameworks, relevant case laws, and the socio-economic factors that influence the dynamics of environmental governance. The paper examines some of the interconnected issues aiming to contribute to the discourse of environmental justice and advocate for a much more inclusive and equitable approach toward the environmental governance of indigenous communities' rights.

The fight for environmental justice⁸ and protection of India's indigenous tribes is complex and multifaceted and demands concerted action from governments, civil society organizations, and the indigenous communities themselves. Amid Indian industrialization and quite serious environmental degradation, there is need for indigenous voices and rights to be included in the schemes of the government. Thus, by eliminating the legal, social, and economic hurdles that come in the way of approaching the court of law for redressal, India can surely progress toward a future that is more sustainable and just than over rights and traditions.

Section 1: Legal Framework for Environmental Protection in India

India possesses an integrated legal framework relating to environmental protection as well as indigenous peoples' rights. This includes legislation formulated on the basis of constitutional provisions and statutes enacted by parliaments. In addition to these, international conventions to which India is a party provide legal support.

A. Constitutional Provisions

The Indian Constitution offers a sound foundation for environmental protection and indigenous peoples' rights:

- **Article 21:** The Supreme Court has interpreted the right to life and personal liberty under Article 21 with great alacrity and has concluded a right to a clean and healthy environment.
- **Article 48A:** This Directive Principle of State Policy enshrines protection and improvement of the environment, with safeguards to forests and wild life.

⁶ <https://www.tandfonline.com/doi/abs/10.3200/AEOH.63.2.87-92>

⁷ https://www.researchgate.net/profile/Maria-Khan-19/publication/330483317_Industrial_Pollution_in_Indian_Industries_A_Post_Reform_Scenario/links/5c420457458515a4c72f8afb/Industrial-Pollution-in-Indian-Industries-A-Post-Reform-Scenario.pdf

⁸ Gupta, Shreekant (2002): 'Environmental Benefits and Cost Savings Through Market- Based Instruments: An Application Using State-Level Data from India'. Working paper no. 02-005, Centre for Energy and Environment Policy Research.

- **Article 51A (g):** This article has put a basic responsibility upon all citizens to protect and enhance the environment, which includes forests, lakes, rivers, and wildlife.⁹

B. Environmental Legislation

From time unknown, India has formulated various Acts related to pollution control and natural resources protection. Some of them have been enlisted below:

I. The Environment (Protection) Act, 1986¹⁰

It is an all-inclusive umbrella type of law, aimed at the protection as well as enhancement of the environment. This legislation empowers the central government to take such steps that may be necessary for control of pollution and protection of ecosystem, which would include prohibition or regulation of industries emitting/likely to emit pollutants and ozone depleting substances. However, implementation of this law is rather weak in tribal areas, and violation becomes widespread. Environmental Impact Assessments are a must as per this act before projects are taken up on an industrial scale, but quite a few were pursued without proper assessment and public consultation, especially in tribal areas.¹¹

II. Air (Prevention and Control of Pollution) Act, 1981¹²

Emission of pollutants by industries, both from large-scale sectors and small-scale sectors, is controlled through air pollution standards. Importantly, central and state pollution control boards control air pollution at the state and national levels, respectively. With this regard, air pollution has continued to be the gravest, especially in areas closer to the industrial centres, like coal-burning power stations and mining companies. Tribal communities are also usually at the worst end in cases of air pollution because the majority suffer from diseases like respiratory, especially youngsters and the aged.¹³

III. Water (Prevention and Control of Pollution) Act, 1974¹⁴

Water Act is the first major legislation that was enacted to provide remedies against the problem of pollution of water in India. The Water Act establishes standards regarding the quality of water and regulates the discharge of pollutants to water. In many tribal areas, industrial waste has often directly been released into rivers and lakes, which have polluted sources of drinking water and impacted the health and livelihoods of indigenous people.

IV. The Forest (Conservation) Act, 1980¹⁵

This act was enacted to stop the destruction of India's rich forest cover mainly in tribal areas. Under this law, the use of forest land for non-forest purposes, such as industrial projects, requires approval by the central government. However, the illegal logging or mining or other industrial activities go on in forest areas sometime under silent sanctions of the local government or in contravention to environmental regulations. These practices prove to be destructive for indigenous tribes, which exist on the basis of forests for food, medicine, and other cultural practices.

V. Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (Forest Rights Act).¹⁶

The Forest Rights Act is, therefore, an attempt at rectifying historical wrongs faced by indigenous tribes. These enactments recognize indigenous rights over forest land and resources and allow these communities to protect their cultural ethos as well as their means of living. However, the implementation has been patchy. It still continues to displace various tribal groups who were not consulted suitably and without compensation from their lands, particularly in areas that are slated for mining and industrial purposes.

Section 2: Case laws

Case law certainly plays a vital role in deciphering and implementing environmental laws, especially regarding indigenous rights and industrial pollution. Various cases that are raised before Indian courts flag the intersection of protection of environment and human rights issues, more particularly the influence on marginalized communities. Some of the crucial case laws are followed along with a great case, M.C. Mehta, and their implications on environmental justice and indigenous rights.

1. M.C. Mehta v. Union of India (1987) – The Ganga Pollution Case¹⁷

- M.C. Mehta, an environmental lawyer of repute, had filed a Public Interest Litigation in the Supreme Court of India concerning the pollution of the River Ganges. This led to the judicial forum dealing with the dangerous effect of industrial wastes and sewage on this river, that holds sacred waters for many communities including particular aboriginal tribes.

⁹ https://www.indiacode.nic.in/bitstream/123456789/15240/1/constitution_of_india.pdf

¹⁰ <https://cpcb.nic.in/env-protection-act/>

¹¹ <https://www.taylorfrancis.com/chapters/edit/10.4324/9780203813331-47/educating-environmental-justice-randolph-haluza-delay>

¹² <https://cpcb.nic.in/air-pollution/>

¹³ [https://books.google.co.in/books?hl=en&lr=&id=y9cWTa_bwqgC&oi=fnd&pg=PP9&dq=II.%09Air+\(Prevention+and+Control+of+Pollution\)+Act,+1981&ots=-XB7ziISSY&sig=DnWworfxy2PS8_qeGEI4ydM3mc&redir_esc=y#v=onepage&q=II.%09Air%20\(Prevention%20and%20Control%20of%20Pollution\)%20Act%2C%201981&f=false](https://books.google.co.in/books?hl=en&lr=&id=y9cWTa_bwqgC&oi=fnd&pg=PP9&dq=II.%09Air+(Prevention+and+Control+of+Pollution)+Act,+1981&ots=-XB7ziISSY&sig=DnWworfxy2PS8_qeGEI4ydM3mc&redir_esc=y#v=onepage&q=II.%09Air%20(Prevention%20and%20Control%20of%20Pollution)%20Act%2C%201981&f=false)

¹⁴ [https://cpcb.nic.in/water-pollution/#:~:text=The%20Water%20\(Prevention%20and%20Control,of%20water%20in%20the%20country.](https://cpcb.nic.in/water-pollution/#:~:text=The%20Water%20(Prevention%20and%20Control,of%20water%20in%20the%20country.)

¹⁵ https://forest.odisha.gov.in/sites/default/files/2020-01/7TFA_1980.pdf

¹⁶ <https://tribal.nic.in/FRA.aspx>

¹⁷ M.C. Mehta v/s Union of India: Ganga Pollution Case - Citation AIR 1988 SC 1037;(1987) 4 SCC 463

Judgment

- The Supreme Court asked the state to take swift action to check the degradation through pollution of the Ganges. It recognized the fact that rivers, especially in cultures and spirituality of many tribes, have revered values for the indigenous people themselves.

Implications:

- **Development of Environmental Rights:** The case established the right of a clean environment as a fundamental right under Article 21 of the Indian Constitution, which identifies the right to life.
- **PILs and Environmental Justice:** The M.C. Mehta case came as a way of employing PILs as a means for environmental justice. This was an opportunity that opened up for communities, including the tribal peoples, the opportunity to get redress regarding their environmental grievances.

2. Indian Council for Enviro-Legal Action v. Union of India (1996)**Background**

- This is a writ petition filed by the Indian Council for Enviro-Legal Action, brought in the wake of dangerous waste disposal by industries in the Tamil Nadu district of Cuddalore. The local community, including aboriginals, was affected adversely by the toxic waste.¹⁸

Judgment:

- The Supreme Court ruled that the polluters shall be liable to compensate for environmental damage. It generally emphasized the principle of "polluter pays"; those who cause damage to the environment should bear the expenses of dealing with such damage.

Implication:

- **Accountability of industries:** This judgement strengthened the liability of the industries to be responsible for its environmental impacts, and in return, the strength kept apart its way to protect indigenous rights against industrial pollution.
- **Community Compensation:** The court provided a right to communities, including indigenous tribes, to file compensation claims because of environmental destruction to their health and livelihood.

3. T.N. Godavarman Thirumulpad v. Union of India (1997)**Background:**

- This was a case concerning illicit logging and falling of trees in the Western Ghats forests, which was against the interests of several tribal groups who were dependent on the forest for living.¹⁹
- The Supreme Court gave some much-needed directions to maintain forests, ecological balance by declaring that all activities in forest areas have to stand hand in hand with the Forest Conservation Act.

Implications:

- **Protected Forest Rights:** The judgment encouraged rights over forests, which, according to them, is a vital necessity for survival and livelihood of the indigenous tribes.
- **Sustainable Development:** It highlighted the step of sustainable development that must safeguard the rights and means of livelihood of indigenous peoples.

4. Sterlite Industries (India) Ltd. v. Union of India (2013)²⁰**Background:**

- The case involved the Sterlite copper smelter plant in the area of Tuticorin, Tamil Nadu. The Sterlite plant was blamed on major releases of severe air and water pollution which adversely affected the local communities, including indigenous tribes.

Judge's Ruling:

- Through this judgment, the Supreme Court upheld the shutting down of the plant on grounds of not only technical but also health grounds.

Implication

¹⁸ Indian Council for Enviro-Legal Action v Union of India and Ors. Etc is 1996 (2) SCR 503.

¹⁹ T.N. Godavarman Thirumulpad v. Union of India is (1997) 2 SCC 267.

²⁰ Sterlite Industries (I) Ltd. Etc. Etc vs Union of India and Ors. Etc. Etc on 2 April, 2013

- **Corporate Accountability:** This case established the accountability of industries towards environmental legal norms, specifically in areas where poor sections of society live.
- **Public Health Issue:** In this judgment, the rulers considered public health as a factor while deciding upon any environmental issue; thus, their rights were strengthened.

5. Samatha v. State of Andhra Pradesh (1997)

Background:

- This was one such landmark case where the Supreme Court considered whether the mining leases bestowed upon private companies in the scheduled areas without the consent of tribesmen as required by the Panchayats (Extension to Scheduled Areas) Act, 1996.²¹

Judgment:

- The Supreme Court held that the state government could not alienate tribal lands to non-tribals without following legal frameworks that protect tribal rights.

Implications :

- **Protection of Tribal Land Rights:** This judgment ensured legal guardianship over the rights of natives regarding their land against any encroachment by a non-tribal body, emphasizing that concerned communities must give free, prior, and informed consent.
- **Empowerment of Indigenous Community:** The judgment empowered the indigenous community by giving them the right to challenge any illegal forms of land acquisition practice and to fight for their rights.

6. S.R. Tiwari v. District Board, Agra (1964)

Background:

- This case dealt with the rights of the landholders and the consequences faced by them through the acquisition of land for public purposes, which most of the time implicated the indigenous people.²²

Judgment:

- The Supreme Court maintained that the acquisition of land must be according to due process and the interests of the existing landholders, particularly the tribes, must not be disregarded.

Implications:

- **Due Process in Land Acquisition:** The case discussed the importance of following proper procedures in law during land acquisition and thus saved the indigenous tribes from arbitrary dispossession.
- **Legal Remedy to the Tribal Communities:** It further fortified the principle that communities have a right to legal remedy if their lands were being taken for development schemes.

The above case laws portrayed the shifting jurisprudence of India towards environmental justice, the rights of tribal people, and those rights which are recognized, yet still exist as challenges.

Continued advocacy for legal reforms in the form of public interest litigation is similarly an overwhelming need for protecting the rights of indigenous people against industrial pollution. Strengthening the process of law and accountability towards pollutants, as well as legal literacy and representation of populations, can contribute to the aim of concrete environmental justice in India.

Case laws, therefore, pave ways for further legal and policy articulation in promoting the voices of indigenous peoples with protection of their rights concerning industrial development and environmental degradation.

Section 3: Challenges to Environmental Justice and Human Rights for Indigenous Tribes in India

The presence of industrial pollution and the rights of indigenous people severely undermines the case for environmental justice in India. Of course, this is in a country with a robust legal framework that is increasingly coming to realize its need both to protect the environment and indigenous rights, but several systemic, socio-economic, and political issues persist. These problems are not only weaknesses for law enforcement but also enhance vulnerabilities within indigenous communities.

²¹ Samatha v. State of Andhra Pradesh & Ors. (1997)

²² S.R. Tewari vs District Board Agra and Another on 15 April, 1964 AIR 1680, 1964 SCR (3) 55

1. Weak Legal and Regulatory Frameworks As mentioned earlier, India has drafted many laws regarding its environment along with the indigenous people's rights. However, one feels that there is a lack of proper execution along with very weak enforcement.²³

A. Fragmented Legal Provisions

- Some acts present in the available legal framework include the Environmental Protection Act, 1986, the Water (Prevention and Control of Pollution) Act, 1974, and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. However, the law is generally piecemeal and fails to come up with a holistic approach to dealing with some of the complex plays between industrial development and indigenous rights.²⁴
- **Inconsistencies in Laws:** Laws provide different provisions that sometimes contradict each other. Agencies and indigenous people are then confused on which laws to apply in certain situations. This inconsistency often results in the poor protection of the tribal communities from industrial pollution.²⁵

B. Capture and Corruption of Regulation

Often, such regulatory bodies that enforce environmental laws are highly plagued by problems of corruption and capture due to the dominance of industrial developers' interests over those of the environment and human rights considerations.

- **Political Influence:** The regulatory agencies could be influenced more by local politicians or strong industrialists to slacken the enforcement of laws. This may further erode public trust in the regulatory process and discourage native communities from voicing their concerns.

2. Lack of Awareness and Legal Literacy Many indigenous people are either unaware of their legal rights or lack the necessary resources to navigate the complex legal landscape in India.

- **Low Levels of Legal Awareness** Low levels of legal awareness have been noted among those living in indigenous regions.²⁶
- Many indigenous groups have no clue what rights they are legally afforded under national or international law. A lack of such information restricts the ability of these groups to self-defence or express discontent against industrial projects put up on their lands and threatening their subsistence means.²⁷
- **Cultural Barriers:** Legal language and processes are not accessible, especially to communities which have less exposure to formal legal apparatuses. This non-access to understanding can further sideline indigenous voices over legal affairs.²⁸

B. Access to Legal Aid Not Available

There is availability of legal aid provision under India's act, but several indigenous communities are inaccessible for such legal aid.

- **Geographical Isolation:** The indigenous peoples generally live in places that are inaccessible. Legal aid is not accessible in such areas. In addition, legal aid organizations would not have adequate expertise relating to environmental law or indigenous rights.²⁹

3. Socio-Economic Vulnerabilities

The Indian indigenous communities have generally been plagued by socio-economic issues that enhance their vulnerability to environmental degradation.

- **Economic Dependence on Natural Resources**

The same is with indigenous tribes, who rely so much on natural resources for survival for instance farming, fishing and forestry. This forms a reason why they are the most vulnerable to the effects of industrial pollution.

- **Displacement and Land Loss:** Industrial projects usually take place by displacing local indigenous communities from their centuries-old lands, which can cause loss of their traditional livelihoods and cultural identity

²³ <https://www.uky.edu/~tmute2/GEI-Web/password-protect/GEI-readings/Bullard-Environmental%20justice%20for%20all.pdf>

²⁴ <https://academic.oup.com/socpro/article-abstract/40/1/5/2925259>

²⁵ Shanti Gamper-Rabindran & Shreyasi Jha (2004) -

²⁶ <https://heinonline.org/HOL/LandingPage?handle=hein.journals/jluenv111&div=7&id=&page=>

²⁷ <https://journals.sagepub.com/doi/abs/10.1177/0309132510388384>

²⁸ <https://www.tandfonline.com/doi/full/10.1080/14615517.2019.1611035#d1e181>

²⁹ Shanti Gamper-Rabindran & Shreyasi Jha (2004) -Environmental Impact of India's Trade Liberalization. Accessed from <https://www.gtap.agecon.purdue.edu/resources/download/1690.pdf>

- Loss of land not only affects their economic stability but also their social cohesion and cultural heritage.³⁰

B. Limited Economic Opportunities

It is often the case that these communities, even without education, health care, or any economic advantage, might be marginalized and unable to come out into an open and direct struggle for justice or a legal battle against the big industrial interests.³¹

- **Poverty and Vulnerability:** High incidences of poverty among indigenous populations prevent them from pursuing legal redress or investing in some measure of protection against environmental degradation. The lack of alternative livelihoods especially exacerbates their vulnerability to environmental impacts from industrial pollution.

4. Cultural and Social Marginalization

To a great extent, indigenous peoples who get marginalized in cultural and social terms often are prevented from having their rights assertively.

- **No Political Representation**

Generally, people from the indigenous face political underrepresentation through industrial development and environmental protection processes.

- **Lack of Indigenous Representation in Policy Decisions:** The absence of indigenous voices in the formulation and implementation of policy decisions may mean that such decisions are unrelated to their cultures or land-use patterns, making them yet another entrenched notion of oppression.

B. Stigmatisation and Discrimination

Indigenous peoples are stigmatised and discriminated against by governmental and nongovernmental alike, which may deter them from demanding their rights.

- **Social Exclusion:** Negative stereotypes and social exclusion might hamper an effective mobilization and organization of indigenous communities. This kind of social exclusion frightens away outside support for advocacy work.³²

5. Health and Environmental Impacts of Industrial Pollution

Health and environmental effects on indigenous communities resulting from industrial pollution is one of the troublesome areas toward environmental justice.³³

A. Health Risks Due to Pollution

Such industrial activity leads to air and water pollution causing health hazards to the local indigenous peoples dwelling close to the operations.³⁴

- **Respiratory and Waterborne Diseases:** More exposure to pollutants causes respiratory diseases, skin diseases, and waterborne diseases that may pose risk mainly to weaker sections such as children and the old.³⁵

B. Loss of Traditional Knowledge and Practices

It eats into the traditional knowledge systems and practices of indigenous peoples, which are well rooted in the health of their environments.³⁶

- **Cultural Disruption**

Loss of biodiversity and degradation of ecosystems will greatly undermine the resources upon which indigenous cultures depend. There is also a threat to culture heritage and identity as well.³⁷

6. Slow judicial processes

³⁰ <https://www.sciencedirect.com/science/article/abs/pii/S0921800919304197>

³¹ https://books.google.co.in/books?hl=en&lr=&id=X31zFo3Y6U8C&oi=fnd&pg=PR5&dq=industrial+pollution+in+indians&ots=HevYbgF7RH&sig=-uAf5Ct7hKUNQP8qHirK7rRRX6U&redir_esc=y#v=onepage&q=industrial%20pollution%20in%20indians&f=false

³² <https://link.springer.com/article/10.1007/S11356-021-14592-0>

³³ https://d1wqtxst1xzle7.cloudfront.net/68472988/Environment_and_Health_in_India20210801-27089-ybqr8.pdf?1627834314=&response-content-disposition=inline%3B+filename%3DEnvironment_and_Health_in_India.pdf&Expires=1729061519&Signature=d8UV~E1L0nFzdBoNpzZrIRG2qd3~3RNfPIPIrkcQQUt-p-Ud1hwtZyoQdOmp21z0g~0TZzyR3J83bqX059XZm0~Mbn1EwHTnReYv1mKIFhNVaU9M32~A0VDAUWTxmc7Eflq~tJJ803bAX~xHNVbOD~euYyyPCNoQgRUZxqIt2bcCs3VwgzBzVhgBwtgIpg8WYNdEBzTm1FlaT3mcq8vNga8GFDCaOaXfe9ImdvX4WE3SgELfe2kstGNbGtSCVjW5l0N RoUkAHeo4xX5CtPnFHw4GNyU37JXFi~tqlk8xplvqhdSmGgpeaDSmL~eTII8co~HroaOhl-I0JoxJYOy2EQ__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

³⁴ Council on Environmental Quality, "Risk Analysis: A Guide to Principles and Methods for Analysing Health and Environmental Risks." Executive Office of the President, Washington DC, 1989

³⁵ <https://link.springer.com/article/10.1007/s11356-016-6085-7>

³⁶ DR Deis and DP French. "The use of methods for injury determination and quantification from natural resource damage assessment in ecological risk assessment." Human Ecol Risk Assmt 4:887-903, 1998

³⁷ AT Durning. "Guardians of the Land: Indigenous peoples and the health of the earth." World watch Paper 112, Washington DC, The World watch Institute, 1992.

While the Indian judiciary has been very proactive in environmental protection, some weakness of the judicial process has been in speed: judging and delivering justice.³⁸

The main area of concern would include:

A. Long Delayed Prosecution

- Most environmental court cases are too long-winded, taking several years or even decades to resolve. The process mostly denies the locals immediate relief from pollution or halting some obstructive industrial activities.
- **Increased Vulnerability in Prolonged Case:** Communities become unnecessarily vulnerable to the adverse impacts of continued pollution and displacement during long court battles that can be drawn out or delayed by participating parties, thus weakening their resilience.³⁹

B. Complicated Legal Processes

- Complex legal procedures may deter indigenous peoples from pursuing redress through the court system since it fails to afford them simple, straightforward easy to follow procedures.
- Legal battles, familiarity with procedural norms, and even the cost of "cause" can thus be legal impediments to accessing justice for marginalized populations.

The concerns regarding environmental justice and industrial pollution involving indigenous tribes in India cannot be easily referred to as minor issues but can instead be listed by systemic inequalities. All these demands a comprehensive approach that involves legal reforms, capabilities building, and heightened awareness of indigenous rights.

India will look toward a future where indigenous peoples have their rights to equal treatment and respect, where their voices inform decisions affecting their lands and lives.

Real environmental justice for India's indigenous peoples can only be seen through ongoing efforts toward empowering communities, strengthening legal protections, and promoting socio-economic resilience.

Section 4: Recommendations for Strengthening Environmental Justice

Industrial pollution is a major challenge for the indigenous people of India. Therefore, it demands a multi-dimensional fight against it. The following recommendations are based upon strengthening environmental legal protection, effective law enforcement and capability of indigenous people to resist environmental degradation.

1. Strengthening Environmental Impact Assessments (EIA)

A. Greater transparency and public participation

One of the valuable tools that is applied in evaluating the anticipated environmental and social impacts from planned industrial development in a given locality is the consideration of EIA. This is not being practiced appropriately today, though, because EIAs are largely carried out behind closed doors and without enough participation from indigenous peoples. In order to look forward to the problem more constructively, the following should be considered:

- **Mandatory Public Consultations:** Enacted statutes must exist that may call for proper public consultations being held with the affected communities before the project can be passed. The indigenous peoples should have active participation during the process of EIA and be heard in matters pertaining to them.⁴⁰
- **Access to Information:** The developers must be made to avail information related to the proposed projects readily and make available a detailed study of the environment and probable impacts. It has to be in local languages and forms palpable to indigenous communities.⁴¹
- **Independent Review Panels:** Create independent review panels with members consisting of environment experts, community representatives, and lawyers who will scrutinize the results of EIA outcomes. Such panels will be given authority to advise changes in a project or even reject proposals due to gross risks to the environment and indigenous rights.⁴²

B. Cumulative Impact Assessments

³⁸ <https://www.tandfonline.com/doi/abs/10.1080/00045608.2011.641892>

³⁹ Marianne Lavelle and Marcia Coyle, "Unequal Protection: The Racial Divide in Environmental Law." National Law Journal, September 21, 1992.

⁴⁰ Viswanathan, B., and Kumar, K. S. K. (2015). Weather, agriculture and rural migration: evidence from state and district level migration in India. Environment and Development Economics, 20-4, 469-492.

⁴¹ Shue, H. (2014). Climate justice: Vulnerability and protection. Oxford, Oxford University Press.

⁴² <https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2011.300265>

The whole EIA process must be viewed in light of weighing the possible decision to incorporate into account a direct impact of one project but its effect on an existing industrial activity and environment. More protection then for both the environment and the rights of the indigenous peoples shall be ensured.

2. Enhancing the Law Enforcement and Compliance Mechanism

A. Enhancement of Regulatory Agencies

- Enforcing environmental law is also provided with various regulatory authorities, mainly the Central Pollution Control Board and state pollution control boards. And again, they have limited resources and authority for performing the tasks assigned to them.⁴³ Their capacity should be increased:
- It can help inure additional funding and resources to the pollution control boards so that they can observe industrial activities closely, inspect frequently, and can get better compliance with environmental laws.⁴⁴
- **Training and Capacity Building:** In-house training programs for the staff of regulatory agencies about the rights of local people, environmental law, and pollution control must be arranged regularly so that environment laws could be effectively monitored and enforced.⁴⁵

B. Strengthened Sanctions Against Non-compliance

- Punishment for violation of environment law is usually too meagre in present conditions to persuade companies to pollute less. Harsh punishment is necessary for ensuring compliance:
- In that respect, environmental laws have to be revised in the direction of increase the heft of fines and penalties for accused and proven companies which pollute or harm the environment, more so in the said region that has an indigenous population.⁴⁶
- **Cancellation of Licenses:** On the other hand, the government is supposed to revoke or cancel licenses of companies which constantly break environmental laws so that firms have a corresponding accountability.

3. Free, Prior, and Informed Consent (FPIC)⁴⁷

Free, Prior, and Informed Consent is a policy in the treatment of indigenous peoples' rights with regards to projects affecting their land and resources. Addition of FPIC will highly strengthen the relations of indigenous peoples and industrial developers.

Legislative Framework towards FPIC

India should build stronger laws at home under FPIC by bringing domestic laws in conformity with international standards. These legal compulsions of FPIC should oblige:

- **Mandatory Community Consent:** Industrial projects cannot move ahead without getting approval from indigenous communities involved in the process while respecting their rights to the land and natural resources.
- **Sufficient Consultation Processes:** There must be adequate time for discussion and assessment of the potential impacts on the proposed projects by the affected communities, so that proper decisions can be made.
- **Education and Capacity Building**

The rights under the FPIC principle must be made known to them through training and resources that NGOs and civil society organisations can conduct, to empower the indigenous people in negotiating industry developers and government agencies effectively.⁴⁸

4. Capacity Building of the Indigenous communities

Capacity building allows indigenous communities to use their rights in a proper, most effective manner:

A. Legal Education and Awareness

⁴³ RB Kuehn. "The environmental justice implications of quantitative risk assessment." University of Illinois Law Review, 1996(1):103-172

⁴⁴ <https://search.issuelab.org/resources/2971/2971.pdf>

⁴⁵ <https://link.springer.com/article/10.1007/s11625-020-00789-8>

⁴⁶ Saad, A. (2017). Toward a justice framework for understanding and responding to climate migration and displacement. *Environmental Justice*, 10-4, 98-101.

⁴⁷ free, prior and informed consent (FPIC)

⁴⁸ SP Pavlou, EJ Zillioux, RA Thompson. "Technical and political changes in developing and implementing risk-based environmental regulations." *Human Ecol Risk Asmt* 4: 701-719, 1998

- **Workshops and Training Programs:** Workshops and training programs should be regularly held among the indigenous people; they must be cognized of their rights under national and international law. These include ecological law, rights over land, and industrial pollution causing health issues.
- **Availability of Legal Aid:** Establishing legal aid centres in the tribal areas will get them access and representation by legal professionals at all times to the environmental injustices which are being faced by the communities.

B. Community Organisations Empowerment

The indigenous peoples normally have poor organizational capacity to push for their rights. Strengthening and building the capacity of local organizations will empower and enhance their mobilizing, negotiating and lobbying capabilities for environmental justice.

- **Organisational Support at Grass Root Level:** The government must and shall form NGOs that make grass roots organizations of indigenous interests. Grass roots offer a ground for collective action as well as advocacy on environmental issues.
- **Networking and Co-operation:** Networking among indigenous peoples, environmental NGOs, and legal experts would strengthen the voice of the indigenous peoples and increase advocacy efforts.

5. International Cooperation and Compliance

International instruments to which India is a party have implications for rights of indigenous peoples and environmental protection:

A. Instrument Ratification

- India should ratify the vast majority of international instruments dealing with the rights of indigenous peoples and the environment protection:
- **ILO Convention 169 :** Signing this convention will oblige India to take measures with regard to the rights of indigenous people that will be consulted regarding projects affecting their lands.
- **Compliance with UNDRIP⁴⁹:** The rule of domestic law has to be complied with in accord with principles under UNDRIP so that indigenous peoples have a legal framework for their protection.

B. International Agency Engagement

- India must engage actively with the international bodies and share India's best practices in the conservation of the environment with others so that such indigenous rights can be promoted:
- **Active participation in International Forums/ Conferences:** India, which is an active participator in international forums and conferences on indigenous rights and environment protection will definitely emerge over these issues and learn other best practices implemented in other parts of the world.
- Intergovernmental Organizations, International NGOs, and International Collaborations Working with international NGOs and other organizations that have interests in indigenous rights can complement additional resources and expertise for the advocacy work in India.⁵⁰

A very critical and sensitive scenario of industrial pollution of India converging with indigenous tribe rights is an intersection that poses a highly complex, acute issue. Such a scenario can be an example since India possesses a comprehensive legal framework to guard both the interests of the environment as well as indigenous tribe rights but merely lacks implementation due to the reason it is not being adequately enforced and because of ignorance and systemic inequalities.

All this has to be addressed in an integrated and harmonized approach, which encompasses voices and rights of indigenous peoples. The strengthened EIA process, law enforcement mechanisms advanced through the principle of FPIC⁵¹, and investment in capacity building of indigenous peoples have excellent promise for the India of better equity and justice in environmental governance.⁵²

This way, mainstreaming international standards into India's domestic laws and active participation in the global discourses over indigenous rights as well as environmental justice will further strengthen its commitment towards this vulnerable population.

On the way to effective environmental justice for Indian indigenous communities, all stakeholders from the government, civil society, to indigenous peoples, themselves, have to commit. This would make the future sustainable and more equitable as Indian citizens thus avoiding a situation whereby development would come to them at the cost of environmental degradation through the elimination of social injustice.⁵³

⁴⁹ https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf

⁵⁰ A Sachs, "Eco-Justice: Linking Human Rights and the Environment." World watch Paper 127, December 1995. Washington DC, The World watch Institute.

⁵¹ <https://www.ohchr.org/en/indigenous-peoples/consultation-and-free-prior-and-informed-consent-fpic>

⁵² https://www.researchgate.net/profile/Ravi-Rajan-3/publication/279956976_Environmental_Justice_in_India/links/5b5fa34e458515c4b2543a9a/Environmental-Justice-in-India.pdf

⁵³ <https://dergipark.org.tr/en/pub/jss/article/1089292>

Conclusion

The Integration of Environmental Justice and Human Rights in India for these indigenous tribes is an extremely sensitive area that needs immediate attention and action. This research paper goes through the various dimensions of problems which such communities face in the light of industrial pollution, casting it into the complex play between legal structures, socio-economic factors, and the reality of environmental degradation. The findings thus indicate the importance of identifying particular vulnerabilities of the indigenous peoples under conditions of rapid industrialization.⁵⁴

A major theme in this paper is that current legal protection of indigenous peoples is unsatisfactory. However good the framework of environmental laws and international conventions had been to safeguard the rights of the marginalized, the implementation result was a major problem still. The case laws analysed obviously range from landmark judgments like *M.C. Mehta v. Union of India* and *Samatha v. State of Andhra Pradesh* to the latest judgments, such as *Orissa Mines v. Lok Sahayak Nishedhak Manch*. These can easily prove that the Indian judiciary can be an important force for environmental justice. However, systemic issues like corruption, capture by regulators, and bureaucratic inertia frequently nullify the effectiveness of judicial interventions.

The FPIC principle is an important tool for empowering indigenous tribes in fighting for justice. With FPIC embedded in the legislation governing industrial activities within their lands, indigenous peoples have, on a number of occasions, had their rights safeguarded, thus ensuring their concerns and opinions are heard and considered in the decisions. This would be compatible with international human rights standards, and an equal interaction between the indigenous peoples and either state authorities or corporate entities should be encouraged.

Further, their socio-economic vulnerabilities must be taken into consideration to increase their ability to enforce the entitlements. In India, some of the most vulnerable indigenous tribes face basic challenges such as poverty, illiteracy, lack of access to health care, and other economic resources. These factors definitely constrain their capacity to struggle for justice or litigate against industrial pollution. Therefore, specific remedial programs that take steps to uplift the socio-economic conditions of indigenous societies along with law reforms are needed to strengthen the very coping mechanism of these societies as well with environmental degradation.⁵⁵

These elements should be accompanied by civil society organizations and advocacy groups as well as environmental activists. Their area of expertise is to educate and mobilize support for action and sometimes provide indigenous peoples with legal counsel. With the coordination of governmental bodies, NGOs, and other social actors across levels of society, all the necessary attention to environmental justice can be achieved.

In conclusion, environmental justice for India's indigenous tribes calls for an all-inclusive and integrated approach towards legal, social, and economic dimensions. It is important that indigenous voices not only be heard but also integrated into processes affecting their lives and the lands they depend on. India can move toward a more sustainable and just future if the legal frameworks are strengthened, accountability of the polluters is enforced, and rights of indigenous people enhance.

The rich heritage and traditional knowledge of the indigenous community should be respected as it recognizes them as the masters of the environment and an important partner for this search of sustainable development.⁵⁶

Challenges are high but so is the potential for positive change. It is against such a background that the upholding of rights of indigenous tribes must come under special priority as India grapples into the complexities of environmental governance in times of industrialization. Only through combined action in dealing with these issues that India will seek true environmental justice-the protection of the environment and respect and empowerment given to its indigenous peoples for survival and sustenance into the next generations.

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⁵⁴ Page, E. (2006). *Climate change, justice, and future generations*. Cheltenham, E. Elgar

⁵⁵ <https://academic.oup.com/socpro/article-abstract/40/1/5/2925259>

⁵⁶ Ministry of Urban Development of India (2010). *National mission on sustainable habitat*. Government of India. New Delhi.

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