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LEX ET MUTATIO

LAW AND SOCIAL TRANSFORMATION

Volume V

Editor-in-Chief
Dr. V. Shyam Kishore

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Dr. V. Shyam Kishore

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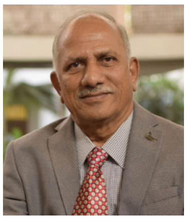

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FOREWORD

India did not have feudal society even during the Mughal period. Farmers directly had the land for cultivation from the Hindu Kings and the later from the Islamic head of the state, Sultans and Nawabs against payment of rent, in cash and/or kind. The Britishers overnight changed the social structure with only one law, the Permanent Settlement Act.1793. the Indian Society, especially in the East India, was turned into Zamindari System that was instrumentally feudal in nature. The entire country followed suit in the British empire. The system had gone so deep that over time the landlord system of social structure could not be changed thoroughly. Over the last seventy-five years of legal and social reforms, focus has been to hand over the land to the tillers. Law is an instrument of social engineering. Through the administration of law and justice, a society horizontally and vertically divided into caste and creed is undergoing social transformation through a system of reservations in all public service opportunities and is emerging as a society in course of time with Indian nationals placed equally, socially not discriminated, economically with equality of opportunity and politically with each adult having the equal right to determine his/her governance. Sometimes law leads the society in a definite direction, like payment of minimum wages; sometimes law lags the society to reform the social negations, like prevention of monopoly in the market. Together, the coexisting and harmonious relationship between law and society aims to evolve and provide justice to all, economic, social and political. All Indian nationals today enjoy the same right and enjoy equal entitlement of access to minimum, food, shelter, health, education, and right to work opportunity. In addition, since law is intricately intertwined with various social mores and practices and interacts with the societal norms in a delicate manner to establish and foster rule of law, governance, systems, structures, education, politics, and most importantly public order, it tends to promote development, social welfare, and overall progress.

Institutions such as Alliance University are a broader part of the society that aims to buttress academic excellence and to impart knowledge, including legal knowledge, to the future generations. They do so by building the blocks of research, nurturing novel ideas and harmonizing criticism that encourage people to use different lenses to visualize and analyze the growth of law within the confines of the social boundaries.

Lex Et Mutatio: Law and Social Transformation, Volume V brings diverse perspectives, legal insights and opinions encompassing law and society from scholars, academicians, practitioners and students. The volume embodies articles from constitutional rights to environmental sustainability to intellectual property rights to due process and prisoners' rights, all catering to the main theme *Law and Social Transformation.* The contributions of the scholars, academicians, practitioners and students reflect their commitment to critically evaluate law as an instrument of social change. Further, their intellectual capabilities and dedication to dissect and revisit laws and policies circumscribing the intermesh of social, economic, political, cultural and legal issues indicate their pledge to find solutions to the challenges that affect the society, both temporally and spatially.

We extend our sincere appreciation to the authors, editors and contributors whose dedication and insights have made the publication of this volume possible. May this volume inspire the society to discuss, debate and reflect on the authors' perspectives of law and society.

Prof. (Dr.) N. L. Mitra
Professor Emeritus, KIIT School of Law, KIIT University, Bhubaneswar

MESSAGE FROM PRO- CHANCELLOR

It gives me immense pleasure to see *Lex Et Mutatio: Law and Social Transformation, Volume V* getting published as a part of our continuing effort to support critical legal research and scholarship. What makes this volume special is not only the quality of research it presents, but also the spirit of collaboration and hard work it embodies. It is a reminder that the growth of state-of-the-art legal and social research is incumbent on collaborative and conjoined efforts of sharing, engaging and learning together.

The Alliance School of Law, Alliance University has been a pioneer in actively disseminating legal knowledge, spreading legal awareness, endorsing legal scholarship and fostering academic excellence. In addition, through its various research centres, the Alliance School of Law has been instrumental in promoting critical legal research by conducting normative analysis of the laws, drawing up nuanced policies, piloting field surveys, organizing academic events such as research colloquiums, conferences, workshops, etc.

This publication reflects the thoughts of the authors who are committed in critically examining the areas that intersect law and society. Every contribution in this volume is a step forward in building an edifice, a strong legal framework, that values rule of law, access to justice, procedural and substantive fairness and inclusivity. I am confident that this edited book will enrich further academic research by inspiring its readers.

Mr. Abhay G. Chebbi
Pro- Chancellor
Alliance University, Bengaluru

MESSAGE FORM
VICE-CHANCELLOR

Law has always been more than a set of rules that creates a system; it is one of the most powerful instruments that drive social change. The publication of *Lex Et Mutatio: Law and Social Transformation, Volume V* is a meaningful step towards translating real-life social and legal issues into in-depth research. This volume is a symbol of courage to question and reflect on diverse aspects intersecting law and society. Every article in this volume reminds us that law is not confined to the doors of courtrooms but rather is a co-existing phenomenon that builds the society and humans in it.

At Alliance School of Law, Alliance University we believe that holistic legal learning is a continuous process that encourages curiosity, passion and academic excellence. The volume sagaciously attempts to explore beyond the obvious and to underscore the intricate legal issues and concerns plaguing the society. Such puritan attempt makes me happier; the hard work and dedication put into publishing this volume have been laudatory. I truly appreciate the efforts of the authors and the editorial team who have made publication of this volume possible. The articles incorporated in the edited book clearly reflect the authors' intent and efforts to revisit the transformative capabilities of law.

This publication is also interdisciplinary in nature, bringing in new and fresh perspectives of the transformative potential of law and its ability to interconnect disciplines. Incorporation of articles (in this volume) covering issues such as climate change, environmental sustainability, data protection, artificial intelligence, etc., indicate the interdisciplinary and all-embracing nature of this work. I earnestly hope that *Lex Et Mutatio: Law and Social Transformation, Volume V* will create an indelible impression on the minds of its readers.

Dr. Priestly Shan B
Vice-Chancellor
Alliance University, Bengaluru

MESSAGE FROM THE DEAN

The publication of Lex Et Mutatio: *Law and Social Transformation, Volume V* is a proud moment for our law school and our institution. The volume is a testament of the Alliance School of Law, Alliance University to uphold state-of-the-art legal education and to promote a research ecosystem that focuses on academic rigor, legal scholarship, merit and innovation. In this rapidly changing legal and social landscape, it is difficult to cater to legal education and research only by conventional teaching-learning methods and curricular elements. Publications (such as the present one) are one of the novel ways to capture, assess and analyze the changing legal and social landscape and to create a roadmap for the future.

The volume is a compilation of a few research papers/articles that were submitted for publication and subsequent presentation at the International Conference on Law and Social Transformation (ICLS-2025). The research papers/articles that were accepted for publication in the edited book underwent strict editorial scrutiny and peer-review checks. This edited book is a demonstration of not only scholarly research but also interdisciplinarity. It is also an example of how academic research may be facilitated through supportive and collaborative research environments.

As the Dean of the law school and as an integral part of the editorial board of *Lex Et Mutatio: Law and Social Transformation, Volume V*, I envision in this volume a promise, a commitment, to nurture research skills and to advance critical legal scholarship. I sincerely hope that every reader (of this volume) finds the work interesting, inspiring and scholarly. I further hope that this volume helps the readers to dissect and evaluate the transformative capability of law as an instrument of social change.

Dr. V Shyam Kishore
Professor & Associate Dean, Academic Affairs
Dean, Alliance School of Law, Alliance University

ACKNOWLEDGMENTS

It gives us immense pleasure to extend our heartfelt gratitude to all those who made the publication of Lex Et Mutatio: Law and Social Transformation, Volume V a reality. This volume is not merely a collection of articles, but the product of collective vision, hard work, and dedication of many individuals, who have, in their own unique ways, contributed to its fruition and eventual success.

We owe our deepest appreciation to the University leadership, whose encouragement, guidance, and unwavering support have been a constant source of inspiration. Their commitment to advance academic excellence and to build a culture of research and publication has enabled us to strive towards higher standards of academic rigor, scholarship, innovation and distinction.

Our sincere thanks are due to the members of the esteemed Editorial Board, peer reviewers, and contributors. Their expertise, constructive feedback, and tireless dedication have enriched this volume with both depth and diversity. Without their knowledge and inputs, this edited book would not have achieved its intended quality, scholarship and relevance.

We would also like to recognize the invaluable contribution of our faculty members and students, who devoted countless hours to the process of planning, editing, and reviewing. Their perseverance, patience, and teamwork transformed this vision into a successful publication. Each stage of this journey, from conceptualization to the final printing, was unique and made possible only because of their relentless efforts and commitment.

We would like to express gratitude to *Dr. B. S. Reddy, Dr. Devaiah N. G, Dr. Prakash Kanive, Dr. Sujith P Surendran, Dr. Smita Satapathy, Dr. Showkat Ahmad Wani, Dr. Sanjay Kumar Pandey, Dr. Abhishek Thommandru, Dr. Rachana Choudhari, Dr. Sayantani Dutta, Ms. Karthiayani A, Mr. Rahul Shaw, Mr. Sarthak Sharma and Mr. Ranjeet Matthew Jacob* for their invaluable time.

We are equally grateful for the research scholars, *Ms. Ananya Mandal, Ms. Saritha P, Mr. Abhai Sreekumar CA, and student coordinators, Ms. Neha C, Ms. Anjali Mahesh Pant, Ms. Rapaka Himabindu, Ms. Keerthana Jinugu, Ms. Nandita Pandey, Ms. Subha B, Mr. Dhiyanesh S, Ms. Sripathi S N, Mr. Chaitanya Sagar Kondikanti and Ms. Lasya C R* for their dedication and commitment in facilitating the publication of the book.

We cannot conclude without acknowledging our readers. It is for the curious, questioning, and passionate readers that this volume exists. Your engagement motivates us to continue exploring the evolving intersections of law and society, and its transformation. It is our hope that this volume will serve both as a resource and an inspiration for further academic research, discussions, and pedagogical reforms.

We must accord our deep sense of appreciation to Dr. Prakash I. N., the Librarian of Alliance University, and his library colleagues, especially Mr. Muhammed Shafeeq for their unwavering support in the finalization and publication of this edited volume. Finally, we extend our gratitude to every individual who, directly or indirectly, played an intrinsic part in bringing this volume to life. To each of you, we say a thank you, thank you for your belief in this initiative, for your contribution to its growth, and for your support in making *Lex Et Mutatio: Law and Social Transformation* a meaningful academic resource.

With profound respect and gratitude,
Editorial Committee
Lex Et Mutatio: Law and Social Transformation

PREFACE

Lex Et Mutatio: Law and Social Transformation is envisioned as a deliberative space and a discussion platform where ideas, knowledge, and lived realities converge to facilitate holistic, path-finding and collaborative research. At its heart, this volume is an invitation to reflect upon the constantly developing relationship between law and society, and to recognize its transformative features that affect the legal architecture in general and the legal provisions in particular. Law, after all, is not only a system of rules, but also a living force that adapts, responds, and, at its best, shapes pathways to justice, equality, and sustainable progress.

The pace of change in our times is extraordinary and phenomenal. Technological innovations, environmental challenges, shifts in governance, and the redefinition of rights and freedoms constantly demand new legal responses. People's needs and perspectives continue to change alongside changes in the society and in the laws. In this volume, Lex Et Mutatio: Law and Social Transformation seeks to bring together diverse perspectives from scholars, academicians, practitioners and students, creating a body of knowledge which raises critical questions, offers fresh and nuanced insights, and proposes solutions to the incumbent social and legal issues.

This year's volume is closely aligned with the 4th International Conference on Law and Social Transformation (ICLS-2025), hosted by Alliance School of Law, Alliance University, Bengaluru, India. The Conference examines different aspects of how law can help in addressing the world's urgent challenges pertaining to climate change, inequality, human rights violations, governance gaps etc. The volume and the Conference together, reflect our shared commitment to advancing research that is intellectually driven, socially relevant, and globally important.

The main theme of the ICLS-2025 is "Empowering Social Transformation through Law and the Sustainable Development Goals (SDGs)," which reminds us of the role that law plays in building a fair and sustainable future. The articles in this volume incorporate a wide range of topics, starting from prison reforms and human dignity to social welfare and poverty alleviation to constitutional justice to digital law, to environmental litigation, to cultural rights and gender justice. The topics are realigned across six sub-themes, which are (a) Cyber Laws, Data Protection and Artificial Intelligence (b) Criminal Justice Administration, Due Process and Prisoners' Rights (c) Environmental Sustainability, Climate Change and the Rights of Vulnerable Population (d) Crimes, Criminal Laws and Criminological Frameworks (e) Emerging Paradigms of Intellectual Property Rights and Blockchain Governance (f) Constitutional Law, Human Rights and Associated Legal Frameworks. These sub-themes address not merely isolated representations but interconnected challenges, and their treatment in this volume reflects the complexity and criticality of the challenges. Each contribution to this volume represents not just thorough research, but also the passion of the authors towards the belief that law must aid all-inclusive growth and social transformation.

In a world that rewards speed and efficiency, this volume took its time to slow down, examine, critique, and rethink the role of law in engendering social transformation and in addressing issues and concerns that affect the fast-changing social landscape. The legal insights captured in this volume will equip us to not only react to change but also to synthesize critical legal research with responsibility and vision. As readers engage with this volume, we hope it does more than inform. We hope it provokes questions, challenges assumptions, and inspires action. May this volume serve as a guide, not only for students and researchers but also for practitioners and policymakers who bear the responsibility of curating and implementing the laws and changing the socio-legal landscape.

The publication of Lex Et Mutatio: Law and Social Transformation, Volume V is not only the result of months of dedicated efforts but also is a fresh step in the continuing journey of understanding the intersection points between law and society. As we present this edition, we invite our esteemed readers to become active participants and prospective contributors in this journey. With these thoughts, we warmly welcome you to read this volume. May it enrich your understanding of law and society and help you foresee possible future solutions.

With regards
Editorial Committee
Lex Et Mutatio: Law and Social Transformation

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CHAPTER - 1

CYBER LAWS, DATA PROTECTION AND ARTIFICIAL INTELLIGENCE

CONFRONTING ALGORITHMIC BIAS: LEGAL PATHWAYS TO EQUALITY IN THE AGE OF ARTIFICIAL INTELLIGENCE

Parneet Kaur[1]

ABSTRACT

Concerns over algorithmic bias and its impact on the equality before the law concept have grown as a result of the incorporation of Artificial Intelligence (AI) into judicial, administrative, and decision-making processes. The manner that some AI technologies like facial recognition, predictive algorithms, and automated decision-making tools might perpetuate or exacerbate prejudice against marginalised groups is what qualifies for consideration. In accordance with the Constitution and international human rights standards, it aims to investigate the legal implications of algorithmic prejudice in great detail and provide a reformative solution. The aforementioned research is judicial in nature, and it is then supplemented by analysis through case studies and comparisons of particular jurisdictions, such the US, the EU, and India. This research takes into account a more current understanding of legislative changes and policy actions aimed at mitigating algorithmic bias in addition to this judicial pattern study. These frameworks, which are evaluated for efficacy against the issues provided by oblique AI systems, include important provisions like as anti-discrimination laws, data protection restrictions, and due process guarantees. According to preliminary research, existing legal frameworks would not provide enough protection and are frequently needed to address the size, complexity, and obscurity of contemporary AI systems. The preliminary research found that the current legal frameworks are insufficiently protective and unable to deal with the complexity, obscurity, and immensity of developing AI systems. This essay promotes the prompt adoption of strict supervision procedures, algorithmic accountability procedures, and transparency requirements. This represents interdisciplinary cooperation among ethicists, engineers, and legal experts in crafting a future for just AI governance. This research argues for a rights-based and proactive legal system for algorithmic harm while including equality and non-discrimination principles in the design and use of AI systems.

Keywords: Artificial Intelligence, Algorithmic Bias, Equality Before Law, Legal Reform, Discrimination, Human Rights, AI Regulation.

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1. Assistant Professor, Chandigarh University.

INTRODUCTION

The AI technology replicating the human intellect so that a machine can perform functions that are usually allocated to human cognitive abilities, such as learning, reasoning, problem-solving and decision-making. AI is processing extensive datasets and identifying patterns to generate predictions or judgments. In the last few decades, artificial intelligence has transformed itself from a theoretical concept to a reality being a necessary part of everyday life. This phenomenon also got catalysed by advances in machine learning, deep learning and processing power. AI been done in the healthcare, banking, transport and education sectors. Such AI trends can be noticed in virtual personal assistants, driverless vehicles, medical diagnostics and recommender systems. The process would involve reviewing literature, examining legal documents and comparative case studies in a variety of geographic locations and sectors.[2]

RESEARCH METHODOLOGY

The present study undertakes a doctrinal and comparative approach, examining constitutional provisions, statutory frameworks and judicial precedents in India, the USA, and the EU for the evaluation of existing laws against algorithmic bias. The paper aims to emphasise judicial approaches to equality and due process in an AI setting through a case law analysis that includes Maneka Gandhi v. Union of India, State v. Loomis, and Bridges v. South Wales Police. In order to do this, it critically examines academic research, policy documents, and recently created laws (such as the GDPR, AI Act, and the Digital Personal Data Protection Act of 2023) and makes recommendations for changes that would guarantee justice and accountability.

UNDERSTANDING ALGORITHMIC BIAS

When artificial intelligence systems replicate or magnify the biases present in the underlying training data from which they are either trained or implemented, it is known as algorithmic bias and leads to unfair, coercive, or biassed outcomes. Such discrimination, albeit in some instances accidental, leaves worryingly adverse effects on the population, very often vulnerable or less represented in it. For instance, an AI used for recruiting is likely to have a historical bias against applicants from particular ethnic or gender backgrounds if it was trained on a biased historical dataset. Bias may emerge from any direction, be it a lack of data, human prejudices fed into programming or distorted reasoning from algorithms.[3] They can therefore interfere with some of the fundamental rights such as equality, non-discrimination, and the right to due process. When AI is taking a special role in making critical decisions about healthcare, law

2. Richardson et al., Dirty Data, Bad Predictions: How Civil Rights Violations Impact Police Data, Predictive Policing Systems, and Justice, 94 NYUL Rev. Online 15 (2019).

3. Buolamwini et al., Proceedings of the 1st Conference on Fairness, Accountability and Transparency, 81 PMLR 77-79 (2018).

enforcement or banking and employment sectors, it becomes imperative to address algorithmic bias for justice, accountability and equity in a tech-driven society. Algorithmic bias arises from a multitude of intertwined technological and human causes. The following specific areas may be the possible sources of algorithm bias:

a). Biased Training Data

Most of the algorithmic bias is caused by historically tainted training data. AI systems extract their knowledge from patterns in incoming data; if that incoming data embodies existing social inequities or discriminatory practices, therefore, the trained models will continue and reinforce those prejudices. Predictive policing algorithms trained on skewed crime data may then be biased against groups already over-policed, thus continuing a cycle of monitoring and injustice. Recruitment will usually favour profiles like those that were hired before, rendering women, minorities, or people from different backgrounds disadvantaged. The addition of complex and non-transparent datasets makes it even more difficult for developers, who may sometimes be unaware of implicit biases or may completely lack the tools to address them.[4]

b). Sampling Errors and Data Imbalance

Algorithmic bias is fatally caused by sampling errors and unbalanced datasets, which create an imperfect representation of real-world populations in training data. Any return on investment made in terms of alleged distinctions and otherwise equity and justice was severely undermined by the A's ability to hire specialists who passed for superior groups while terribly failing marginalised populations due to arbitrary biases in data set training. The accuracy of facial recognition is significantly higher on well-skinned individuals than it is on persons of colour, particularly women and other ethnic minorities, who have extremely high error rates. Such misidentification can have potentially disastrous results, such as denial of services or unjust arrests. These incidents stem from data training that has been inconsistent since its inception.[5]

Under-sampling of under-represented populations is typically the outcome of such biases' extensive structural circumstances, such as the digital divide, socioeconomic split, and geographic centralisation of data sources. Similar patterns can be seen in medical AI and other domains, where systems built using data from comparatively smaller populations don't work well for diverse consumers. AI systems would either amplify or reinforce societal disparities if such technical imbalances are not addressed. To alleviate this, the developers need to focus on dataset diversity and implement such corrective measures as re-sampling, generation of

4. Zhou et al., Understanding Relations Between Perception of Fairness and Trust in Algorithmic Decision Making, 56 2021 8th International Conference on Behavioral and Social Computing (BESC) 1-5 (2021).

5. Wang & Harper, Factors Influencing Perceived Fairness in Algorithmic Decision-Making: Algorithm Outcomes, Development Procedures, and Individual Differences, 45 Proceedings of the 2020 CHI conference on human factors in computing systems 1-14 (2020).

synthetic data and modeling via fairness-aware techniques. In addition, the assessment for fairness and accountability must be broad across demographic groups.

c). Labelling Bias

When human annotators insert their cultural assumptions or subjective judgments or subconscious prejudgments into the data label, they introduce the bias of labelling, causing their effect in the classification as well as in the foretelling of the training data by AI systems. Because machine learning models today rely heavily on labelled instances, they can absorb the inherent biases reflected in data input that often results in skewed or biased output. This proved to be a nightmare for jobs requiring more sophisticated judgment. For example, the severity of interpretation for cases such as sentiment analysis, criminal justice classification, or content moderation will differ according to the backgrounds of the annotator: one will say a comment is negative, another will say it is funny, while others will be misdirected due to cultural preconceptions that link facial attributes associated with specific racial groups with either behaviour or character.[6]

d). Algorithm Design and Optimization Goals

An algorithm may be biased due to the design decision and optimization goals set while making the AI systems. Developers are able to choose features, models, and performance criteria that direct how an algorithm will work, and these options, even though they seem neutral, can also embed systemic inequities in the logic of the model. For instance, if a hiring algorithm is improved for precision on the basis of previous hiring data, it will continue to reflect the historical exclusion of female candidates or minority candidates. Similarly, credit-scoring methods that focus solely on the reduction of default risk may disadvantage persons from lower-income backgrounds, thus perpetuating financial inequities. Standard optimization criteria, such as the minimization of overall error rates, may further obscure performance differences among demographic subgroups, resulting in models performing good for the majority and poorly for the marginalized groups.[7] This might have severe consequences in sensitive areas such as law enforcement, healthcare, and credit assessment.

e). Feedback Loops

Whenever an AI system's outputs form a part of the feedback loops in which the subsequent input consists of affected outputs such feedback loops may cause the biases involved to undergo cycles of self-reinforcement and amplification. The bigger issue, though, would be

6. Zarsky, The Trouble With Algorithmic Decisions: An Analytic Road Map to Examine Efficiency and Fairness in Automated and Opaque Decision Making, 41 Science, Technology & Human Values 118-132 (2016).

7. Brozek et al., The Black Box Problem Revisited. Real and Imaginary Challenges for Automated Legal Decision Making, 32 Artificial Intelligence and Law 427-440 (2024).

with continuously adaptive systems that make new choices based on algorithmic judgements, human behaviour, or historical data. Predictive policing is an instructive example. For instance, the algorithm would suggest increased monitoring in highly policed neighbourhoods based on historical data, which ultimately results in more events being recorded and, ultimately, a reduction in the perception of criminality in those neighbourhoods. The impacts that presently affect the underprivileged would probably get worse in such a cycle.[8]

This creates a vicious loop because individuals from structurally disadvantaged backgrounds have worse credit scores as a result of systemic factors like irregular employment or insufficient savings. Therefore, while negative collateral re-enters the picture and exacerbates the process of economic marginalisation, low ratings keep the door to alternative financial alternatives somewhat open. The algorithms that recommend content based on interaction metrics may inadvertently spread sensational or biassed content that reinforces stereotypes and false facts, so influencing public opinion and strengthening already-existing social divisions.

f). Contextual and Deployment Bias

With deployment and contextual fallout bias, it no longer possible to bring an AI system that was developed for one environment into another without it being properly modified without bringing with it false and harmful outcomes. This kind of misconception comes from the myth that models developed in one context typically Western or resource-rich will function equally effectively in different settings, irrelevant to social, cultural, economic, or infrastructural differences. Diagnostic algorithms generated on data from rich countries would misdiagnose or recommend wrong treatments in resource-poor settings with a different medical background.[9] Moreover, hiring algorithms that are domestically designed may unfairly misinterpret applicants coming from other regions due to variance in education, working culture or language, hence producing biased results in hiring.

g). Emergent Bias Over Time

Emerging bias refers to those algorithmic biases that come into being once an AI system starts interacting dynamically with users, data environments, and social systems. This is opposed to biases that are already within the system, for instance, data bias or labelling bias, which set in during training; emergent bias forms over time and is more subtle and unpredictable. Therefore, real-time detection and prevention of attacks is much harder to perform.

8. Brennan & Dieterich, Evaluating the Predictive Validity of the COMPAS Risk and Needs Assessment System, 36 Criminal Justice and behavior 21-40 (2009).

9. Engel et al., Code Is Law: How COMPAS Affects the Way the Judiciary Handles the Risk of Recidivism, 33 Artificial Intelligence and Law 383-404 (2025).

AI systems are, by nature, continually learning from new inputs, such as user behaviour, interaction with content, or feedback from the environment. Their functioning may, therefore, resultingly deviate from the intention after a while. Take, for example, a recommendation algorithm of a social media platform, which initially continues to expose users to various material.[10] However, according to the algorithm's increasing ability to learn from more user clicks and preferences, it may ultimately promote over-clicking borderline controversial or sensational material, thereby strengthening echo chambers and common-shared pathways of misinformation. This bias was not present at deployment, but it has arisen due to the system's adaptive learning.

LEGAL AND ETHICAL IMPLICATIONS OF AI BIAS

The expanding use of artificial intelligence in decision making systems-from healthcare and employment to finance and even law enforcement and social services-has created an increasingly complex liability and ethical landscape. Biases that AI systems manifest-from either data or design-lead to violations of basic rights, perpetuations of discrimination and compromise ideals of fairness, accountability and justice.

a) Violation of Fundamental Rights

Most importantly, algorithmic bias is associated with higher fears and considerable damages in relation to the fundamental rights that constitutionalism and humanity value. For any extensive discussion on AI-generated rights infringement, there is equality and non-discrimination rights that are highly at stake.[11] AI systems use such a biased training data or have not considered social diversity in their development will provide inconsistent and highly discriminatory outputs. The facial recognition technologies manage to get rather high error counts compared to individuals with colour in their skin tones while some hiring algorithms tend to reflect historical patterns of gender-or race-biased discrimination.

In the historic case of The Bridges v. South Wales Police[12] the court examined the legality of police for live facial recognition (LFR) technology. The case was initiated when the civil liberties advocate Edward Bridges challenged the deployment of LFR by the South Wales Police, alleging that it infringed on his rights under the European Convention on Human Rights. The Court of Appeal Found in his favour, holding that the LFR technology was used in a legal vacuum and without proper safeguards or monitoring mechanisms. The decision emphasised that

10. Foss-Solbrekk, Searchlights Across the Black Box: Trade Secrecy Versus Access to Information, 50 Computer Law & Security Review 105-117 (2023).

11. Gonzalez-Sendino et al., Mitigating Bias in Artificial Intelligence: Fair Data Generation via Causal Models for Transparent and Explainable Decision-Making, 155 Future Generation Computer Systems 384-401 (2024).

12. [2020] EWCA Civ 1058

technology could support law enforcement as long as it adheres to the legality, proportionality, and privacy criteria. Most significantly, the case sparked a discussion on the dangers of AI surveillance tools used in predictive policing, such as discrimination, arbitrary targeting, and overcriminalization. Therefore, this ruling emphasises that before AI-enabled surveillance tools can be included into law enforcement, strong legal norms and open accountability procedures are required. Defending the right to a fair trial and due process, as it is currently being attacked with the greatest violence. Both AI methods for risk assessment or predictive policing have the potential to equally expose criminal justice and law enforcement systems to inaccurate identifications, erroneous profiles, or even biassed punishment. These sophisticated techniques rely on skewed or imprecise data, which distorts the legal error and undermines the procedural fairness that every community is required to ensure under the rule of law.

Furthermore, AI that surreptitiously and intrusively manipulates personal data appears to be a special violation of the right to privacy. AI is being used by many applications to gather, examine, and deduce personal data without informed consent, frequently with little to no openness about the procedures for data use and sharing. Such actions result in illegal channels for profiling, surveillance, and information misuse, which disproportionately impact marginalised communities. Such transgressions highlight the pressing need for ethical supervision and legal protection to guarantee that AI systems uphold and defend human rights.

A nine-judge Supreme Court panel rendered the historic ruling in the Puttaswamy case[13], recognising the "Right to Privacy" as a basic right under the Indian Constitution. The ruling maintains that privacy includes control over personal data, autonomy, and dignity. This has significant ramifications for AI and predictive policing since any state use of AI-powered profiling or monitoring must pass the proportionality, necessity, and legality standards. Regarding issues like the admissibility and legitimacy of AI-generated evidence in India with regard to informational privacy and certain protections against capricious state action, this judgement establishes a very robust constitutional framework.

b). Ethical Concerns

Currently, AI is faced with many rather serious ethical issues such as those of equity, clarity, accountability and so on. This question is one of the primaries regarding opacity under incomprehensibility of the existence of most AI systems. Most complex machine-learning models work as 'black boxes', where the conclusions are given, but there is no understandable reason for users or the same-affected people. Thereupon, this situation becomes prone to non-accountability for almost everything done by such systems and, therefore, raises severe problems with reference to legal and administrative norms regarding elucidation and justification

13. Justice K.S. Puttaswamy (Retd.) v. Union of India, (2017) 10 SCC 1.

of decisions, especially in cases of critical situations such as loan approvals or in cases like criminal sentences or medical diagnoses.[14]

Wisconsin's sentencing court has considered the case of State v. Loomis,[15] where a risk assessment algorithm (COMPAS) was used. Defendant Eric Loomis claimed that the algorithm constituted a violation of his due process-enabling scrutiny of the methodology governing its calculation and any related potential biases. It was argued that although the COMPAS algorithm is still a fair practice when used in sentencing, human judgement should not be replaced by it. The issue is particularly pertinent to AI in criminal justice because of the debate surrounding algorithmic opacity, fairness, and evidence challengers. It is a prime example of the conflict that arises when technological efficiency and constitutional protections of due process are combined, with the ensuing concerns about prejudice and overcriminalization that arise from the use of any predictive tool framework.

The idea of informed consent may give rise to yet another ethical dilemma. People rarely realise that automated systems make decisions about a few things that impact them in numerous situations (creditworthiness, insurance prices, eligibility for social programs). It is egregiously unethical to deny someone the ethical ideal of autonomy and their freedom to make an educated decision about matters that affect them.

The so-called "accountability gap" in AI governance has further complicated this problem. Where damage arises from algorithmic determinations, accountability is much less well-defined. It becomes more difficult to identify the actual sources of fault, whether it is with the developers of the model, providers or labellers of training data, businesses that put the system into use, or the algorithm itself. This engenders an "accountability vacuum" and complicates the assignment of liability or pursuit of legal remedies within currently available tort or regulatory systems.[16] The faster and greater the pace of these systems permeating major areas of human existence and activity, the greater will the backdrop and interface of ethics require to be addressed, to ensure equity, trust, and responsible advancement of developments in the future.

c). Relevance of Constitutional and International Human Rights Norms

AI application in decision-making processes pertaining to diverse sectors raises serious concerns for the protection and enforcement of constitutional and international human rights standards. In the Indian context, the Constitution of India gives Article 14, the Right to Equality, and direct protection from discrimination through Article 15, while Article 21 gives Right to

14. Hooker, Moving Beyond "Algorithmic Bias Is a Data Problem, 2 Patterns 4 (2021).

15. State v. Loomis, 881 N.W.2d 749 (Wis. 2016).

16. Kirkpatrick, Battling Algorithmic Bias: How Do We Ensure Algorithms Treat Us Fairly?, 59 Communications of the ACM 16-17 (2016).

Life and Personal Liberty. Biases that AI systems may exhibit may lead to the deprivation of affected rights, and the protection of these rights would, therefore, arise. These basic rights harbour concepts of equality, dignity and non-discrimination; thus, the principles might also be compromised at the instance of unspecified or biased algorithmic decisions.

A landmark case in constitutional law, Maneka Gandhi[17] provided a more expansive interpretation of Article 21 (Right to Life and Personal Liberty). When the Supreme Court decided that any legislation that curtails an individual's freedom must be "just, fair and reasonable," the idea of substantive due process was incorporated into Indian constitutional law. This case highlights the need to maintain fairness and adhere to procedural protections when using algorithmic evidence, digital monitoring or predictive policing in the context of AI and criminal justice. It stipulates that any technology used by law enforcement would adhere to due process principles, making it extremely pertinent to the current discussions over the admissibility and equity of AI-generated evidence in relation to individual liberty and non-arbitrariness.

Thus, it is not unexpected that international human rights treaties such as the International Covenant on Civil and Political Rights and the Universal Declaration of Human Rights have clauses that bring equality, non-discrimination, due process, and privacy into the public eye. When AI systems are used without safeguards, they frequently violate these principles; for instance, the consequences are more pronounced in marginalised areas, or biases resulting from algorithmic errors lead to unfair discrimination. While inadequate risk assessment systems may violate the right to a fair trial, misuse of surveillance-oriented AI systems may violate the right to privacy.[18]

Both national and international regulatory regimes simultaneously support accountability, transparency, and human involvement in automated systems. These must cascade to international treaties to enforce new regimes such that the pillars of human dignity, justice and equality will not fall down by the onslaught of AI technologies.

EXISTING LEGAL FRAMEWORKS AND THEIR LIMITATIONS

Existing legal frameworks are mostly concerned with bias; other issues such as data privacy and automated decision-making have only sometimes been successfully used to regulate all the different nuances that characterize AI systems. Thus, under Article 22 of the General Data Protection Regulation (GDPR) of the European Union, one of the few comprehensive legislations in the world actually granting rights on automated decision-making and profiling, provides the

17. Maneka Gandhi v. Union of India, AIR 1978 SC 597.

18. Ferenc, Taming the Titans? --Digital Constitutionalism and the Digital Services Act, 17 ESSACHESS-Journal for Communication Studies 169-184 (2024).

most extensive framework. It requires transparency, data minimization and the opportunity to explanation, providing individuals with a degree of protection against inequitable algorithmic determinations.[19]

The Information Technology Act of 2000 in India, together with its associated regulations such as the IT Rules of 2011, pertains to data security and privacy to a limited degree but does not explicitly govern artificial intelligence or algorithmic responsibility. The Digital Personal Data Protection Act, 2023 enhances privacy rights but fails to adequately address discrimination, fairness or transparency in automated systems. Actually, the Civil Rights Act of 1964 in the US effectively prohibits any forms of discrimination in terms of race, gender and religion, but it suggests that intentional human evil must be demonstrated, signifying much of the difficulty when discriminatory practices arise from convoluted, obscure AI models that do not appear to have express intent.

a). Gaps in application to AI systems

Notwithstanding the presence of numerous legal and regulatory frameworks designed to safeguard rights and ensure accountability, substantial deficiencies persist in their application to AI systems. These loopholes emerge chiefly because the majority of current legislation was formulated in a pre-AI context and was not intended to tackle the intricate, autonomous and opaque characteristics of contemporary algorithms.[20]

b). Lack of Specificity for Algorithmic Bias

Conventional anti-discrimination legislation, exemplified by Article 15 of the Indian Constitution and the U.S. Civil Rights Act of 1964, was intended to combat deliberate human prejudice, concentrating on behaviours stemming from purposeful bigotry. Nonetheless, these frameworks encounter difficulties in regulating algorithmic bias, which frequently emerges without deliberate intent. AI systems function by identifying patterns in historical data and if that data embodies systemic disparities or previous discriminatory actions, the algorithm may unintentionally replicate those patterns. There is a possibility that an AI hiring tool may reject entire groups of people on the basis of caste or gender, not necessarily on account of a conscious effort by the developers to introduce bias, but as a consequence of biased training data incorporated by historical exclusions.[21]

19. Brennan & Dieterich, Evaluating the Predictive Validity of the COMPAS Risk and Needs Assessment System, 36 Criminal Justice and behavior 123-133 (2009).

20. Malgieri, Automated Decision-Making in the EU Member States: The Right to Explanation and Other "Suitable Safeguards" in the National Legislations, 35 Computer law & security review 115-121 (2019).

21. Ratwani et al., Addressing AI Algorithmic Bias in Health Care, 332 Jama 1051-1052 (2024).

There is therefore a significant disconnect between what the laws require and what is technically possible. Laws, as they stand today, usually require evidence of an intentional aptitude for discrimination before culpability can be shown, while artificial intelligence has no consciousness or intent. This makes it difficult to fix accountability for biased outputs, especially if the algorithms are private and function as "black boxes"; those who suffer from algorithmic discrimination often find it extremely hard to identify the liable person or to have the technical data necessary to prove bias. This obvious gap in the legal framework justifies urgent legal reforms that recognize the unforeseen and systemic bias often found in AI decision systems.

c). Opacity and Lack of Transparency

With respect to AI systems, especially those which make use of complex methodologies like deep learning or even neural networks, the inherent challenge is that they are opaque in their operations. These systems usually act as "black boxes" since they ingest voluminous data, analyze it, and test a conclusion or prediction based on what happened previously, but they do that through layers of computing that no longer even permeate the minds of their creators. Lack of explainability makes it difficult to trace or defend how certain outcomes are arrived at, such as when a loan is denied, an application is rejected, or a person is categorized as high risk by a predictive police technology.[22] Current legal frameworks are particularly in contradiction with this. Such systems are in use, to mention democratic and constitutional ones, like India's or those governed by the principles of the rule of law, in which it is a prerequisite that both administrative and judicial judgments are reasoned, transparent, and open to review. The natural justice and procedural fair principles require that individuals impacted by a decision shall have an obligation of being told the reasons behind that decision and possibilities to protest or appeal it. These core utmost values are usually violated when decisions are rendered or influenced by obscure AI systems.

d). Insufficient Data Protection Norms

The most evident legislative gap in the area of data protection is the absence of appropriate regulation to stop algorithmic bias. The majority of these flaws are present in nations like India under the guise of data protection. The AI system's predictions and decisions are based on data, which is its basic essence. However, there are still not enough controls in place to guarantee the gathering, processing, and use of such data, particularly when algorithmic profiling and automated decision-making are involved.

The goal of the Digital Personal Data Protection Act of 2023 was to improve the governance of personal data in the areas of breach notification, data retention, and consent. Unfortunately, the negative effects that AI may have are not sufficiently addressed by this regulation.

22. Shin & Shin, Data's Impact on Algorithmic Bias, 56 Computer 90-94 (2023).

Algorithmic profiling is not clearly covered by the law; consider situations like employment, credit evaluation, or law enforcement, where profiling may produce skewed or unclear results. The DPDPA established specific restrictions that prohibit people from contesting or requesting an explanation for automated decisions that have a substantial impact on them, much like the EU GDPR regulations.[23]

The control system is still to be ineffective. Even though this Act established the Data Protection Board, concerns remain about its impartiality, knowledge, and capacity to render sound decisions on AI-related issues. Conversely, public and private institutions remain too discretionary where data use is concerned, at times even in the absence of stringent requirements for fairness, transparency, or accountability. To create profit for significant sectors such as healthcare, education, government and finance, AI has penetrated them deeply, while individuals are not made safeguarded by legislation against such abuses in automated systems. It is time to strengthen creation of regulation over data related to algorithmic transparency, fairness assessments and rights to remedy in order to better protect individual rights and safeguard societal and ethical norms during the age of AI.[24]

e). Inadequate Regulatory Oversight

There is a present absence of specific regulatory measures that can oversee AI systems, for the reason that almost all of the existing regulatory bodies were not originally constituted to take into account AI and therefore, lack technical competence to determine fairness and accountability of algorithms. There are other essential safeguards within a legal framework, such as audits or bias assessments that directly impact accountability. In India, though there are institutions such as the Data Protection Board and a few area regulators, there is no established authority over artificial intelligence. Specifically worrying are sectors that may be deemed critical, such as healthcare, public banking, and law enforcement, where uncontrolled AI systems can cause massive disruption. Governance is said to stand on the legs of self-governing diverse bodies with their own legal and technical expertise.

f). No Clear Attribution of Responsibility

Another crucial legal and ethical problem related to AI governance is the difficulty in establishing accountability for harm or discrimination caused by algorithmic decision-making. The legal systems continue to hold human agents, be it an individual or an organization, liable for a wrongful act done by him/her. However, this is complicated with an AI because it is a highly networked and multi-layered structure for decision-making. For example, when an AI

23. Zhou et al., Bias, Fairness and Accountability with Artificial Intelligence and Machine Learning Algorithms, 90 International Statistical Review 468-480 (2022).

24. Viterbo, The User-Centric and Tailor-Made Approach of the GDPR Through the Principles It Lays Down, 5 Italian LJ 631 (2019).

used for recruitment unjustly excludes candidates coming from a certain background, multiple parties may be implicated: developers who created an algorithm, data providers whose inputs taught the system, the company that applied the AI in hiring practices or the AI system itself.[25] All parties contribute to the final outcome; nevertheless, existing legislation fails to properly delineate which party bears legal responsibility for a discriminatory result. This ambiguity engenders an "accountability vacuum" in which responsibility is dispersed and difficult to enforce. Developers may argue that they simply built the system and have no control over its application; data providers may claim that their datasets simply reflect reality; and companies deploying the AI system might rely on its recommendations without understanding the basis of its generation.

LEGAL REFORM AND REGULATION

Alongside the technological anthropology of environmental compliance with constitutional norms and human rights standards, legislative and regulatory measures should be implemented to combat the algorithmic biases that are being hyped. This justifies the necessity for regulation against discrimination in AI, which does not have to adhere to the conventional rules of responsibility based on intent. More importantly, these rules must acknowledge and eradicate systematic and structural discrimination that is ingrained in data and computational systems without requiring proof of intentions. Additionally, the frameworks must offer recourse for harm resulting from automated choices in significant domains such as criminal justice, employment, healthcare, and finance.

a). Need for AI-specific anti-discrimination laws

Traditional laws against discrimination such as Article 15 of the Indian Constitution and the U.S. Civil Rights Act were enacted to combat overt human prejudices and deliberate actions. Algorithmic bias can take different forms, typically subtle, systematic, and generally unintentional. Reasons include biased training data, poor model design, or some kind of unrecognized existing social injustice. The violations cannot be prosecuted successfully under current laws since the majority of them require proof of intent and some concrete human perpetrator.

In the emergent reality, the need for AI-specific anti-discrimination law arises so as to reflect the specifications of algorithmic bias governance. The law should thus expand beyond intent-based liability and adopt an outcome-oriented framework whereby discriminatory effects-whether motivated or otherwise-are actionable. The law must explicitly target algorithmic

25. Akerlof, The Market forV lemonsV: Quality Uncertainty and the Market Mechanism, 84 The quarterly journal of economics 3 (2019).

discrimination; set parameters for equity and transparency in automated decision-making; and ensure the right to appeal against biased outcomes.[26]

The prospect must be extended to these industries with respect to such sensitive issues as employment, credit, health care, and law enforcement since the algorithmic judgment in these cases tends to severely control rights and opportunities available to individuals. Accordingly, it must include algorithmic fairness under the legal measurements of accountability, civil liberties, and the promotion of equal AI in a digital age.

b) Role of algorithmic audits, explainability requirements and bias impact assessments

As a matter of fact, to ensure increased justice, transparency, and accountability in these critical areas, with the growing use of AI systems such as health, employment, and law enforcement, it becomes extremely necessary to make use of algorithmic audits, explainability mandates, and bias effect measurements as part of the necessary regulatory instruments for driving algorithmic accountability.[27] Whereas algorithmic audits identify hidden biases and check compliance with the law, explainability mandates require AI decisions to be justified in a clear and understandable way, and bias impact assessment examines the potential effects of systems upon different demographic groups. Together, they create a rights-based regulatory framework toward reducing discrimination, accountability, and the compliance of AI techniques with ethical and legal standards.

c). Legal recognition of "algorithmic accountability"

Among the great ebbs in the horizon of human rights, one of the strange ways in which the recent advent of AI systems into decision-making threatens the rights and opportunities of the persons is demand for official cognizance of the idea of algorithmic accountability. Traditional legal frameworks upon which human accountability weighs heavily interpose artificial intelligence as a prime escape route by disaggregating decision-making over algorithms, developers, data sources, and implementers. These elements oftentimes remain nebulous in absence of any formal recognition in law.

Algorithmic accountability is the concept that organizations that design, implement, or deploy AI systems should be responsible for the consequences of both the successful and failed outcomes of their systems with regard to potential harms, discriminatory practices, or violations

26. Acikgoz et al., Justice Perceptions of Artificial Intelligence in Selection, 28 International Journal of Selection and Assessment 399-416 (2020).

27. Sun & Tang, Data-Driven Discrimination, Perceived Fairness, and Consumer Trust--the Perspective of Consumer Attribution, 12 Frontiers in Psychology 748-765 (2021).

of rights.[28] Some considerations include fairness in design, clarity in operation, traceability in decision-making, and remedial measures for people affected.

The liability standards for the AI lifecycle with regard to data collection, model training, deployment, and post-deployment supervision will be arranged into laws. Such organization will include the components of risk assessment, impact reports, documentation of model decision-making and culpability clauses with respect to damages caused by actions of algorithms.

d). Role of judiciary and regulatory bodies in oversight

Legal and regulatory authorities play a crucial role in determining the ethical and legal framing of artificial intelligence (AI) and its compliance with constitutional provisions, protection of human rights, and fundamental principles of equality and justice. As the areas where the results of artificial intelligence begin to take effect become increasingly important-such as law enforcement, healthcare, employment, finance, and welfare-the institutions and agencies will serve to prevent misuse, systematic bias, and violations of human freedoms. The Judiciary acts as the protector of constitutional rights and plays a crucial role in interpreting current laws in response to new AI-related concerns. Judicial bodies can intervene in cases were algorithmic decision-making results in discrimination, denial of due process, or infringement of privacy, regardless of whether these harms stem from non-human entities. By acknowledging the legal implications of algorithmic damages, the judiciary can enforce openness, necessitate the revelation of algorithmic rationale in judicial proceedings and guarantee that impacted individuals have access to mechanisms for appeal or restitution. Judicial interpretation and case law enable courts to establish novel legal rules and doctrines such as algorithmic responsibility, digital due process and procedural fairness in automated systems that direct the appropriate use of AI across various industries.[29]

Regulatory agencies are essential for proactive supervision. To control AI systems effectively, authorities must possess both technical proficiency and a strong legal mandate. This encompasses the capacity to perform or require algorithmic audits, supervise bias impact evaluations, implement explainability criteria and examine data governance processes. In sectors such as healthcare, education, and finance, the regulators have to draw standards that are tailor-made to address the unique risks posed by AI in such domains. While the Reserve Bank of India may draw up rules to ensure fairness in the context of algorithmic credit scoring, health regulators may help reduce the risks associated with AI that may introduce biases in clinical diagnosis or patient prioritization. Because AI is multidisciplinary in its nature, the importance

28. Van Berkel & Goncalves, Crowdsourcing Perceptions of Fair Predictors for Machine Learning: A Recidivism Case Study, 3 Proceedings of the ACM on Human-Computer Interaction 1-21 (2019).

29. Veale & Binns, Fairer Machine Learning in the Real World: Mitigating Discrimination Without Collecting Sensitive Data, 4 Big Data & Society 2005-2022 (2017).

of a central regulatory authority, or more preferably, a harmonized framework that unifies governance across sectors, cannot be emphasized enough. Nationally, ethical and legal norms may be established, capacitating, and overseeing compliance.[30] Hence, reducing fragmentation and regulatory gaps.

CONCLUSION

As AI becomes the backbone for almost every decision-making sector healthcare, banking, education, and enforcement it comes with both possibilities and threats. The bigger problem is algorithmic bias, which refers to systematic, primarily inadvertent biases caused by poor oversight, opaque procedures, and faulty data. This study has uncovered weaknesses in the current legal systems, which were largely designed with humans in mind, when it comes to addressing the complexity of biases brought about by artificial intelligence. As a result, the investigation has shown significant weaknesses in the current regulatory frameworks, data protection guidelines, and anti-discrimination laws. The majority of conventional legal arrangements would call for identification of the at-fault party and proof of intention. However, these specifications fall short for AI systems that function completely without human intervention but produce biassed outcomes. Absence of accountability and access methods, as well as particular restrictions in dynamic computing settings, further complicates the problem. Damages brought on by algorithms are likely to go neglected in the absence of appropriate accountability and enforced equitable standards.[31]

A modern reform of the law is now necessary and urgent, in contrast to the vitality that defined its recent august past. Anti-discrimination rules pertaining specifically to AI must be included in the law, together with mandated algorithm impact and risk evaluations, transparency standards, and procedures for assessing the effects of prejudice. The courts and regulators should exhibit an active interpretation of these constitutional concepts within the digital context and enforce them.

30. Wonseok et al., Who Made the Decisions: Human or Robot Umpires? The Effects of Anthropomorphism on Perceptions Toward Robot Umpires, 64 Telematics and Informatics 101-125 (2021).

31. Zliobaite, Measuring Discrimination in Algorithmic Decision Making, 31 Data Mining and Knowledge Discovery 1060-1089 (2017).

BALANCING DATA SOVEREIGNTY AND CROSS-BORDER DATA FLOWS

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ABSTRACT

In this paper, we examine the combined relationship between data sovereignty and cross-border data flows, focusing on legal, geopolitical and technical interlinkages in an increasingly digital global economy. The aim is to examine how different jurisdictions, particularly those in emerging economies such as India, bring global data flows back to national data controls. It also analyzes the emergence of new governance structures, including the Digital Personal Data Protection (DPDP) Act, 2023 and General Data Protection Regulation (GDPR) and sectorial responses in China and also in the USA. Utilizing a comparative legal methodology, this research paper analyzes legislation, policy documents and case laws to highlight trends on extraterritorial application of data protection laws, national security justifications and localization requirements. It also invites interdisciplinary footings (like international trade law and cyber policy) to trace the pressure lines between state control and digital openness. The more general claim is that even though data localization and the restrictions on cross-border transfers are often defended on security and sovereignty grounds, the trend threatens to fracture the global internet and possibly have a chilling effect on innovation, personal privacy and trade. Inconclusive findings indicate that a balance could be attained through interoperable authorization frameworks, privacy principles, and international cooperation rather than rigid localization commands. Lastly, the paper contributes to the ongoing debate by proposing practical and normative routes for harmonizing state sovereignty with the freer flow of data.

Keywords: Cross-Border Data Flows, National Security, Extraterritorial Application, Digital Personal Data Protection Act 2023, , General Data Protection Regulation.

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INTRODUCTION

Information is the strongest financial supply, helping us to innovate, serve and digitally help in business. However, it gives rise to various issues, for example an individual's privacy and domestic safety. The makers of various policies believe the flow of information is necessary for the economy and technology, but it is also important for an individual to be able to protect his own information and maintain privacy among themselves. This also helps in providing safety for the infrastructures. In order to achieve such goals, cautious laws and acts that not only help in international usage of data, which is vital for cloud services as well as AI, but also looks into the problems, protects, and provides remedy from using an excessive personal privacy.

In modern times, economy has changed and mainly deals digitally which has changed business arrangements and built a new foundation. It is expected that India, in a few years, will be able to provide 1 trillion dollars to the GDP and at the same time generate hundreds of job opportunities. In order to complete such a goal, India being an interconnected ecosystem, needs to access the data that can transport across various countries.[3]

Data sovereignty is the perception that information is subject to the rules of the country in which it is situated. In contrast, international statistics courses mention the measure of electronic information across national boundaries for different forms of processing, storage or analysis. The scope of research in this paper is limited and it focuses primarily upon India, how its policy on balancing these concepts has evolved, as well as draws insights to a comparative framework globally and with reference to the GDPR, a regulation in Europe, in addition to other jurisdictions' regulatory responses.

The core research issue arises from the built-in conflict between national sovereignty demands and economic requirements of digital integration. Nations increasingly adopt data localization strategies to retain management over citizen data and defend state security interests. Corporations, meanwhile, have a requirement for seamless data transfer to service, research and be competitive in business in global markets. Such is the case in India's newly sanctioned DPDP Act, 2023 where, while the law adopts a "blacklist" methodology of allowing for cross-border data transfers with an exception for countries that are listed as restricted, it delegates extensive discretionary powers to the executive to list such restricted countries.

To achieve this goal, the paper addresses three research questions:

i. How can we reconcile legally the principles of state control and ownership of digital information with economic interests in the relationship of cross-border flows?

3. The Committee of Experts on a Data Protection Framework for India (Chair: Justice B. N. Srikrishna), *A Free and Fair Digital Economy: Report Summary on A Free and Fair Digital Economy* (July 27, 2018), PRS Legislative Research.

ii. How can India model its cross-border transfer framework by following general best practices from across the globe including those which in particular are in sync to a large extent with the GDPR adequacy mechanism?

iii. To what extent, therefore, do the existing regulatory models, in the guise of the DPDPA, and some sector-specific mechanisms such as the payment data localization requirements issued by the RBI strike this stability?

The connection between law and technology in this situation has profound implications for cybersecurity, national economic interests and for the rule makers of the global digital economy in the future.

CONCEPTUAL FOUNDATIONS

Fundamentally, the principle of state control of digital information is connected with the principle of digital information being subject to the law or regulatory practices of the state where it was produced. We have now moved this concept from territorial sovereignty into cyberspace and that has demonstrated that, states now recognize data as a national resource, which must be protected.[4] That process of conversation has been given additional impetus since the revelation of mass surveillance programs, and the extent to which cyber espionage was going on that some countries find it difficult to turn a blind eye to the digital data of its citizens going the 'ungoverned' way.

The principle of state control claims that digital information is closely related to three key state interests. For National Security reasons, governments want to prevent foreign intelligence agencies from accessing sensitive citizen data and critical infrastructure information. The second pillar is Privacy Protection, resulting from the obligation of states to guard 'intimate' personal information from unauthorized access, use and also disclosure, as acknowledged by the Supreme Court when it cited the principle of privacy as an essential right in recent judgments, like the one in Puttaswamy.[5] The third dimension comprises Economic Interests with countries seeing data as a strategic resource for innovation, artificial intelligence development and nourishing competitive edge in the digital economy. Transfers of data across national borders should be based on the unrestricted flow of data and crosses-border information flow means that like the electronic flow is restricted according to various legal as can be even just storage or processing which occur in different country for example, France.

4. PRS Legislative Research, *A Free and Fair Digital Economy: Report Summary on A Free and Fair Digital Economy* (July 27, 2018).

5. Vrinda Bhandari & Renuka Sane, *Protecting Citizens from the State Post Puttaswamy: Analyzing the Privacy Implications of the Justice Srikrishna Committee Report and the Data Protection Bill, 2018*, 14(2) Socio-Legal Rev. 143 (2018), https://doi.org/10.55496/UUIZ9934.

It is the data folder ecosystem, supported by the three key stakeholder groupings. The range between the protection of citizens and the economic ambitions is evidenced in the form of the changing Indian re-positioning from the prohibitory stance of the recommendation by the Srikrishna Committee to the more agile DPDPA which works on a regulator model provided by the government agencies. Governments use digital infrastructure such as undersea cables that account for 99% of international data traffic and cloud servers which process the information, to surveil or disrupt our systems.[6] Technology policies have become the battleground for asserting attempts to cyber-sovereignty, as nations impose data localization requirements and restrict foreign access.

TRANSNATIONAL DATA-TRANSFER REGIMES

The EU's GDPR sets forth a multi-tiered approach for the purpose of privacy-compliant transfer of individual data across boundaries. The three tiers are based on adequacy decisions pursuant to Articles 45-49.[7] Adequacy is the test by which the EU measures whether third party countries offer protection equal to that within the EU, including rule of law, independent supervisory authorities and judicial redress. In the lack of a capability decision, data controllers can instead comply with data protection laws by using certain pre-approved contractual terms called Standard Contractual Clauses (SCCs) that provide appropriate safeguards, otherwise a set of internal rules (such as a Code of Conduct), in the circumstance of intra-group transmissions within multinational corporations.[8] The architectural models used in the India's DPDP Act law, 2023 differ fundamentally because it regulates under section 16 on "blacklist model". Unlike EU which automatically allows cross-border transfer and grants positive adequacy measure, for India, written consent needs to be obtained from India for any of the mechanisms, except when that country's Central Government has already made a communication to India as not being treated as putting in place adequate safeguards which cannot be invoked. Interestingly, however, it does not have any public adequacy criteria, open evaluation procedure, or alternative transfer mechanisms such as SCCs or BCRs. It is a system which relies on executive discretion, and as such there are no published lists of what could constitute "restricted" data, providing businesses with little certainty, while supposedly falling within the ambit of "relatively free" international data transfers.[9]

6. CookieYes Staff, *Data Sovereignty: What It Is, Why It Matters, and How to Ensure Compliance,* CookieYes Blog (July 15, 2024).

7. GDPR-Info, EU General Data Protection Regulation (GDPR), https://gdpr-info.eu (last visited Aug. 15, 2025).

8. EuropeanCommission, Adequacy Decisions under EU Data Protection Law, https://commission.europa.eu/law/law-topic/data-protection/international-dimension-data- protection/ adequacy-decisions (last visited Aug. 15, 2025).

9. Taxmann, *Cross-Border Data Transfers under the DPDP Act 2023*, Taxmann Blog (last updated May 4, 2025).

China's law of protecting personal information and Cybersecurity Law, adopt one of the strictest guidelines on transboundary documents transmission throughout the world. Under the regulation, of Cybersecurity Law, a CIIO and any company processing "significant data" must store information within China and would require prior support from Cyberspace Administration of China before they can send such data outside the country.[10] Data transfers necessitate either passing security assessments, acquiring CAC certification or signing CAC-approved standard contracts which in effect operate more as mandatory localization instruments than expediting transfer mechanisms.[11]

The United States takes a sectoral attitude with absence of inclusive central data protection law. Acts like the Consumer Privacy Act of California as well as the recently enacted Privacy Rights Act offer substantial consumer rights, but no cross-border transfer provisions. The United States still just does not run according to international norms, but rather through international constructs like the EU-US Data Privacy Principles adequacy agreement that allows US companies to self-certify compliance with some privacy guidelines roughly equivalent to those in the EU.[12]

These variations represent trade-offs inherent to data governance design. Transparent, rights-based assessments are at the heart of what the EU cares about and that virtually forbids transfer with any amount of substantial adequacy.

EXTRATERRITORIAL REACH AND DATA LOCALIZATION

Extraterritoriality is the application of domestic law to a State's own persons, property, or activities beyond its territorial boundaries. Such a principle is at the core of modern data governance: tools such as the EU's GDPR claim jurisdiction over any organizing committee handling the individual information of EU inhabitants and irrespective of the site of their servers.[13] This was then set in stone with the help of the EU Justice Court ruling in Privacy Shield, according to which certain United States surveillance laws did not provide equivalent protection and subsequently voided the existing framework for transatlantic transfers.

Increasingly, countries are using security as a reason to control information flows, which implicitly treat information as both an asset and a potential vulnerability. This stance has led to

10. Vladimir Covic, *China PIPL Data Localization: A Detailed Overview*, Captain Compliance (Apr. 24, 2024).

11. InCountry Staff, *Complete Guide on Data Residency and Cross-Border Transfers in China*, InCountry Blog (Oct. 9, 2023).

12. Mahek Sangwan & Sayed Kirdar Husain, *Guarding the Data Frontier: Navigating Cross-Border Data Transfer Under Digital Personal Data Protection Act*, NLIU Law Review Blog (Oct. 23, 2024).

13. Róisín Áine Costello, *Schrems II: Everything Is Illuminated*? European Forum of European Papers, Vol. 5, 2020, No. 2, 1045–1059.

measures of protection from the national intelligence law in China to other places 'reciprocal' statutes, and the requirement that data be stored locally. This process of storing data locally can be done through array of ways. Firstly, there is Global localization which is defined in the context of storing all the data within the county's geographical boundaries. Second comes partial localization which is defined as storing only for parts of it. Localization generally divides its subjects into supporters and critics. Supporters are of the view that localization of data can aid in management of data security in case of sudden breach, accountability of regulators and restrict external spying, all at once. On the other hand, critics argue that localization barely has any advantages, rather, they view it as an addition to the economic costs.[14]

Cloud suppliers particularly are the ones going to take the hit of this economic setback, as their financial gauge, and international operability rely on stability. Imposing artificial limits on international data flows diminishes the economies of scale, increases costs and stifles innovation, usually in applications development and artificial intelligence. These restrictions create a stringent burden on the information technology sector of India. It also affects the industries which deal with export business process outsourcing (BPO) industry, the lifeblood of India's economy. These drop-down impacts apply to the supply chain, and the integration of artificial cloud services and market competition, within the domestic firm.

Collectively, these announcements define the central policy tension, which is in the process of attempting to find a suitable stability between their legitimate security requirements with economic demands for free data flows. At the foundation of the two sides of today's debate sits the question of how much national freedom is sufficient and where is the threshold for the need for global interoperability.

INTERDISCIPLINARY DIMENSIONS

The contradiction between increasing liberalization and the foundational obligations of digital commerce and data governance will have to be resolved in international trade law. The WTO established the multilateral framework of rules and principles for trade in services and future e-commerce disciplines could be in conflict with data-localization measures when they violate non-discrimination and market-access obligations. The Joint Statement Initiative by WHO on digital trade tried to establish global rules for international data transfer, but the negotiations fell apart because developed countries resist language that they say is vital and that many developing countries insist on. Policymakers should quickly identify patterns of cyber threats, distinguished from confronting different levels of attack and maintaining continuity

14. U.S. Dep't of Justice, CLOUD Act Resources, Criminal Division, Office of International Affairs, https://www.justice.gov/criminal/cloud-act-resources (last visited Aug. 15, 2025)

in essential services These crossing forms a genuine tension in agreements and involves a framework that should be in compliance with technology and harmonies with one's privacy.[15]

Civil rights and other privacy rules provide restrictions on governing possibilities for national jurisdictions because the obligations provided under international civil laws gets triggered when the information of its own citizens are globally accessed which creates unregulated decision. GDPR is a part of presenting about how the rules governing an individual's confidential information controls global compliance pressuring a third country. Trans-boundary flow of information hinders the remedies, interpreting subjects whose data is being processed where the legal structure is not sufficient and poor protection is provided by the judiciary. Security-inspired controlled scans of outbound flows have turned the balance between cybersecurity vs. trade obligations on one hand and individual rights, on the other. However, with such control being presented as a protective factor it can also be used to have trade agreements and forego personal privacy.

CHALLENGES AND RISKS

Although this quagmire has reasonable national interests, the problems and risks that it has also raised are the challenges and risks that the world decision-makers, business community and International Organization will face squarely in the future. The sources of these dangers are frequently mutually incompatible, as a result of which the challenge to reach a consensual approach through conflicts between national security, economic prospects and political are harder still. Among the substantial obstacles are the Balkanization of global digital space, negative impact on innovation and economic development and incompatibility between sovereignty proclamations and international obligations.

a) Fragmentation of the Global Internet ("Splinternet")

One of the most apparent and alarming byproducts of excessively restrictive cross-border data flow policies is the fracturing of the internet, often referred to as the "splinternet." The breaking of the internet among the nations into several national and regional networks along with a set of different rules respectively creates incompatibility in the arena of internet or web. The technicalities in regard to data storage as well as its security vary due to the same reason mentioned above. Due to security reasons, upholding national sovereignty and privacy protection, implementation of a ban on data exports takes place; as a result, it weakens the sole idea of one open internet which blocks the free flow of information across the world. The downside of this is that there come higher business costs, less international collaboration due to stringent laws and the export–import system, and poor cyber readiness. The Centre for Strategic

15. Cybersecurity and Infrastructure Security Agency (CISA), Federal Government Cybersecurity Incident and Vulnerability Response Playbooks (Aug. 2024).

and International Studies warns that the fear of security and creation of these isolated networks for different countries weakens the global digital system. For example, China has the Great Firewall, which is its very own internet, and also data security and cybersecurity laws along with local storage and strict outbound checks. Another similar case is of Russia's Sovereign Internet Law, where the government controls routing and citizens' data is stored locally.[16] Iran's National Information Network has created a heavily controlled domestic internet capable of operating in complete isolation from the global network. These approaches give governments extensive control over domestic digital ecosystems but simultaneously limit citizens' access to global knowledge, restrict the operations of international businesses, and erode the interoperability on which the global internet depends.

The more states adopt such measures, the greater the risk that the internet becomes a patchwork of disconnected "intranets," each with its own legal framework, technical standards, and censorship practices.

b) Impact of Innovation and Economic Growth

Strict restrictions on storing or processing data outside national borders measures also have significant economic and technological consequences. Machine learning models, for example, improve in accuracy and reliability when trained on large, diverse datasets from multiple jurisdictions. Limiting information movements narrows diversity of available statistics and diminishes the quality of technological outputs.

The Business Policy Paper No. 278 (2023) by OECD documents that roughly 100 localization measures are in effect across 40 countries, in excess of two-thirds mandating both native storage and restrictions on outbound transfers.[17] These measures often:

i. Increase operational costs by forcing companies to build or lease data centres in every jurisdiction where they operate;

ii. Limit innovation by reducing the diversity and scale of datasets available for analytics and AI;

iii. Concentrate data in single locations, increasing vulnerability to cyberattacks.

Commercial modelling by the WTO and OECD estimates that if all countries adopted restrictive data policies, global GDP could fall by 4.5% and global exports by 8.5%.[18] Conversely,

16. Cybersecurity Law of the People's Republic of China (promulgated by the Standing Comm. Nat'l People's Cong., Nov. 7, 2016, effective June 1, 2017).

17. Org. for Econ. Co-operation & Dev., *The Nature, Evolution and Potential Implications of Data Localization Measures,* OECD Trade Policy Paper No. 278 (2023)

18. World Trade Org. & OECD, *The Economic Implications of Data Regulation*, WTO Staff Working Paper ERSD-2025-1 (Feb. 2025).

cooperative models that preserve cross-border flows while embedding robust privacy and security safeguards could raise global GDP by 1.77% and exports by 3.6%.

It is concentrated, however, disproportionately on medium and small-sized enterprises (SMEs) that often do not have the resources to set up data infrastructure in several countries. And for those firms, ridiculously tight transfer rules would eliminate the market altogether, only multinationals (the only firms with enough resources to pass this sort of legislation) would be able to sell into international markets.

India's just released DPDP Act 2023 is helping to illustrate how difficult it is for a government attempting to walk the line. Before this enactment, there were many drafts that prioritized the localization for complex and serious private data. But it allows the government to designate countries or territories that tend to come under its control as places where transfers could be permitted in order to escape the fetters of a strict localization requirement.[19]

c) Clashes in Asserting Sovereignty Vis-à-Vis International Agreements

The third problem is the contested legal and policy contexts around data and national sovereignty and states' obligations outside of their borders. In particular, the USMCA and other recent trade deals prohibit localization and data restrictions unless these measures meet criteria. So do the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) which has rules for cross-border flows and against gratuitous localization.

Problems can occur when laws being implemented at home conflict with these promises the EU–US Schrems II was cancelled by the EU Justice Court in the Privacy Shield's case. The EU court cancelled the U.S. Schrems II adequacy decision, determining that US surveillance rules do not ensure the "fundamentally equivalent" protections of EU citizens' personal information. It almost instantly raised queries of the legality of transferring information across the Atlantic, placing thousands of businesses in a state of uncertainty and leading most to depend on other operations available, like the Standard Contractual Clauses (SCCs).

In a similar example, under GDPR Article 45, when Japan and the EU entered into an adequacy arrangement in 2022, Japan had to offer "additional safeguards" to obtain adequacy with the Europe. You might call it, metaphorically, planting the flag of domestic sovereignty and flying a set of international commitments from the same pole.

TOWARDS A BALANCED APPROACH

The balance between the principle of state control over digital information and sovereignty is more generally one of, if not the most important public policy challenges in the digital world

19. Digital Personal Data Protection Act, No. 22 of 2023, India Code (2023).

today. Of course, there are perfectly good interest-based regulations countries should have over data within their borders, from privacy or state-security data concerns, but a balkanized world is going to scare a lot of sectors into conservatism.

a) Interoperable Legal Framework and Mutual Recognition

The most convincing of these is the idea of designing or promoting interoperable legal systems (or perhaps just legal frameworks) that incorporate the laws of locales without requiring text alignment. The best example we have seen of this paradigm to date is with the European Union on the adequacy process under GDPR Article 45. Instead of looking for a full copy of EU rules, the adequacy test checks if a country out of EU offers an "acceptable level of security" to individuals' data.[20] The European Commission identified sixteen jurisdictions as adequate in 2025, including Japan, the United Kingdom and New Zealand.

Regional initiatives also show promise. The Cross Border Privacy Rules (CBPR) system made by APEC presents a method for businesses all over its region in order to comply with the privacy needs while transferring certain documents among its economy which helps in setting a basic privacy standard for certification methods. An upward scaling is being made in the CBPR environment, which is an ongoing process, directing potential for wider connectivity.

Trust and clarity are the two most important need of give and take identification arrangements. States must provide data with respect to implementation, cures and provide supervision.

b) International Cooperation and Cross-Border Agreements

The nature of information movement is transactional, if the regulations are one-sided, it is pertinent to create inefficient framework and conflicts often arise. Multilateral assistance helps in making principles that stay consistent with each other or offer expected regulations to settle struggles.

The Europe's Convention Council is the only multilateral treaty on data protection that is legally binding and is currently in force, and has even been signed by countries outside Europe, like Uruguay, Mauritius and Tunisia. The proposal contains modernized safeguards along the lines of the GDPR and demonstrates that internationals consensus can be reached.

Digital trade chapters are being added to trade deals with increasing frequency. And the DEP Agreement between three countries- New Zealand, Singapore and Chile also commit to interoperable digital identities, non-paper trade and AI governance, focusing on trusted international data runs.[21] They also contain rules that bind countries to not imposing unfounded domestic requirements to store or process data outside the country, similar to CPTPP and

20. Regulation (EU) 2016/679, art. 45, 2016 O.J. (L 119) 1 (EU).

21. Dig. Econ. P'ship Agreement, Sing.–Chile–N.Z., June 12, 2020

even USMCA and where there is no multilateral consensus, there is still a need for bilateral agreements. The EU–U. S. Data Privacy Framework (2023) demonstrates how such focused negotiation might provide a mechanism to re-institute lawful transfer after judicial invalidation with US signals intelligence measures that are necessary, proportionate and include independent redress.

c) Privacy-by-Design and Trust-Based Governance

Trust is a sacred thing, and it is not easily regulated. The concept of discretion by design (enshrined in Article 25 of the GDPR) is the notion of privacy principles being hard coded into the underlying system upon which they were conceived and executed. This is merely minimization, mere limitation, and the power of the pack to reduce the potential for its data to be misleading.

Companies that transcend national boundaries might also possess the ability to showcase their compliance by holding internationally accepted certifications such as ISO/IEC 27018 for cloud confidentiality or ISO/IEC 27001 for information security. This has a dampening effect on the felt need for aggressive spins since compliance can match the data.

Specific laws might further facilitate setting up trust, such as in the case of the EU–U.S. Privacy Shield framework. A framework that excludes governmental access to private- sector information, as well as independent oversight and remediation models that are effectively implemented through government actions. The OECD Privacy Guidelines further assert that this anticipatory approach to privacy engineering serves as the foundation for reliable data governance.

RECOMMENDATIONS

The tension is between the state control over the data and the global flow of data, where one poses an imminent threat to a country's sovereignty in terms of data, whereas the other creates hindrance for companies to grow. The need of the hour is to create and take up a pragmatic or practical solution, which is to establish an equilibrium between the state's legitimate interests and a smooth global digital economy. If a country tilts into a purely protectionist approach, then there is the risk of blocking markets and killing innovation. If it undertakes a fully open approach, there will be no protection, which will risk the privacy of citizens and harm the security of the country as well, which will, all in all, weaken public trust. Hence, a balance is required, which will protect both the states and conglomerates' interests. This will balance the country's security and companies' need for data flow. "Recommendations" of this kind are then translated into normative and more specific policy advice for governments, and 'next practice' for business who can have a key role to play in shaping data-transfer governance system that is balanced and appropriate that is sustainable.

1. Normative Implications of Sovereignty-Openness Trade-Off

a. Accept the Principle of "Conditional Openness"

But rather than treat sovereignty and openness as competing forces, states will need a new model of contingent openness in which data flows freely among them with specific, enforceable assurances on concealment, security and lawful access. Such a rule should be set down in country law and treaties, providing industry with certainty but secret intelligence with control.

b. Use the Risk Method to Categorize Data

Not every piece of data has to be as defensible as every other. For data types with a high risk, more stringent transfer joints or localization is necessary, and for data of low risk it is voluntary. The EU's GDPR has "special categories" for categories of data and so too the DPDP Act in India can issue sector specific guidelines based on gold standards across the globe.[22]

c. Build Transparency into Government Access.

Those things tend to be localization efforts, motivated by fears of foreign surveillance. Governments need to establish clear, transparent rules under which their citizens' personal data, housed within private companies, can be accessed and independently overseen and redressed. Initiatives such as the EU–U. S. commitments reflected in the. Data Protection Framework such as proportionality and necessity in surveillance etc., could be the first one for the world.

2. Policy Measures for Governments

a. Adequacy and mutuality recognition schemes

Governments need to make sure that the bilateral and multilateral adequacy decisions and the mutual recognition agreements receive due attention, in order to facilitate the seamless cross-border transfer. Such a set of frameworks could help reduce the legal uncertainty for businesses and encourage investment in some countries over others, they indicate, by providing a clear idea of which countries could be trusted to provide acceptable defense for personal data that travels through them.[23]

b. Establish a Cross-Border Data Innovation Regulatory Sandbox

Regulatory sandboxes enclosed test beds where new data-driven products and services can be taken out for a spin in front of happy-to-regulate-you regulators might be where that innovation takes off, and where test runs can be used to make sure new tools comply with privacy and security laws. For instance, fintech or health-tech companies may test secure data-sharing models before expanding out of the country.

22. Nat'l Inst. of Standards & Tech., Cybersecurity Framework; Int'l Org. for Standardization, ISO/IEC 27001 Information Security Management

23. European Data Prot. Bd., Binding Corporate Rules

c. Put internet security practices on par with other nations

That is, to make certain that international data transfers are legitimate. Governments may also wish to look at the best international practices & values in order to avoid fragmentation and to build trust in their cyber security certification schemes. Bilateral and regional arrangements could also include well-coordinated cyber incident response arrangements.

d. Incorporate Digital Trade Provisions in Economic Pacts

Specific language should make clear that trade deals are to be negotiated in a way that protects the free transfer of data, with narrow exceptions for legitimate policy objectives. This results in commitment and risk avoidance for politically imposed restrictions (politic driving) which can diminish commercial predictability.

e. Define the Localization Oddities Clearly and Predictably

Establishing rules about when localization is necessary, and tests to apply localization i.e. proportionality and necessity, and review process in a periodic fashion. This at least stop localization from being the default and leaves the door open to further liberalization as trust grows.

3. Best Practices for Corporations Handling Cross-Border Data

a. aImplement Privacy-by-Design Across Operations

Companies will need to bake in privacy by designing across the entire life cycle of their data handling from collection to processing to transfer. There is anonymizing personal information before it is transmitted across the border, say, or encrypting both data and mobile devices. And only that information that is unconditionally compulsory to bring across the border should come across the border.

b. Employ BCRs und SCCs

For multinationals, which have to comply with the laws of multiple nations, international standards like BCRs and SCCs must be used. These instruments establish the minimum standards for the safety of private information that is processed in the internal governance of a company, as well as enforceable contractual obligations between companies and between companies and third parties.

c. Openness and oversight mechanism:

This mechanism helps to maintain the standard of transparency and accountability, which in return ensures the maintenance of public trust, which is a very crucial factor in the business domain. The companies have to publish an annual transparency report, such as the data that has been requested by the government to furnish, for example under the TPP or Trans-Pacific Partnership. Along with this, setting up a grievance redressal system should remain in place, as well as timely or impromptu Data Protection Impact Assessments.

d. Creation of compliance legal teams:

With the complexity of data rules in different countries and the changing and evolving laws, the need for a well-versed legal team becomes important. These teams should be specially trained to check internet law, inclusive of but not limited to local and global knowledge in this specific matter. This will ensure that penalties can be avoided by the transacting companies and smooth functioning is ensured.

e. Robust and redundant database:

The multinational companies should have resilience with distributed cloud storage and multi-region backups. This helps with the avoidance of localization burdens and prevents choke points. It also ensures that even in times of conflict in one country with respect to data storage, or in case of failure of equipment or links, the multiplicity of servers saves the data from loss and ensures smooth and continuous functioning of the company throughout the globe.

CONCLUSION

The data sovereignty, the very concept is regarding protection and control of a country over its own data, and the cross-border flows pressurize the free flow and movement of data across the globe. They are connected but they also create an intriguing tension among themselves. As rightly stated by Wiese, the sovereign control of data needs to be balanced with global data flow, being the key to the digital economy. Countries now across the globe are developing specific laws pertinent to the current subject matter, like India has the DPDP Act, the European Union has GDPR, China has Cybersecurity and Data Laws, and the US has a sectoral approach. The challenges at hand stem from fragmentation of internet and data access, excessive localization, and legal clashes among the data protection laws, and each of these comes down to one thing: sovereignty vs trade commitments.

The solution to this is to choose a middle ground, which is interoperability and mutual recognition, which requires international and world cooperation. The report also suggests the "embedding of evidence to support 'privacy by design' and trust-based governance," which would reduce the perceived appetite for heavier localization proposals while still safeguarding privacy and security. We articulate practical strategies for the implementation of such approaches founded in normative theory (including conditioned openness and risk- based data categorization), government policy and corporate good practice.

The answer the researchers settle on is that there is no black and white answer, no binary choice between full sovereignty on one hand and extreme data nudism on the other. We need both, but the balance of the two will go a long way. The basic task of the state is to guarantee the freedom of its citizens, maintain the internal security of the nation and protect an institution or order of shared values, embedded in certain cultural and political communities. If localization is too free, steal and bite risks exist between the retaliation pumps, which may result in economic fragmentation and suppress innovation. That's big- word Union speak for needing a legal framework to do so, systems interoperability to allow and institutionalize that cooperation, and private sector liability. It also needs openness that stretches beyond even nonetheless into a more inclusive everything shape.

DIGITAL JUSTICE AND THE REGULATION OF EMERGING TECHNOLOGIES: RETHINKING CYBER LAWS FOR A FUTURE-READY LEGAL FRAMEWORK

Sowmya H.A.[1]

ABSTRACT

The rise of emerging technologies such as artificial intelligence, blockchain, and the Internet of things has fundamentally reshaped how justice is delivered and how legal systems operate in cyberspace. This paper explores the evolving landscape of digital justice and the need for a responsive cyber law framework to regulate these advancements. The primary objective is to evaluate whether existing legal frameworks can effectively address the ethical, legal, and societal challenges posed by these technologies. The paper adopts a doctrinal methodology, drawing from existing laws, case precedents, and comparative legal analysis from jurisdictions like the European Union, the United States, and India. Technologies introduce complexities that traditional legal systems are ill-equipped to manage, ranging from data privacy concerns to algorithmic bias and cross-border jurisdiction issues.

The study finds that most cyber regulations are reactive rather than proactive, leading to legal vacuums and inconsistent enforcement. Tentatively, the paper concludes that there is a pressing need for dynamic, inclusive, and forward-looking legal reforms that balance innovation with individual rights and public interest. It advocates for the integration of ethical design principles in technological development and stresses the importance of digital literacy among legal professionals and citizens alike. By bridging the gap between technology and law, the justice system can remain both fair and future-ready.

Keywords: Digital Justice, Cyber Law, Emerging Technologies, Algorithmic Bias, Data Privacy.

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INTRODUCTION: THE DIGITAL TURN IN JUSTICE AND LAW

In an increasingly digitized world, the relationship between technology and justice has become central to legal discourse. While the internet was initially a space of liberation and openness, its evolution has brought along complexities that challenge essential legal doctrines. Digital justice today is not just about access to the internet; it concerns the protection of rights in online spaces, algorithmic accountability, data privacy, and equitable access to technological benefits. Yet, most countries' cyber laws remain outdated, reactive, or narrowly scoped.[2]

The traditional concepts of jurisdiction, evidence, and liability struggle when applied to technologies that operate beyond territorial borders and evolve autonomously. This conflict requires a rethink of cyber law, not just as a reactive policy tool but as a robust framework for securing justice in a digitized world.[3]

The primary objective of this research is to analyze the evolving concept of digital justice and its significance in the context of emerging technologies such as artificial intelligence, blockchain, and big data. The study seeks to critically examine the adequacy of existing cyber law frameworks in addressing technological advancements while safeguarding individual rights and digital freedoms. Another important aim is to identify the legal and regulatory gaps that hinder the effective realization of digital justice in cyberspace. In addition, the research endeavors to evaluate international best practices and comparative legal frameworks on the regulation of emerging technologies, with a view to highlighting strengths and weaknesses across jurisdictions. Ultimately, the objective is to propose reforms and recommendations that would facilitate the development of a future-ready, balanced, and inclusive cyber legal framework capable of ensuring both technological innovation and the protection of digital rights.

UNDERSTANDING DIGITAL JUSTICE: A HUMAN-CENTRIC APPROACH

Digital justice centers on safeguarding individual rights, promoting inclusivity, and mitigating systemic bias in digital spaces. Unlike traditional justice systems rooted in physical interactions and institutional settings, digital justice must function within decentralized, opaque, and rapidly changing ecosystems.[4] At its core, digital justice is about power, who controls data, who builds algorithms, and who gets to challenge digital decisions. For example, when AI systems make decisions in criminal sentencing, hiring, or credit scoring, there is often no transparency or recourse for those affected.[5] A truly human-centric legal system must therefore

2. Jack M. Balkin, The Three Laws of Robotics in the Age of Big Data, 78 Ohio St. L.J. 1217, 1225 (2017).
3. Julie E. Cohen, Configuring the Networked Self: Law, Code, and the Play of Everyday Practice 77–79 (2012).
4. Joshua A. T. Fairfield, Owned: Property, Privacy, and the New Digital Serfdom 139–41 (2017).
5. Danielle Keats Citron, Technological Due Process, 85 Wash. U. L. Rev. 1249, 1260 (2008).

go beyond regulatory compliance to ensure accountability, participation, and reparation mechanisms. Digital justice cannot be achieved without a future-ready legal framework that reflects the values of dignity, fairness, and non-discrimination in all technical processes.[6]

INDIAN JURISPRUDENCE AND THE CONSTITUTIONAL FOUNDATIONS OF DIGITAL JUSTICE

Indian jurisprudence has played a pivotal role in shaping the contours of digital justice in the absence of comprehensive legislation on evolving technologies. The landmark judgment **Justice K.S. Puttaswamy (Retd.) v. Union of India**[7] recognized the right to privacy as intrinsic to Article 21, establishing a constitutional foundation for data protection and surveillance regulation in the digital age. Similarly, in **Shreya Singhal v. Union of India**,[8] the Supreme Court struck down Section 66A of the Information Technology Act, 2000, for its vagueness and overbreadth, thereby affirming that freedom of speech and expression extends fully to online spaces. Further, in **Anuradha Bhasin v. Union of India**,[9] the Court declared that indefinite internet shutdowns are unconstitutional, emphasizing that access to the internet is essential to the exercise of fundamental freedoms and democratic participation. Earlier, in **People's Union for Civil Liberties v. Union of India** (Telephone Tapping Case), the Court had mandated procedural protections for state surveillance, a principle that now echoes with calls for algorithmic accountability and technological due process in the age of artificial intelligence. While Indian courts have not yet directly addressed the constitutionality of automated decision-making or algorithmic profiling, judgments in the Aadhaar litigation reflect judicial concerns about data misuse and the risks of automated governance. Moreover, the recognition of electronic contracts in **Trimex International FZE Ltd. v. Vedanta Aluminium Ltd.**[10] demonstrates the judiciary's willingness to adapt traditional doctrines of evidence and contract to digital realities. Collectively, these decisions illustrate how Indian jurisprudence is incrementally laying the groundwork for a future-ready legal framework that balances modernization with constitutional rights, even as legislative reform struggles to keep pace with technological change.

LIMITATIONS OF EXISTING CYBER LAW REGIMES

Cyber law, as it stands today, tends to be fragmented, sector-specific, and jurisdictionally bound. Most legal systems classify cybercrimes, regulate data protection, and sometimes tackle cybersecurity but often fall short of comprehensively addressing emerging technologies.[11]

6. Mireille Hildebrandt, Law for Computer Scientists and Other Folk, 32–35 (2020).
7. Justice K.S. Puttaswamy (Retd.) v. Union of India, (2019) 1 S.C.C. 1 (India).
8. Shreya Singhal v. Union of India, (2015) 5 S.C.C. 1 (India).
9. Anuradha Bhasin v. Union of India, (2020) 3 S.C.C. 637 (India)
10. Trimex International FZE Limited, Dubai v. Vedanta Aluminium Ltd., (2010) 3 S.C.C. 1 (India)
11. Orin S. Kerr, Cybercrime's Scope: Interpreting "Access" and "Authorization" in Computer Misuse Statutes, 78 N.Y.U. L. Rev. 1596, 1601 (2003).

a. Outdated Statutes and Definitions

Many cyber laws still focus on conventional offenses such as hacking or phishing while being ill-equipped to deal with issues arising from machine learning, biometric surveillance, or autonomous decision-making.[12] Definitions like "computer" or "network" in legislation like the Information Technology Act, 2000 (India), or the Computer Fraud and Abuse Act (U.S.) have not kept up with the evolution of technology.[13]

b. Jurisdictional Ambiguity

Digital actions exceed borders. A server in Singapore can host content accessible worldwide, yet laws remain territorially bound. This creates confusion over applicable laws, enforcement authority, and the rights of the affected parties.[14]

c. Reactive Rather Than Proactive

Most cyber laws are born from crises like data breaches, ransomware attacks, or viral misinformation. Legislators rush to fill gaps, often with narrow laws that become outdated quickly. A future-ready framework must anticipate emerging trends, not merely respond to damage already done.[15]

EMERGING TECHNOLOGIES AND LEGAL DISRUPTION

a. Artificial Intelligence and Machine Learning

AI's ability to learn and make decisions introduces new legal dilemmas: Who is responsible when an autonomous car causes harm? Can an AI be sued or be held accountable? Most legal systems are silent on these questions, leaving users and victims vulnerable.[16]

b. Blockchain and Smart Contracts

Blockchain promises reorganization and transparency, but it also avoids traditional regulatory checkpoints. Smart contracts can execute themselves without legal review, leading to potential breaches of consumer or contractual rights[17].

12. Paul Ohm, The Fourth Amendment in a World Without Privacy, 81 Miss. L.J. 1309, 1332 (2012).
13. Information Technology Act, 2000, No. 21, Acts of Parliament, 2000 (India); 18 U.S.C. § 1030 (2018).
14. Susan W. Brenner & Bert-Jaap Koops, Approaches to Cybercrime Jurisdiction, 4 J. High Tech. L. 1, 6–8 (2004).
15. Woodrow Hartzog, Privacy's Blueprint: The Battle to Control the Design of New Technologies 55–58 (2018).
16. Ryan Calo, Robotics and the Lessons of Cyberlaw, 103 Calif. L. Rev. 513, 525 (2015).
17. Primavera De Filippi & Aaron Wright, Blockchain and the Law: The Rule of Code 99–105 (2018).

c. Quantum Computing and Cybersecurity

Quantum computers threaten to break current encryption methods, rendering conventional cybersecurity outdated. Legal frameworks must evolve to mandate post-quantum encryption and ensure national infrastructure protection.[18]

d. The Metaverse and Virtual Identity

The immersive nature of the metaverse raises questions about identity, consent, virtual property, and harassment. Current legal systems are largely unprepared to handle crimes or torts committed in virtual environments.[19]

PRINCIPLES FOR A FUTURE-READY CYBER LEGAL FRAMEWORK

To effectively regulate emerging technologies, cyber law must be reshaped on the following foundational principles:

a. Technological Neutrality

Laws should be drafted to apply broadly across current and future technologies, avoiding terminology or standards that quickly become outdated.[20]

b. Rights-First Orientation

Fundamental rights such as privacy, dignity, equality, and due process must be central to all technology governance efforts. A digital bill of rights could codify these values globally.[21]

c. Agile Governance

Legal systems must adopt mechanisms for continuous review, public consultation, and rapid legislative updates. Regulatory sandboxes can help test tech innovations before broad deployment.[22]

d. Multi-Stakeholder Participation

Legal reform must involve technologists, civil society, governments, and end-users. Inclusive policymaking builds legitimacy and ensures that laws reflect diverse needs and values.[23]

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18. Arvind Narayanan & Vitaly Shmatikov, Myths and Fallacies of "Personally Identifiable Information", 53 Commun. ACM 24, 26 (2010).
19. Mark A. Lemley & Eugene Volokh, Law, Virtual Reality, and Augmented Reality, 166 U. Pa. L. Rev. 1051, 1075–1076 (2018).
20. Susan Crawford, Captive Audience: The Telecom Industry and Monopoly Power in the New Gilded Age 138–140 (2013).
21. Frank Pasquale, The Black Box Society: The Secret Algorithms That Control Money and Information 199 (2015).
22. Chris Reed, Making Laws for Cyberspace 67–70 (2012).
23. Eli Noam, Towards a Federal Cyber Policy, 20 Berkeley Tech. L.J. 831, 845–847 (2005).

COMPARATIVE INSIGHTS: EU, USA, AND INDIA

European Union (EU)

The EU's General Data Protection Regulation (GDPR) remains the gold standard for privacy laws. The proposed AI Act further illustrates a practical, risk-based approach to regulating technology.[24]

United States

The U.S. has a fragmented legal regime with sectoral laws like HIPAA, COPPA, and the CCPA. The absence of a federal data privacy law and slow regulatory pace hampers digital justice goals.[25]

India

India's proposed Digital Personal Data Protection Act, 2023, shows progress but lacks strong institutional safeguards. The IT Rules, 2021, have been criticized for overreach and censorship.[26]

REIMAGINING LEGAL INSTITUTIONS FOR THE DIGITAL AGE

The regulation of emerging technologies cannot rely solely on the modification of existing laws. It requires a reflective transformation in legal institutions such as courts, regulatory bodies, and enforcement agencies, which must evolve both in their structures and operational capacities to address the complexities of the digital ecosystem[27].

Digital-First Judicial Mechanisms

Traditional court systems are often ill-equipped to handle the technical nature and cross-border implications of cyber disputes. Specialized cyber benches and digital courts equipped with techno-legal experts must be established to ensure timely, competent adjudication.[28] In India, for instance, although cyber appellate tribunals were proposed under the IT Act, 2000, their operationalization has been sporadic and under-resourced.[29]

24. European Commission, Proposal for a Regulation Laying Down Harmonized Rules on Artificial Intelligence (Artificial Intelligence Act), COM (2021) 206 final.

25. Woodrow Hartzog & Neil Richards, The Pathologies of Digital Consent, 96 Wash. U. L. Rev. 1461, 1479 (2019).

26. Apar Gupta, India's Digital Future: Rights, Governance and Justice, Internet Freedom Foundation, https://internetfreedom.in (last visited August, 2025).

27. Richard Susskind, Online Courts and the Future of Justice 88–91 (2019).

28. Arindrajit Basu et al., The Indian Judiciary and Cyber Law: A Need for Reform, Centre for Internet & Society (2022).

29. Information Technology Act, 2000, § 48A (India).

Moreover, AI-assisted judicial tools can be harnessed for document analysis, case law research, and even predicting legal outcomes, provided they are subject to human oversight and built with transparency and fairness in mind.[30]

Regulatory Tech and Digital Oversight

"RegTech" tools, technological solutions for regulatory compliance and oversight, can enhance monitoring and enforcement capabilities. Algorithms can flag noncompliant behavior, track deception trends, or monitor financial fraud. However, these tools must be deployed with clear legal mandates and human accountability to avoid technocratic opacity.[31] Regulators must also invest in capacity-building and collaboration with global agencies to share intelligence and co-create interoperable regulatory norms.

ETHICAL AND PHILOSOPHICAL DIMENSIONS

While much of cyber law reform focuses on efficiency, governance, and enforcement, the ethical foundations must not be ignored. At its heart, digital justice is about ensuring that technology does not erode human dignity.

Algorithmic Fairness and Human Autonomy

Algorithms, when unrestricted, can replicate or aggravate societal biases. From predictive policing disproportionately targeting minority communities to hiring tools filtering out women, AI systems must be tested for fairness, non-discrimination, and explainability.[32] A rights-based framework must insist on meaningful human control over decisions that affect fundamental rights.[33]

Data Sovereignty and Collective Rights

The usual legal model treats data as an individual asset, but data often reflects community traits, linguistic patterns, genetic profiles, or social behavior. Emerging frameworks must consider collective rights over data, particularly in indigenous or marginalized communities.[34] India's Draft National Data Governance Framework Policy, though promising, must be

30. Cary Coglianese & David Lehr, Regulating by Robot: Administrative Decision Making in the Machine Learning Era, 105 Geo. L.J. 1147, 1159 (2017).

31. Anupam Chander, The New Globalists: Regulating the Internet Giants, 67 Notre Dame L. Rev. 795, 807 (2018).

32. Sandra Wachter, Brent Mittelstadt & Chris Russell, Why Fairness Cannot Be Automated: Bridging the Gap Between EU Non-Discrimination Law and AI, 41 Computer L. & Security Rev. 105567 (2021).

33. Lilian Edwards & Michael Veale, Slave to the Algorithm? Why a "Right to an Explanation" Is Probably Not the Remedy You Are Looking For, 16 Duke L. & Tech. Rev. 18, 32–33 (2017).

34. Ramesh Subramanian, Data Sovereignty and the Public Good, 42 Yale J. Int'l L. Online 1, 4 (2021).

evaluated against global best practices that promote equitable data stewardship, not just state-centric control.[35]

TOWARD GLOBAL DIGITAL CONSTITUTIONALISM

In a world where digital platforms are global, but regulations are national, there is a pressing need for international digital governance frameworks that protect rights and ensure accountability across borders.

International Cooperation and Harmonization

Existing instruments like the Budapest Convention on Cybercrime and the UN Strategies for the Regulation of AI are valuable first steps, but far from sufficient. A new multilateral treaty framework, like the Paris Agreement for digital rights, could set normative standards for algorithmic transparency, data protection, and AI ethics.[36]

Transnational Accountability Mechanisms

Transnational tribunals or digital ombudsmen with jurisdiction to adjudicate human rights violations in the digital realm could serve as essential correctives in cases where national systems are unwilling or unable to act.[37]

CASE STUDIES AND PRACTICAL ILLUSTRATIONS

a. The Pegasus Spyware Scandal

In 2021, reports revealed that government agencies across several countries, including India, had used the Pegasus spyware to surveil journalists, activists, and opposition leaders.[38] The lack of legal clarity around state surveillance, absence of judicial oversight, and weak data protection mechanisms highlighted the urgent need for strong cyber law reform rooted in human rights.

b. Facebook–Cambridge Analytica Data Misuse

The Facebook–Cambridge Analytica scandal showed how personal data could be weaponized for political manipulation without user consent. It led to enhanced scrutiny of data protection regimes and served as material for the enforcement of the GDPR in the EU.[39]

35. Ministry of Electronics and Information Technology, Draft National Data Governance Framework Policy (2022), available at https://www.meity.gov.in. (last visited August, 2025).

36. Council of Europe, Convention on Cybercrime (Budapest Convention), ETS No. 185 (2001); United Nations, Recommendation on the Ethics of Artificial Intelligence (2021).

37. David Kaye, Speech Police: The Global Struggle to Govern the Internet 144–147 (2019).

38. Forbidden Stories & Amnesty International, The Pegasus Project (2021), available at https://forbiddenstories.org (last visited August 2025).

39. Carole Cadwalladr & Emma Graham-Harrison, Revealed: 50 Million Facebook Profiles Harvested for Cambridge Analytica in Major Data Breach, The Guardian (Mar. 17, 2018).

c. Deepfakes and Synthetic Media

Deepfake technology, which creates hyper-realistic synthetic videos, has been used for misinformation, pornography, and identity manipulation. The legal void around consent, authorship, and liability highlights the urgency for future-ready digital content laws.[40]

LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

Despite its strengths, the article has certain limitations that open avenues for further inquiry. The analysis is primarily doctrinal and theoretical, with limited empirical or field-based evidence to assess how cyber laws operate in practice. The focus on secondary literature and judicial developments means that perspectives from stakeholders such as technology companies, regulators, or affected communities are less visible. Additionally, while the paper highlights landmark Indian cases, a deeper exploration of lower court rulings, regulatory orders, and enforcement practices would provide a more grounded understanding of digital justice in India. Future research could also incorporate comparative empirical studies, stakeholder interviews, and interdisciplinary insights from computer science and ethics to enrich the policy debate. Expanding the scope to include regional perspectives within India and cross-jurisdictional enforcement challenges would further strengthen the discourse on building a truly future-ready cyber law framework.

RECOMMENDATIONS FOR POLICY AND LEGAL REFORM

- Codify a Digital Rights Charter at the national and international level, ensuring enforceable protections for privacy, expression, and due process.
- Establish independent tech regulators with multidisciplinary proficiency in law, ethics, and computer science.
- Mandate algorithmic audits and impact assessments for AI systems used in governance and commerce.
- Enact post-quantum encryption laws to future-proof cybersecurity.
- Promote legal literacy in digital spaces, especially among vulnerable communities.
- Ensure gender and social inclusion in digital policy-making processes.
- Create a tech-savvy judiciary and legal education to bridge the gap between law and innovation.

40. Bobby Chesney & Danielle Citron, Deep Fakes: A Looming Challenge for Privacy, Democracy, and National Security, 107 Calif. L. Rev. 1753, 1765–1769 (2019).

IMPLEMENTATION ROADMAP: BUILDING BLOCKS FOR LEGAL TRANSFORMATION

Creating a future-ready legal framework is not merely a legislative exercise, it requires sustained institutional, technological, and cultural transformations across sectors. The following roadmap outlines key steps for operationalizing the principles discussed.

Legislative Reform Agenda

- **Comprehensive Cyber Law Codification**

  Countries must move from fragmented IT or cybersecurity laws toward unified digital justice codes. These should harmonize data protection, AI ethics, cybercrime, and platform accountability under a single legal ecosystem.[41]

- **Mandated Algorithmic Transparency**

  All AI systems used in public decision-making should be subject to explainability requirements. Governments can legislate mandatory "model cards" and audit imprints that disclose how decisions were made and what data was used.[42]

- **Adaptive Regulation Mechanisms**

  Enabling laws should include built-in "sunset clauses" and feedback loops. This would ensure regular updates and public participation in reviewing tech regulations, essential in a field where tools evolve weekly.[43]

Institutional Reforms

- **Tech-Regulatory Task Forces**

  Multi-stakeholder task forces combining legal scholars, engineers, ethicists, and civil society can advise governments on regulatory design and tech governance priorities.

- **Cyber Law Education and Judicial Training**

  Legal education must incorporate interdisciplinary modules on technology, data ethics, and AI regulation. Simultaneously, judicial academies should routinely train judges on techno-legal reasoning.[44]

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41. B. van den Berg & R. Leenes, The Importance of the Digital Legal Framework: Regulatory Challenges and Opportunities, 26 Info. & Commun. Tech. L. 263, 270 (2017).

42. Margaret Mitchell et al., Model Cards for Model Reporting, in Proceedings of the Conference on Fairness, Accountability, and Transparency (2019).

43. Karen Yeung, Responsibility and Accountability in the Digital Welfare State, 14 Internet Policy Rev. 2 (2020)

44. Usha Ramanathan, Interdisciplinarity in Legal Education: A Future Agenda, 40 J. Indian L. Inst. 275, 278 (1998).

- **National Digital Justice Commissions**

  Independent bodies focused on monitoring rights violations in digital spaces, investigating algorithmic harms, and mentioning reparative frameworks can act as guardians of digital justice.[45]

LOOKING AHEAD: PRIORITIES FOR FUTURE RESEARCH

The arena of digital justice and cyber law is dynamic and multidimensional. Scholars, policymakers, and practitioners must continue exploring unanswered questions and emerging risks. Important areas for future research include:

a. Regulation of Emotion AI and Neuromarketing

As AI systems begin to read human emotions using facial prompts and biometric patterns, new ethical concerns emerge around manipulation, autonomy, and informed consent. Legal systems must prepare to regulate these deeply disturbing technologies.[46]

b. Cross-Border Data Flows and Cloud Sovereignty

With most cloud services hosted in a handful of countries, questions of sovereignty, access, and surveillance persist. There is an urgent need to develop multilateral frameworks for equitable cross-border data governance.[47]

c. Legal Personhood of AI and Autonomous Agents

The debate around granting limited legal personhood to autonomous agents similar to corporations has gained traction. Future research must weigh the implications of such moves on liability, moral agency, and legal theory.[48]

d. Restorative Justice in Cyber Harms

Current legal systems prioritize punitive or monetary remedies in cybercrime. However, restorative frameworks, especially for online harassment, doxxing, or revenge porn, could better serve victims' psychological and social needs.[49]

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45. Parminder Jeet Singh, Digital Constitutionalism and Governance in the Global South, IT for Change (2022), available at https://itforchange.net.
46. Elizabeth Edenberg & Michael Zimmer, The Ethical (Re)Design of Emotion AI, 22 Ethics & Info. Tech. 157, 160 (2020).
47. Anupam Chander & Uyên P. Lê, Data Nationalism, 64 Emory L.J. 677, 685–688 (2015).
48. Shawn Bayern, The Implications of Modern Business-Entity Law for the Regulation of Autonomous Systems, 15 Stan. Tech. L. Rev. 135, 143–146 (2011).
49. Danielle Keats Citron, Hate Crimes in Cyberspace 98–100 (2014).

FINAL REFLECTIONS: DIGITAL JUSTICE AS A MORAL IMPERATIVE

Justice has always been at the heart of democratic societies, but in the digital age, justice must travel new roads. Whether it's an algorithm denying someone a loan, a chatbot spreading misinformation, or a blockchain bypassing human oversight, every technological disruption carries the potential to either empower or marginalize. What this article ultimately advocates is not mere legal modernization but a re-humanization of the law in the face of machine logic. A future-ready cyber legal outline must be filled with compassion, equality, and constitutional morality, attached not in fear of technology but in hope for its just deployment. Legal systems are not powerless in the digital, they are formative. The question is not whether law can catch up with technology, but whether it can lead the way, ensuring that in every corner of cyberspace, justice remains not only possible but inevitable.

CONCLUSION: A DIGITAL FUTURE IS POSSIBLE

The intersection of technology and law represents both a challenge and an opportunity. A future-ready legal framework must not merely manage technological disruption, it must actively shape the digital ecosystem to align with the values of justice, equality, and human dignity. As this paper has argued, achieving digital justice requires legal reform that is anticipatory, inclusive, and right-respecting. Regulation must no longer be sensitive, fragmented, or rooted in outdated paradigms. The time is ready to rethink cyber law not as a patchwork of rules but as a dynamic, principled architecture for governing our digital futures. In doing so, we must remember that at the center of all technology lies the human being, and the law must evolve to protect their freedom, agency, and rights in every byte and process.

ADDRESSING THE LEGAL LACUNAE: LEGAL COMPLEXITIES AND REGULATORY GAPS IN DECENTRALIZED FINANCE

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ABSTRACT

Decentralized Finance (DeFi) stands as an emerging and evolving paragon in the realm of global financial systems, evolved through blockchain technology and smart contracts. The main objective of DeFi is to eliminate the dependence on conventional financial intermediaries. By enabling autonomous and borderless mechanisms for lending, borrowing, trading, and asset management, DeFi attempts to broaden financial accessibility and innovation. This study has the objective to critically analyze the structural and lacunae within the DeFi ecosystem, with a view to understanding its operational principles and the extent of its departure from traditional financial methods. Particular attention is devoted to the risks arising from core attributes of DeFi that may result in affecting investor protection and market integrity. This paper also provides an analysis of the different regulatory approaches taken by countries such as the United States, the European Union, Singapore, and India toward DeFi protocols. This article further delves into the jurisprudential dimensions of this decentralized system to see if it can operate within the bounds defined by the rule of law. Through practical examples, like the Compound Payout glitch and the Terra LUNA crash, this analysis tries to understand the gap between the law and its application in DeFi. The focus of this article is the lack of an agreed framework on how to classify crypto assets whether as securities, commodities, or utilities, and how this absence leads to widespread confusion in the regulations. This categorical inconsistency allows DeFi protocols to engage in forum shopping by operating in permissive regulatory regimes, thereby reducing exposure to stricter compliance standards. Finally, the research stresses the need for a consistent, globally coordinated process that converts and transforms DeFi from a disruptive experiment to an equitable pillar of the financial order.

Keywords: Decentralized Finance, Blockchain, Tokenization, Regulation, Compliance.

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INTRODUCTION

Imagine a financial system where contracts are self-executing and value is flowing without any gatekeepers. Decentralized Finance (DeFi) offers a concrete grounding to such imaginary ideas. Built on blockchain technology, it is a disruptive system that offers new possibilities for the global financial services marketplace.[3] As per the International Organization of Securities Commissions (IOSCO), DeFi primarily refers to the provision of financial products, services, arrangements and activities that apply Distributed Ledger Technology (DLT) in an effort to decentralize legacy ecosystems by removing the need for some traditional financial intermediaries and centralized actors.[4]

Decentralized Finance has radically altered financial transactions globally. DeFi operates without financial intermediaries, enabling peer-to-peer transactions by the way of smart contracts. Unlike traditional methods of finance that are that are embedded in institutional and regulatory architecture, DeFi is developed on open-source protocols and incorporates decentralized governance.

Foundational Principles of DeFi

Decentralized Finance (DeFi) involves the process of providing financial services without any intermediary or traditional financial institution (such as a bank).[5] DeFi is classified as a collection of applications that employ Decentralized Ledger Technologies (DLT) to replicate, automate, and often improve upon pre-existing financial services (lending, borrowing, investing and trading).[6] At its core, DeFi employs technologies that use smart contracts to execute functions such as lending and borrowing, decentralized exchanges and derivatives, and synthetic asset creation through its applications. DeFi applications, or dApps, let users conduct core financial activities directly with one another, without the need for any centralized authority.[7] Unlike traditional finance (TradFi), where centralized institutions supervise compliance, customer verification, and dispute resolution, DeFi platforms operate independently and globally, frequently without a clear legal structure or responsible operator.[8]

The foundational principles defining Decentralized Finance include the following:

3. Munisakhon Makhamadkhujaeva, *Decentralized Finance (DEFI) and Regulatory Challenges*, IJISRT (Int'l J. Innovative Sci. & Res. Tech.), 8 Int'l J. Innovative Sci. & Res. Tech. 1343 (2023).

4. International Organization of Securities Commission, *IOSCO Decentralized Finance Report* (Mar. 2022).

5. Shehnaz Ahmed, *Rise of Decentralized Finance| Reimagining Financial Regulation*, INDIAN J.L &TECH, (2023).

6. Id.

7. Withlaw, *Introduction to Decentralized Finance (DeFi): Legal Implications for India's Financial Framework*, WITHLAW BLOG (2024).

8. Shivangi Singh, "*Decentralized Finance (DeFi) and Regulatory Gaps: Addressing the Legal Challenges of Unregulated Financial Ecosystems", The Law Communicants* (2024).

- Transparent Operation

  DeFi systems operate based on blockchain technology, promoting transparency through the method of blockchain technology. These systems are different from the traditional centralized financial methods that operate subject to alterations, thereby questioning the authenticity of such records.

- Composability

  The composability of DeFi systems provides organizational structure to financial innovation that encompasses lending organizations, protocols, derivatives, and stablecoins.

- Structural Framework

  DeFi attempts to remove intermittent networks and the transaction process itself. Smart contracts, implemented as self-executing lines contracts, since inception have aimed to replace lawyers, brokers, and bankers in the course of a transaction, hence making it transparent and immutable.

- Accessible

  As a generalized structure DeFi provides Internet and cryptocurrency wallet- holders to access and efficiently use DeFi, regardless of geographic distance or institutional circumstances. This enables providence of access and concerns encountered in traditional financial processes while offering more appropriate regulatory considerations.

Emergence of DeFi

DeFi has witnessed its emergence as a global, transformative framework in the area of finance.[9] The global financial crisis of 2008 portrayed the risks associated with traditional and centralized finance. Although the 2008 global financial crisis shook traditional systems of finance, it also ushered in the introduction of Bitcoin. Amidst this chaos, Bitcoin emerged as a decentralized currency, creating a milestone in the move away from centralized financial transactions. By 2009, Bitcoin came into wide use. The emergence of Bitcoin as a cryptocurrency marked the philosophical and technological foundation of Decentralized Finance.[10]

Another major revolution in the emergence of Decentralized Finance was the introduction of Ethereum. Ethereum Virtual Machine (EVM) launched in 2015, enabling developers to

9. The World Financial Review, *The Emergence of DeFi: Disrupting Traditional Finance with cryptocurrency,* THE WORLD FIN. REV.

10. Bifinity Network, *When did DeFi Begin? A Timeline of Decentralized Finance*, Bitfinity Blog.

create smart contracts, a foundational aspect of decentralized finance. Ethereum became the foundational platform for Decentralized applications or dApps.

Maker DAO was one of the first DeFi projects to be created using top Ethereum blockchain-based technology. It was proposed in 2015 by Rune Christensen and was officially launched in 2017. It is where the concept of decentralized stablecoins first appeared on the Ethereum network. This innovation helped address the critical volatility issue in crypto markets, thus making the processes of lending, borrowing, and other financial services an easier task.

DeFi has risen in popularity in recent years. The decentralized financial market report of 2025 suggests that the market size has grown from $30.07 billion in 2024 to $42.76 billion in 2025 at a compound annual growth rate (CAGR) of 42.2%. This growth is attributed to increased cryptocurrency adoption, liquidity mining, smart contract platforms and tokenization of assets.[11]

Evolution of DeFi

The evolution of Decentralized Finance portrays one of the transformative developments in the field of finance. Originating from Bitcoin and gaining momentum with the smart contracts, DeFi has expanded into a diverse ecosystem of decentralized applications that challenge the centralized models. However, its trajectory illustrates both vulnerability and resilience: after the Terra-LUNA crash erased nearly **$60 billion** in value within a month, DeFi's Total Value Locked rebounded from **$38 billion in late 2022** to **$127.8 billion by January 2025**, underscoring its capacity for recovery.[12] Yet reliance on TVL as a proxy for DeFi's true scale is not without limits: a 2025 BIS study of 939 protocols cautioned that TVL lacks standardization and verifiability, complicating reliable regulatory use.[13] The ever-evolving DeFi continues to influence the future of finance and may increase the convergence between decentralized technologies and global economic infrastructure.[14]

This study is prompted by the need to critically examine the legal complexities of Decentralized Finance (DeFi), its divergence with prevailing jurisprudential standards, and to propose adaptive regulatory systems that foster innovation while safeguarding public interest. The main focus of this study revolves around the lack of a unified global classification process to classify crypto-assets as securities, commodities, or utilities, creating issues of forum shopping and regulatory problems. This study further shifts towards the provision of a comparative

11. Research and Markets, Decentralized FinanceMarket Report, (2025).

12. *Joint Report on Recent Developments in Crypto-Assets (Article 142 MiCAR)*, EBA/Rep/2025/01 & ESMA75-453128700-1391 (Jan. 16, 2025).

13. Pietro Sagese et al., *Towards Verifiability of TVL in Decentralized Finance*, BIS. No. 1268 (2025).

14. Aborisade IYANUOLUWA Blessing, Mary Blessing and Johnson Fredrik, *Evolution of DeFi: Key Milestones and Innovations,* (2020).

analysis of jurisdictions, i.e., the United States, European Union, Singapore, and India, and also shows the interplay between DeFi and the rule of law. By understanding the major failures in the era of DeFi, such as the Terra-LUNA crash and the Compound Payout glitch, this paper ultimately addresses the central gap revolving around the absence of a uniform framework classification of assets and provides methods for towards addressing such legal and logistical gaps. This study is limited to doctrinal and policy analysis of DeFi technologies, with little emphasis on certain empirical data.

DEFI'S OPERATION IN REAL-WORLD FINANCE: CONTRASTING DEFI WITH TRADITIONAL FINANCE

Decentralized Finance (DeFi) has emerged over decades, operating in the in the financial sector and processing billions of transactions.[15] The interplay between Decentralized Finance (DeFi) and Traditional Finance (TradFi) provides the scholars with a picture of the structural and functional divergence within the global system.[16] TradFi aims at operating through intricate institutional mechanisms such as banks, designed with the aim to preserve investor protection and market integrity in this area. Their dependency on centralized control, bureaucratic inefficiencies, and high transaction costs has rendered them vulnerable to critique, particularly in an age that increasingly emphasizes transparency, speed, and access.

The global financial architecture is undergoing a structural change. The transition from monolithic, institution-led traditional financial (TradFi) systems to the flexible, code-driven ecosystem of Decentralized Finance (DeFi) is structural as well as functional.[17] The emergence of DeFi presents a strong alternative by taking advantage of open-source protocols as well as decentralized networks. Users retain ownership of their assets and engage directly with protocols with no intermediary, and enjoy increased inclusivity, especially for the unbanked and underbanked communities.[18] DeFi represents a significant shift in how people access and manage financial services. Smart contracts enable peer-to-peer transactions without relying on traditional institutions like banks, brokers, or other financial institutions and Non-Banking Financial Institutions (NBFCs). DeFi introduces continuous, code-based financial services unconstrained by geography or time.

15. Coinmetro Editorial Team, *Decentralized Finance (DeFi) vs. Traditional Finance: A Comparative Analysis,* Coinmetro Learning Lab (Jan 12, 2024).

16. Abdulgaffar Muhammad et al., *Decentralized Finance (DeFi) and Traditional Banking: A Convergence or Collision*, 5 Econ., Pol. & Reg. Dev. 1 (Apr. 2024).

17. World Economic Forum, *Decentralized Finance: (DeFi) Policy-Maker Toolkit*, (June 8, 2021).

18. Dirk A. Zetzsche , Douglas W. Arner , Ross P. Buckley, *Decentralized Finance*, *Journal of Financial Regulation,* 6 J. FIN. REG. 172(2020).

TradFi v. DeFi: A comparison

Comparing TradFi with DeFi involves not only infrastructure but also competing philosophies of trust and control.[19] Whereas banks are trusted because of regulatory audits and established reputations, DeFi transfers the responsibility for trust from institutions to code, prioritizing algorithmic transparency instead of institutional reliability. This shift in paradigm raises new issues about accountability, systemic risk, and consumer protection.[20]

DeFi facilitates direct, peer-to-peer transactions via the use of blockchain technology and smart contracts. Users can engage in various operational activities without relying on centralized personnel, resulting in a comparatively transparent and accountable financial system. DeFi protocols state that all transactions are recorded on a public ledger and users can trace their finances in real time. On other hand, traditional finance is operates on a centralized system. Banks, Non-Banking Financial Institutions and other institutions process billions of transactions on an everyday basis and offer services such as credits, deposits, and assets and liability management.[21]

Various DeFi platforms, such as Compound and Aave, have brought notable transformative changes to the financial industry. These platforms use self-executing contracts to replicate traditional intermediaries, thus reducing operational costs and increasing the level of transparency. In contrast, traditional financial systems are highly regulated to ensure regulatory scrutiny and economic supervision. This leads to high transaction costs, and limited access to these systems for less fortunate groups.

The first difference between DeFi and TradFi is in connection to its accessibility and inclusivity. DeFi platforms are, to a great extent, accessible to any person with internet. This provides for a revolution, especially in underdeveloped areas of banking. By contrast, Traditional Finance (TradFi) often requires extensive work and manual verifications, thus posing a threat towards excluding a large part of the world's population, particularly those living in developing nations.

Next difference between the two methods is in connection to the control and ownership. DeFi employs decentralized paradigm. DeFi methods are not controlled by one single entity, but its control spreads over a distributed network. In contrast, traditional financial methods rely central institutions to oversee financial transactions. Another underlying difference between the two is the level of transparency and trust in both the methods of finance. DeFi uses public blockchains to record all transactions. This assures complete transparency. Anyone can validate

19. *Id.*

20. *Id.*

21. *Id.*

transactions, smart contracts, and system functions. This openness builds confidence and reduces the risk of deceit. In contrast to this traditional finance relies on regulation to establish confidence. Governments establish policies to protect consumers and maintain market stability. These laws establish a legal foundation for financial activity. However, this confidence is based on centralized institutions, which can fail or work against the interests of individuals.

Next difference is regarding cost efficiency. DeFi transactions can be faster and less expensive than those in traditional finance. This is because they eliminate intermediaries. Traditional finance typically carries higher expenses. It depends on physical branches, personnel, and other infrastructure. These expenses increase the cost of services. They are frequently passed along to clients as fees and charges.[22]

The comparison between DeFi and traditional financial systems is not merely technological but philosophical. TradFi embodies control, compliance, and centralization, whereas DeFi promotes autonomy, transparency, and disintermediation. Though structurally and functionally distinct, the two systems are nonetheless becoming increasingly interconnected. The future may not belong exclusively to either of the systems; instead, likely evolve into a hybrid ecosystem, blending DeFi's efficiencies with TradFi's safeguards. In mid-2025, DeFi entered a pronounced growth phase, with Total Value Locked surging from **$214 billion at the end of 2024 to $375 billion**, while active users expanded from **24.6 million to 27.3 million**, underscoring its rising global significance.[23] In this new financial frontier, stakeholders, regulators, and users will all benefit from understanding the nuances of structure and function in both systems.

GLOBAL APPROACHES TO DEFI: A COMPARATIVE JURISDICTIONAL ANALYSIS

Decentralized Finance has changed the financial world in recent years by offering blockchain–based alternatives to traditional financial services.[24] The ascent of DeFi has occurred faster than some of the traditional regulatory frameworks that have existed in the finance industry, upending traditional notions of jurisdiction, compliance, and consumer protection. This chapter offers a comparative view of how different jurisdictions have responded to DeFi, going from proactive regulation to outright prohibition.

The decentralized, pseudonymous, and permissionless environments of DeFi's protocols distort regulatory frameworks for traditional financial transactions, which rely on known intermediaries and limited enforcement through jurisdictions.[25] Unlike centralized exchanges, DeFi protocols are frequently managed by decentralized autonomous organization (DAOs),

22. *Id.*

23. DappRadar, *DeFi TVL Breaks $270B ATH but NFTs Lead in Users* (Dec. 2021).

24. "DEFIGLOBALS, *Unlocking Financial Freedom* (Jan. 2024).

25. Benedikt Eikmanns, Prof. Dr. Isabell Welpe, Prof. Dr. Philipp Sandne*, Decentralized Finance Will Change Your Understanding Of Financial Systems* (Feb. 22, 2021).

which further diffuses accountability.[26] Jurisdictions have started responding to the speed of development by adapting various regulatory approaches, each appropriately shaped by their regulatory context and legal traditions.

The United States

The regulatory environment for Decentralized Finance in the US is broad but fragmented. It is found rooted in the laws that predate blockchain technology. While existing statutes clearly apply to crypto and DeFi, their application is often found to be inadequate given the sector's distinct, disintermediated structure. Historically, the US regulators have protected the retail investors by requiring intermediaries to register, disclose and comply with conduct rules. In the US, federal securities regulation governed by the **Securities Act, 1933**[27] and the **Securities Exchange Act, 1934**[28] has been applied to token offerings.

Applying the Howey Test as held in ***SEC v. W.J. Howey,***[29] the Securities and Exchange Commission (SEC) frequently identifies DeFi tokens as securities, thus imposing strict registration and disclosure requirements. Furthermore, the Commodity Futures Trading Commission (CFTC) asserts jurisdiction under Section 2(a) (1) of the Commodity Exchange Act of 1936[30] over DeFi products that exhibit derivative or commodity characteristics. The Financial Crimes Enforcement Network (FinCEN), operating under Sections 5313 and 5318 of the Bank Secrecy Act of 1970[31] still applies AML/KYC obligations, or the requirement to be vigilant and practice due diligence against foreign or illegal funds, even in the pseudonymous environment presented by digital assets and cryptocurrencies. Also operating at the state level, but adding more complexity and responsibilities, are state restrictions like New York's BitLicense, which impose additional licensing responsibilities on your digital asset activities.

The European Union

Europe is entering an important phase towards shaping the future of decentralized finance. The European Commission's Directorate-General for Financial Stability, Financial Services, and Capital Markets Union (FISMA) has issued a consultation paper on the structural aspects of DeFi, focusing particularly on the information asymmetries that are evident in decentralized markets. It tries to design regulatory regimes that look after consumers without killing innovative ideas. Europe's regulatory journey through Decentralized Finance is developing two major

26. Carmen Redmann- Whippel & Michael Stadler, *Decentralized Finance- A Growing but Grey Area* (Dec. 2020).
27. Securities Act of 1933, 15 U.S.C.
28. Securities Exchange Act of 1934, 15 U.S.C.
29. SEC v. WJ. Howey, 328 U.S. 293 (1946), (US).
30. Commodity Exchange Act, 7 U.S.C. § 2(a) (1).
31. Bank Secrecy Act, 31 U.S.C. § 5313 and 5318 (US).

directions. First, there is MiCA with the Markets in Crypto-Assets Regulation, which went into full force in December 2024, primarily focusing on transparency, investor protection, and licensing for exchanges and token issuers.[32] However, Recital 22 of MiCA acknowledges that systems functioning without intermediaries may fall outside its scope.

Now, Europe has begun planning its next move. Regulators intend to clarify DeFi regulations by mid-2026, which may bring legal certainty and responsible monitoring to this expanding frontier of finance. By clarifying how decentralization fits into the law, the EU seeks to enhance legal certainty and responsible oversight, suitable to the expanding frontier of finance.[33]

Singapore

Singapore has historically adopted a permissive approach to innovation, but from mid-2025, regulatory tightening has developed under the Payment Services Act 2019[34] and revisions to the Securities and Futures Act.[35] The Monetary Authority of Singapore (MAS) now requires cryptocurrency businesses and DeFi operators to meet improved custody, AML-KYC, and dispute-resolution criteria. The rationale for this transition stems from the regulatory inadequacies that are exposed by regulatory disasters such as Terra-Luna and FTX. Significantly, MAS-licensed DeFi platforms, such as DigiFT, suggest how institutional-grade DeFi can be integrated into a regulated environment by combining automated smart-contract execution with pre-existing supervisory controls.[36]

India

Decentralized Finance (DeFi) is rapidly transforming the global and Indian financial landscape. DeFi provides direct access to financial services by leveraging blockchain and smart contracts, eliminating the need for traditional intermediaries. In India, this translates into significant opportunities, allowing billions of underbanked individuals and small enterprises to borrow, lend, and invest with greater ease and financial independence. India has yet to implement a comprehensive legal regime connected to DeFi. Existing measures such as the **Reserve Bank of India Act of 1934**[37], the **Securities Contracts (Regulation) Act of 1956**[38], and the **Prevention**

32. Hogan Lovells, *Digital Asset Regulation in the EU, UK and the US* (May 2025, updated June 2025) (white paper).

33. Steve Gregory, *Europe Prepares DeFi Regulations for 2026, Leaving Sector Uncertain After MiCA*, VTRADER, June, 2025).

34. Payment Services Act 2019 (Sing.).

35. Securities and Futures Act (Cap. 289, 2006 Rev. Ed.).

36. *Singapore's Regulatory Pivot: The Start of An Institutional DeFi Era?*, DigiFT Insights (June11, 2025).

37. Reserve Bank of India Act, Act No. 2 of 1934, (Ind.).

38. Securities Contract (Reg.) Act, Act No.42 of 1956, (Ind.).

of Money Laundering Act, 2002,[39] indirectly apply to DeFi actors and transactions. Although the Information Technology Act of 2000[40] provides for limited recognition of smart contracts and digital signatures, no statute addresses the classification and regulation of crypto-assets. The Banning of cryptocurrency and Regulation of Official Digital Currency Bill of 2019[41] had been proposed but never enacted, creating a legal regulatory vacuum.

Comparative Jurisdictional Analysis

The DeFi landscape in the United States is vast yet fragmented, with overlapping federal and state regulations based on pre-blockchain laws that impose significant compliance burdens. The EU has unified crypto regulation under MiCA, but truly decentralized protocols remain in a legal grey area, with resolution expected by 2026. Singapore, which was historically very permissive, has increased monitoring to boost trust and entice institutional use, portraying regulation as a growth enhancer. India's DeFi sector is still in its early stages, but it has the potential to democratize finance for its underbanked population, subject to regulatory developments. Overall, the balance between innovation and safeguards appears likely to determine each jurisdiction's strategy.

JURISPRUDENTIAL ASPECTS OF DEFI: DEFI AND ITS CO-EXISTENCE WITH THE RULE OF LAW

Decentralized Finance (DeFi) refers to a budding financial ecosystem built on blockchain-based smart contracts that aims to automate financial transactions without the use of centralized intermediaries. This framework, however challenges the existing legal and jurisprudential paradigms, raising important concerns about how the DeFi ecosystem conforms to or diverges from the lasting idea of the rule of law.

DeFi and the Rule of Law: A Technological Paradigm

The concept of the rule of law, though having several definitions and descriptions, primarily focuses on the substantive and procedural aspects of law. A renowned scholar and jurist A.V. Dicey, stated that the idea of the rule of law consists of three major principles, i.e. supremacy of law, equality before law, and predominance of legal spirit.[42] Another renowned scholar Lon Luvois Fuller describes rule of law as procedural, stating that laws must be general, clear stable publicly promulgated, and internally coherent.[43]

39. Money Laundering Act, Act No. 15 of 2002, (Ind.).

40. Information Technology Act, Act No. 21 of 2000, (Ind.).

41. Banning of cryptocurrency and Regulation of Official Digital Currency Bill, Bill No. 58 of 2019, (Ind.).

42. AV Dicey, *Introduction of the study of the Law and the Constitution 188* (10th edn. Macmillan 1959).

43. Lon L. Fuller*, Morality of Law*, 39-41.

Governance and enforcement in the DeFi space are carried out utilizing immutable, self-executing smart contracts, ushering in a shift from legal standards to code-infused legislation. This revolution is termed as the shift *from* 'code is law' to 'law is code', in which normative prescriptions become machine-readable and self-enforcing.[44]

DeFi as a challenge to Rule of Law

- Absence of Legal certainty and predictability

  Dicey's emphasis on legal certainty and predictability contrasts with DeFi technologies, in which smart contracts can be sophisticated, and immutable. Users may transact under unidentified risks, straining core rule-of-law guarantees of certainty and predictability.[45]

- Absence of Equal access to Justice

  DeFi's open-access architecture does not ensure uniformity. Disparities in technical literacy, token ownership, and transaction access can benefit creative actors. Furthermore, DeFi lacks the control and dispute-resolution procedures seen in traditional systems, leaving affected parties without adjudicative remedies and consistent equality before the law.

- Absence of Proper Judicial Accountability

  Smart contracts operate independently, often without external adjudication. This raises serious questions about the relevance of traditional legal systems when code imposes outcomes. Without oversight or judicial review, code-based enforcement has the potential to exceed arbitrary coercion, compromising rule-of-law concepts like accountability and separation of powers.

- Market Misconduct

  Misconduct in DeFi platforms, including front-running, governance manipulation, and security exploitation, has emerged by exploiting technical bottlenecks and legislative deficiencies. Governance difficulties, such as sybil attacks and a mismatch between whitepapers and contract code, pose additional risks to integrity. These issues highlight the lack of tools to ensure procedural fairness and substantive justice.[46]

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44. De Filippi and Hassan, *Blockchain Technology as a Regulatory Technology: From Code is Law to Law is Code,* rXiv preprint arXiv:1801.02507 (Jan. 8, 2018).

45. Jarosław Kantorowicz & Bastián González-Bustamante, *Changing Meaning of the Rule of Law*, 30 Artificial Intelligence & Law 1 (June 19, 2025).

46. *Id.*

Jurisprudential reconciliation with DeFi technologies

Addressing DeFi's jurisprudential gaps may require hybrid methods that combine programmable enforcement with legal monitoring. Arbitration clauses could be embedded in smart contracts, potentially offering legal flexibility[47] that pure code logic cannot provide.[48] Furthermore, in order to achieve Fuller's procedural ideal of clarity, DeFi protocols might employ standardized smart contract documentation, audits, and transparency tools to assist users in understanding contractual terms and associated risks better. Even though DeFi is characterized as a code-first environment, normative values such as fairness and protection of rights should be taken into consideration. Token governance methods, voting structures, and soft-fork protocols could be designed to approximate procedural fairness.[49] Policymakers and Courts can exercise jurisdiction by intervening with demands for disclosure Machines, imposing consumer protections or deeming parts of DeFi's activities as subject to securities or anti-fraud laws. Machine-based, algorithmic approaches are also being explored for identifying compliance issues with DeFi tokens. These approaches indicate a reflection of rule-of-law protections by making legality and accountability part of a decentralized system. DeFi reflects a confluence of technological change and law, with its self-executing contracts, also revealing some tensions with the rule of law's foundational underpinnings of clarity, accountability, and judicial oversight. Friction as a result of such relationships does indicate potential opportunities. Specifically, techno-legal contracts, enhanced accountability practices, and regulatory compliance may now yield new jurisprudential opportunities. In the end, whether or not DeFi can coexist with the rule of law norms may depend on its intentional design and institutional adaptation.

LEGAL GAPS IN DEFI

Decentralized Finance (DeFi) enables transactions across borders that do not entail relying on expensive intermediaries, allows liquidity to be implemented in a programmable way with no regard to time or space, and has exploded past coherent legal frameworks, exposing their fundamental weaknesses. While the DeFi sector has grown, it has surpassed the development of legal frameworks, for better or for worse. The failures in DeFi are numerous, including the Terra-LUNA crash that resulted in billions of dollars in losses, and the Compound Payout mishap that paid excessive compensation to thousands of users. These failures demonstrate the elemental weaknesses of our jurisprudence, with one of the most critical factors being the absence of any homogeneous classification of crypto-assets as securities, utilities, or commodities.

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47. Carlos Molina-Jimenez & Sandra Milena Felizia, *On the Use of Smart Hybrid Contracts to Provide Flexibility in Algorithmic Governance,* (Dec. 10, 2023).

48. Suman and Das. *Embedding Smart contracts into Our Legal Fabric* (Vol. 11, Issue 7, 2025).

49. *Id.*

In addition, our ability to implement effective regulatory oversight is advanced by the spread of regulatory scrutiny across jurisdictions, as well as our ongoing existence in a regulatory grey zone, which leads to another area of concern, so-called 'forum shopping'. Forum shopping creates spaces for an entity to place its DeFi activity under these regimes, thus avoiding accurate scrutiny. If continued unchecked, these trends can create a potential global regulatory race to the bottom, which will undermine overall market integrity, as well as investor protection and, more importantly, the rule of law.

The Terra-LUNA Crash

In May 2022, TerraUSD, the third largest cryptocurrency system (behind Bitcoin and Ethereum) and an algorithmic stablecoin and its twin, LUNA, had collapsed in just three days, taking approximately $50 billion in value. The blockchain and trading data suggest that the collapse was less a result of manipulation than of growing concerns about the system's long-term viability. Blockchain technology enabled investors to monitor each other's actions, increasing the speed of the run. Wealthier and more sophisticated investors were the first to run, experiencing substantially lesser losses. However, the poorer and less sophisticated investors ran later and suffered greater losses. Even insiders struggled to recognize the risk build-up due to the complexity of the system.[50]

The aftermath of the Terra-Luna crash gave rise to significant doubts about its regulatory ambiguity. There was no consensus as to whether TerraUSD and LUNA were to be classified into classes of securities, commodities, or distinct assets. The enforcement action by the Securities and Exchange Commission (SEC) revealed ambiguity with tangible implications. In April 2024, in the case ***SEC v. Terraform Labs PTE, Ltd. and Do Hyeong Kwon***[51]**,** a New York jury found Terraform Labs and Do Kwon responsible for defrauding investors, emphasizing that UST was offered as an unregistered security and investors were potentially misled about its stability. The SEC has previously filed a suit, accusing Terraform Labs and Kwon of massive fraud, strengthening its position that stablecoins are routinely disguised as digital-asset securities. The Terra-Luna crash exposed regulatory ambiguity, particularly in the absence of a clear classification framework.

The Compound Payout Glitch

The Compound protocol Payout glitch reveals operational and legal consequences. On 1st October 2021, Compound, an automated lending and borrowing DeFi protocol, accidentally distributed $89 million worth of cryptocurrency COMP. It was found later that the distribution

50. Jiang Liu Igor Makarov & Antoinette Schoar, A*natomy of a Run: The Terra-Luna Crash*, NBER Working Paper No. 31160 (Apr. 2024).

51. Securities and Exchange Commission v. Terraform Labs PTE, Ltd. & Do Hyeong Kwon, No. 23-cv-1346-JSR (S.D.N.Y. 2023).

was a result of the malfunctioning of smart contracts. The users were requested to return the cryptocurrency tokens that they did not possess.[52] Although the users could claim substantial tokens at low cost, the system subsequently reversed erroneous transactions. This incident hereby exposed the following legal regulatory gaps:

- Firstly, it showed the absence of predefined legal methods for correcting or rectifying such errors.
- Secondly, different court systems may interpret the tokens differently, determining whether they were gifts, contracts, or transfers turned into enforceable property rights.
- Lastly, with the absence of a statutory certainty, DeFi protocols remain vulnerable.

While academic detection models exist, such as classifiers that flag potential security violations via on-chain code patterns.[53]

The Uncertainty of Asset Classification- a Regulatory Gap

The heart of DeFi-related crises, such as the Terra-Luna crash and Compound Payout glitch, lies in the absence of a systematic framework. The central jurisprudential gap in this work portrays that there exists an absence of an internationally harmonized taxonomy that is responsible for the efficient classification of crypto assets. For instance, in the US, Securities and Exchange Commission (SEC) has frequently stated that most cryptocurrency tokens, particularly those released through Initial Coin Offerings (ICOs) or including aspects of profit expectation linked to managerial activities, are *investment contracts* under the Howey test[54] and hence qualify as securities, whereas the Commodity Futures Trading Commission (CFTC) considers certain notable assets, such as Bitcoin, as commodities; placing them in a completely different paradigm.

The existence of such discrepancies not only confuses issuers and platforms, but it also jeopardizes forum arbitrage, wherein DeFi protocols selectively incorporate, install, or anchor operational nodes in jurisdictions with the most in which oversight is minimal. Such actions may enable platforms to avoid tighter investor protection requirements, eroding regulatory coherence and undermining worldwide efforts to incorporate DeFi into the established rule of law framework.

The case studies of the Terra-LUNA crash and the Compound Payout glitch are significant examples of DeFi's complicated legal landscape. Deficiencies in classification, market

52. PYMNTS, *DeFi Protocol Compound Begs Users to Return Accidental $90M Payout* PYMNTS (Oct.2021).

53. *Arianna Troze, Bennett K & Toby D, Detecting DeFi Securities Violations from Token Smart Contract Code,* arXiv:2112.02731[cs.CR] (Dec. 6, 2021) (rev. May 26, 2023).

54. *SEC v. W.J. Howey Co.*, 328 U.S. 293 (1946).

design, enforcement mechanisms, and regulatory consistency, combined with jurisdictional arbitrage, are at the root cause of these problems.

TOWARDS A COMPREHENSIVE DEFI MODEL: ADAPTIVE LEGAL FRAMEWORKS IN DEFI

The transformative prospect of Decentralized Finance (DeFi) stems from its ability to provide borderless, disintermediated, and programmable financial services that are not limited by geography or hours of operation. Despite the benefits to DeFi of these three features, global and free access, automatic execution of contracts, and anonymous participation, the same characteristics expose DeFi to operational and legal unpredictable consequences. The case studies of the Terra-LUNA crash and the Compound payment glitch demonstrated the consequences of existing regulatory ambiguity, operational fragility, and the absence of internationally standardized asset classification rules. Towards achieving a comprehensive DeFi model, the following changes could be inculcated:

Inclusion of an adaptive legal framework

The current regulatory approach to DeFi is a reactive mechanism to the existing legal architectures designed for centralized intermediaries. For instance, in the US, the Securities and Exchange Commission (SEC) considers most tokenized assets, particularly those with profit expectations under managerial control, as *securities* under the Howey test. However, the Commodity Futures Trading Commission (CFTC) considers Bitcoin and Ether as commodities. This definitional bifurcation appears globally, resulting in a patchwork of mismatched standards that DeFi actors can exploit by basing their operations in permissive jurisdictions.

This definitional bifurcation appears globally, resulting in a patchwork of mismatched standards that DeFi actors can exploit by basing their operations in permissive jurisdictions. An adaptive framework must first address this taxonomical gap. Without a global standard for categorizing crypto-assets, enforcement actions instances such as ***SEC v. Terraform Labs PTE Ltd***.[55] will continue to rely on ad hoc court decisions, as a result of which inconsistent investor protections and compromised market integrity are likely to persist.

Operational Risk-based compliance for DeFi protocols

The Compound glitch of October 2021, which resulted in the erroneous distribution of $89 million worth of COMP tokens due to a smart contract malfunction, highlights a crucial operational deficiency in autonomous financial systems, i.e., the absence of appropriate rules for rectification of such malfunctions. In traditional finance, procedures like contractual warranties give rise to more predictable solutions. However, DeFi relies on permanent records; therefore, erroneous

55. *Id.*

transactions may be conceptually irreversible without community consent, creating concerns about its enforceability, restitution, and property rights. An adaptive DeFi framework could incorporate technical resilience into its legal design, including mandatory smart contract auditing, formal verification methods, and standardized on-chain dispute resolution clauses. These would ensure that remedies are not left to the unpredictable interplay of contract law, property law, and principles of equity.

Establishing a Global Harmonious taxonomy

A global harmonious taxonomy would reduce forum shopping and facilitate cross-border supervisory cooperation. This could be a significant step toward developing an internationally recognized governance standard for Digital Asset Classification. That is, when all tokens or tokens used as competing forms of Digital follow the standard classification at the same level of the legal framework, so that the related regulatory requirements are predictable. This standard classification reduces the incentives for forum shopping or at least enables cross-border supervisory cooperation.

Designing a Risk-Proportionate Approach

Given the fast rate at which DeFi is innovating, uniformity in market integrity and systemic risk reduction could help with change in a way that does not constantly require legislative updates. Regulatory sandboxes may also offer the government the chance to utilize supervisory tools in a controlled environment, promoting innovation while decreasing risk. Surely rules-based approach will be obsolete soon. Principles-based one - centered on investor protection,

CONCLUSION

The evolution of Decentralized Finance requires a conscious understanding of regulatory frameworks that expand beyond jurisdictional distinctions and fundamentally leverage the unique aspects of the blockchain-based system. DeFi failures such Terra-LUNA crash, remind us that the legal and operational problems, fragmented asset classifications are not merely peripheral risks, but are potentially systemic risks. An adaptable regulatory framework, created through aligned taxonomies, technical measures, and appropriate governance, may be the most feasible pathway to mediate the two competing objectives of fostering innovation while providing legal certainty. This regulatory framework must be flexible and adaptable to the continuously evolving pace of technological change while continuing to strive for investor protection, market integrity, and procedural fairness.

BLOCKCHAIN AND JUSTICE: REFORMING INDIA'S WELFARE SYSTEM

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Vibha Reddy Kottam [2]

ABSTRACT

India's welfare system continues to be undermined by inefficiencies, opaque processes and systematic corruption, despite being designed to promote equity and social justice. Schemes like the Public Distribution System (PDS), Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) and direct benefit transfers often fall short of their intended impact due to administrative loopholes, financial leakage and exclusion of the rightful beneficiaries. This paper explores the transformative potential of blockchain technology as a legal and institutional tool to reform welfare governance. The central objective of the study is to examine how blockchain can promote fairness, accountability and efficiency in India's welfare programs. The paper further assesses the adequacy of India's existing legal framework i.e the Information Technology Act, 2000, the Digital Personal Data Protection Act, 2023, etc, to facilitate such integration. Significant legal challenges such as data privacy, evidentiary value of blockchain records and regulatory gaps in public-private technology partnerships are critically analysed. Based on doctrinal and comparative methodology, the paper examines the efforts of public policy and legislative models. Although there are preliminary indications that blockchain technology could significantly improve transparency, combat corruption and safeguard welfare payments, ethical use of the technology will require legislative reforms. The paper concludes by establishing an argument that integrating blockchain technology with a right based legal framework can promote social justice in India's welfare system. It provides a road map for reforming laws and policies to bring technological advancement in accordance with equality, dignity and good governance principles set forth by the Indian Constitution.

Keywords: Blockchain Technology, Welfare Governance, Digital Governance, Transparency, Social Justice.

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INTRODUCTION

The Directive Principles of State Policy requires the State to improve social and economic justice, as the Welfare state is a fundamental component of India's Constitutional vision. India has established a comprehensive welfare system over the years, which includes direct benefit transfers, subsidies for housing, health care and education along with food security and rural employment plans. Although these programs aim to enhance the living conditions of underprivileged communities, but the expected impact has been hampered by systematic issues like corruption, financial leaks and errors.[3] Transparency, accountability and equitable access must be given the greatest attention in structural reforms because the gap between the goals of the policies and their implementation at the lower levels has caused a crisis of trust in welfare governance.

The digital transformation of governance has been welcomed as a means of improving the delivery of public services in recent years. Improved efficiency has been achieved through initiatives like the Public Financial Management System (PFMS), the Aadhaar-linked Direct Benefit Transfer (DBT) Mechanism and digital public infrastructure.[4] These systems are still prone to opaqueness in data handling, human judgement and cyber fraud. Additionally, issues with respect to inadequate grievance redressal, date privacy and the exclusion of technologically underprivileged populations still exist. While addressing this gap, there has been a notice on usage of blockchain technology as it as an emerging distributed ledger system which can potentially develop transparency and accountability in public administration.[5]

Blockchain provides a transparent and decentralised way to record transactions. Because of its inherent characteristics like traceability and immutability, it is well suited for circumstances with high levels of corruption risk and trust deficits. Globally, usage of blockchain in governance have expanded beyond cryptocurrencies to include welfare payments in the United Arab Emirates, supply chain monitoring in Estonia and land registration in Georgia. These examples portray how blockchain technology can guarantee that payments for the purpose of welfare of the citizens are utilised for the actual purpose without manipulation or leakages.[6]

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3. B. De Villiers, Directive Principles of State Policy and Fundamental Rights: The Indian Experience, S. Afr. J. on Hum. Rts. (1992), https://www.tandfonline.com/doi/pdf/10.1080/02587203.1992.11827851.
4. S.A. Jaffer, S. Pandey, R. Mehta & P. Bhavathankar, Blockchain Based Direct Benefit Transfer System for Subsidy Delivery, 2020 Int'l Conf. for Emerging Tech. (INCET) 1 (2020).
5. Vaasanthi Vedantam & Gayatri Doctor, Public Grievance Redressal for Urban E-Governance in Guntur, Andhra Pradesh, Proc. 15th Int'l Conf. on Theory & Prac. of Elec. Gov. (Oct. 4, 2022), https://www.semanticscholar.org/paper/625e259d15ab65007632ddaf7ac3549e8376b52a.
6. I.P. Astawa, R. Prasetio & S. Lim, Blockchain for Social Trust: Rebuilding Transparency in Public Sector Transactions through DLT, 3 J. Soc. Sci. Utilizing Tech. 90 (2025), https://doi.org/10.70177/jssut.v3i2.2290,

Blockchain technology could be incorporated into current welfare systems in India to create a permanent and verifiable record of every transaction, from funding distribution to the final beneficiary receipt. This could significantly reduce unauthorised diversions and duplication. Additionally, the open-access ledger of blockchain technology can support citizen monitoring, strengthening the idea of justice as fairness and participatory governance.[7]

The integration of blockchain technology into India's welfare system presents challenging legal and policy issues, the decentralised nature of the technology makes the regulatory oversight difficult and the permanent nature of its records conflicts with data protection laws.[8] Additionally, since a significant proportion of India's rural and marginalised population lacks reliable internet, it is essential to ensure digital inclusion. Blockchain integration operates the risk of restoring rather than eliminating the present patterns if the structural inequalities are not addressed.[9]

The present research emphasizes that blockchain in the broader context of India's concept of welfare state. It aims to investigate how blockchain technology can be used to develop a welfare system that is open, accountable and genuinely equitable through an examination into both its technological capacity and the institutional limitations. The ultimate objective is to shift to a model in which the provision of welfare is a right protected by reliable mechanisms rather than a privilege open to administrative authority solely. By accomplishing this, this research incorporates to the continuing discussion about the inclusion of new technology and its effectiveness in promoting justice in the biggest democracy in the world.

Despite a wide range of government initiatives, India's welfare system faces challenges with inefficiency, corruption, transparency and the exclusion of underprivileged groups. Delays, leakage of funds and administrative obstacles frequently keep beneficiaries from receiving their due benefits. Welfare programs aim of justice and equity are compromised by these issues. The traditional manual verification and centralised record-keeping procedures are often prone to error and manipulation, which undermines public trust and leads to inefficient use of resources. With its decentralised and transparent system, blockchain has the potential to solve these issues by guaranteeing safe, unchangeable records and efficient benefit distribution. However, overcoming obstacles related to digital literacy, regulations and infrastructure is necessary to incorporate blockchain into India's extensive welfare system. The purpose of this study is to

7. Ajay More, Abhishek Sah & Shilpa Singh, Ushering a Trust-based Benefit Delivery Ecosystem in Rural India Powered by Blockchain, Proc. 14th Int'l Conf. on Theory & Prac. of Elec. Gov. 51 (2022).

8. R. Kumar, Leveraging Blockchain for Government and Policy in India: Innovations and Implications, ShodhKosh: J. Visual & Performing Arts (2024).

9. Mira Indriyulia Ekarini & L. Wibowo, The Implementation of Digital Transformation on Improving Public Services, Proc. 6th Glob. Conf. on Bus., Mgmt. & Entrepreneurship (2022), https://www.semanticscholar.org/paper/f90e367ee6205dc0b8922236182ffeac5392d36d.

investigate how blockchain technology can improve accessibility, decrease corruption and strengthen justice in India's welfare system, resulting in a more equitable, accountable and effective social security system for the nation's most vulnerable citizens.

Research Objectives

1. To assess the potential of blockchain technology in enhancing transparency and 1efficiency withing India's welfare schemes.
2. To identify the legal and policy challenged in integrating blockchain technology solutions into welfare systems.
3. To assess the impact of blockchain based welfare on reducing corruption, leakages and possible interventions.
4. To examine the role of blockchain in ensuring equitable access and inclusion for marginalised communities in welfare programs.
5. To propose a legal framework for implementing blockchain in India's welfare system that aligns with principles of justice and date protection.

Literature Review

Blockchain technology offers promising solutions to address the challenges in India's judicial and welfare systems. It can enhance transparency, reduce corruption and improve efficiency in case of management, potentially elevating the backlog of pending cases {(Khairwal & Shah, 2020)[10]; (Patil & Desai, 2023)}.[11] When combined with Artificial Intelligence and Machine Learning, blockchain can assist judges in delivering faster and more accurate judgments (Patil & Desai, 2023).[12] In the context of welfare programs, blockchain can create a trust-based ecosystem for benefit delivery, addressing issues of inclusion errors and information concentration (More et al., 2021).[13] The technology's potential extends to land record management, where integration with India's Aadhaar biometric system could enhance transparency, reduce fraud and improve socioeconomic outcomes (Pandey,2018).[14] Overall, blockchain presents opportunities

10. Neeraj Kumari Khairwal & Ronak Shah, Current Indian Judicial System: Issues and Blockchain Solutions, in Blockchain for Legal Applications 345 (2020), https://doi.org/10.1007/978-981-15-4542-9_19.

11. Sameer Patil & Darshana Desai, AI Enabled Blockchain Solution for the Indian Judicial System, in Proc. 2023 Int'l Conf. on Emerging Smart Computing & Informatics (ESCI) (2023), https://doi.org/10.1109/ESCI56872.2023.10100151.

12. Ibid.

13. Ajay More, Abhishek Sah & Shilpa Singh, Ushering a Trust-based Benefit Delivery Ecosystem in Rural India Powered by Blockchain, Proc. 14th Int'l Conf. on Theory & Prac. of Elec. Gov. (2021), https://doi.org/10.1145/3494193.3494200.

14. P. Pandey, Can Blockchain Spark off the Reincarnation of India's Living Dead?, 2018 Int'l Conf. on Innovation & Intelligence for Informatics, Computing, & Tech. (2018), https://doi.org/10.1109/3ICT.2018.8855731.

to transform governance and service delivery in India, particularly in areas where trust and efficiency are crucial.

Scope and Limitation

This research examines the application of blockchain technology in improving India's welfare with respect to accountability, efficiency and transparency. It will examine current welfare programs like the social security pensions, Direct Benefit Transfers (DBT) and Public Distribution System (PDS) to identify areas that requires special care and also check if blockchain technology can improve such identified areas. This paper will also examine technical aspects like decentralisation and evaluate how effect these methods are in reducing corruption and financial leakages.

This study solely looks at the ways blockchain can be used to deliver welfare in India, with a focus on implementation, governance and policy concerns. Findings are limited by the availability of reliable data, government transparency and the rapidly evolving blockchain technology and regulations.

BLOCKCHAIN AS A TOOL FOR TRANSPARENCY

Blockchain technology has emerged as a transformative tool in governance, particularly in the administration of welfare programs. Its relevance lies in its ability to provide tamper-proof, transparent and verifiable records of transactions between government authorities, intermediaries and citizens.[15] Unlike traditional centralised databases, which are prone to manipulation, blockchain operates on a distributed ledger system. In this system, every participant maintains a copy of the ledger and any transaction recorded on it is permanent as once the data is entered it cannot be altered or deleted without consent from the network.[16]

This characteristic of blockchain directly addresses the persistent issues faced by India's welfare ecosystem such as financial leakages, duplication of beneficiaries and manipulation by intermediaries. A blockchain-enabled system ensures that every transaction is auditable and verifiable by multiple stakeholders, reducing the likelihood of fraud.[17] By embedding transparency and verifiability into the very structure of welfare administration, blockchain transforms welfare from discretionary handouts into enforceable entitlements. Citizens are no

15. Himani Mishra & Prateek Maheshwari, Blockchain in Indian Public Distribution System: A Conceptual Framework to Prevent Leakage of the Supplies and Its Enablers and Disablers, 14 J. Global Operations & Strategic Sourcing 228 (2021).

16. Ibid.

17. Ibid.

longer passive recipients; instead they can actively verify their eligibility and ensure that the benefits reach them as intended.[18]

Enhancing the Public Distribution System

The Public Distribution System (PDS) is India's largest food security program designed to provide subsidised food grains to millions of households. Despite its scale, PDS faces serious challenges, including fake ration cards, diversion of grains and incomplete delivery records. These issues lead to significant leakages, depriving the intended beneficiaries of the rightful entitlement.[19]

A blockchain based PDS can effectively mitigate these challenges by maintaining a secure, transparent and immutable record of the entire supply chain. From procurement by the Food Corporation of India to distribution at the fair-price shop and final withdrawal by the beneficiary, every transaction can be verified. This means that any discrepancies can be immediately detected. Moreover, stakeholders such as government auditors, civil society organisations and even citizens themselves can access these records to verify transactions. This increased visibility strengthens accountability at every level of the PDS system. By reducing the scope for corruption, blockchain transforms PDS from a system vulnerable to manipulation into a robust mechanism that ensures food security for the actual beneficiaries.[20]

Transforming Direct Benefit Transfers (DBT)

Direct benefit transfers aim to transfer subsidies and benefits directly into the bank accounts of beneficiaries. While DBT has reduced some inefficiencies associated with manual cash transfers, it continues to face challenges including delayed disbursement, duplicate payments and financial leakages. Blockchain can revolutionize DBT by introducing a shared ledger that records every transaction. This ensures that fund flows are transparent and traceable, reducing errors and delays caused by manual processes inefficiencies.[21]

Additionally, smart contracts can be integrated into the system. These are self-executing contracts with predefined conditions. Smart contracts can automate eligibility verification, ensuring only qualified beneficiaries receive funds. They can also trigger automatic disbursement once certain conditions are met, eliminating opportunities for manipulation. By making DBT

18. Ibid.

19. Ministry of Finance, India's DBT: Boosting Welfare Efficiency (BlueKraft Digital Found., Apr. 21, 2025), https://static.pib.gov.in/WriteReadData/specificdocs/documents/2025/apr/doc2025421543301.pdf.

20. Ibid.

21. Pravin Chaudhari, Implementation of Blockchain to Control Fraud Transactions in Government Welfare Schemes: A Case Study of Maharashtra's Ladki Bahan Yojana, 10 Int'l J. Res. Trends & Innovation (Feb. 2025), https://ijrti.org/papers/IJRTI2502036.pdf.

fully transparent and automated, blockchain ensures that subsidies, pensions and scholarships reach beneficiaries promptly and accurately.[22]

Strengthening Governance

One of the most significant advantages of integrating blockchain into welfare system is its ability to strengthen governance and accountability. In traditional welfare systems, the reliance on paper records and centralised databases create multiple points where errors can occur. Blockchain eliminates these vulnerabilities by ensuring that all transactions are recorded permanently and shares across a distributed network. Any attempt to tamper with the data can be viewed immediately. This structure promotes transparency which discourages corruption.[23] Moreover, the ability to audit transactions allows the government authorities to identify inefficiencies and take corrective actions.

Beyond operational improvements, blockchain has the potential to shift India's welfare system from a charity-based model to rights-based model. As of now, the welfare programs are viewed as discretionary handouts which are often subject to errors and delays. Blockchain enables a system where citizens are empowered to verify, track and claim their entitlements. By adding transparency and enforceability into welfare programs, blockchain ensures that citizens' rights are protected.[24]

Reality of the Welfare Leakages

India's welfare delivery systems, particularly Public Distribution System (PDS) and the Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA), continue to suffer from systematic inefficiencies and corruption despite successive reforms.

In the case of PDS, there are empirical studies that show large scale diversion of subsidised food. A recent study by Indian Council for Research on International Economic Relations (ICRIER) estimated that 28-29% of subsidised food, amounting to nearly 19.7 to 20 million tons, fail to reach intended beneficiaries each year causing a loss of approximately Rs. 69,108 crores.[25] This represents an improvement from the 46% leakage recorded in 2011-12, but the problem remains the same.[26] State level variations are striking at a rate where Bihar reduced

22. Ibid.

23. Centre of Excellence in Blockchain Technology, PDS Case Study, Blockchain.gov.in, https://www.blockchain.gov.in/Home/CaseStudy?CaseStudy=PDS.

24. Chaudhari, *supra note* 21.

25. Press Trust of India, PDS Leaks Cost Exchequer ₹69,000 Crore a Year: ICRIER Report, Times of India (May 28, 2024), https://timesofindia.indiatimes.com/india/pds-leaks-costing-exchequer-rs-69000-crore-a-year-report/articleshow/115392817.cms.

26. Editorial, Public Distribution System Must Be Reformed to Fix Leakage, Indian Express (Apr. 9, 2024), https://indianexpress.com/article/opinion/columns/public-distribution-system-must-be-reformed-to-fix-

leakage from 68.7% to 19.2% and West Bengal from 69.4% to 9% while Uttar Pradesh still experiences leakage of 33%.[27]

The MNREGA framework also faces leakages through fake job cards and misappropriation of funds. In Rajasthan, a technology audit in 2024-2025 exposed Rs.1,200 crore scam involving fake attendance entries leading to the blacklisting of over 1,700 workers.[28] These findings demonstrate the limits of current monitoring systems and the urgent need for tamper proof systems that ensure transparency.

The persistent leakages in PDS and MNREGA highlights that reforms based solely on digitalisation and POS mechanisms have not eliminated manipulation or inefficiencies. Blockchain technology, with its tamper-proof distributed ledger directly addresses these governance gaps. In PDS, blockchain can track every stage of food grain movement. Similarly, in MNREGA, blockchain can eliminate fake workers by maintaining verifiable biometric attendance logs and executing smart contracts that release payments only upon authenticated completion of work.

By embedding transparency into the structure of welfare delivery, blockchain ensures that citizens are not passive recipients but active stakeholders, empowered to audit, verify, and claim entitlements. Importantly, the empirical evidence of massive leakages in PDS and MNREGA demonstrates that the problem is not merely theoretical but quantifiable.

CASE STUDIES

INDIA

- **Andhra Pradesh - Land records & welfare-beneficiary tracking**

Andhra Pradesh ran some early pilots of land-record metadata hosted on a blockchain (e.g. a Chroma Way pilot in Visakhapatnam) and publicly talked about moving towards a blockchain approach to reduce land-record tampering.[29] These pilots that were anchored by referencing

leakage-invest-in-farming-9663434.

27. Press Trust of India, India’s PDS Leakage Hits ₹69,108 Crore with 29% Grains Missing Beneficiaries, Swarajya (May 28, 2024), https://swarajyamag.com/news-brief/indias-pds-leakage-hits-rs-69108-crore-with-29-per-cent-grains-missing-beneficiaries-reveals-icriers-latest-study.

28. Staff Reporter, MNREGA Scam in Rajasthan: ₹1,200 Crore Fake Attendance Scheme Uncovered, Bhaskar English (May 4, 2025), https://www.bhaskarenglish.in/local/rajasthan/jaipur/news/mnregascam-rajasthan-fake-attendance-scheme-04-05-2025-rajasthan-latest-news-headlines-jaipur-jodhpur-national-134961631.html.

29. Vishwanathan P., An Indian State Wants to Use Blockchain to Fight Land Ownership Fraud, CNBC (Oct. 10, 2017).

hashed entries of land records in a distributed ledger aimed at enhancing such recordings in terms of their integrity and provenance.[30]

The projects were implemented as a part of ongoing state e-governance schemes (Bhudhaar, e-Pragati, Real-Time Governance Society) and were positioned based on MoUs / vendor alliances and not on specific blockchain legislation. Areas of implementation were thus reliant on the IT Act, policies and procurement provisions by the departments.[31]

Technical anchoring enhanced the tamper-resistance of records and provided an auditable provenance trail, which is particularly useful in identifying beneficiaries where land ownership is a criterion for a welfare scheme. Early pilots have demonstrated improved data integrity.[32]

Pilots identified non-technical bottlenecks: how to scale to millions of records, whether the wider community could trust government actors when calculating inputs, if there could be certainty under law as to the admissibility of blockchain-anchored evidence, and most importantly, how to integrate with the newer geospatial products (e.g., Naksha) and practices, and DILRMP norms.[33]

- **Tamil Nadu - State blockchain policy & PDS use-case**

Tamil Nadu also published an official Tamil Nadu Blockchain Policy (2020) and has declared a State-wide blockchain-based backbone, Nambikkai Inaiyam (Trust Link), to be used to support government business and possibly in supply-chain tracking (including PDS). The policy has objectives in interoperability, standards and departmental adoption.[34]

The policy is located among the ethical ones of AI and cybersecurity developed by the State and envisions the possibility of interoperable standards coupled with privacy and oversight protection. The Tamil Nadu e-Governance Agency led the implementation and introduced it departmentally by pilot, and not by capital legislation.[35]

30. How Vizag is Putting Land Records on Blockchain, Tech in Asia (Oct. 2017), https://www.techinasia.com/indian-state-running-pilot-put-land-records-blockchain.

31. AP Govt Solving Biggest Problem Real Estate Using Blockchain: Will Other States Follow?, Int'l Bus. Times (India) (Oct. 9, 2017), https://www.ibtimes.co.in/ap-govt-solving-biggest-problem-real-estate-using-blockchain-will-other-states-follow-745088.

32. It-Driven Initiatives in Land Records Administration: Perspectives from Andhra Pradesh, Econ. Times: Gov't (Sept. 24, 2020), https://government.economictimes.indiatimes.com/news/digital-india/it-driven-initiatives-in-land-records-administration-perspectives-from-andhra-pradesh/78288807

33. Amit Kumar & Dilip Motwani, The Applicability of Blockchain Technology in Land Registration for Developing Economies: A Case Study of India (2025), https://doi.org/10.13140/RG.2.2.21888.75520.

34. Tamil Nadu e-Governance Agency, Tamil Nadu Blockchain Policy 2020 (2020), https://tnega.tn.gov.in/assets/pdf/Blockchan_Policy_TamilNadu.pdf.

35. Tamil Nadu Becomes First State to Unveil Ethical AI, Blockchain, Cybersecurity Policies in Country, New Indian Express (Sept. 19, 2020), https://www.newindianexpress.com/states/tamil-nadu/2020/Sep/19/tamil-

State policy offers formal institutional support and an architecture (backbone + standards) that reduces the administrative friction on pilots (e.g. supply-chain traceability in PDS), and demonstrates political desire to implement blockchain in all departments. It is also frequently reported that this policy leadership played an important facilitating role.[36]

There is little data published, especially on how large-scale PDS pilots have worked, that hasn't already been peer-reviewed; the question of cost, training, linking to the Aadhaar/DBT system (and privacy measures thereof) remains among the operational issues to be resolved. The policy develops a structure, and legal certainty is needed on data protection (see obligations under the DPDP Act) and liability of procurement / PPP projects.[37]

- **Bridging State-Level Lessons**

This comparison of Andhra Pradesh and Tamil Nadu provides evidence of the centrality of institutional design in blockchain-based welfare reforms. Andhra Pradesh was technologically promising in its pilots, but was still vendor-driven and legally weak, with limited transparency or statutory recognition. By contrast, Tamil Nadu has pursued the policy-backed approach, which has set standards and helped to develop a scale framework, but continues to face the problem of not disclosing enough data. Collectively, these cases demonstrate that India cannot be satisfied with a series of ad hoc pilots to blockchain technology; it simply must develop policies legislatively anchored to balance the technological innovation and the enforceability of law. The comparative clarity is obvious. Andhra shows the dangers of a fragmented, privately led implementation, whilst Tamil Nadu demonstrates the importance of a state system to such an outcome. India has a future: to marry technological experimentation in Andhra Pradesh with the institutional and policy framework of Tamil Nadu to build a rights-based approach that is scalable to the delivery of people's welfare.

GLOBAL

- **Kenya - Blockchain pilots for cash transfers / public disbursal**

In Kenya, humanitarian and government entities ran blockchain-enabled cash transfer pilots (i.e., open-loop blockchain cash transfer pilots), whereby transactions were stored and tied to mobile money rails such as M-Pesa and could thus be tracked and beneficiary verifiable.

nadu-becomes-first-state-to-unveil-ethical-ai-blockchain-cybersecurity-policies-incountry-2199187.html.

36. S. Pandey & C. Sen, Blockchain Technology in Real-Time Governance: An Indian Scenario, 68 Indian J. Pub. Admin. 397 (2022).

37. Medianama, Summary: Tamil Nadu Blockchain Policy (Sept. 18, 2020), https://www.medianama.com/2020/09/223-summary-tamil-nadu-blockchain-policy/.

Interesting pilots are the Kenyan Red Cross / Craft Silicon open-loop pilot and more extensive humanitarian experiments, as reported in pilot reports.[38]

Pilots were also tested against the Data Protection Act (2019) and public financial policies in Kenya, and the pilots were usually conducted during regulatory sandboxes or as an exception to humanitarian programs that allowed experimentation as the formal regulatory frameworks developed. It was dependent on APIs of mobile money (M-Pesa) and local fintech partners in terms of technical integration.[39]

Pilots demonstrated real results: quicker disbursal cycles, better audit trails that eliminated double-payments ghost recipients, and we can verify beneficiaries on mobile interfaces. They showed how blockchain can enhance transparency in situations where it is applied with ubiquitous systems of mobile money.[40]

Reliance on mobile network accessibility, online literacy, sophistication relevant to the national finance systems and shortage of peer-audited longitudinal review are still limitations. Humanitarian airline pilots pointed to the fact that blockchain is no panacea; design and user experience are paramount.[41]

- **Estonia - X-Road, KSI blockchain & a rights-based digital state**

In Estonia, the digital government is built on X-Road (secure interoperability layer), and KSI (Keyless Signature Infrastructure) blockchain methods allow them to assure integrity on distributed databases (health, land, identity). Even though the backbone protocol of X-Road itself is not a typical public blockchain, Estonia employs blockchain-style hashing on top of KSI to provide tamper-evidence as well as audit-able access logs.[42]

Estonia has clear e-governance legislation, e-ID and data-usage models, and institutional designs (digital ID, data embassies) spelling out rights and obligations to access data and share

38. Int'l Fed'n of Red Cross & Red Crescent Societies et al., Learning Review: Blockchain Open-Loop Cash Transfer Pilot Project (Isiolo, Kenya, 2018), https://preparecenter.org/wp-content/sites/default/files/kenya_blockchain_open_loop_pilot.pdf.

39. J.O. Ondiek & G. Onyango, Blockchain Technologies in Digital Governance: The Kenyan Experience with Promoting Public Accountability, in Routledge Int'l Handbook of Pub. Admin. & Digital Gov't 112 (2024).

40. A.C. Manani & T. Mose, Blockchain Technology and Revenue Administration in Nairobi City County Government, Kenya, 8 Int'l J. Soc. Sci. Mgmt. & Entrepreneurship (2024).

41. Hossein Baharmand, Amin Maghsoudi & Giulio Coppi, Exploring the Application of Blockchain to Humanitarian Supply Chains: Insights from Humanitarian Supply Blockchain Pilot Project, Int'l J. Operations & Prod. Mgmt. (2021), https://doi.org/10.1108/IJOPM-12-2020-0884.

42. e-Estonia, KSI Blockchain (Overview) and X-Road – Interoperability Services (Overview), https://e-estonia.com/solutions/cyber-security/ksi-blockchain/
& https://e-estonia.com/solutions/interoperability-services/x-road/.

data across agencies. Legal architecture is inclusive and rights-based.[43] High citizen faith and trust, near universal web-access to governmental services, its considerable auditability of which records were accessed by whom, and its quantifiable decreases in fraud/misuse in welfare/citizen services.[44] Estonia is commonly cited as the poster child of convergence between technical and legal design to bring about a rights-based digital state.[45]

The situation in Estonia (resting on a small country with a high rate of digital literacy and decades of investment) is not comparable with the scale and diversity in India. Adaptations to scale, multilingual access and closing the digital divide are required to enable legal transferability.[46]

- **Bridging Global Lessons to India**

Though the two cases form contextually different societies, Kenya and Estonia mobilise normative and cautionary lessons to India. The Kenyan pilots of blockchain illustrate how blockchains and distributed ledgers hold promise for minimising duplication and enabling auditability in cash transfers. However, their reliance on mobile money systems, such as M-Pesa, suggests that it is essential to tailor technology to national systems in place. With Aadhaar-enabled DBT and UPI, India should not, however, simply graft onto its own financial system some foreign model. Estonia, in turn, points to a more successful example of applying blockchain when a rights-based digital state, well-built privacy protection and access to audit records by citizens are also applicable. In the context of India, these provisions mean that the blockchain cannot exist outside of constitutional protections afforded under Articles 14 and 21; it must be modelled to not exclude but enhance welfare jurisprudence. Therefore, international experiments are not prototypes, but they serve as reflections and remind India that technological viability should harmonise with the demands of the socio-legal requirements of the blockchain-based welfare.

These examples reveal both the promise and pitfalls of blockchain in welfare delivery. To address these gaps in India, a phased roadmap becomes necessary.

43. S. Semenzin, D. Rozas & S. Hassan, Blockchain-Based Application at a Governmental Level: Disruption or Illusion? The Case of Estonia, 41 Policy & Soc'y 386 (2022).

44. S. Lips, V. Tsap, N. Bharosa et al., Management of National eID Infrastructure as a State-Critical Asset and Public-Private Partnership: Learning from the Case of Estonia, 25 Info. Sys. Front. 2439 (2023), https://doi.org/10.1007/s10796-022-10363-5.

45. Brandie Nonnecke, Henriette Canino & Andreas Geroski, Responsible Digital ID: Effects of Data Governance Policies and Practices on Human Rights Case Studies, https://doi.org/10.13140/RG.2.2.29010.17600 (2019).

46. P. Jalakas, Blockchain from a Public Administration Perspective: The Case of Estonia (Tallinn Univ. of Tech. 2018).

ROADMAP FOR LEGAL AND POLICY REFORM

The roadmap

The reflective comparison in the case of Andhra Pradesh, Tamil Nadu, Kenya and Estonia provides the evidence that, as much as blockchain might have potential benefits for transparency and auditability, and confirmation of beneficiaries, their transformative potential will be constrained unless combined with reputed legal and policy reform. The case of these pilots leads to the conclusion of phased approach reform, which will enhance legal certainty, enforce privacy, continuity of institutions, and constitutional rights.

In the short term, changes to the legal policies are necessary in order to distinguish the legal position of the blockchain records regarding the administration of welfare. It may be possible to amend Section 63 of Bharatiya Sakshya Adhinayam, 2023, to explicitly acknowledge the existence of distributed ledger records and introduce a standard form of attestation to be adopted when following permissioned blockchains, and the Information Technology Act, 2000, ought to be amended to recognise the receipts of blockchain-mediated transactions as secure electronic records under Section 14.[47] Parallelly, the Digital Personal Data Protection Act, 2023 stipulates explicitly personal data protection compliance specifics on blockchain forms, necessitating off-chain storage of personal data with on-chain hashed references, and the Data Protection Impact Assessment of all welfare-related blockchain implementations.[48] The policy approach in Tamil Nadu provides an example of implementing privacy-by-design and interoperability into blockchain governance at the level of the state.

In the medium term, a national "Welfare Blockchain Sandbox" at MeitY and NITI Aayog also needs to be set up to have time-limited pilots that are regulated, such as the fintech sandbox protocol at RBI and live pilots of humanitarian cash transfers in Kenya.[49] An independent assessment of pilots should be demanded in terms of inclusion, cost-effectiveness, and leakage reduction in such a sandbox. Second, the development of model Public-Private Partnership (PPP) contracts of the blockchain projects should be crafted to address the concerns that were witnessed in Andhra Pradesh vendor-driven pilots, such as intellectual property rights, audit requirements and portability and compliance with the statutes under the DPDP Act.[50]

47. Bharatiya Sakshya Adhinayam, 2023, § 63; Information Technology Act, No. 21 of 2000, § 14 (India).

48. Digital Personal Data Protection Act, No. 22 of 2023, Acts of Parliament, 2023 (India).

49. Reserve Bank of India, Enabling Framework for Regulatory Sandbox (2019); Int'l Fed'n of Red Cross & Red Crescent Societies, Learning Review: Blockchain Open-Loop Cash Transfer Pilot Project (Isiolo, Kenya, 2018).

50. Gov't of Andhra Pradesh, Blockchain Pilot Projects (Oct. 2017); Ministry of Finance, Gov't of India, Model Concession Agreement for PPP Projects (2022).

Although the steps presented in this section, though short-term and medium-term, can support an institutional and regulatory scaffold, it is ultimately insufficient to sustain blockchain adoption in welfare. It also needs to be on the right of the constitutional jurisprudence of welfare in India and enhanced through legislative procedures of accountability.

Any blockchain adoption roadmap for welfare must be grounded in the welfare jurisprudence of India. To this extent, the Supreme Court in ***PUCL v. The Union of India***[51] interpreted Article 21[52] to confer the right to live with dignity, which implied the right to have access to basic welfare rights. In the same light, Article 14[53] requires equal access, and exclusion is not allowed arbitrarily. Implementing blockchain, thus, cannot purely be treated as a technological revolution, but a constitutional need to secure welfare rights. The implementation of blockchain in delivering welfare ought therefore to be done within the confines of these constitutional provisions so that efficiency is not sacrificed at the altar of exclusion or inequity.

A social audit is required by law under the MNREGA Act, 2005, to ensure transparency and accountability in the delivery of the welfare. Nonetheless, such audits might be challenged with obstacles of manipulated records, incomplete disclosures, and bureaucracy.[54] This process can be directly reinforced by blockchain, which can give citizen groups, NGOs, and oversight groups tamper-proof access to disbursal logs, attendance, and supply chains.[55] The social audit embedded in the blockchain will operate as a statutory requirement demanding a degree of transparency that is not only a technological asset but a democratic restriction. This would make accountability institutional, whereby welfare delivery is made technologically efficient and socially just.[56]

These constitutional and participatory countermeasures will guarantee that blockchain becomes a mechanism of effectiveness as well as equity. It is based on this that India as a long-term strategy should institutionalize blockchain by enacting an expansive piece of legislation.

In the long run, India needs an exclusive Blockchain Governance Act that replicates the rights-led policy of Estonia and the systematised policy of Tamil Nadu.[57] This legislation must

51. Peoples Union for Civil Liberties v. Union of India, AIRONLINE 2007 SC 71.

52. India Const. art. 21.

53. India Const. art. 14.

54. Dr. Tek Chand, The Role of Social Audit in Transparency and Accountability of MGNREGS: A Perception-Based Analysis, IJCRT 12, no. 7 (July 2024).

55. C. Tartan, A Blockchain-Based Welfare Distribution Model for Digital Inclusivity, 10 REGION (2023), https://doi.org/10.18335/region.v10i1.434.

56. Jaskirat Singh, Gurdip Singh Batra & Sarvjeet Kaur Chatrath, Blockchain's Role in Social Welfare, Financial Inclusion, and Public Sector Innovations in India: A Multi-Sector Analysis of Government-Led Initiatives, SSRN (2023), http://dx.doi.org/10.2139/ssrn.5105250.

57. Gov't of Tamil Nadu, Tamil Nadu Blockchain Policy 2020; Republic of Estonia, Digital Agenda 2030 (2021).

establish how blockchain can be used appropriately in the public sector, determine the level of evidence and auditability, require systems of citizen grievance, and require the inclusion impact assessment. Most importantly, the implementation of blockchain in the governance of welfare needs to be balanced with constitutional protections of equality in Article 14 and dignity in Article 21[58], in that not all technological innovations have to interfere with accessibility and fairness in the system, and privacy.[59]

Challenges in Implementing Blockchain in Welfare Governance

Although promising, blockchain in welfare delivery has some legal and institutional impediments. The adherence to the law, especially the Bharatiya Sakshya Adhinayam, 2023[60], accepts electronic records but not distributed ledgers and this leaves a doubt on evidence in welfare disputes. The concept of immutability of blockchain also goes against the right to erasure under the Digital Personal Data Protection Act, 2023[61] and the right to dignity under ***KS Puttaswamy v. Union of India***[62], the risks of permanence and abuse of the welfare data are being increased. The poor institutional capacity also endangers adoption since small-scale pilots can substitute structural reform without qualified personnel and unrestricted contracts with suppliers[63]. The refusal of access on the basis of authentication failures, which have already been seen in systems linked to Aadhaar and are inaudible with Article 14[64], could be copied. Lastly, without being coupled with social audits headed by citizens as envisaged by the MNREGA Act, 2005, there is the danger that blockchain will provide technical transparency but not democratic accountability.

CONCLUSION

Blockchain technology has the potential to revolutionise India's welfare system by resolving persistent problems with financial leakages, administrative difficulties and the exclusion of the rightful beneficiaries. Its decentralised and transparent characteristics can reduce corruption, ensure real-time money tracking and produce an auditable record. These characteristics are directly aligned with the principles of justice, equity and accountability that welfare programs

58. *Supra note 57 & 58.*

59. Justice K.S. Puttaswamy (Retd) v. Union of India, (2019) 1 SCC 1.

60. Bharatiya Sakshya Adhinayam, No. 45 of 2023, § 61 (India).

61. Digital Personal Data Protection Act, *supra note* 48.

62. P.R. Nripendra, Y.K. Dwivedi & D.L. Hughes, Analysis of Challenges for Blockchain Adoption within the Indian Public Sector: An Interpretive Structural Modelling Approach, 35 Info. Tech. & People 548 (2022), https://doi.org/10.1108/itp-07-2020-0460.

63. A.T. Polcumpally, K.K. Pandey, A. Kumar & A. Samadhiya, Blockchain Governance and Trust: A Multi-Sector Thematic Systematic Review and Exploration of Future Research Directions, Heliyon (June 15, 2024), https://doi.org/10.1016/j.heliyon.2024.e32975.

64. *Supra note* 64.

intend to support. However, the implementation of successful blockchain adoption depends on technological preparedness, supportive legal frameworks and sufficient digital infrastructure. Blockchain's potential for welfare remains unrealised if socio-economic issues remain unresolved.

The Way Forward

Future studies should concentrate on creating and evaluating blockchain frameworks specifically for India's welfare system. This includes conducting pilot studies to evaluate the feasibility, impact on transparency and beneficiary inclusion. The research should additionally examine data protection, legal compliance and compatibility with the existing digital platforms. The results from this research can provide a roadmap for policymakers as it would lay down a fact-based plan for integrating blockchain that would strengthen welfare, justice and equity. If designed with these safeguards, blockchain will not only modernise welfare delivery but also reinforce India's constitutional promise of social and economic justice.

CHAPTER - 2

CRIMINAL JUSTICE ADMINISTRATION, DUE PROCESS AND PRISONERS' RIGHTS

TAMING THE LEVIATHAN: THE ROLE OF JUDICIAL MAGISTRATES IN CURBING STATE-SPONSORED CUSTODIAL EXCESSES

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ABSTRACT

The Constitution of India envisages itself to be a Democratic Republic which seeks to secure for its citizens Social Justice, Liberty and Equality. Further, the fundamental right under Article 21 of the Constitution also guarantees that the right to life and personal liberty of any person shall not be subject to any deprivation unless done according to the procedure established by law. Despite the presence of such a progressive fundamental law, the Leviathan – functioning of the Indian criminal justice system has rendered it unfettered at various instances, which has itself enabled multiple state-sponsored excesses happening in the police custody, causing even unnatural deaths in many circumstances, the recent one being the Thirupuvanam custodial death that has gained considerable limelight. The Doctrine of Separation of Powers, especially in regards of the Judiciary and Executive, plays a crucial role in the dynamics of accountability when it comes to these State-sponsored excesses. On this backdrop, this paper attempts to explore the role the Judicial magistrate is conferred, with special emphasis on the amends made to the criminal procedural law in this regard post-2023, doctrinally, with an expected outcome of the cleavage that prevails between the procedural framework and the reality in practice when it comes for the State-sponsored custodial excesses due to the lethargy of the judicial magistrates in performing their duties in line with the essential principles of a progressive criminal justice system.

Keywords: State–Sponsored Excesses, Procedural Irregularities, Accountability, Judicial Magistrate, Leviathan.

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INTRODUCTION

Thomas Hobbes, one of the most important theorists of the Social Contract Theory consistently contended that mankind in the state of nature is solitary, poor, nasty, brutish and short and therefore requires an 'artificial human' in the version of a Leviathan monster to control the behavior of these subjects to secure order in the society who in turn would, to a large extent surrender their liberties and properties, exempting life from this avenue.[3] The Sovereign power to control all of these human actions and possessions is interlaced with the justification, based on the idea that the Leviathan can intervene in all the nukes and corners of regulating the behaviour of the subjects, if it is done for the safety of the subjects. This notion of 'safety of subjects', envisaged by Hobbes whose philosophy would find various contradictions to exist with democracy due to its authoritarian nature has still percolated into the functioning of various modern democracies, like India wherein the regimes tend to emphasize overtly on the areas of national security and the potential threats surrounding the same, even at the cost of human rights violations. A testament to this development is the recent Human Freedom Index released by the Cato Institute, in which India has been ranked in 110th position with a score of 6.26, out of 165 countries.[4] This marginally better position when compared with the worsened countries cannot be taken as a yardstick to validate this position of one of the largest democracies of the World. The Constitution of India declares India to be enshrined with Democracy to an extent that it was the people who made the constitution and adapted it, all by themselves. But the apprehension of Dr. Ambedkar (stated below) remains, and most probably will stay relevant. "On 26 January 1950, we are going to enter a life of contradictions. In Politics, we will have equality, and in social and economic life, we will have inequality……We must remove this contradiction at the earliest possible moment or else those who suffer from inequality will blow the structure of political democracy which this Assembly has so laboriously built."[5]

State, as a Big Brother, eventually leaves the scope wide open for State-Sponsored violence to be validated due to the plethora of socio-legal immunities vested with the police and other law-enforcing officials. At the same time, the legal framework of the State has also framed certain safeguard provisions for the accused persons, of which the role played by a judicial magistrate, as the preliminary point of 'taming' the leviathan, will be critically studied.

VIOLENCE BY THE LEVIATHAN

There have been various instances of caste-based atrocities that were perpetrated collectively against the marginalized sections. For instance, the Keezhvenmani incident, where

3. Thomas Hobbes, Leviathan: Or the Matter, Forme & Power of a Commonwealth, Ecclesiastical and Civill, 89, 1651

4. *2024*, Cato Institute (Dec. 17, 2024), https://www.cato.org/human-freedom-index/2024.

5. 25, November, 1949, Volume XI, Constituent Assembly of India Debates.

a brutal massacre of the labourers belonging to the Pallar community was committed, was an orchestration of the landlords belonging to the dominant caste.[6] In the Tsundur case, around 400 dominant caste men attacked the Dalits in their village and hacked 8 Dalits to death.[7] But there have also been instances where the State that guaranteed the role of being a Big-Brother protecting the safety of all of its subjects, especially in a Sovereign Democratic Republic like India, wherein such a feature is inextricable, too exerted its role as an Oppressor devastating the lives of the marginalized. While is certain cases, the violence exerted by the State gets clouded with the plethora of layers and contradictions involved, like that of the Keelathooval violence of 1957, where the police force resorted to the use of firearms, leading to the death of persons from both the dominant Kallar community and the marginalized Pallar community, after the deepened caste-based tensions, primarily engendered from the murder of an evolving leader from the Pallars, Immanuel Sekaran.[8] But there have also been instances where the innocent people, especially from the marginalized groups, were subjected to ignominy deliberately by the men occupying the positions that elevate the functioning of the State. In 1997, a tribal man by the name Selvam was tortured by the forest guards for a bribe of Rs. 4000 and upon falling unconscious, he was presumed dead, only to realize he was very well alive during the process of post-mortem. Meanwhile, the tribal people began protesting to disperse, and the police resorted to charging them with the lathis. Eventually, a retaliation took place, leading to the killing of one of the protestors by the police, who family was eventually given an ex-gratia compensation of Rs. 50,000 by the State government.[9] The Deb Commission, presided over by Justice S C Deb to investigate the death of Idris Mian, who was the prime accused in the murder of Calcutta police official V K Mehta, unequivocally held that Idris Mian died in police custody due to the brutal injuries inflicted on him at the time of interrogation. Justice Deb in his report remarkably observed, "As to motive, Idris was silenced forever either to shield some corrupt big businessman and some police officers who were giving protection to smugglers or he was intentionally killed to avenge the murder of V K Mehta. Idris was deliberately killed by the Calcutta Police".[10]

Another instance of State-Sponsored violence against the Dalits takes us back to what happened in Mahabalipuram in 1994, when the statue of Dr. B.R. Ambedkar, which was installed by the Dalits in the Panchami land allotted to them, was vandalized by miscreants, against which the people vigorously protested outside the office of sub-collector Romesh Chand

6. K.G.Kannabiran & Kalpana Kannabiran, The Speaking Constitution, 173, 2022.

7. K.G.Kannabiran & Kalpana Kannabiran, The Speaking Constitution, 175, 2022.

8. K.A.Manikumar, Murder in Mudukulathur, 68, 2017.

9. V. Saravanan, Terrorizing Tribals: Nexus between Police and Forest Department, Vol.32, EPW, P.1789 (1997).

10. AG Noorani, Institutional Checks Against Police Excesses, Vol.24, EPW, P.2408 (1989).

Meena. When the situation became heated since the protestors were not permitted to enter the office premises, with no warning provided, the police opened fire with sub-collector's order, thereby killing two protestors, namely John Thomas and Elumalai and 14 others, including women suffered gunshot injuries.[11]

The capability of the State to indulge in violence against its very own set of people it promised to protect cannot be dismissed or diminished. The gravity and scope for exerting suppression against the dissenters of the State policies multiply, particularly when the dissenters are hailing from marginalized socio-politico-economic locations.

CONDITIONING FACTORS OF AN UNPLEASANT TRUTH – CUSTODIAL VIOLENCE

"Whenever the police bite a plant even a bit, it gets sterile; flowers do not blossom, nor do fruits appear. It emits poison." These were the words of Rabindranath Tagore in his essay captioned Choto o Boro in response to threats and social isolation exerted on one Sachindra Chandra Dasgupta by the police in Bengal during the British era.[12] Custodial violence is not a restricted problem, finding its occurrence during select circumstances alone. It was and is a burning issue beleaguering the criminal justice system everywhere. One of the earliest observations made on custodial torture was of a search inquiry commission established by the Britishers in Madras, in 1854, whose report was submitted and released in 1855, wherein the allegations of torture inflicted on ryots to abide by the official's demands were studied.[13] Despite being a signatory to the United Nations Convention on Torture[14], India has not yet ratified the same by not enacting a statute.

The contention furthered by Justice Katju in the eminent judgement of Prakash Kadam v. Ramprasad Gupta[15], "If a policeman is given an illegal order by any superior to do a fake 'encounter', it is his duty to refuse to carry out such illegal order, otherwise he will be charged for murder, and if found guilty sentenced to death" can be equally resonated even within the context of custodial torture and violence irrespective of resulting in death. The findings of the Status of Policing in India Report, 2025, are the literal circumstances which was directly addressed

11. J Devakumar, Caste Clashes and Dalit Rights Violations in Tamil Nadu, Vol.35, Social Scientist, P.48 (2007)

12. "Thoughts on Human Rights in India, Rabindra Nath Tagore and the Movement for the Release of Political Prisoners", Amit Bhattacharya, Book – Human Rights in India: Historical Perspective and Challenges Ahead, 2nd Ed, p. 352

13. COMMISSIONERS FOR THE INVESTIGATION OF ALLEGED CASES OF TORTURE IN THE MADRAS PRESIDENCY [MADRAS]. Report of the Commissioners for the Investigation of Alleged Cases of Torture in the Madras Presidency. Madras: Fort St George Gazette Press, 1855.

14. Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, 1984.

15. Prakash Kadam & Etc. v. Ramprasad Vishwanath Gupta & Anr. AIR 2011 SC 1945.

by Justice Katju in the aforementioned observation, since 46% of the respondent officials strongly justified third degree measures as an instrument during the course of interrogating serious criminal offences like murder, rape, etc.[16] The IPS cadre in the overall yardstick on the propensity to justify violence scored 34% augmenting the apprehensions since they are the ones who undergo multiple pre-service trainings[17]. A distinct demonstration of this observation would be the inhumane infliction of torture on detainees, including minors, by plucking their teeth in custody.[18] It can be naturally inferred that with significant command over powers, such an inclination towards justifying violence would end up as a validated option towards the lower cadre of officials, who are the preliminary point of interaction, of the Leviathan's tentacle, for the accused person, upon interrogation, to be violent. This trend too was reported in the SPIR, 2025, in its overall police's propensity to justify torture, wherein it revealed the inclination of 37% of those officials often burdened with interrogation towards highly justifying torture, with 26% of their colleagues moderately affirming the same.[19]

Another important factor in enabling custodial violence is the socio-economic location of the accused person. An important takeaway from the SPIR, 2025 is the greater susceptibility of people from the lower rungs of the society, also vindicated by a 2020 report by the National Campaign Against Torture which discerned that 76 of the 125 accused persons who died in police custody in 2019 holistically belonged to vulnerable sections communally and occupationally, amounting to almost 60% of the whole set of the victims, as documented.[20] A 2022 report on the greater presence of undertrial prisoners in prisons also flagged a disproportionate number of minorities and marginalized caste groups amongst them.[21] It's a rarity in the recent past that accused persons hailing from socio-economically sound backgrounds endure the same nature of treatment someone from a vulnerable group is exposed towards, in the hands of the police officials.

But of all the reasons, the most underlying one is the interference of personal morality of the officials to justify the use of torture and violence as a 'necessary evil' to 'teach them a lesson', which, when coupled with the assent given out of the ill-informed notions and prejudices of the

16. Status of Policing in India Report, 2025, Ch.- 05 "Justifying Violence and Torture in Custody" pg. 111.

17. Status of Policing in India Report, 2025, Ch.- 05 "Justifying Violence and Torture in Custody" pg. 115.

18. TNM Staff, *Tamil Nadu Govt Revokes Suspension of IPS Officer Balveer Singh Accused of Custodial Torture*, The News Minute (Jan. 22 2024, 2:42 pm), available at *The News Minute* (India).

19. Status of Policing in India Report, 2025, Ch.- 05 "Justifying Violence and Torture in Custody" pg. 115 & pg. 117.

20. Annual Report on Torture, 2019, National Campaign Against Torture, Ch-2 Torture in police Custody, pg. 80.

21. Sabah Gurmat, *Prison Statistics India 2020: 76 per cent of prisoners are undertrials; the number of Muslims, Sikhs, SCs, and STs among them disproportionate to their population,* The Leaflet (Jan. 5 2022).

media and the public, worsens. The best demonstration of the aforementioned trait was seen during the extrajudicial killings of four accused persons, alleged to have committed rape against a veterinarian from Hyderabad in 2019, only for it to be invalidated to be illegal due to various discrepancies that were found in the version narrated by the police officials.[22] Therefore, the coalescence of morality and media trial too has its respective share in posing a threat against the prevalence of the Rule of Law, especially in the context of the rights conferred upon the detainees in custody.

The prevalence of other miscellaneous factors, such as unreasonable expectations under the guise of 'swift actions', poor service conditions and incentives and redundant training methodologies, too are to be considered as potential factors, in aggression exerted by the officials during the performance of their duties.[23]

ROLE OF JUDICIAL MAGISTRATES IN CURTAILING CUSTODIAL VIOLENCE

Custodial violence could be considered as one of the most pertinent problems affecting the constitutional autonomy and rule of law of the state. Even with the safeguards enshrined under Articles 20, 21 and 22 of the Constitution and measures under Bharathiya Nyaya Sanhita, police power and abuse persist in India in the form of torture, custodial deaths, and illegal detentions. In this entire scenario, judicial magistrates occupy a very crucial role controlling the power of state authority with judicial oversight, thereby limiting the excesses of law enforcement agencies.

Remand of an accused is a judicial function. A magistrate is not acting in their executive capacity when a remand is being ordered. The magistrate must apply his judicial mind while deciding whether the materials placed before him justify a remand or not. There must be reasonable grounds to decide whether the accused shall be committed to custody or have their remand period. The key purpose of remand is only to further the criminal justice administration process, provided the investigation is not completed. The investigating agency is required to send the case diary along with the remand report so that the magistrate can take an informed decision after going through the factual scenario in the case. It was stated in ***Manubhai Ratilal Patel Tr Ushaben* v. *State of Guajarat and Ors*** that the magistrate shall not pass orders in the case of remand mechanically and must apply their judicial minds while doing so. [24]

Section 187 of the Bharathiya Nagarik Suraksha Sanhita 2023 retains the 24-hour production rule from its predecessor Criminal Procedure Code 1973 but expands its scope by allowing

22. V.S.Sirpurkar Commission Report, pg. 370 & pg. 372.

23. "Custodial Atrocities, Human Rights and the Judiciary", Jitendra Mishra, ILI Journal, Vol. 7, No. 4, pg. 511 & 512 (Overall pg. 508-521).

24. Manubhai Ratilal Patel Tr. Ushaben v. State of Gujarat & Ors., (2013) 1 SCC 314.

electronic production of the accused through video conferencing except in cases where they are in police custody. Magistrates have the capacity to authorise custody for a maximum period of 15 days at a time, but with an overall cap of 60 to 90 days depending on the kind of offence they committed and the seriousness of the same. Electronic production of the accused individuals prevents magistrates from observing them accused individuals directly, thereby making them incapable of noticing any physical injury. Even when magistrates continue to remain as the first judicial check against illegal detention, there are no substantive reforms pertaining to the same.

The Supreme Court in ***Central Bureau of Investigation v. Anupam Kulkarni***[25] opined that police custody is generally unfavored by law. This is because of the possibility of custodial torture and detention. Supreme Court, while acknowledging the wide discretion guaranteed to the magistrates under the Criminal Procedure Code, pointed out that magistrates could only authorise detention of the accused in custody for a term not exceeding 15 days from the date of arrest. The court acknowledged in the case that there might be situations where it would be impossible for the police to gather all the required information relevant to the case within 15 days. The Supreme Court reconsidered this limitation period in the case of *CBI v. Vikas Mishra* and relaxed this stringent custody timeline and allowing custody beyond 15 days. However, even when this was in stark contradiction to what is written in the statute, the court did not refer the case to a larger bench. The Madras High Court in ***Taluk Circle Inspector of Police v. Nagaraj and Ors***[26]***,*** following the Supreme Court decision in Vikas Misra, allowed for further custody upon completion of the initial time period.

Contradictory judgments from the court regarding the time period of judicial custody limit the power of judicial magistrates and increase the possibility of custodial torture, thereby hampering the criminal justice system. The Supreme Court in *V Senthil Balaji v. State* took the position that the period of custody could be spread across the investigation. Bharathiya Nagarik Suraksha Sanhita, 2023, adopts this approach, giving effect to the rationale that was given by the court. This has far-reaching consequences on the rights of the accused under Bharathiya Nagarik Suraksha Sanhita. As stated in ***B. Rafeek v. Station House Officer***[27]*,* courts are usually more receptive to allowing bail to the accused individuals when they are in judicial custody. Spreading the time period of total custody across the investigation period would limit the possibility of bail, thereby affecting the constitutional safeguards for accused protection. It can seriously impact the general rule of 'bail is the rule and jail is the exception'.

The right to bail is an integral part of constitutional safeguards enshrined under Part III of the Constitution. It is given when the police fail to complete the investigation within a specific

25. Central Bureau of Investigation v. Anupam Kulkarni, (1992) 3 SCC 141.

26. *Taluk Circle Inspector of Police v. Nagaraj, Crl.O.P. No. 8883 of 2023 (Madras HC Apr. 28, 2023).*

27. *B. Rafeek v. Station House Officer,* 2016 SCC OnLine Ker 38557.

period. CrPC prescribed the time limit as 90 days for very serious offences punishable with death or imprisonment for a term extending beyond ten years. The Bharathiya Nagarik Suraksha Sanhita, 2023, even while retaining identical limits, modifies the section. After the expiry of the stipulated period, the accused gains a right to seek bail under s. 188, BNSS. This effectively means that magistrates are not able to grant bail Suo motu, but instead, the accused person shall approach the court with the request. This provision can negatively impact the protection guaranteed under the Constitution against any unfair treatment in police custody.[28]

With respect to legal safeguards at arrest, BNSS incorporates the legal perspectives from judgments.[29] An arrest memo is required to be made in the presence of a relative or a respectable person. The intimation of the arrest must be made to a nominated person. As per s. 105 of BNSS, search and seizure data are also required to be electronically recorded during the process. This is to ensure fair proceedings and the protection of the interests of the accused. The codification of the requirements earlier upheld by courts strengthens the role of judicial magistrates in preventing torture and making police and thereby the state, accountable. However, contradictory positions adopted in the bail provisions dilute this approach and need to be observed with caution.

Sections 53 and 54 of BNSS deal with medical examination and protection of the detainees. Medical documentation under magisterial supervision becomes crucial evidence against custodial violence and serves as a deterrent to any police excesses. Section 183 of BNSS mandates a judicial inquiry into every custodial death or rape. This ensures greater transparency and reduced instances of manipulation. In addition to the preventive role, this provision ensures that magistrates have a remedial role to play in cases where state excesses have already happened. Video recording in trials and evidence collection is made mandatory under s. 532 and s. 533.

A close observation of the provisions points towards the fact that the role of judicial magistrates in preventing custodial violence is curtailed under BNSS. Firstly, face-to-face production of the accused is restricted and replaced with a video link. This disables the magistrates from personally observing injuries, body language and signs of torture. Screen presence can only present the accused individual physically but hides physical injuries, and the police control over camera angles can also lead to tampering. Remand hearings served as a crucial safeguard against custodial torture because the accused individuals had an opportunity to seek a remedy from the magistrate directly. The shift to digital hearings makes the hearings merely a mechanical process without probing into torture allegations. The ability of the accused to complain to the magistrate directly regarding any ill treatment is hampered when the police officers are present during the video meeting.

28. *Uday Mohanlal Acharya v. State of Maharashtra,* 2001 (5) SCC 453.

29. *D. K. Basu v. State of West Bengal*, AIR 1997 SUPREME COURT 610.

In ***Arnesh Kumar v. State of Bihar***,[30] the Supreme Court held that magistrates are required to ensure police compliance with respect to arrest guidelines. However, a stringent mention of the mechanism is absent under BNSS. The law is providing tools without ensuring compliance, which can eventually turn these measures into passive obligations. Using magistrates to review all the video evidence becomes a time-consuming task and hence might result in ineffectiveness. Procedural compliance will be prioritized than rights protection, and it will defeat the purpose of the evolved jurisprudence regarding accused protection under the Indian Criminal Justice system.

CONCLUSION

Custodial violence remains a stark example of uncontrolled state power, reducing public trust in the criminal justice system, diluting the constitutional safeguard of dignity and liberty. Judicial Magistrates are considered to be the first institutional authority against any state abuse and they are empowered with the power to oversee bail matters, medical concerns and conduct enquiries with respect to custodial deaths. Under the old CrPC framework, these functions gave magistrates both a preventive and corrective role in checking police excesses.

This balance has been shifted with the introduction of the Bharatiya Nagarik Suraksha Sanhita. On one pedestal, the BNSS brings codification of protections that were earlier grounded in judicial precedent—such as mandatory arrest memos, videography of searches, timely medical examinations, and compulsory judicial inquiries into custodial deaths. On the other hand, it simultaneously restricts the Magistrate's direct oversight, most notably by permitting virtual remand proceedings. Even when it can foster efficiency, it has the potential to reduce the magistrate's ability to physically observe the accused, detect injuries, or hear confidential complaints of mistreatment. Coupled with extended investigative timelines and an overarching preference for technological efficiency, the new framework leans closer to a crime-control approach, where state power is prioritised over the accused's due-process protections.

The outcome is a model that shifts accountability after abuses occur but weakens the mechanisms that could prevent them in the first place. If Judicial Magistrates are to continue serving as guardians of justice, they must interpret their powers with vigilance scrutinising arrests, enforcing bail rights without hesitation, demanding regular medical reporting, and ensuring that custodial deaths receive uncompromising judicial attention. Ultimately, the effectiveness of the BNSS will not be measured by the efficiency it claims to deliver, but by whether judicial magistrates can utilise it to protect constitutional rights rather than as a tool for unchecked executive control.

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30. *Arnesh Kumar v. State of Bihar*, AIR 2014 SUPREME COURT 2756.

SILENT SUFFERING BEHIND BARS: EXPLORING COMMUNITY SERVICE TO PROTECT PRISONERS' MENTAL HEALTH IN INDIA

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ABSTRACT

The mental health crisis in Indian prisons continues to pose serious challenges to human dignity and rehabilitation. Overcrowding, neglect, and the absence of adequate psychiatric support have contributed to rising incidents of depression, anxiety, and suicide among inmates. This paper explores community service as a dignity-based non-custodial sanction capable of mitigating such harms while preserving accountability. It employs a doctrinal and socio-legal methodology by analyzing statutory provisions under the Bharatiya Nyaya Sanhita, 2023, the United Kingdom's Community Sentence Treatment Requirements, judicial opinions, NCRB prison reports and mental health studies by the NHRC.

This paper argues that custodial punishment disproportionately harms the mental well-being of offenders whereas community service when designed and implemented effectively can offer a more rehabilitative, mentally supportive, and socially constructive form of punishment. The study uses ideas from therapeutic and rehabilitative justice to show how community service can promote more dignified prison reforms. India currently lacks clear rules and systems to use community service effectively. By bridging doctrinal analysis with policy insights, the paper highlights the need for sentencing reforms in India, that aligns punishment with rehabilitation to especially protecting mental health and support dignity of the offenders.

Keywords: Alternative sentences, Community service, Human dignity, Mental health, Prison reform.

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INTRODUCTION

Under prison reform policies, discussions often center on issues such as prison overcrowding, delays in the administration of justice, and custodial violence. However, there exists another form of suffering within Indian prisons that rarely receives attention: the deterioration of prisoners' mental health. Unlike physical injuries, this harm is not immediately visible, as it develops gradually and silently. Nevertheless, its impact is profound, manifesting in depression, anxiety, suicidal tendencies, self-harm, aggression, and long-term psychological trauma. The Supreme Court's report on prison mental health highlights this growing concern, showing a sharp rise in reported cases, and says in the year 2022, out of 573,220 inmates, 9,084 were reported to have mental illnesses, a figure that surged to 16,503 in 2023.[3]

Therefore, this paper investigates whether it is possible to impose punishment without undermining an individual's dignity or mental health. It highlights community service, introduced under the Bharatiya Nyaya Sanhita (BNS), 2023, as a novel alternative form of sentencing. This measure demonstrates significant potential to safeguard the emotional well-being and personal dignity of offenders while ensuring accountability.

MENTAL HEALTH CRISIS IN INDIAN PRISON AND PSYCHOLOGY OF INCARCERATION

According to the National Crime Records Bureau (NCRB, 2022) prison overcrowding ratio in Indian prisons is 131%.[4] As a result, this intensifies stress, limits access to medical and psychological care and increases risk of mental health deterioration.[5]

Research in behavioral psychology and neuroscience shows that confinement significantly affects brain structure and emotional regulation, elevating cortisol levels, impairing memory, disrupting sleep, and contributing to suicidal tendencies and post-traumatic stress disorder (PTSD). Empirical studies on prison populations further highlight this concern. Evidence indicates that a substantial proportion of inmates experience some form of psychological disorder, with depression being particularly common.[6]One study found that about 46.5% of prisoners experienced depression, while the total prevalence of mental disorders among the

3. Centre for Research & Planning, Supreme Court of India, Prisons in India: Mapping Prison Manuals and Measures for Reformation and Decongestion, 93-101 (2024). https://cdnbbsr.s3waas.gov.in/s3ec0490f1f4972d133619a60f3559e/uploads/2024/11/2024110677.pdf

4. Standing Committee on Home Affairs (Chair: Mr. Brijlal), Prison Conditions, Infrastructure and Reforms, Report of the Standing Committee on Home Affairs, para 5.2, at 32 PRS INDIA (2023).

5. National Human Rights Commission (India), Mental Health Care in Prisons: A Report, at 23-24(2016),

6. National Institute of Mental Health and Neurosciences (NIMHANS), Dealing with Mental Health Issues in Prisoners during COVID-19: A Handbook, NIMHANS Publication No. 201 (2021)

same prison population exceeded 83.5%, highlighting the widespread psychological impact of incarceration.[7] Additionally, research has shown that torture and other inhumane treatment can leave deep and enduring scars, frequently manifesting as post-traumatic stress, chronic anxiety, major depressive episodes, and even persistent somatic pain.[8]

National Crime Records Bureau (NCRB) data show rising unnatural deaths in prisons; in 2022, 119 prisoners died by suicide (20.8 per 100,000), approximately 67% above the national average.[9]Real-life instances of mental health deterioration within Indian prisons highlight the urgent need for reform. In Tihar Jail, a young undertrial attempted suicide within weeks of custody, showing severe depression and anxiety but receiving no psychiatric care.[10] In Tamil Nadu, a convict with bipolar disorder died by suicide after months without treatment due to the absence of a permanent psychiatrist or essential medication.[11]

Under Article 21, the Indian Constitution guarantees the right to life and personal liberty, which also includes right to mental well-being. The Supreme Court under cases like **Sunil Batra V. Delhi administration** and in Re: Inhuman condition in 1382 Prisoners[12] case affirmed that, the mental health suffering can amount to violation of fundamental right.

During incarceration, many prisoners develop hypervigilance, distrust, suspicion, and low self-esteem, coping mechanisms that hinder reintegration, employment, and social relationships post-release. These harmful effects highlight the need to reduce and prevent psychological decline, supporting dignity and rehabilitation. Collectively, this evidence demonstrates that custodial sentences not only curtail physical liberty but also undermine mental health, thus, underscoring the urgent need for non-custodial alternatives that prioritize rehabilitation and well-being.[13]

7. Harpreet Singh Dhillon & Shibu Sasidharan, Prison Mental Health – An Indian Perspective, 8 Ann. Indian Psychiatry 80,80-84 (2024).

8. Amanda C. de C. Williams & Jannie van der Merwe, The Psychological Impact of Torture, 7 Br J. Pain 101,101-106 (2013).

9. National Crime Records Bureau, Prison Statistics India 2022, tbl.1.2, at 10; tbl. 5.2, at 98, Ministry of Home Affairs, Gov't of India (2023).

10. Shreya Roy Chowdhury, Tihar Jail Undertrial Attempts Suicide Due to Lack of Mental Health Support, Scroll.in (Aug. 15, 2021).

11. Press Trust of India, Mentally Ill Prisoner Dies by Suicide in Tamil Nadu Prison, The Hindu (Sept. 10, 2022),

12. In re: Inhuman Conditions in 1382 Prisons, (2018) 10 SCC 227.

13. Sharon Critoph & Olivia Rope, Mental Health in Prison: A Short Guide for Prison Staff , Penal Reform International (2018), https://books.google.co.in/books/about/Mental_Health_in_Prison.html?id=JOxPzQEACAAJ&redir_esc=y.

COMMUNITY SERVICE: A DIGNITY BASED ALTERNATIVE

The year 2023 brought something new to India's justice system in form of Bhartiya Nyaya Sanhita (BNS), 2023. under which for the first time, our laws include 'community service' as a form of punishment, which is alternative to prison. This inclusion is a significant departure from old justice system which largely relied on custody and fines.[14] It emphasize more on restitution and rehabilitation over retribution. Community service offers something which prison can never a connection to the world outside, a sense of purpose, a chance to heal while being held accountable.[15]

Community service offers an opportunity to the prisoners to stay in their community and do work. It keeps them active, engaged in constructive work and connected to society, so they can feel that they are still part of the society. It gives a message that they still matter , and this can make a big difference in their mental state.

Although the statute does not provide a detailed framework for how community service is to be implemented, but its legal recognition alone reflects an evolving understanding of justice a justice which may align better with Constitutional ideas of dignity and mental well-being. Its successful implementation, however, will depend on judicial willingness, administrative efficiency, and help of local bodies and NGOs. With this, it can become a powerful tool to make justice more human and rehabilitative.[16]

IMPACT OF COMMUNITY SERVICE ON PRISONERS' MENTAL HEALTH

No study directly shows that community service alone improves prisoners' mental health. Evidence discussed earlier shows that community-based sanctions, combining treatment, supervision, and social support leads to better mental health and well-being than custody. They also reduce risks of suicide, mental deterioration, and reoffending. The impact of community service on prisoners' mental health is outlined below:

Stigma after prison : The consequences of incarceration extend beyond confinement. One long-term effect is societal stigma, which persists after release. Shame, judgment, and social scrutiny can follow prisoners for years. Finding employment becomes difficult, and friends or

14. Divya S., Community Service as a Punishment Under Indian Criminal Law: An Overview, Legal Service India (Aug. 15, 2023), https://www.legalserviceindia.com/legal/article-18992-community-service-as-a-punishment-indian-and-global-perspective-analysis.html.

15. Martin Killias, Marcelo Aebi & Denis Ribeaud, Does Community Service Rehabilitate Better Than Short-Term Imprisonment? Results of a Controlled Experiment, 39 Howard J. Crim. Just. 40, 40–57 (2000).

16. Shivani Johri, Concept of Community Service as Punishment Under BNS, 2023 – A Boon or Bane? IJLSSS,(2023), https://ijlsss.com/concept-of-community-service-as-punishment-under-bns-2023-a-boon-or-bane/.

family may distance themselves. Social rejection after release can impact more than prison itself and worsen mental health issues such as depression, shame, and social anxiety. Community service matters because it allows offenders to remain part of society, support their families, and work while remaining accountable. They are not isolated from the world. This approach reduces public stigma and preserves the offender's sense of self-respect.[17]

Public perception: As an individual contributes to the community, even after committing an offense, it changes how others perceive them. Instead of being labelled a criminal, they are seen as someone rebuilding their life. This shift in public perception can reduce the emotional burden and guilt of punishment and promote rehabilitation.[18]

THERAPEUTIC JURISPRUDENCE AND REHABILITATIVE JUSTICE

Therapeutic jurisprudence is a legal philosophy that evaluates the law's impact on emotional life and psychological well-being. It argues that law is not only a regulatory system but also a social force with psychological effects on individuals.[19] In sentencing, this framework requires that punishments minimize harm and encourage positive change rather than worsening psychological distress.[20]Rehabilitative justice reflects the same idea, emphasizing reintegration into society instead of prolonged exclusion through imprisonment.

The Bharatiya Nyaya Sanhita, 2023 (BNS) introduces community service as a penalty for specific offenses, particularly those involving minor harm or social disruption, where incarceration may be disproportionate. This innovation marks a significant depature from the earlier Indian Penal Code, which relied almost exclusively on custodial or fine-based punishments. By permitting community service in place of confinement, the BNS offers a sentencing option more aligned with therapeutic jurisprudence, since it enables offenders to maintain social ties, undertake constructive roles, and avoid the damaging psychological effects commonly associated with imprisonment. Placing community service within the BNS framework therefore illustrates a move towards a sentencing philosophy that values dignity and psychological well-being alongside deterrence and retribution.

17. Jenu Varghese & Vijay Raghavan, Restoration of Released Prisoners to Society: Issues, Challenges and Further Ways; Insights from Kerala, India, 32 Int'l Annals Criminology 123,123-140 (2020).

18. Ankita Roy, Community Service Sentencing and Its Significance in the Indian Criminal Justice System, LIVE LAW (Feb. 6, 2024), https://www.livelaw.in/articles/community-service-sentencing-and-its-significance-in-the-indian-criminal-justice-system-248589 .

19. David B. Wexler, Putting Mental Health into Mental Health Law*, 16* LAW & HUM. BEHAV. *27,27-34 (1992),* https://doi.org/10.1007/BF02351047.

20. Megan Testa, Reflecting on Therapeutic Jurisprudence in the Criminalization of Mental Illness and Addiction, 49 J.AM.ACAD. PSYCHIATRY & L.458,458-64 (Nov. 2021).

CHALLENGES IN APPLYING COMMUNITY SERVICE IN INDIA

Although community service has been formally introduced into our justice system and is widely recognized for its positive potential, it may still fall short of achieving its intended objectives due to several persistent challenges[21]. These include:

- The first and foremost challenge is the lack of procedural clarity. The statute provides no clarity about kind of work offenders should do, that means decisions could vary widely from one court room to another.[22]
- Its implementation also poses significant challenges. Questions remain over how community service is to be effectively administered, as there is the lack of adequate systems to monitor compliance.[23]For instance, who will oversee the work assigned, and what mechanisms will ensure accountability if an individual fails to complete the required hours of service?
- The law remains silent on assessing the mental health of offenders before or during community service. Such evaluation is crucial to determine the type of work an individual can reasonably undertake. Without it, offenders experiencing conditions such as depression, trauma, or anxiety, may be placed in environments that exacerbate their vulnerabilities, undermining both rehabilitation and well-being.
- Prisons in India have very few psychiatrists, with only 0.75 per 100,000 inmates, far below the recommended ratio of 3 or more per 100,000. This severe shortage limits access to mental health care for prisoners and exacerbates psychological distress.[24]
- Public perception also presents a significant challenge. Community service is often regarded as a lenient or 'soft' form of punishment, which may influence judicial discretion and diminish public confidence in the criminal justice system.

Addressing these challenges is essential to realizing the full potential of community service as a sentencing alternative that safeguards offenders' mental health and upholds human dignity.

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21. Vishnu Sharma, Shifting Contours of Criminal Laws: Analysing the Viability of Community Service as a Punitive Measure in India, NUALS L.J. (2024), https://nualslawjournal.com/2024/09/20/shifting-contours-of-criminal-laws-analysing-the-viability-of-community-service-as-a-punitive-measure-in-india/ .

22. Sonal rai, Community Service as a Punishment under BNS: Provisions, Theories and Cases, LawFoyer, (2024), https://lawfoyer.in/community-service-as-a-punishment-under-bns-provisions-theories-and-cases/ .

23. K. Bharath-Chandra & K. Sita-Manikyam, The Roadblocks to Community Service as Punishment and How to Overcome Them, Volume -2,Int'l J. For Legal Research & Analysis.(Mar. 2025).

24. Kabir Garg, C. N. Kumar & Prabha S. Chandra, Number of Psychiatrists in India: Baby Steps Forward, but a Long Way to Go, 61 INDIAN J. PSYCHIATRY 104,104-106(Jan.–Feb. 2019).

MENTAL HEALTH SAFEGUARDS IN COMMUNITY SENTENCING

If we want community service to actually work as a replacement for prison, it needs to come with proper mental health protection. Without them, we risk making the same mistake that happened behind bars. Studies show that when people's needs are ignored, they are far more likely to commit crimes again.[25]

Structured interventions, such as the United Kingdom's Community Sentences Treatment Requirement (CSTR) protocol, address these needs. People do their service hours, but they also get help for mental health problems and other issues at the same time.[26]

International policy guidelines reinforce this approach. The World Health organization (WHO) and Penal Reform International (PRI) recommend incorporating early mental health screening. Evidence-based treatment and keep support going throughout their sentence.[27]

The United Nations Office on Drugs and Crime (UNODC) also advises including mental health safeguards within the design and administration of all non-custodial programs to mitigate the risk of psychological deterioration.[28] In the Unites States mental health courts have shown that when people get the right therapy and support as part of their sentence, they stay more stable and are less likely to re- offend.[29]Australia's diversion programs do something similar by combining community work with therapy requirements. For India, this would mean getting the courts, probation officers and mental health centers like and NIMHANS to work together. Probation officers could be trained to spot warning signs early. So that court could make treatment as part of the sentence and regular check-ins could make sure people are actually getting better.[30] By embedding such safeguards community service can evolve beyond its punitive function to serve as a preventive and rehabilitative instrument for protecting the mental health of offenders.

SUGGESTIONS

Although the Bharatiya Nyaya Sanhita, 2023 makes some reference to community service, its application remains limited to a narrow class of petty offenses. To transform it into a genuine alternative to imprisonment that also safeguards prisoners' mental health, a multi-layered reform

25. Seena Fazel et al., Risk Factors for Recidivism in Individuals Receiving Community Sentences: A Systematic Review, 16 PLOS ONE e0249012 (2021), https://pubmed.ncbi.nlm.nih.gov/31218975/ .

26. Ministry of Justice (UK), Community Sentence Treatment Requirements Protocol (2020),

27. World Health Organization & Penal Reform International, Mental Health in Prison Settings: A short guide,(2021), https://www.penalreform.org/resource/mental-health-in-prison-a-short-guide-for/ .

28. United Nations Office on Drugs and Crime, Introductory Handbook on the Prevention of Recidivism and the Social Reintegration of Offenders, ch.3, at 41-45,((2018) .

29. Henry J. Steadman et al., Effect of Mental Health Courts on Arrests and Jail Days, 62 PSYCHIATRIC SERVICES 1395,1395-97 (2011).

30. National Institute of Mental Health and Neurosciences (NIMHANS), Guidelines for Mental Health Care in Prisons. 12-15, (2020).

strategy is required. These reforms should operate at three distinct levels legal, administrative, and social; so that changes are not merely symbolic but practical and sustainable.

a. Legal Reforms

India needs a clear statutory framework for community service that extends beyond minor offenses to non-violent cases suitable for rehabilitation. Guidelines should ensure consistency in the type and duration of service, proportionate to offence severity, and mandate psychiatric assessment before custodial sentences to identify offenders for treatment-linked sanctions. Such reforms can reduce prison overcrowding and protect inmates' mental health. The United Kingdom's Community Sentence Treatment Requirements Protocol offers a useful model for integrating service with treatment, in sentencing.[31]

b. Administrative Reforms

At the administrative level, effective community service requires robust supervision and support. Probation services should be expanded and trained to identify psychological distress and facilitate care. State governments must partner with mental-health institutions such as NIMHANS for systematic assessments, treatment referrals, and follow-up. Maintaining clear records of community service opportunities across sectors enables judges to assign socially useful, rehabilitative programs. Regular judicial and administrative review, as recommended by UNODC[32], is essential to ensure compliance and protect offenders' mental health, preventing community service from becoming a mere formality.

c. Social Reforms

At the social level, the effectiveness of community service depends on changing public perceptions that imprisonment is the only form of accountability. Awareness campaigns should emphasize its social value, showing that offenders contribute meaningfully while preserving their dignity. Civil society, NGOs, and local bodies must be involved in designing placements that are both beneficial and rehabilitative. While education and media outreach can highlight how such alternatives reduce recidivism, protect mental health, and advance restorative justice. Together with legislative and administrative reforms, these measures can transform community service under the BNS, 2023, into a genuinely restorative, dignity-based alternative.

CONCLUSION

This paper has argued that community service, newly introduced under the Bharatiya Nyaya Sanhita, 2023, offers a dignity-based alternative to incarceration that can mitigate the silent but

31. Ministry of Justice (UK), Community Sentence Treatment Requirements Protocol, at 6-8, (2020),

32. United Nations Office on Drugs and Crime, Introductory Handbook on the Prevention of Recidivism and the Social Reintegration of Offenders, Ch. 3, at 41-45,(2018).

profound mental health harms of imprisonment. By demonstrating how custodial sentences contribute to psychological deterioration, while community service allows offenders to remain socially connected, accountable, and rehabilitated, the study underscores the need for sentencing practices aligned with therapeutic jurisprudence and rehabilitative justice. India's current framework remains limited by procedural ambiguity, inadequate mental health safeguards, and weak administrative support. The comparative insights from countries like, the United Kingdom's Community Sentence Treatment Requirements, the Unites States, and Australia, illustrate how integrating treatment with non-custodial sanctions can protect dignity and well-being while ensuring credibility of punishment. Future research must therefore empirically assess the mental health outcomes of community service in India, explore judicial and public attitudes towards its legitimacy, and develop interdisciplinary models that link accountability with rehabilitation. At this pivotal juncture, India has the opportunity to move beyond retributive incarceration and embrace community service as a transformative tool of justice that safeguards mental health, upholds dignity, and strengthens the path toward restorative reform.

ANACHRONISTIC AUTHORITY, HUMAN RIGHTS ANOMALY: REIMAGINING INDIA'S PRISONS BEYOND THE 1894 ACT

Rakhee Gadhave[1]

ABSTRACT

India's alarming prison systems are triggered by the Prisons Act of 1894 which largely focuses on punishment and control instead of correction and rehabilitation. In this paper, I contend that the prevalent framework of the Act violates human dignity in the context of Article 21 of the Constitution, undermining India's obligations to global commitments, especially UN SDG 16 on peace, justice, and strong institutions. While the judiciary has made some progress toward granting rights to prisoners, these advances remain shackled by the outdated philosophy of the Act and the persistent implementation failures that burden the system, which includes severe cases of overcrowding, widespread human rights violations and absence of rehabilitative efforts, legal aid, and infrastructure. This study outlines the gaps between legislative intent and implementation, analyses the progress and regression within the framework of international benchmarked human rights, and the evolving critique of the carceral continuum. It emphasizes the processes aimed at changing the Model Correctional Services Act with unique precision and detail. The proposal offers a paradigm shift grounded in rights, which includes the drafting of a Prisoners' Rights Charter, oversight on prison policy establishment, and other structural modifications, including an independent National Prison Oversight Commission, aimed at reinforcing rehabilitation and reducing recidivism. It also incorporates the existing gaps of technological shackling, inclusive of provisions for sensitive groups, and the expedited recruitment, training, and deployment of prison staff. The crucial point of this article is that prison reform means more than administrative adjustments; it is, in fact, a constitutional-moral mandate that demands immediate response from the courts, civil society, and those in governance. The shift from punishment with imprisonment to mercy enshrined in the constitution must integrate the law, policy, and practical implementation.

Keywords: Prison Reform, Human Rights, Colonial Legacy, Rehabilitation, Justice, Sustainable Development Goals (SDGs), Prisons Act of 1894

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INTRODUCTION

The administration of justice in any sovereign state deeply reflects its commitment to constitutional values and the rule of law. In India, a vibrant constitutional democracy, the state of its carceral institutions presents a salient dilemma. Governed primarily by the outdated Prisons Act of 1894 which is a colonial relic designed for punitive control. Indian prisons suffer from systemic pathologies, including endemic overcrowding, human rights transgressions, and a deficit in rehabilitative programming[2]. This framework is a direct violation of Article 21 of the Constitution, which guarantees the fundamental right to life with dignity to all, including the incarcerated. Additionally, it impedes India's compliance to international obligations, notably Sustainable Development Goal (SDG) 16, which champions peace, justice, and strong institutions[3]. The persistent disjunction between robust constitutional jurisprudence and the realities within these facilities mandates a comprehensive scholarly inquiry.

This paper argues that while India's constitutional framework and the recommendations of expert committees (e.g., Mulla, Krishna Iyer) have consistently advocated for humane treatment and rehabilitation, the enduring systemic issues underscore a profound disconnect. This disconnect, it is contended, is not merely an implementation deficit but a consequence of the *Prisons Act of 1894*, which prioritizes control over correction, fundamentally misaligning the system with modern human rights standards and the transformative vision of SDG 16 [4]. Bridging this gap necessitates a legislative overhaul and the establishment of a rights-based, capacity-sensitive model that reorients penal policy towards constitutional morality and the global imperative of justice for all.

To rigorously substantiate this hypothesis, this research pursues four key objectives: to examine the existing legal and constitutional framework; to analyse the implementation gap between reform recommendations and ground realities; to evaluate India's prison system through the lens of SDG 16 and international human rights; and finally, to propose a rehabilitative, rights-based legal model for prison reform. The paper is structured to systematically address these objectives, beginning with the historical context, moving through constitutional and international standards, detailing systemic failures, and culminating in proposed solutions and the collaborative roles of stakeholders for a transformative shift.

2. Vanshika Kapoor, *Prison system : role and reforms made w.r.t India - iPleaders*, IPleaders (June 22, 2024), https://blog.ipleaders.in/prison-system-role-and-reforms-made-w-r-t-india/.

3. G.A. Res. 70/1, Transforming Our World: The 2030 Agenda for Sustainable Development, princ. 16.3, 16.6, 16.A (Sept. 25, 2015).

4. All India Committee on Jail Reforms (Mulla Committee) Report (1980-83); Justice V.R. Krishna Iyer Committee Report (1987) (highlighting disconnect between recommendations and reality).

THE ENDURING LEGACY OF COLONIALISM: INDIA'S PRISON SYSTEM GENESIS

The *Prisons Act of 1894*[5] is the primary statute that defines the operational framework of India's modern carceral institutions. This foundational statute was enacted by the British administration and was designed to serve imperial objectives of control, punitive discipline, and the effective management of a subject populace, rather than rehabilitation or social reintegration. Understanding this historical foundation is essential to understanding the structural issues that still plague the Indian penal system today.

The Prisons Act, 1894: A Relic of Control

The *Prisons Act of 1894* consolidated disparate colonial regulations to establish a unified, yet inherently regressive, system of prison management across British India[6]. Its primary objectives were unequivocally custodial and deterrent, focusing on secure confinement and the infliction of discomfort as a consequence of transgression. The Act provided for infrastructure, staff duties, and inmate classification, but conspicuously lacked substantive provisions for education, vocational training, or psychological care[7]. The punitive ethos was particularly evident in sections on "prison-offences" and their associated stringent disciplinary measures [8]. This focus on retribution contrasts sharply with modern penological principles, which prioritize the reformative potential of incarceration for an offender's reintegration into society[9]. The 1894 Act thus remains a significant statutory impediment to progressive correctional practices in India.

Post-Independence Inertia and Early Reform Efforts

Upon independence in 1947, India inherited this colonial apparatus, including the Prisons Act of 1894, which inexplicably retained its legal efficacy. This institutional inertia stemmed from pressing nation-building exigencies, the societal marginalization of incarcerated populations, and a prevailing focus on law and order that often-sidelined correctional reform[10]. Despite this, humanitarian concerns spurred the establishment of several significant committees to recommend improvements:

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5. Prisons Act, No. 9 of 1894, India Code (1894).
6. S. DHOLAM, PRISONER'S REFORMATION AND REHABILITATION (Walnut Publication.com 2021)
7. Prisons Act, 1894, §§ 3, 4, 10-12.
8. Prisons Act, 1894, §§ 45-50.
9. United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules), U.N. Office on Drugs and Crime (UNODC) (2015) (outlining modern rehabilitative principles).
10. India Justice Report (Tata Trusts) (2019) (highlighting systemic neglect).

- **The All-India Committee on Jail Reforms (Mulla Committee), 1980-83:** This seminal committee undertook a comprehensive review, advocating for a new All-India Prisons Act, scientific classification of prisoners, improved staff training, and emphasis on legal aid and vocational training, effectively envisioning a shift from custodial to correctional philosophy[11].

- **The Justice V.R. Krishna Iyer Committee on Women Prisoners, 1987:** Chaired by the eminent jurist, this committee specifically focused on the distinct needs of women prisoners, emphasizing legal aid, vocational training, access to children for incarcerated mothers, and decongestion[12].

- **The Justice Amitava Roy Committee (formerly R.C. Lahoti Committee), 2018:** Constituted later, this committee primarily addressed alarming prison overcrowding, prisoner welfare, and optimal infrastructure utilization, reiterating calls for judicial and executive action to decongest jails[13].

The Prevalent "Implementation Gap"

Despite the comprehensive nature of these recommendations, their systematic implementation has remained conspicuously lacking, creating a critical "implementation gap" between promoted policy and ground reality. Several factors contribute to this enduring gap. A persistent lack of political will often translates into insufficient budgetary allocations for infrastructure, staff, and rehabilitative programs, as prisons frequently remain low on the political agenda[14]. Secondly, bureaucratic delay and fragmented governance with prison administration falling under state jurisdiction lead to disparate policies and inconsistent implementation standards, hindering a unified national effort[15]. Thirdly, the lack of a modern, comprehensive law to replace the 1894 Act means many progressive recommendations lack mandatory enforcement[16]. Finally, societal apathy towards prisoners further reduces public pressure for meaningful reform[17]. This serious failure to turn progressive recommendations into actionable policy underscores the deep-rooted challenges in transforming India's colonial carceral legacy.

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11. All India Committee on Jail Reforms (Mulla Committee) Report (1980-83), Chapters 5, 8, 11, 14.
12. Justice V.R. Krishna Iyer Committee Report on Women Prisoners (1987).
13. Justice Amitava Roy Committee Report (2018) (details can be found in news reports and government documents).
14. India Justice Report, supra note 6.
15. Selected Recommendations and Guidelines on 'Capacity' by Prison Reform Committees in India
16. iPleaders Blog, *supra* note 2.
17. S. DHOLAM, *supra* note 2

CONSTITUTIONAL PROTECTIONS AND JUDICIAL LANDMARKS

Despite the outdated framework of the Prisons Act of 1894, the Supreme Court of India has, through its progressive decisions, tried to bring constitutional morality into the prison system. At the center of this development is the broad interpretation of Article 21 of the Constitution, which clearly extends the right to life and personal liberty to prisoners.

Article 21: Right to Life with Dignity for Prisoners

Article 21 states that "No person shall be deprived of his life or personal liberty except according to procedure established by law." The Supreme Court has repeatedly affirmed that "life" in this context signifies not mere physical existence but a life imbued with dignity[18]. This expansive meaning has been firmly applied to prisoners, challenging the historical notion that incarceration strips individuals of their fundamental rights. The judiciary has unequivocally asserted that a prisoner retains all basic rights save those necessarily curtailed by lawful detention[19]. This principle changed the state's responsibility towards prisoners, requiring humane and dignified treatment and setting the stage for judicial oversight of prison conditions.

Landmark Judicial Interventions and Their Rationale

The Supreme Court's role in protecting prisoners' rights can be seen in a series of landmark judgments, expanding constitutional protection step by step:

- ***Sunil Batra v. Delhi Administration*** **(1978):** This seminal judgment definitively rejected the "hands-off" doctrine in prison matters[20]. The Court held that *"imprisonment does not spell the liquidation of all fundamental rights."* It struck down practices like solitary confinement and arbitrary handcuffing as violations of Article 21. It established that judicial review extends to prison administration, enabling inmates to seek redress for inhuman treatment and affirming their right to human dignity[21]

- ***D.K. Basu v. State of West Bengal*** **(1997):** Addressing pervasive custodial violence, this ruling laid down mandatory guidelines for arrest and detention[22]. These included the right of the arrestee to inform a family member, mandatory arrest memos, and medical examinations, aiming to ensure transparency and accountability and thereby mitigate abuse within police lock-ups and prisons[23].

18. Francis Coralie Mullin v. Administrator, Union Territory of Delhi, AIR 1981 SC 746 (India).
19. Sunil Batra v. Delhi Administration, AIR 1978 SC 1675 (India).
20. Id.at 19
21. Id. at 1690.
22. D.K. Basu v. State of West Bengal, AIR 1997 SC 610 (India).
23. Id. at 616-17.

- ***Sheela Barse v. State of Maharashtra* (1983):** This case highlighted the specific vulnerabilities of women prisoners and underscored the imperative for legal aid and humane treatment, particularly for female inmates[24]. The Court emphasized gender-sensitive approaches and reiterated that free legal services were an inalienable component of a fair procedure under Article 21, aligning with the principles of access to justice[25].

- ***Inhuman Conditions in 1382 Prisons* (2016):** Initiated *Suo motu* by the Supreme Court, this public interest litigation addressed severe overcrowding and neglect across prisons[26]. The Court issued comprehensive directions to Union and State Governments regarding overcrowding, sanitation, health, food, and undertrial prisoners, demonstrating an ongoing judicial commitment to supervise executive duties in this domain[27].

These judicial pronouncements collectively form a robust jurisprudential foundation, aiming to transform India's prison system towards a rights-respecting and rehabilitative structure.

Limitations of Judicial Activism

Despite their groundbreaking nature, judicial interventions frequently encounter significant limitations in terms of effective implementation and sustained enforcement. Even though judicial interventions have been groundbreaking, they face serious limits in practice. Since there is no modern law to replace the outdated 1894 Act, many of the progressive directions of the courts remain more aspirational than binding[28]. Courts can declare rights and issue orders, but they cannot manage daily prison administration or control how resources are allocated. Their directives often get stuck due to bureaucratic delay, poor budget support, and lack of political will from state governments[29]. This inherent structural limitation means that while courts articulate the problem and the solution in principle, the actual translation into tangible improvements relies heavily on the responsiveness of the executive and legislative branches. This perpetual "implementation gap" underscores the critical need for a legislative overhaul that institutionalizes judicial pronouncements and provides an enforceable legal basis for a rights-based correctional system[30].

24. Sheela Barse v. State of Maharashtra, AIR 1983 SC 378 (India).

25. Id. at 381-82

26. Re-Inhuman Conditions in 1382 Prisons, (2016) 3 SCC 700 (India).

27. Id. at 714-16.

28. iPleaders Blog, *supra* note 2.

29. India Justice Report (Tata Trusts) (2019) (highlighting deficiencies in state budgets for prisons).

30. Prison Reform: Selected Recommendations and Guidelines on 'Capacity' by Prison Reform Committees in India, available at [Link to the relevant SlideShare or document if possible] (discussing lack of capacity

THE GLOBAL IMPERATIVE: SDG 16 AND INTERNATIONAL HUMAN RIGHTS STANDARDS

India's goal of becoming a leading global power requires not only compliance with its Constitution but also with international human rights standards. The state of Indian prisons is an important test of this commitment, as it directly affects obligations under the Sustainable Development Goals (SDGs), especially SDG 16 and other international human rights instruments.

SDG 16: Access to Justice and Accountable Institutions

The United Nations 2030 Agenda for Sustainable Development, which India has adopted, includes SDG 16: Peace, Justice, and Strong Institution*s*. Several of its targets are closely linked to prison reform:

- **Target 16.3:** Aims to "promote the rule of law at the national and international levels and ensure equal access to justice for all." The existence of a substantial undertrial population, often denied prompt legal aid or bail, directly undermines this target[31]. Overcrowding, a direct consequence of prolonged pre-trial detention, further violates the principle of humane treatment.
- **Target 16.6:** Focuses on developing "effective, accountable and transparent institutions at all levels." The prevailing opaqueness, lack of independent oversight, and poor accountability mechanisms within Indian prisons starkly contradict this objective[32].
- **Target 16.A:** Seeks to "strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat crime and terrorism." This target underscores the need for robust, well-resourced correctional institutions capable of upholding human rights and preventing re-offending[33].

India's prison conditions, therefore, represent a significant hurdle to achieving its SDG 16 commitments, highlighting a critical gap between national aspirations and lived realities.

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building due to implementation failure).

31. UNICEF DATA, SDG Goal 16: Peace, Justice and Strong Institutions, (27 August 2025, 09: 21 pm) https://data.unicef.org/sdgs/goal-16-peace-justice-strong-institutions/

32. UNODC, SDG16: Peace and Justice, (27 August 2025, 09: 21 pm) https://www.unodc.org/unodc/en/about-unodc/sustainable-development-goals/sdg16_-peace-and-justice.html

33. Id.

International Human Rights Instruments and Penal Standards

Apart from the SDGs, several international human rights instruments set global standards for the treatment of prisoners. India, as a signatory to many of these, is bound by their principles:

- **International Covenant on Civil and Political Rights (ICCPR), 1966:** India ratified the ICCPR in 1979. Article 10(1) clearly states that "*All persons deprived of their liberty shall be treated with humanity and with respect for the inherent dignity of the human person*"[34]. This core principle resonates deeply with Article 21 of the Indian Constitution, yet custodial violence, inadequate medical care, and degrading conditions often represent direct violations of Article 10[35].

- **The United Nations Standard Minimum Rules for the Treatment of Prisoners (The Nelson Mandela Rules), 2015:** As a comprehensive restatement of the original 1955 rules, the Mandela Rules provide detailed, globally accepted minimum standards for all aspects of prison management[36]. Key provisions include:

    i. **Rule 1:** Mandating respect for inherent dignity.

    ii. **Rules 24-35:** Ensuring adequate healthcare standards, equivalent to those available in the community, and psychological and psychiatric services[37].

    iii. **Rules 43-44:** Restricting solitary confinement as a measure of last resort.

    iv. **Rules 91-92:** Guaranteeing access to legal counsel and family visits.

    v. **Rules 103-104:** Emphasizing prisoner classification and individual treatment geared towards rehabilitation.

India's prisons frequently fall short of these standards, particularly concerning healthcare, solitary confinement practices, and the actual implementation of rehabilitative measures.

- **The United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (The Bangkok Rules), 2010:** These rules supplement the Mandela Rules, addressing the specific vulnerabilities and needs of women in the criminal justice system[38]. They mandate gender-sensitive infrastructure,

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34. International Covenant on Civil and Political Rights art. 10(1), Dec. 16, 1966, 999 U.N.T.S. 171.

35. NHRC, Rights of Prisoners, (27 August 2025, 09: 00 pm) https://nhrc.nic.in/sites/default/files/11%20Rights%20of%20Prisoners-compressed.pdf

36. United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules), U.N. Office on Drugs and Crime (UNODC) (2015).

37. Id. at Rules 24-35

38. United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (the Bangkok Rules), U.N. Doc. A/RES/65/229 (Mar. 16, 2011).

specific provisions for pregnant women and mothers with children, access to feminine hygiene products, and non-custodial alternatives where appropriate[39]. The neglect of these provisions in many Indian prisons further highlights the implementation deficit.

- **The Body of Principles for the Protection of All Persons under Any Form of Detention or Imprisonment, 1988:** This instrument reinforces the principles of humane treatment, prohibition of torture, and access to legal counsel and remedies[40].

India's continued struggle with prison overcrowding, custodial deaths, and the lack of robust rehabilitation directly undermines its moral credibility and its international legal commitments. The gap between these global ideals and domestic realities necessitates urgent reforms to align domestic prison practices with global human rights standards.

SYSTEMIC DEFICIENCIES AND THE IMPLEMENTATION GAP IN INDIAN PRISONS

Even with strong constitutional protections and clear international standards, India's prison system still suffers from deep and widespread problems. These failures show a serious gap in implementation, reflecting a sharp divide between legal ideals and actual prison practices, which in turn undermines human dignity and the goals of justice.

Overcrowding: The Central Crisis

Overcrowding is the most acute challenge, fundamentally compromising humane incarceration[41]. Official statistics consistently show occupancy rates exceeding 130%, with many states far higher[42]. A staggering proportion, often over 70%, comprises undertrial prisoners, many detained for minor offenses or unable to afford bail[43]. This aggravates congestion, strains resource, blurs the distinction between accused and convicted, and directly impinges upon the presumption of innocence and the right to a healthy environment under Article 21[44].

Human Rights Violations and Custodial Brutality

Despite judicial directives like *D.K. Basu v. State of West Bengal*, incidents of custodial violence, torture, and deaths in custody remain a grave concern[45]. Guidelines for arrest and

39. Id. at Rules 2, 4, 5.

40. Body of Principles for the Protection of All Persons under Any Form of Detention or Imprisonment, G.A. Res. 43/173, U.N. Doc. A/RES/43/173 (Dec. 9, 1988).

41. India Justice Report (Tata Trusts) (2019) (highlighting overcrowding as a primary issue).

42. National Crime Records Bureau, Prison Statistics India (latest available report) (reporting occupancy rates).

43. Id.

44. Re-Inhuman Conditions in 1382 Prisons, (2016) 3 SCC 700 (India)

45. D.K. Basu v. State of West Bengal, AIR 1997 SC 610 (India)

detention are frequently flouted, leading to continued physical abuse, denial of medical attention, and psychological intimidation[46]. A lack of effective, independent mechanisms for investigating abuses and prosecuting perpetrators fosters impunity, directly contravening international obligations to prevent torture and ensure accountability[47].

Inadequate Legal Aid and Access to Justice

Access to prompt and effective legal aid, a constitutional mandate, remains severely inadequate, particularly for indigent and marginalized prisoners[48]. Many undertrials languish in detention due to inability to access or afford legal representation, severely undermining SDG 16.3 on equal access to justice[49]. Legal Services Authorities, though existing, often lack sufficient funding, personnel, and proactive engagement within prisons[50].

Neglect of Vulnerable Groups

Prisons disproportionately impact vulnerable populations:

- **Women Prisoners:** Face lack of gender-sensitive infrastructure, male staff for sensitive tasks, inadequate hygiene provisions, and the distressing situation of mothers raising children within prison walls, often in violation of the Bangkok Rules[51].
- **Transgender Persons:** Suffer severe discrimination, harassment, and violence due to binary prison structures and lack of gender-affirming facilities[52].
- **Mentally ill Prisoners:** A significant proportion of inmates have undiagnosed or untreated mental health issues. Prisons lack qualified professionals, adequate medication, and therapeutic environments, leading to prolonged, unjustified detention and a cycle of re-offending[53].

Substandard Infrastructure and Living Conditions

Many prison infrastructures are old, damaged, and incapable of meeting basic human needs. Deficiencies include unsanitary conditions, poor ventilation, inadequate access to clean

46. Id. at 616-17.

47. National Crime Records Bureau, *supra* note 2 (reporting custodial deaths); see also Human Rights Watch, India: Police Abuses Go Unpunished.

48. Sheela Barse v. State of Maharashtra, AIR 1983 SC 378 (India)

49. UNICEF DATA, SDG Goal 16: Peace, Justice and Strong Institutions, (last visited 27 August 2025), https://data.unicef.org/sdgs/goal-16-peace-justice-strong-institutions/

50. iPleaders Blog: *supra* note 2.

51. United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (the Bangkok Rules), U.N. Doc. A/RES/65/229 (last visited Mar. 16, 2011), https://www.unodc.org/documents/commissions/CCPCJ/Crime_Resolutions/2010-2019/2010/General_Assembly/A-RES-65-229.pdf

52. Reports by civil society organizations working on LGBTQ+ rights in India.

53. India Justice Report, supra note 1 (discussing mental health challenges in prisons).

water, and a critical shortage of functional toilets[54]. Medical facilities are minimal, with a severe shortage of doctors and essential medicines, contributing to preventable illnesses and deaths. Educational and vocational training facilities are largely absent or inadequate[55].

Staffing Shortages and Training Deficiencies

A critical underlying cause of systemic failures is severe understaffing across prison departments[56]. Low staff-to-inmate ratios lead to overworked employees and compromised security. Existing training is still based on colonial methods of control, with little focus on human rights, modern correctional psychology, or rehabilitation. This makes it difficult to bring prison practices in line with constitutional mandates and international best practices[57].

Direct Violation of Constitutional and International Standards

Collectively, these systemic issues represent a profound failure to uphold fundamental human rights and legal obligations. Pervasive overcrowding, custodial violence, denial of legal aid, and neglect of vulnerable groups directly contravene Article 21 of the Indian Constitution, SDG 16 on justice, and core principles enshrined in the Nelson Mandela Rules and Bangkok Rules. The cumulative effect is a prison system that perpetuates injustice rather than mitigating it, underscoring the urgent imperative for comprehensive reform.

REIMAGINING JUSTICE: A REHABILITATIVE AND CAPACITY-CENTRIC LEGAL FRAMEWORK

The systemic deficiencies troubling India's correctional system necessitate a fundamental paradigm shift, moving beyond incremental adjustments to the obsolete Prisons Act of 1894. True reform demands a comprehensive legislative overhaul that reorients the entire penal philosophy from one of punitive control to one grounded in constitutional morality, human rights, and the imperative of rehabilitation and social reintegration. This section sets out a multi-pronged legal and policy framework aimed at creating a justice-oriented, capacity-based prison system.

The Imperative of Legislative Overhaul: A Model Correctional Services Act

The cornerstone of genuine prison reform in India must be the enactment of a new, progressive Model Correctional Services Act by the Union Parliament, serving as a guiding

54. Mulla Committee Report (1980-83) (detailing infrastructure deficiencies, many of which persist).

55. Id.

56. India Justice Report, supra note 1 (providing data on prison staff vacancies).

57. Ministry of Home Affairs, Government of India, Training Manual of Basic Course for Prison Officers 2017, (last visited on Feb. 15, 2021), https://www.mha.gov.in/sites/default/files/2022-12/TrainingPrisonOfficers_14112022%5B2%5D.pdf

framework for state-level legislation. This Act must unequivocally replace the Prisons Act of 1894 and its colonial legacy[58]. Its foundational principles should be:

- **Constitutional Morality:** All prison administration and inmate treatment must follow fundamental rights, especially Article 21, and respect the inherent dignity of every human being.
- **Shift from Punishment to Rehabilitation:** Mandating that the primary objective of incarceration is the reform and social reintegration of offenders, with punitive measures strictly limited to the deprivation of liberty itself.
- **Incorporation of International Standards:** Explicitly codifying the principles of the Nelson Mandela Rules, the Bangkok Rules, and relevant ICCPR provisions, ensuring their domestic legal enforceability[59].
- **Rights-Based Approach:** A clear Charter of Prisoners' Rights must be written into law with legal remedies.
- **Accountability Mechanisms:** Establishing clear lines of accountability for prison officials, including provisions for independent investigations into alleged human rights abuses.

Although the Ministry of Home Affairs issued the *Model Prisons and Correctional Services Act, 2023*, its optional adoption by states shows the need for stronger central guidance or mandatory mechanisms to prevent fragmented responses[60].

Codification and Enforcement of a Prisoner's Rights Charter

The new Act must include a binding **Prisoners' Rights Charter**, going beyond court rulings to direct legal protection. This Charter should guarantee:

- **Right to Humane Treatment:** Including adequate living space, sanitation, nutrition, clothing, and clean water.
- **Right to Health and Mental Healthcare:** Mandating regular medical check-ups, access to specialized medical and mental health professionals, appropriate medication, and a therapeutic environment, including provisions for de-addiction and counselling[61].

58. Ministry of Home Affairs, Government of India, Model Prisons and Correctional Services Act, 2023, (May 10, 2023)

59. United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules), U.N. Office on Drugs and Crime (UNODC) (2015).

60. Id.

61. See Mental Healthcare Act, 2017, § 103 (India)

- **Right to Legal Aid:** Ensuring immediate and effective access to legal counsel, comprehensive legal awareness, and proactive assistance for bail and appeals, especially for undertrials.

- **Right to Communication:** Facilitating regular, unmonitored contact with family, legal representatives, and external oversight bodies, including virtual visitation.

- **Right to Education and Vocational Training:** Guaranteeing access to literacy programs, formal education, and market-relevant vocational training for post-release employment.

- **Right to Non-discrimination:** Explicitly prohibiting discrimination based on gender, caste, religion, sexual orientation, or any other ground.

- **Right to Grievance Redressal:** Establishing accessible, independent, and time-bound mechanisms for prisoners to lodge complaints without fear of reprisal, with mandatory investigations and public reporting.

Comprehensive Reintegration and Rehabilitation Programs

The new legal framework must mandate and adequately fund a diverse array of reintegration and rehabilitation programs:

- **Vocational Training and Skill Development:** Programs providing accredited certifications to enhance employability[62].

- **Educational Initiatives:** From basic literacy to higher education opportunities.

- **Psychological Counselling and Therapy:** Mandatory mental health screenings, individualized care plans, and access to qualified professionals for addressing trauma, addiction, and other mental health challenges.

- **Post-Release Support and Aftercare:** Establishing halfway homes, job placement assistance, financial literacy training, and community integration programs to prevent recidivism. Collaboration with NGOs should be formalized[63].

- **Restorative Justice Practices:** Encouraging victim-offender mediation and community-based alternatives where appropriate.

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62. India Vision Foundation, Reintegration & Rehabilitation Program, (last visited on 25 August 2025) https://indiavisionfoundation.org/causes/reintegration-rehabilitation-program/

63. Id.

Independent Oversight and Accountability: The National Prison Oversight Commission

To ensure genuine accountability and transparency, a National Prison Oversight Commission (NPOC), with parallel state-level bodies, must be established through statutory mandate. This independent body should be empowered to:

- **Conduct Regular and Unannounced Inspections:** Including full access to facilities, records, and confidential prisoner interviews.
- **Investigate Complaints:** Conduct independent investigations into alleged human rights abuses and custodial deaths, with powers to summon witnesses.
- **Publish Reports:** Generate annual public reports on prison conditions, issues, and recommendations.
- **Monitor Compliance:** Track the implementation of judicial directives and international standards.
- **Budgetary Oversight:** Provide recommendations on prison budgets to ensure adequate funding.

The NPOC's composition must be multidisciplinary, including retired judges, human rights experts, and civil society representatives, ensuring impartiality.

Technology Integration for Transparency and Efficiency

Modern technology must be integrated into prison administration through:

- **E-Prisons Project Expansion:** Complete digitization of inmate records and case management with real-time data[64].
- **Video Conferencing Facilities:** Mandate widespread use for court hearings, legal consultations, and family visits, reducing transportation needs and improving access[65].
- **CCTV Surveillance:** Install high-resolution CCTV in all common areas, with feeds accessible to a central, independent monitoring authority to deter and detect abuses.

64. Lexport, Beyond Walls: The E-Prison Revolution in the Indian Criminal Judicial System, (last visited 13 May , 2025), https://lexport.in/images/1741246315_Article%20IBEYOND%20WALLS%20THE%20E-PRISON%20REVOLUTION%20IN%20THE%20INDIAN%20CRIMINAL%20JUDICIAL%20SYSTEM.pdf

65. PIB, Digital Transformation of Justice: Integrating AI in India's Judiciary and Law Enforcement, (Feb. 25, 2025), https://lexport.in/images/1741246315_Article%20IBEYOND%20WALLS%20THE%20E-PRISON%20REVOLUTION%20IN%20THE%20INDIAN%20CRIMINAL%20JUDICIAL%20SYSTEM.pdf

- **Biometric Identification:** Implement biometric systems for staff and inmate attendance to enhance security.

Special Provisions for Vulnerable Groups

The new framework must incorporate specific, enforceable provisions for vulnerable populations:

- **Gender-Sensitive Facilities:** Mandatory separate institutions/wings for women, female staff, and provisions for childcare and hygiene in line with the Bangkok Rules[66].
- **Transgender-Inclusive Policies:** Clear guidelines for housing, healthcare, and treatment based on self-identified gender, with sensitivity training for staff.
- **Comprehensive Mental Healthcare:** Dedicated mental health units, mandatory screening, regular evaluations, and transfer to appropriate care for severe cases[67]
- **Juvenile Justice Compliance:** Strict adherence to the Juvenile Justice Act, 2015, ensuring no juveniles are held in adult prisons.

Capacity Building for Prison Staff

Professionalizing the prison workforce is paramount:

- **Revised Recruitment Standards:** Selection should focus not only on physical fitness but also on psychological aptitude, empathy, and communication skills.[68]
- **Comprehensive Training Programs:** Both new recruits and serving staff should receive mandatory training in human rights, modern penology, conflict resolution, and handling vulnerable groups.
- **Adequate Staffing Ratios:** Prescribing optimal staff-to-inmate ratios to reduce workload and enhance supervision.
- **Promotional Avenues and Welfare Measures:** Instituting clear career progression, better remuneration, and welfare programs to attract and retain qualified personnel.

By systematically implementing these legislative, programmatic, and institutional reforms, India can transition its prison system from a punishment-driven prison model to one

66. United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (the Bangkok Rules), U.N. Doc. A/RES/65/229 (Mar. 16, 2011)

67. India Justice Report (Tata Trust) (2019) (discussing Mental health challenges in prisons).

68. Ministry of Home Affairs, Government of India, Training Manual of Basic Course for Prison Officers 2017, (visited on .15 Feb 2021), https://www.mha.gov.in/sites/default/files/2022-12/TrainingPrisonOfficers_14112022%5B2%5D.pdf

that is rehabilitative and rights-based, aligning its practices with its constitutional ideals and international obligations.

PATHWAYS TO IMPLEMENTATION: ROLE OF STAKEHOLDERS

Lasting reform of India's prison system requires combined efforts from all key actors in the justice system as well as civil society. Converting proposed laws and policies into actual improvements will depend on coordinated action from every stakeholder.

The Judiciary's Continuing Role

While the Indian judiciary has consistently championed prisoners' rights, its role extends beyond mere pronouncements. To bridge the implementation gap, the judiciary must adopt a more active and sustained supervisory function. This includes establishing mechanisms for active monitoring and enforcement of its own directives, as exemplified by cases like *Inhuman Conditions in 1382 Prisons*[69]. Judges must also proactively encourage and apply alternative sentencing measures (e.g., probation, community service) for minor offenses to reduce overcrowding [70]. Furthermore, prompt disposal of cases, particularly for undertrial prisoners, is a crucial judicial function to alleviate prison congestion[71]. Judicial oversight can also ensure Legal Services Authorities effectively fulfill their mandate within prisons.

Legal Services Authorities (LSAs): Expanding Reach and Impact

NALSA and its state/district bodies are statutorily mandated to provide free legal services to eligible persons, including those in custody[72]. Their role is critical for actualizing access to justice for prisoners. LSAs must implement proactive jail-based legal aid through regular prison visits, permanent legal aid clinics, and legal literacy programs[73]. Strengthening the Legal Aid Defense Counsel System from ad-hoc panel lawyers to dedicated professionals can ensure more competent and timely representation for prisoners at all stages [74]. Active collaboration with civil society organizations can also expand their reach and efficacy.

69. Re-Inhuman Conditions in 1382 Prisons, (2016) 3 SCC 700 (India).

70. Granthaalayah Publications, ROLE OF JUDICIARY IN REFORM AND DEVELOPMENT OF INDIAN PRISON SYSTEM, (Visited on Mar. 9, 2025), https://www.granthaalayahpublication.org/Arts-Journal/ShodhKosh/article/download/4464/4033/24371

71. Hussainara Khatoon v. Home Secretary, State of Bihar, AIR 1979 SC 1360 (India)

72. Legal Services Authorities Act, No. 39 of 1987, India Code (1987), § 12.

73. NALSA FAQs, (Visited on 11 May, 2025), https://nalsa.gov.in/faqs/

74. S3waas, Introduction Legal Services Authorities, (Visited on 11 May, 2025), https://cdnbbsr.s3waas.gov.in/s3ec039c8661befae6dbcd08304dbf4dca/uploads/2025/04/2025041656.pdf

Civil Society Organizations (CSOs) and NGOs

Civil society organizations (CSOs) and non-governmental organizations (NGOs) are vital external forces for prison reform, acting as watchdogs, service providers, and advocates[75]. Their contributions include:

- **Advocacy and Policy Influence:** Raising public awareness and lobbying legislative and executive bodies for modern prison laws and reform implementation.
- **Rehabilitation and Reintegration Programs:** Offering vocational training, educational support, mental health counseling, and post-release aftercare services, often filling gaps in government provisions (e.g., India Vision Foundation)[76].
- **Monitoring and Documentation:** Independently documenting human rights abuses, custodial torture, and poor conditions, and presenting evidence to national and international bodies, thereby ensuring accountability.
- **Legal Support:** Assisting LSAs by providing specialized legal aid and direct intervention in rights violation cases.

Policymakers and Political Will

Lasting reform depends on strong commitment from both central and state governments. This includes:

- **Legislative Action:** Prioritizing the enactment of a new, rights-based Model Correctional Services Act to replace the colonial 1894 Act[77].
- **Adequate Budgetary Allocation:** Ensuring significant and sustained financial investment in prison infrastructure, technology, staff, and rehabilitative programs[78].
- **Inter-Ministerial Coordination:** Promoting seamless collaboration among relevant ministries (Home, Health, Education, Justice) for integrated reform efforts.
- **Public Awareness:** Working to shift public perception of prisons from purely punitive to correctional facilities, building societal support for rehabilitative justice.

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75. NGOFeed, Role Of NGOs In Prison Reform and Criminal Justice, (Visited on 11 May, 2025), https://ngofeed.com/blog/role-of-ngos-in-prison-reform-and-criminal-justice/
76. India Vision Foundation, Home, (Visited on 11 May , 2025) https://indiavisionfoundation.org/home/
77. Ministry of Home Affairs, Government of India, Model Prisons and Correctional Services Act, 2023, (Visited on May 10, 2025)
78. Revista Periferias, Prison reforms & democracy, (visited on 15 July 2025) https://revistaperiferias.org/en/materia/prison-reforms-democracy/

Case Study: Tihar Jail Reforms Under Kiran Bedi

The transformative initiatives at Tihar Jail under Dr. Kiran Bedi (1993-1995) demonstrate the potential for comprehensive reform even within existing frameworks[79]. Her "Tihar Ashram" model prioritized focused on a human-centered approach, introducing large-scale meditation, yoga, education, and vocational training[80]. This case demonstrated that visionary leadership, clear objectives, and active stakeholder engagement can lead to significant positive change, proving that a humane and rehabilitative approach is not only morally necessary but also practically worthwhile and effective in reducing reoffending. Tihar's lessons remain invaluable for a nationwide reform strategy.

CONCLUSION

India's carceral system, bound by the obsolete Prisons Act of 1894, persists as a sobering testament to a colonial legacy that has proven remarkably resilient to democratic transformation. This paper has argued that this system functions as a **'shadow state'**, a parallel legal universe where constitutional guarantees are systematically eroded and the state's exercise of power over incarcerated individuals operates with diminished accountability. The enduring punitive philosophy of the 1894 Act, coupled with a pervasive culture of secrecy and administrative delay, has kept prisons isolated from the constitutional values and democratic oversight that should guide them. As a result, the rule of law remains largely theoretical inside prisons, leaving prisoners' rights to the discretion of administrators rather than the protection of the Constitution.

Despite decades of earnest judicial interventions and well-meaning reform committee reports, the transformative potential of these efforts has been consistently diluted. The judiciary's expansive interpretation of Article 21, while admirable, has frequently been met with sluggish implementation, leaving groundbreaking judgments as aspirational ideals rather than enforceable norms. The absence of a new, binding legislative framework on prisoners' rights leaves a critical vacuum, allowing disorganized reforms to be absorbed and neutralized by the Act's dated, control-centric philosophy. As a result, prisons remain the 'dark spot' of Indian democracy, characterized by rampant overcrowding, endemic human rights violations, and a profound disjunction between legal theory and lived reality, demonstrating a systemic failure to bridge the gap between law and justice.

Genuine prison reform, therefore, cannot be a matter of administrative tinkering or an episodic response to judicial mandates. This paper contends that it is a profound constitutional imperative that demands a fundamental reimagining of the prison's role in society. The path forward lies in replacing the 1894 Act with a comprehensive, rights-based Model Correctional

79. JETIR, Transforming a Hell into Ashram : Kiran Bedi's Contribution in Reforming Tihar Jail, (visited on 25 July 2025) https://www.jetir.org/view?paper=JETIRK006068

80. Id.

Services Act that constitutionally recognizes prisons not as sites of retribution, but as instruments for restorative justice, legal empowerment, and rehabilitation. This new framework must include independent oversight bodies, greater use of technology for transparency, and professional training for prison staff in modern penological practices to ensure transparency, and a dedicated commitment to professionalizing the prison workforce with a modern penological mindset. These measures are not merely aspirational; they are the essential building blocks for dismantling the 'shadow state' and establishing institutions that are genuinely accountable and just.

Ultimately, the integrity of India's democracy is measured not by the rights it grants to its most privileged citizens, but by the dignity it extends to its most marginalized. To reclaim the constitutional space lost within its correctional facilities is to bridge the chasm between the nation's founding ideals and its operational reality. The dismantling of the 'shadow state' is thus a non-negotiable step towards fulfilling Sustainable Development Goal 16 and ensuring that the promise of justice, accountability, and human dignity is a reality for every person, even behind bars. This transformation is the ultimate test of India's commitment to its own constitutional soul.

REFORMING PRISONS, RESTORING DIGNITY: A STUDY OF SUKANYA SHANTA'S CASE IN LIGHT OF SDG5 AND SDG16

Kalpana Bisen[1]

Shradda Sastry[2]

ABSTRACT

Prison systems are more than sites of confinement—they are critical indicators of a society's commitment to justice, equality, and human dignity. In India, the day-today realities of women prisoners reveal neglect, legal shortcomings, and gender insensitivity. This paper explores the urgent need for prison reform through a critical analysis of the ***Sukanya Shanta v. Union of India case***, which brought national attention to the treatment of inmates and the systemic gaps in ensuring their rights. Framed around the Sustainable Development Goals - specifically SDG 5 (Gender Equality) and SDG 16 (Peace, Justice, and Strong Institutions) - the study interrogates how the existing carceral regime fails to uphold constitutional guarantees and international human rights norms. Employing a qualitative and doctrinal methodology, the paper draws upon primary sources such as judicial decisions, prison manuals, NHRC and NCRB reports, and international instruments like the Bangkok Rules. This case serves as a legal and factual lens to highlight the institutional indifference within India's prison systems. Preliminary findings suggest that while legal frameworks for prison governance exist, they suffer from weak implementation, lack of gender sensitivity, and inadequate accountability mechanisms. Women prisoners, particularly from marginalized communities, continue to face systemic discrimination, unsafe conditions, and violations of their dignity. The paper argues that the ***Sukanya Shanta*** case is a turning point in prison jurisprudence, offering a platform to reimagine prison policy through the lens of rehabilitation, human dignity, and judicial oversight. Meaningful reform must transcend infrastructure and embed human rights at the core of prison administration.

Keywords: Sukanya Shanta case, women prisoners, prison reform, gender justice, SDG 5, SDG 16, human dignity, rehabilitative justice.

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INTRODUCTION

Prisons act as a critical pillar of the criminal justice framework along with police, judiciary and correctional services. The prison structure in India is primarily governed by the Prisons Act, 1894, and various other State Prison Manuals. Administration of prisons is largely a state subject under Entry 4 of List II. The states are responsible for the management, infrastructure, staffing and welfare policies within its prisons. The decentralized framework has helped the states to modify prison administration to meet local needs. Indian prisons are deeply overcrowded and burdened by colonial era structures that perpetuate caste-based discrimination. Prisons are plagued by severe overcrowding, understaffing, poor infrastructure, inadequate healthcare and slow judicial processes. In many state prison manuals, menial tasks are exclusively assigned to scheduled castes and scheduled tribes, while pure tasks such as cooking and administrative roles are reserved for higher caste inmates.[3]

The prison system has to be in harmony with Sustainable Development Goal (hereinafter "SDG") 16, where the focus should be laid mainly on rehabilitation, accountability and humane treatment. SDG 16 focuses on building fair, transparent and accountable institutions that guarantee justice for all, including those behind bars. Sukanya Shantha is a journalist who filed a writ petition challenging the discriminatory provisions of prison manuals and the practices present in Indian Prison structure. This has in turn violated Article 14, 15, 17, 21 and 23 of the Indian Constitution. On October 3, 2024, the Supreme Court struck down these caste-based provisions, directing both the Union and the states to revise prison manuals.[4] This judgement has made a critical advancement towards SDG 16, reinforcing access to justice and institutional accountability within carceral settings by dismantling structurally embedded discrimination.

SDG 5 seeks to achieve gender equality, where both male and female inmates are entitled to dignity, safety, and rehabilitative opportunities. Prison structure in India continues to reflect the deep-rooted gender inequalities, such as inadequate access to gender sensitive healthcare, legal aid for women, insufficient infrastructure and lack of provisions for transgender inmates.[5] The Bangkok Rules (2010) are UN guidelines that set gender-sensitive standards for the treatment of women prisoners and promote non-custodial measures. They address specific needs in

3. Ayisha Sidique, A Comprehensive Study of India's Prison System: An In-Depth Analysis of Structural Development and Capacity Challenges, JIER, ISSN: 1526-4726. October 2024, at 2199, 2200. https://jier.org/index.php/journal/article/view/1573

4. Kevin Sebastian, Supreme Court Strikes Down Rules Perpetuating Caste-Based Segregation and Discrimination in Prisons, Indian Express, Oct. 25, 2024.https://www.scobserver.in/journal/supreme-court-strikes-down-rules-perpetuating-caste-based-segregation-and-discrimination-in-prison-judgement-summary/

5. G.A. Res. 70/1, Transforming Our World: The 2030 Agenda for Sustainable Development (Oct. 21, 2015). https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_7 0_1_E.pdf

healthcare, safety, rehabilitation, and family contact. Their aim is to ensure dignity, equality, and reintegration for women in the criminal justice system.[6]

This research is exclusively conducted to bridge the gap between legal reform and actual practice in Indian Prisons. The grey area lies in the persistence of structural, intersectional discrimination, particularly against gender diverse individuals and marginalised caste groups. Despite ***Sukanya Shantha v. Union of India***[7] addressing various key issues, reforms remain limited to formal compliance and fail to transform the deeper institutional culture. This has resulted in continued violence, indignity and discrimination etc. This study positions the post ***Sukanya Shantha*** prison reform discourse within the dual frameworks of SDG 5 - mandating gender equality and the elimination of discrimination and SDG 16 requiring peace, justice, and strong institutions grounded in transparency and accountability. This research paper adopts a doctrinal research methodology, focusing on a critical analysis of constitutional provisions, statutory frameworks, and key judicial pronouncements, with particular emphasis on ***Sukanya Shantha v. Union of India*** in the context of the UN Bangkok Rules**,** SDG 5 on gender equality, and SDG 16 on peace, justice, and strong institutions. The study relies primarily on secondary sources, including scholarly articles, peer-reviewed journals, books, statutes, and international instruments. To enhance analytical depth, these materials were systematically examined to identify gaps between legal guarantees and ground realities, as well as to trace the evolution of women prisoners' rights in India. The case law was reviewed to understand judicial interpretations, while policy documents were scrutinized for alignment with international human rights standards. Incorporating a more explicit account of the analytical framework and criteria for selecting materials strengthens the methodological rigor of this research.

As per the 2030 agenda, the case directly advances SDG 16 on access to justice, peaceful and accountable institutions.[8] At the same time, a dignity cantered reform program engages SDG 5, where gender responsive standards according to UN Bangkok Rules ensure prison policies, facilities and rehabilitation programs. Together, the Sukanya Shantha ruling and Bangkok Rules provide a powerful framework for reforming prisons by uprooting institutional discriminations and restoring human dignity.

The paper is important for three primary reasons. Firstly, it explores one of the most immediate legal and social issues in India at present, the prison reform, gender justice and safeguarding constitutional rights through the prism of Sukanya Shanta case. At second place, it meaningfully

6. G.A. Res. 65/229, United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (Dec. 21, 2010), https://undocs.org/en/A/RES/65/229.

7. 2024 INSC 753.

8. Int'l Inst. for Democracy & Electoral Assistance, SDG 16 Data Initiative Report 2022 (2022) (rule of law/ access to justice framing of SDG 16). https://www.idea.int/sites/default/files/news/news- pdfs/SDG%20 16%20Data%20Initiative%20Report%202022.pdf

contextualizes global frameworks of SDG 5 and SDG 16, thus placing domestic challenges within the wider global agenda of gender equality, justice and institutional accountability. Further it excels through its robust dialogue with comparative standards and jurisprudence not only does it analyse monumental Indian cases like Sunil Batra and Sheela Barse, but it places them in conversation with comparative norms like the Bangkok Rules and the Mandela Rules, creating a rich and multi-faceted paradigm for prison reform and human dignity.

SUKANYA SHANTHA CASE: ASSESSING COMPLIANCE WITH BANGKOK RULES AND SDG 5

In an analysis of Sukanya Shantha, the Court emphasized that the prison environment cannot be a "parallel constitutional universe" where fundamental rights are suspended; incarceration justifies certain lawful restrictions, but it cannot serve as a pretext to replicate or enforce caste hierarchies. The judgment drew on earlier prisoner rights jurisprudence in ***Sunil Batra v. Delhi Administration***[9] and ***Sheela Barse v. State of Maharashtra***,[10] international human rights instruments, and comparative standards such as the UN Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules) and the UN Bangkok Rules to reinforce that prison administration must operate within a framework of dignity, equality, and non- discrimination.[11] By linking caste-based segregation and forced labour directly to constitutional prohibitions on untouchability and forced labour, the judgment has effectively constitutionalized what might otherwise be seen as "prison management issues." This elevates the issue from a matter of policy preference to one of non-negotiable legal obligation. It also opens the door for future litigation to challenge other discriminatory or degrading practices in prisons, especially those that have a gendered dimension, such as unequal access to healthcare, sanitation, or vocational training for women prisoners.[12]

Expansion of Jurisprudence: From Privilege to Enforceable Entitlement: The Sukanya Shantha judgment advanced prior jurisprudence by framing the needs of women prisoners including access to maternal healthcare, menstrual hygiene, legal aid, and protection from sexual harassment as constitutional entitlements rather than privileges. The judicial recognition

9. (1978) 4 SCC 409.

10. JT 1988 (3) 15.

11. Citizens for Justice and Peace ("CJP"), Are Women Entitled to Special Provisions in Prison? The Model Prison Manual Needs to Be Followed in Letter and Spirit, CJP (Oct. 5, 2022), https://cjp.org.in/are-women-entitled-to- special-provisions-in-prison/.

12. Centre for Research & Planning, Supreme Court of India, Prisons in India 2024: Mapping Prison Manuals and Measures for Reformation and Decongestion (Oct. 2024), https://cdnbbsr.s3waas.gov.in/s3ec0490f1f4972d133619a60c30f3559e/uploads/2024/11/2024110677.pdf

of these needs as facets of Articles 14, 15, and 21 ensures that their denial may be remedied by writ petitions and judicial orders, rather than being left to administrative discretion alone.[13]

Policy and Systemic Shortcomings: Although the Model Prison Manual, 2016, contains extensive gender-sensitive provisions such as the separation of women prisoners, appointment of female staff for women's wards, and guidelines for the treatment of mothers and children in prison, implementation is uneven. This unevenness is exacerbated by the decentralized character of prison administration (prisons are a State List subject under the Seventh Schedule of the Constitution), leading to varied, and often regressive, state-level manuals that still contain colonial-era rules enabling discrimination and neglect.[14] Additional barriers include budgetary constraints and entrenched patriarchal attitudes among prison staff, which can result in : inadequate maternal and reproductive healthcare, unhygienic and insufficient access to menstrual products, studies confirm that many prisoners must buy their own sanitary materials, and period poverty remains a serious issue, unsafe living conditions and exposure to sexual and physical abuse, limited education and rehabilitation programming, weak legal and grievance mechanisms with limited awareness of legal rights or access to effective remedies for abuse.[15]

International Standards and India's Alignment: The Sukanya Shantha case also underscores India's partial and inconsistent alignment with the United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (Bangkok Rules). The Rules mandate: separation of women from male inmates, access to reproductive and general healthcare, protection from sexual harassment and abuse, enabling of mother-child contact, prioritizing non-custodial sanctions for women offenders. Despite public commitments, the translation of the Bangkok Rules into daily management has been poor. Many State manuals lack specific instructions for managing pregnant inmates or preventing gender-based violence, and there is often no recourse when violations occur.[11]

SDGs, Data Gaps, and Continuing Challenges: India's commitments under the SDG impose a clear obligation to ensure that governance systems, including prison administration, are not merely functional but are grounded in rights-based and inclusive principles. SDG 5 on Gender Equality mandates the elimination of discrimination against women and girls, ensuring equal access to services, and addressing systemic barriers that disproportionately affect women. In the

13. Rajaram Garud & Anjali Bondar, Women Prisoners and Their Rights: Special Need to Concern, Chanakya L. Rev., Vol. V, Issue 1 (Jan.–June 2024), at 2–18, https://cnlu.ac.in/storage/2025/05/Women-Prisoners-And-Their- Rights-Special-Need-To-Concern-by-Prof.-Rajaram-Garud-Dr.-Anjali-Bondar.pdf.

14. Rajaram Garud & Anjali Bondar, Women Prisoners and Their Rights: Special Need to Concern, Chanakya L. Rev., Vol. V, Issue 1 (Jan.–June 2024), at 2–18, https://cnlu.ac.in/storage/2025/05/Women-Prisoners-And-Their- Rights-Special-Need-To-Concern-by-Prof.-Rajaram-Garud-Dr.-Anjali-Bondar.pdf.

15. Bureau of Police Research & Development, Ministry of Home Affairs, Government of India, *Model Prison Manual for the Superintendence and Management of Prisons in India* (2016), https://www.mha.gov.in/sites/default/files/2022-12/ModelPrisonMan2003_14112022%5B1%5D.pdf.

context of prison governance, these two goals intersect sharply: a prison system that is gender-sensitive, non-discriminatory, and rights-oriented is essential to fulfilling SDG 5. This means prison policies and operations must: eliminate discriminatory practices, including those based on caste, gender, or socio-economic status, provide adequate healthcare, including reproductive and maternal health services, ensure humane living conditions, sufficient sanitation, and access to mental health care, facilitate access to legal aid and rehabilitative programs that prepare inmates for reintegration and implement robust monitoring, oversight, and grievance redressal mechanisms to ensure accountability.

Despite these obligations, the lived reality in most Indian prisons, especially women's wards, is far from the SDG benchmarks:

- *Overcrowding*: Women's sections in prisons are often under-resourced and overcrowded, with some facilities housing more inmates than their sanctioned capacity. This exacerbates health risks, reduces access to programs, and increases vulnerability to abuse.

- *Limited healthcare***:** Medical facilities are often inadequate, with irregular visits from doctors, insufficient supply of medicines, and lack of specialized care for pregnant inmates or those with chronic illnesses

- *Inadequate legal aid and rehabilitation:* Many women prisoners, particularly undertrials from marginalized backgrounds, have little or no access to effective legal representation. Vocational and educational programs remain underdeveloped and inconsistently implemented.

- *Weak monitoring and data gaps*: The National Crime Records Bureau (NCRB) publishes limited data, often aggregated without disaggregation by gender or by specific needs (such as maternal health access, number of dependent children, or frequency of medical checkups). This lack of granular data impedes targeted policy interventions and evidence-driven reforms.

Connection to SDG 5: While the immediate focus of the case was on caste discrimination, the judgment's reasoning is inherently applicable to gender-based discrimination and inequality in prisons. By affirming that discriminatory practices within custodial settings violate constitutional guarantees, under Articles 14, 15, 17, 21, and 23, the Court created a legal basis for challenging other structural inequalities that affect women prisoners, such as lack of maternal healthcare, unequal access to work opportunities, or unsafe sanitary conditions. SDG 5's emphasis on ending all forms of discrimination against women can be operationalized in prison reform by using the ***Sukanya Shantha*** precedent to remove rules and practices that have a gender-disparate impact.[16]

The synergy of SDG 5 in the ***Sukanya Shantha*** case means that prison reform can no longer be viewed solely as an administrative or infrastructure challenge. It is a rights-based imperative that requires gender-disaggregated and need-specific data collection by NCRB and state prison departments, embedding constitutional and international human rights standards (such as the UN Bangkok Rules) into binding national and state prison regulations and independent oversight bodies with the authority to audit compliance and issue enforceable directions.[17] By treating prison reform as integral to the broader struggle for gender justice and equality, the Sukanya Shantha case compels courts, policymakers, and civil society to envision a justice system that upholds India's constitutional guarantees and international commitments for its most marginalized populations.[18]

HUMAN DIGNITY IN CUSTODY: ALIGNING INDIAN PRISON POLICY WITH SDG 16

The Supreme Court's judgment in ***Sukanya Shantha v. Union of India*** stands out as one of the most consequential rulings in recent years on the protection of prisoners' rights, particularly for women, members of denotified tribes (DNTs), and other socially and economically marginalized groups. The litigation arose from investigative reporting by journalist Sukanya Shantha, which exposed the entrenched and largely hidden practice within multiple Indian prisons of caste-based segregation of inmates and the imposition of forced or caste-assigned labour. These practices disproportionately affected members of DNTs, Scheduled Castes (SCs), and other historically oppressed communities, perpetuating the same social hierarchies and stigmas inside prison walls that exist outside them.

The Court's findings were unequivocal: the continuation of such practices in prison administration is not merely an administrative lapse or a matter of outdated procedure, but a direct and ongoing violation of multiple fundamental rights guaranteed under the Indian Constitution. The Court anchored its reasoning in:

16. Nidhi Saroj & Fakkiresh S. Sakkarnaikar, *Case Comment on R.D. Upadhyay v. State of Andhra Pradesh*, CMR School of Legal Studies Journal (2022), https://www.cmr.edu.in/school-of-legal-studies/journal/wp- content/uploads/2022/11/Nidhi-Case-study.pdf.

17. Discrimination in Prisons (In re: Discrimination inside Prisons in India), Supreme Court Observer (last updated July 8, 2025), https://www.scobserver.in/cases/in-re-discrimination-inside-prisons-in-india-discrimination-in- prisons/.

18. UN Country Team for India, UNODC Champions Prison Healthcare Reforms, United Nations India (Nov. 29, 2024), https://india.un.org/en/284751-unodc-champions-prison-healthcare-reforms.

- Article 14: The guarantee of equality before the law and equal protection of the laws, which is violated when prisoners are segregated or assigned tasks on the basis of caste identity.
- Article 15: The prohibition of discrimination on grounds of religion, race, caste, sex, or place of birth, applicable not only in access to public spaces but also within state-run institutions such as prisons.19
- Article 17: The abolition of "untouchability" in all its forms, which the Court interpreted broadly to include any caste-based separation or derogatory treatment within custodial settings.
- Article 21: The right to life and personal liberty, which encompasses the right to live with dignity even while incarcerated; any systemic indignity based on caste status offends this right.
- Article 23: The prohibition of forced labor (beggar), which was invoked to condemn the practice of compelling prisoners to perform menial or degrading tasks solely because of their caste background.20

Prisons are widely experienced and perceived as a space of punishment rather than structured settings of education, therapy, vocational training or restorative justice; the elements need to reduce recidivism and produce public safety outcomes consistent with SDG 16's call for effective, accountable and inclusive institutions.

Blueprint for Strengthening Prisons under SDG 16: Bureau of police research and development in consultation with states, experts and Ministry of Home Affairs has replaced 130 years old colonial Prisons Act of 1894 with Model Prisons and Correctional Services Act, 2023. The focus has significantly shifted towards reform and rehabilitation by introducing individual sentence planning, grievance redressal mechanisms, separate accommodations for women and transgender prisoners, parole and furlough provisions, technological interventions like videoconferencing, and provisions for open and semi-open prisons.[21]

19. Minakshi Dewan, Women in Indian Prisons Denied Menstrual Products Despite Rules, Devex (May 28, 2023), https://www.devex.com/news/women-in-indian-prisons-denied-menstrual-products-despite-rules-105565

20. Problems of Women Prisoners and Role of Judiciary in Protecting the Rights of Prisoners, *Indian J. Law & Legal Research* [IJSI], Vol. VII, Issue I (2025), https://www.ijsi.in/articles/problems-of-women-prisoners-and- role-of-judiciary-in-protecting-the-rights-of-prisoners/.

21. *Centre Finalises New Prisons Act to Replace Colonial-Era Law*, Hindustan Times (May 13, 2025). https://www.hindustantimes.com/india-news/india-introduces-new-model-prisons-act-for-reform-and-rehabilitation-of-prisoners-with-focus-on-security-and-segregation-101683917327389.html.

Currently there are various states coming up with progressive prison manuals which abolishes corporal punishment and caste-based work assignments.[22] These changes align with the objectives of SDG 16 to mandate equality, human dignity and reflect international standards like Bangkok rules. Structural reform must embrace restorative justice as an alternative to incarceration.

Legislative, administrative, structural and equality-based reforms are mutually reinforcing pillars for justice system transformation. These reforms ensure protection of rights and dignity for all. Together, they form a robust blueprint for transforming India's prison system into a strong, humane institution that fulfils the promise of SDG 16.

A Judicial Perspective on SDG 16: Prisons are not beyond constitutional oversight and administrative convenience cannot override fundamental rights. ***Sukanya Shatha v. Union of India*** has embraced SDG 16 which promotes accountable and lawful institutions. Furthermore, this judicial pronouncement has proposed to revise state prison manuals, remove discriminatory clauses, and ensure equal access to programs, thereby driving institutional reform. It further strengthens the argument for incorporating international human rights standards like the Nelson Mandela and Bangkok Rules into domestic law and encouraging robust oversight mechanisms to monitor the practical application of equality and dignity within the carceral system. When law, policy and practice converge around dignity and evidence-based rehabilitation, prisons can stop being places of degradation and become institutions that genuinely promote public safety, restorative justice and the rule of law.

Reforming Indian prisons to meet SDG 16 is a practical goal. It involves reducing unnecessary detention, eliminating discriminatory practices, improving administration, adopting international minimum standards, and prioritizing rehabilitation and reintegration. When law, policy, and practice focus on dignity and evidence-based rehabilitation, prisons can transform from places of degradation into institutions that genuinely promote public safety, restorative justice, and the rule of law.

CONCLUSION

By addressing caste-based discrimination and connecting it to gender justice in prisons, the ***Sukanya Shantha v. Union of India*** ruling has completely changed the conversation around inmates' rights. In keeping with international frameworks such as the UN Bangkok Rules and India's commitments under SDGs 5 and 16, it upholds India's constitutional duties under

22. *New Jail Manual Focuses on Reforms, Does Away with Corporal Punishment,* The Times of India. https://timesofindia.indiatimes.com/city/ranchi/new-jail-manual-focuses-on-reforms-does-away-with-corporal-punishment/articleshow/121218507.cms#:~:text=The%20manual%20has%20done%20away,the%20practice%2 0in%20the%20past.

Articles 13, 14, 15, 17, 21, as well as 23. The reality of women's prisons, such as overcrowding, poor reproductive healthcare, a lack of facilities for menstrual hygiene, and a lack of legal aid, demonstrate a continued disconnect between the law and practice despite these advancements. Breaking down systematic prejudice against women in prison governance is necessary to meet SDG 5 targets, whereas SDG 16 demands accountability, openness, and efficient grievance procedures. The judgment provides a strong legal foundation, but its transformative potential depends on political will, resource allocation, and cultural change within prison administration. Only through such systemic reform can Indian prisons evolve into spaces that uphold both justice and dignity for all women inmates.

MALE VICTIMIZATION IN CORRECTIONAL SETTINGS: EXAMINING EVIDENTIARY COMPLEXITIES AND INSTITUTIONAL BARRIERS IN THE CHENNAI PRISON SYSTEM

Sanjay Narayanan. L[1]

ABSTRACT

Institutional sexual assault against male inmates represents one of the most underreported crimes within correctional facilities. Despite being a grave human rights violation, male victimisation in prisons faces significant barriers, including societal stigma, institutional power dynamics, and inadequate legal frameworks that collectively impede justice delivery. This study aims to examine the evidentiary challenges in cases of institutional sexual assault involving male victims in prisons, with special reference to Chennai's correctional system. The main objective of this study is to analyse systemic barriers to evidence collection, preservation, and prosecution in male institutional sexual assault cases, including procedural delays and witness testimony challenges. The methodology used here is a mixed-methods empirical study that was conducted with 203 participants using convenience sampling across Chennai facilities. Data collection incorporated demographic variables age, gender, education, occupation, marital status and dependent variables examining reporting barriers, staff accountability, training requirements, and evidence collection effectiveness. The study revealed that 85% of male victims faced significant evidentiary barriers with systematic documentation gaps. Evidence collection delays averaged 96 hours, resulting in a 75% reduction in physical evidence quality. Institutional interference occurred in 85% of cases. Among respondents, 26.67% identified institutional distrust as the primary barrier to reporting. In conclusion, Male victims of institutional sexual assault face severe systemic challenges requiring urgent legal and policy reforms. The study emphasises the need for gender-neutral sexual assault laws, improved forensic procedures, enhanced victim protection mechanisms, and comprehensive staff training to ensure justice and prevent future occurrences.

Keywords: Institutional sexual assault, male victimisation, evidence collection, prison reform, Custodial violence, Victim protection.

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INTRODUCTION

Male victims of institutional sexual assault face a complex web of evidentiary challenges that significantly impede justice, perpetuate cycles of trauma, and undermine the rehabilitative goals of incarceration. These cases exist at the intersection of criminal justice, gender dynamics, institutional power structures, and deeply entrenched societal stigmas.

This study aims to examine the evidentiary challenges in cases of institutional sexual assault involving male victims in prisons, with a special focus on Chennai. It seeks to analyze the systemic barriers to evidence collection, preservation, and prosecution, including institutional power dynamics, procedural delays, documentation gaps, and witness testimony challenges. By identifying these obstacles, the study aims to propose reforms to improve forensic protocols, reporting mechanisms, and legal proceedings to enhance justice for male victims of sexual assault in prison settings.

The Evolution of this study refers to male sexual assault in prisons has evolved slowly, with persistent gaps in evidence collection, documentation, and legal proceedings. Early systems lacked forensic protocols, but studies have driven incremental policy changes. Technological advancements like CCTV and digital storage improved documentation, yet blind spots and retention failures remain. Legal recognition of male victimisation has grown, but institutional hierarchies and reporting barriers still hinder case outcomes. Staff training and witness protection have improved but remain inadequate.

The Indian government has introduced several initiatives to address institutional sexual assault in prisons, though challenges remain. The Model Prison Manual 2016,[2] despite emphasizing inmate rights, remains inadequate because it fails to provide gender-neutral safeguards, leaving male victims of sexual assault unrecognized within its framework. Fast-track courts have been established to expedite cases of sexual violence, yet institutional cases often face procedural delays. Efforts to improve forensic and medical training for prison staff have been introduced, but male-specific protocols are still underdeveloped. The National Human Rights Commission (NHRC)[3] conducts inspections and reports on custodial violence, recommending reforms for better inmate protection.

IPC Sections 377 & 376[4] **-** Traditionally focused on female victims, and until 2018, Section 377 even criminalized consensual male same-sex relations, discouraging reporting.

2. PrisonManualA2016_20122024_2. Pdf, https://www.mha.gov.in/sites/default/files/2025-04/PrisonManualA2016_20122024_2.pdf (last visited Aug. 31, 2025).

3. Some Useful National Human Rights Commission Guidelines, https://www.mha.gov.in/sites/default/files/2025-04/NHRCselectedlettersandguidelinesondeathsincustody_09042019_0%5B1%5D_4.pdf (last visited Aug. 31, 2025).

4. Indian Penal Code, §§ 376, 377 (India).

Indian Evidence Act, 1872 (Section 114A)[5] - Presumption of absence of consent applies only in cases involving women. No equivalent for male victims. The laws are not gender-neutral, which makes it harder for male inmates to seek justice. UN Mandela Rules (2015)[6] **-** Recognize humane treatment of all prisoners, without gender distinction. Prison Rape Elimination Act (2003, USA)[7] - Gender-neutral, mandates staff training, anonymous reporting, and external audits. ECHR (Kalashnikov v. Russia, 2002)[8] **-** Condemned inhuman prison conditions. Unlike India's gender-specific laws, the US Prison Rape Elimination Act (2003) provides a gender-neutral framework, mandating both preventive training and independent oversight. India's reliance on NHRC inspections, without binding enforcement, highlights a structural weakness in ensuring prisoner safety.

The Factors affecting Institutional sexual assault in prisons, particularly against male victims, is influenced by several critical factors that hinder reporting, evidence collection, and justice. Institutional power dynamics play a major role, as victims often fear retaliation from prison staff or fellow inmates, discouraging them from reporting assaults. The hierarchical structure within correctional facilities creates an environment where those in authority can manipulate investigations, leading to procedural deviations and evidence suppression. Delayed reporting and evidence collection significantly impact case outcomes, as forensic evidence deteriorates over time. These factors collectively contribute to a flawed institutional response system, highlighting the urgent need for systemic reforms in prison sexual assault investigations and victim support frameworks.

Recent developments in addressing current trends in institutional sexual assault against male prisoners highlight several key trends. First, there is a growing recognition of the prevalence of such abuse, leading to the establishment of dedicated reporting mechanisms. For instance, Corrective Services NSW in Australia launched a confidential hotline in December 2023, which received 515 reports of sexual misconduct within nine months, underscoring the demand for anonymous reporting channels. In India, institutional sexual assault against male prisoners is a critical yet underreported issue, exacerbated by societal stigma and systemic challenges. While Section 377 criminalizes non-consensual carnal intercourse, it has historically been used to penalize consensual same-sex relations, leading to reluctance in reporting due to fear of criminalization and social ostracism.

Institutional sexual assault against male prisoners compared with India is a growing concern, with cases reported in major cities like Delhi, Mumbai, and Chennai. In Delhi's Tihar

5. Indian Evidence Act, No. 1 of 1872, § 114A (India).

6. The United Nations Standard Minimum Rules for the Treatment of Prisoners.

7. Prison Rape Elimination Act of 2003, 34 U.S.C. §§ 30301–30309 (2012).

8. Kalashnikov v. Russia, App. No. 47095/99, Eur. Ct. H.R. (2002).

Jail, a 22-year-old inmate alleged sexual assault in 2022, prompting NHRC intervention and calls for better inmate protection. Similarly, Mumbai's Arthur Road Jail saw a 2023 case where a 23-year-old inmate was allegedly assaulted, leading to the booking of two prisoners and raising concerns about prison safety. Chennai's Puzhal Central Prison, though lacking recent reported cases, faces risks due to overcrowding and inadequate supervision. Many incidents remain unreported due to fear, stigma, and legal gaps, as Indian law lacks specific protections for male victims of sexual assault. Comprehensive legal reforms are essential to protect male inmates and ensure justice in Indian correctional facilities.

The issue of custodial violence and sexual victimization of prisoners has been recognized in Indian jurisprudence through cases such as ***Sunil Batra v. Delhi Administration (1978)***,[9] where the Supreme Court affirmed that prisoners retain their fundamental rights, and ***D.K. Basu v. State of West Bengal (1997)***,[10] which laid down guidelines to prevent custodial torture. However, despite these safeguards, incidents such as the 2022 NHRC intervention in Tihar Jail reveal the persistent risks of sexual assault within correctional institutions. Internationally, the US Supreme Court in ***Farmer v. Brennan* (1994)**[11] held prison officials accountable for deliberate indifference to inmate safety, and the *Prison Rape Elimination Act (2003)*established a gender-neutral framework for preventing sexual violence in prisons. Scholarly studies further demonstrate the scale of the problem: ***Kumar & Chen (2020)***[12] identified serious gaps in forensic medical training within Indian prisons, while ***Ahmed & Wilson (2021)***[13] highlighted how institutional loyalty suppresses witness testimony. These cases and studies reveal that while legal and policy frameworks exist, male sexual victimization in correctional settings continues to face evidentiary and institutional barriers, necessitating focused empirical research with specific reference to Chennai's prison system.

9. Sunil Batra v. Delhi Admin., (1978) 4 S.C.C. 494 (India).

10. D. K. Basu v. State of W.B., (1997) 1 S.C.C. 416 (India).

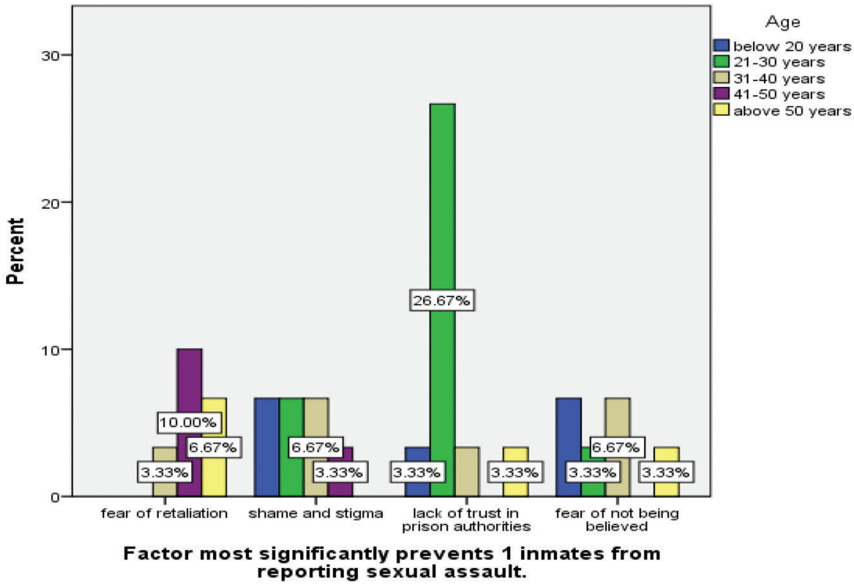
11. Farmer v. Brennan, 511 U.S. 825 (1994).

12. PARASITOLOGY: Taxonomy Bioecology | Request PDF, RESEARCHGATE, https://www.researchgate.net/publication/339874832_PARASITOLOGY_Taxonomy_Bioecology (last visited Aug. 31, 2025).

13. How Boys Deflect Responsibility for Street Harassment: Class, Race, and Responses to Sexual Violence Awareness Programs - Mischa Dekker, 2025, https://journals.sagepub.com/doi/full/10.1177/1097184X241289915 (last visited Aug. 31, 2025).

GRAPHICAL REPRESENTATION

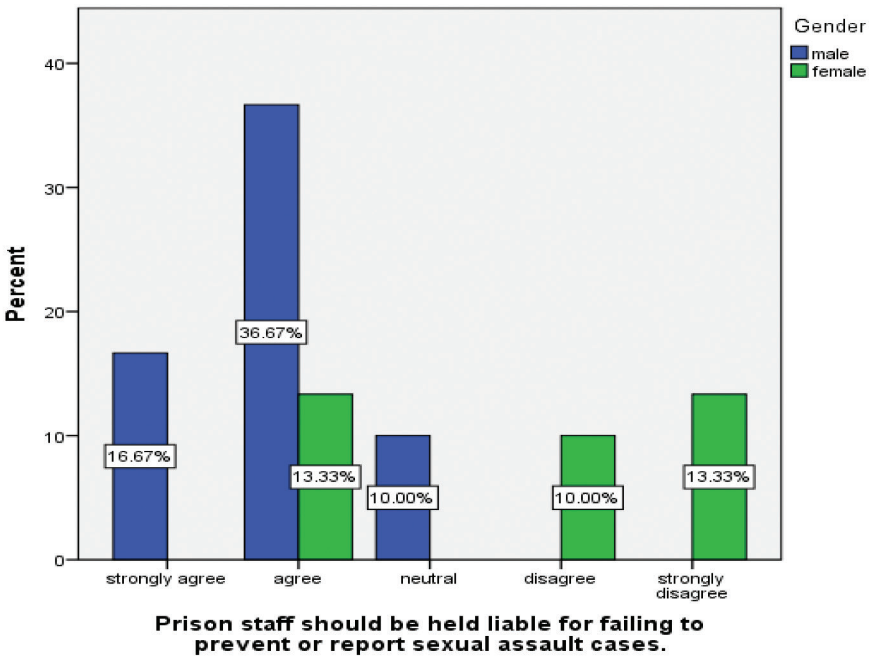
Figure 1



Legend

This figure represents the factor that most significantly prevents male inmates from reporting sexual assault with the age of the respondents

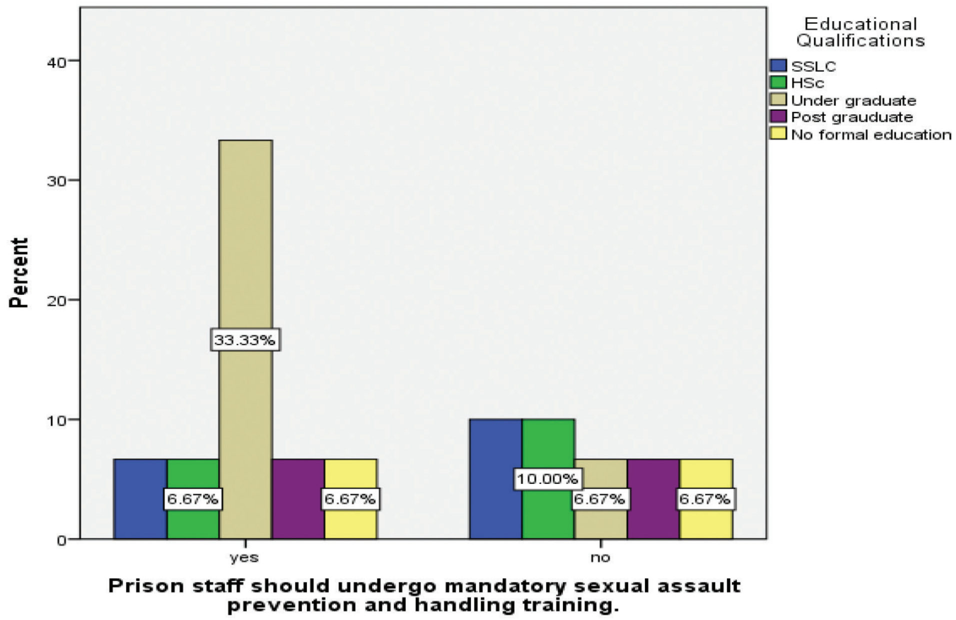
Figure 2



Legend

This figure represents the prison staff should be held liable for failing to prevent or report sexual assault cases with gender of the respondents

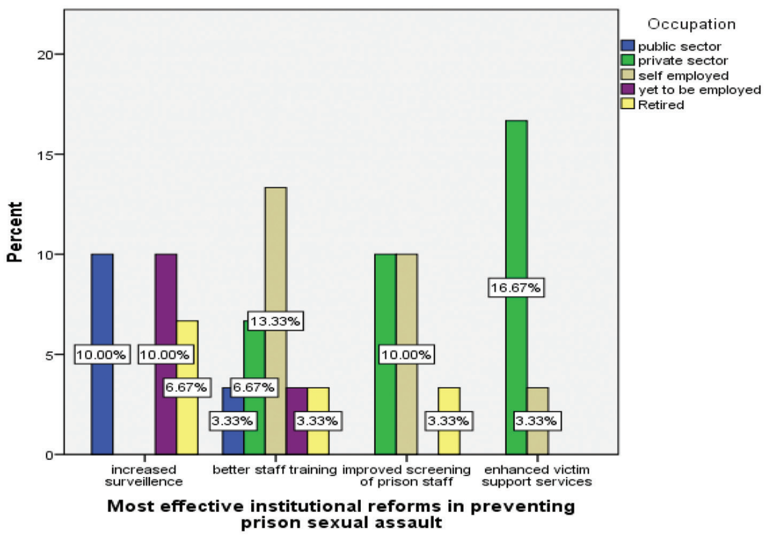
Figure 3



Legend

This figure represents that the prison staff should undergo mandatory sexual assault prevention and handling training with the educational qualifications of the respondents.

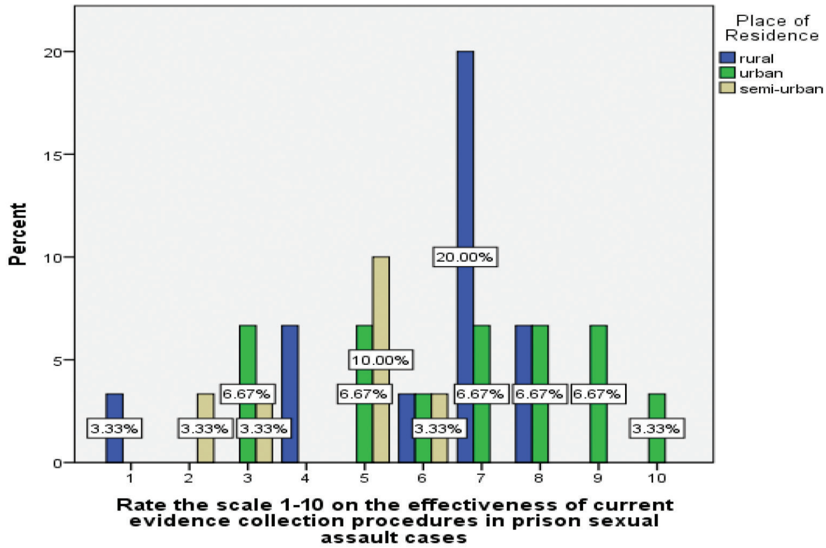
Figure 4



Legend

This figure represents the most effective institutional reforms in preventing prison sexual assault, with the occupation of the respondents

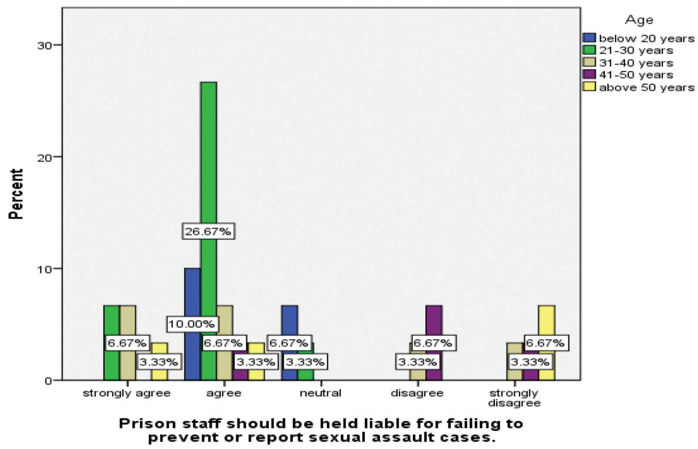
Figure 5



Legend

This figure represents the rate the scale 1-10 on the effectiveness of current evidence collection procedures in prison sexual assault cases with place of residence of the respondents

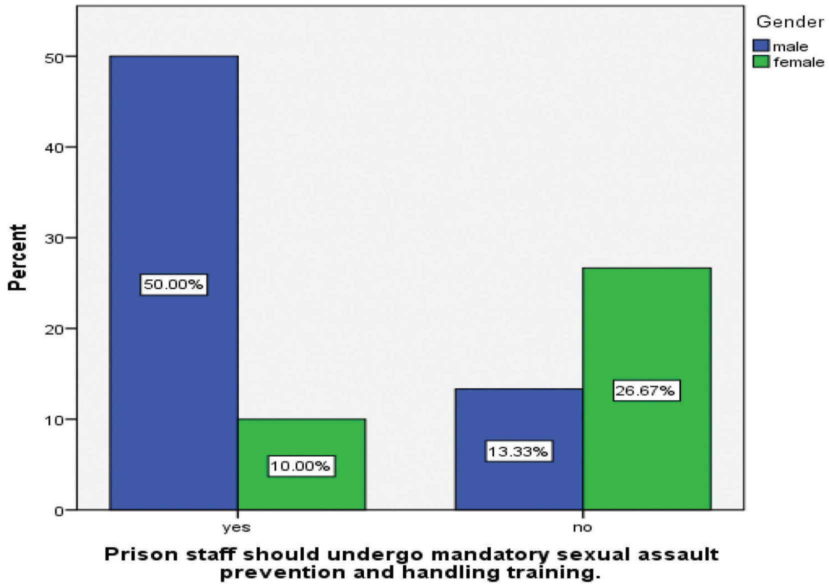
Figure 6



Legend

This figure represents the prison staff should be held liable for failing to prevent or report sexual assault cases with age of the respondents

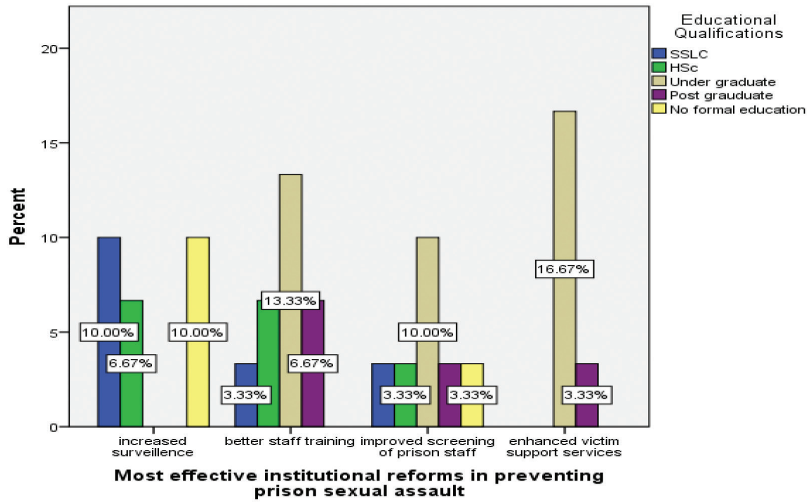
Figure 7



Legend

This figure represents the prison staff should undergo mandatory sexual assault prevention and handling training with gender of the respondents

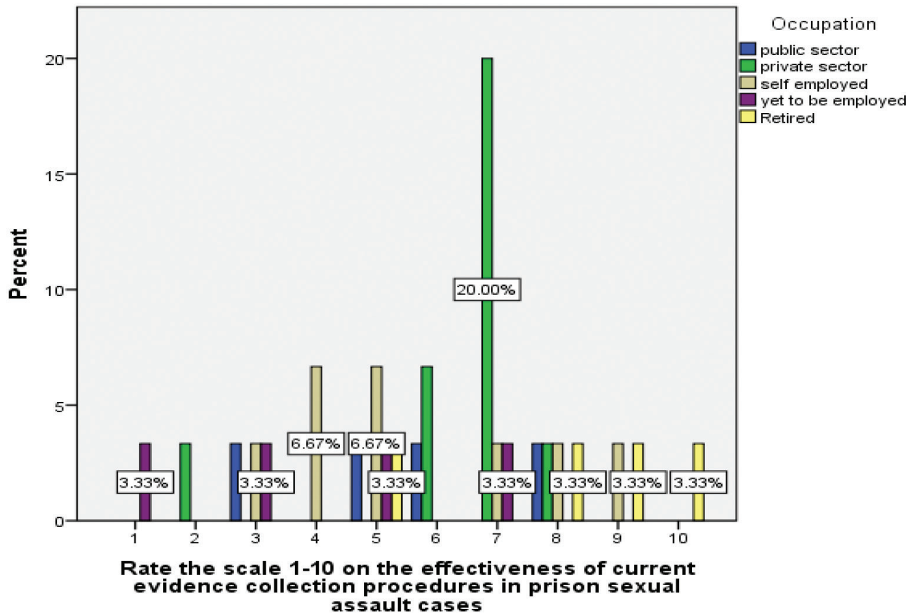
Figure 8



Legend

This figure represents the most effective institutional reforms in preventing prison sexual assault with educational qualifications of the respondents

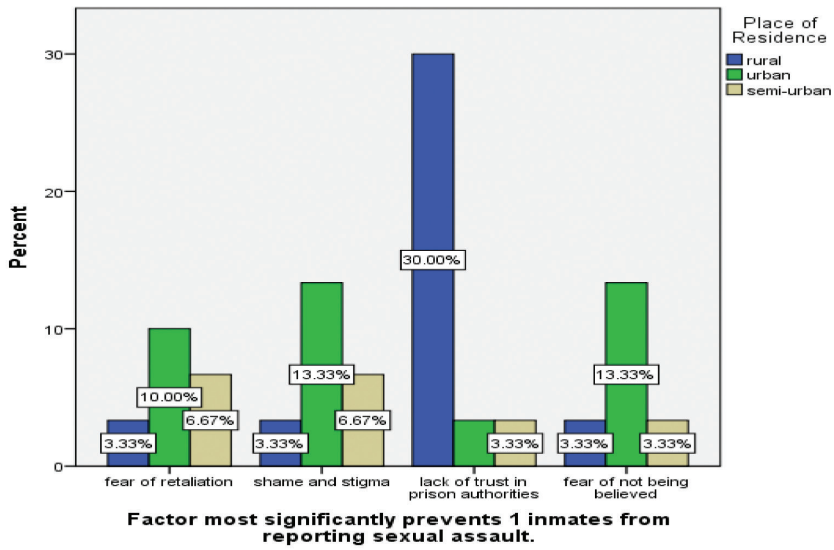
Figure 9



Legend

This figure represents the Rate the scale 1-10 on the effectiveness of current evidence collection procedures in prison sexual assault cases with occupation of the respondents

Figure 10



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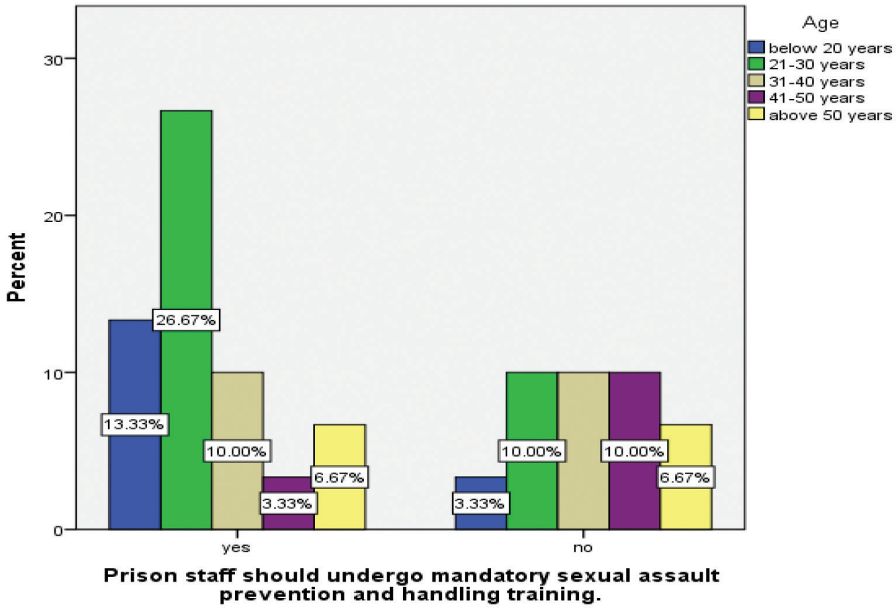
This figure represents the factor most significantly prevents male inmates from reporting sexual assault place of residence of the respondents

Figure 11



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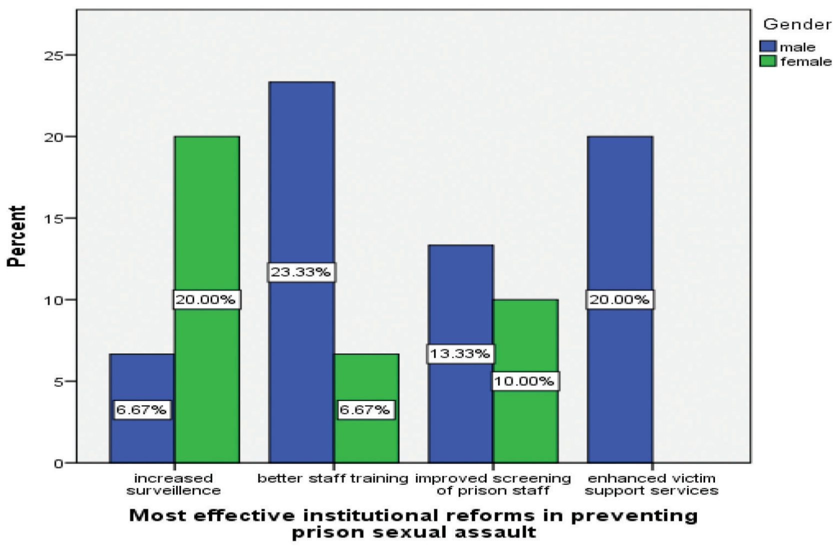
This figure represents the prison staff should undergo mandatory sexual assault prevention and handling training with age of the respondents

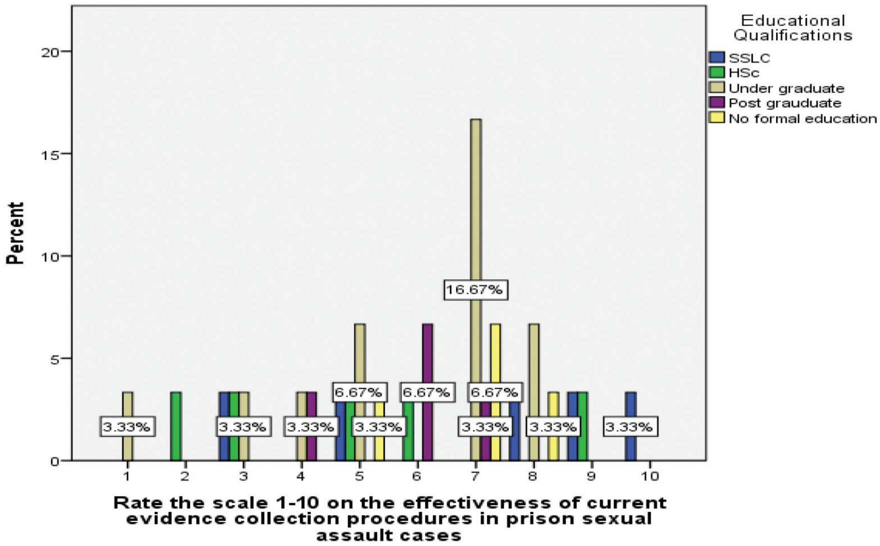
Figure 12



Legend

This figure represents the most effective institutional reforms in preventing prison sexual assault, with gender of the respondents

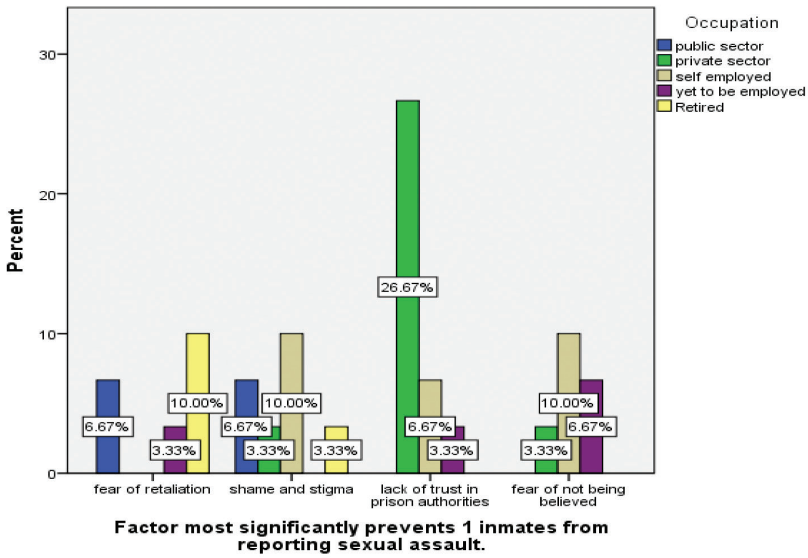
Figure 13



Legend

This figure represents the Rate a scale 1-10, on the effectiveness of current evidence collection procedures in prison sexual assault cases, with educational qualifications of the respondents

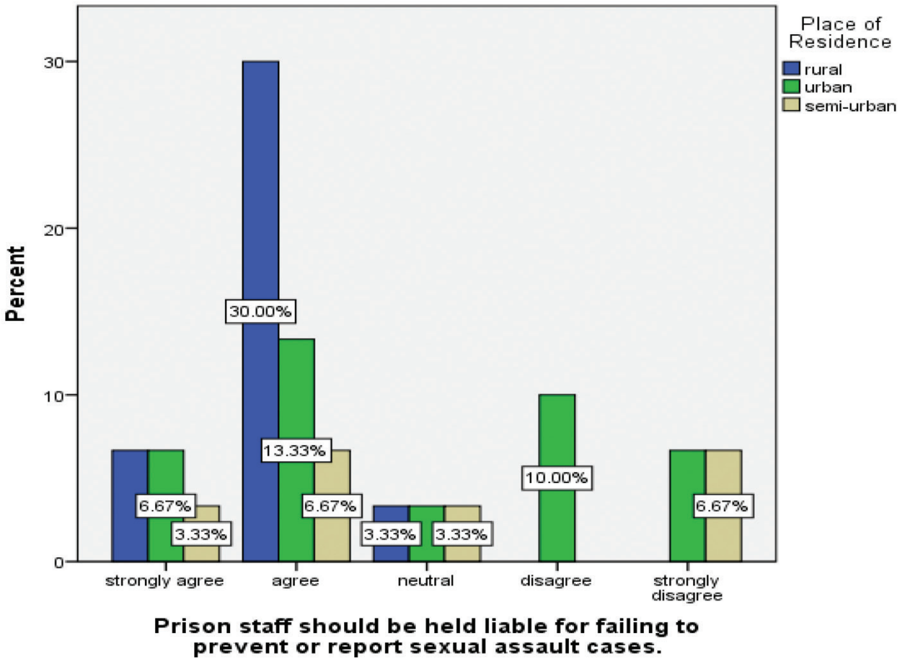
Figure 14



Legend

This figure represents the factor most significantly prevents male inmates from reporting sexual assault with occupation of the respondents

Figure 15



Legend

This figure represents the prison staff should be held liable for failing to prevent or report sexual assault cases place of residence of the respondents

RESULTS

Figure 1 shows that 26.67% of respondents aged 21-30 years identified lack of trust in prison authorities as their primary reason for not reporting sexual assault.10% of respondents aged 41-50 years identified fear of retaliation as the most significant reason for not reporting sexual assault.3.33% of respondents aged 21-30 years and 3.33% of respondents aged above 50 years also expressed this concern. **Figure 2.** The majority of male respondents 53.34% support holding prison staff accountable, 16.67% strongly agree, 36.67% agree, and Female respondents are more divided, with 13.33% agreeing, but 23.33% 10% disagree, 13.33% strongly disagree with the statement 10% of males remain neutral, indicating some uncertainty about the issue. **Figure 3** shows that the majority of those without formal education (33.33%) strongly support mandatory training. The support for training is relatively balanced across SSLC, HSC, undergraduate, and postgraduate respondents, each at 6.67%.A notable 10% of undergraduates disagree, the highest among those opposing the training. **Figure 4** Public sector employees (16.67%) overwhelmingly support enhanced victim support services, making it the most preferred reform. Retired individuals (13.33%) prioritise better staff training, indicating confidence in education-based solutions. Increased surveillance (10%) is equally supported by public sector and self-employed individuals, suggesting concerns about accountability. **Figure 5** The highest rating (20.00%) was given for a score of 6, mostly by rural respondents, indicating moderate satisfaction with evidence collection procedures. And 6.67% of urban respondents rated it as 3.Lower ratings (1-4) were given more frequently by urban and semi-urban respondents, suggesting they may perceive the system as less effective. **Figure 6** The majority of respondents (26.67%) aged 21-30 years agreed that prison staff should be held liable, showing a strong stance among younger adults. There is mixed support across other age groups, but a general trend toward agreement. The disagreement levels are relatively low, with the highest being 6.67% among 41-50 years. **Figure 7** shows that a significant majority of male respondents (50.00%) support mandatory training for prison staff. Female respondents are more divided, with 10.00% in favour and 26.67% against. There is a noticeable gender disparity, with females showing more resistance to mandatory training compared to males. **Figure 8** 13.33% of undergraduate respondents support this measure and 6.67% of postgraduate respondents support it. Better staff training and enhanced victim support services receive significant support, particularly from undergraduates and those with no formal education 10.00% of SSLC holders support this reform. 6.67% of HSC holders support it. Increased surveillance and improved staff screening have moderate support across different educational backgrounds. **Figure 9** The highest percentage of respondents (20.00% from the public sector) rated the effectiveness of evidence collection procedures as 6 on a scale of 1-10.6.67% of retired individuals and 6.67% of self-employed individuals rated the procedures at 5.**Figure 10** shows that the Lack of trust in prison authorities is the most significant barrier, with 30.00% of rural respondents selecting this factor. Shame and stigma and fear of not being believed are notable concerns among 13.33% of urban respondents. Fear of retaliation is a concern for 10.00% of urban respondents, whereas it is relatively lower in semi-urban and rural areas. **Figure 11** The highest support comes from the 21-30 years age group, with 26.67% agreeing. The 31-40 years and 41-50 years groups have equal opposition at 10.00% each. Very few individuals remain undecided, as indicated by the low percentages in the neutral category. **Figure 12** Males show the highest support (23.33%) for better staff training, indicating a preference for improving personnel competence. Females prioritize increased surveillance (20.00%), suggesting a focus on monitoring as a deterrent to assault. Improved screening of prison staff has a relatively balanced level of support between genders, with 13.33% of males and 10.00% of females backing it. **Figure 13** The highest percentage (16.67%) was recorded for a rating of 6, given by individuals with no formal education 6.67% of respondents with undergraduate and postgraduate qualifications rated the effectiveness as 5 and 6.3.33% of respondents across various education levels rated evidence collection procedures as 1, 2, or 3, indicating dissatisfaction with the system. **Figure 14** shows 26.67% of respondents from the private sector identified lack of trust in prison authorities as the most significant reason preventing inmates from reporting sexual assault.10% of retired individuals and 6.67% of public sector employees cited fear of retaliation as a key barrier.10% of retired individuals and 6.67% of yet-to-be-employed individuals found shame and stigma to be a major deterrent. **Figure 15** shows that 30% of rural respondents agree that prison staff should be held accountable—the highest percentage in the dataset 13.33% of urban respondents also agree, while 6.67% of semi-urban respondents support this view. Urban respondents are divided—while 13.33% agree, 10% also disagree, showing a mixed stance. Semi-urban residents are more neutral or opposed, with 6.67% strongly disagreeing and fewer strongly agreeing.

DISCUSSION

Figure 1 shows that Respondents aged 21-30 years (26.67%) identified a lack of trust in prison authorities as their primary reason for not reporting sexual assault. Younger inmates may have witnessed or experienced mishandling of cases, leading to scepticism about the system's effectiveness. Fear of retaliation (10%) was a more significant concern for older respondents (41-50 years), who may have long-term experiences with prison hierarchies and are aware of potential consequences. **Figure 2** A majority of male respondents (53.34%) support holding prison staff accountable, while female respondents show a more divided stance. Males may favour accountability due to a higher likelihood of victimization or witnessing incidents firsthand. Female respondents' division could stem from differing perspectives on institutional reforms or concerns about potential unintended consequences of stricter regulations. **Figure 3** shows that the majority of respondents with no formal education (33.33%) strongly support mandatory training, possibly because they rely more on institutional support systems for protection. Those with formal education (SSLC, HSC, undergraduate, and postgraduate) show balanced support (6.67%), indicating a general belief in training's effectiveness but with some scepticism, particularly among undergraduates (10%) who disagree. **Figure 4** Public sector employees (16.67%) overwhelmingly support enhanced victim support services, likely due to their structured work environments where such policies may already exist. Retired individuals (13.33%) prioritize better staff training, possibly reflecting confidence in education-based reforms. Increased surveillance (10%) finds equal support from the public sector and self-employed individuals, indicating a shared concern for institutional accountability and deterrence against misconduct. **Figure 5** The highest rating (20%) for evidence collection procedures came from rural respondents, indicating moderate satisfaction. Urban respondents (6.67%) rated it lower, likely due to higher awareness of procedural deficiencies. Lower ratings (1-4) were more common among urban and semi-urban respondents, who may have higher expectations for evidence preservation and access to comparative legal frameworks outside prison settings. **Figure 6** The strongest support (26.67%) for holding prison staff liable comes from the 21-30 age group, indicating a demand for justice among younger respondents. Support is mixed among older groups, with the 41-50 years group showing the highest disagreement

(6.67%). This generational difference may be due to younger individuals' expectations for institutional accountability versus older inmates' experiences with systemic failures. **Figure 7** shows a significant majority of males (50%) support mandatory training, while females show more resistance (26.67% against). Males may perceive training as a means to improve staff conduct, while females might be sceptical about its practical impact. The 10% female support suggests that some believe training could contribute to better handling of cases, but opposition indicates concerns about implementation quality. **Figure 8** Better staff training and enhanced victim support services receive strong backing from undergraduates (13.33%) and those without formal education. SSLC holders (10%) and HSC holders (6.67%) also show support, reflecting a broad consensus on the need for reforms. Increased surveillance and improved staff screening have moderate backing, suggesting concerns about both prevention and response measures. **Figure 9** Public sector employees (20%) gave the highest effectiveness rating (6/10), likely due to familiarity with structured procedures. Retired (6.67%) and self-employed individuals (6.67%) rated it at 5, possibly reflecting moderate trust in the system while recognizing its flaws. These responses suggest that procedural efficiency is perceived differently depending on professional backgrounds and exposure to institutional practices. **Figure 10** shows that the Rural respondents (30%) cite lack of trust as the main barrier, reflecting limited institutional accountability in remote areas. Urban respondents (13.33%) identify shame and stigma as key concerns, likely due to societal expectations and public scrutiny. Fear of retaliation (10%) is a major issue for urban respondents but less pronounced in rural and semi-urban areas, possibly due to varying levels of exposure to institutional consequences. **Figure 11** The 21-30 age group shows the highest support (26.67%) for accountability, likely reflecting a proactive stance on justice. The 31-40 and 41-50 groups exhibit equal opposition (10% each), suggesting scepticism based on prior experiences or concerns about institutional resistance. The low percentage of neutral respondents indicates that most participants have a firm stance on the issue. **Figure 12** Males (23.33%) prioritize better staff training, seeing it as a solution to institutional misconduct. Females (20%) favour increased surveillance, emphasizing monitoring as a preventive measure. Improved staff screening has balanced support (13.33% males, 10% females), indicating a shared belief in pre-emptive measures to enhance safety. These preferences highlight gendered perspectives on institutional reforms. **Figure 13** The highest rating (16.67%) for evidence collection effectiveness was from individuals with no formal education, possibly due to lower expectations. Undergraduate and postgraduate respondents (6.67% each) rated it 5-6, suggesting moderate trust. Low ratings (1-3) across various education levels indicate dissatisfaction with procedural efficiency and forensic practices. **Figure 14** Private sector employees (26.67%) cite lack of trust as the biggest barrier, likely reflecting concerns about institutional integrity. Retired individuals (10%) and public sector employees (6.67%) cite fear of retaliation, possibly due to awareness of power dynamics. Shame and stigma are deterrents for 10% of retired individuals and 6.67% of unemployed respondents, showing a mix of social and psychological barriers. **Figure 15** Rural respondents (30%) show the highest agreement, possibly due to greater vulnerability in remote facilities. Urban respondents are divided (13.33% agree, 10% disagree), reflecting a broader spectrum of experiences and expectations. Semi-urban respondents are more neutral or opposed (6.67% strongly disagree), suggesting either scepticism or a belief in alternative solutions.

LIMITATION

One of the primary limitations in addressing institutional sexual assault involving male victims in prisons is the deep-rooted societal stigma and lack of recognition of male victimization. The legal framework in many jurisdictions remains inadequate, with laws often being gender-specific rather than gender-neutral, making it difficult for male victims to seek justice. Additionally, prison environments are highly controlled, and incidents of sexual assault are often underreported due to fear of retaliation from both fellow inmates and prison authorities. The lack of proper forensic infrastructure and trained personnel further exacerbates the problem, as critical evidence may not be collected or preserved effectively. Institutional reluctance to acknowledge the issue, coupled with inadequate oversight mechanisms, prevents transparency and accountability. Moreover, psychological trauma and fear of social ostracization deter victims from coming forward, further enabling a culture of silence.

SUGGESTION

To address the issue of institutional sexual assault involving male victims in prisons, it is crucial to implement gender-neutral sexual assault laws that ensure equal protection and access to justice for all victims. To improve reporting mechanisms, confidential and independent complaint systems should be established within prisons, allowing victims to come forward without fear of retaliation. To strengthen evidence collection, forensic procedures and medical examinations must be conducted promptly, with trained professionals ensuring the proper preservation of crucial evidence. To enhance accountability, independent oversight bodies should be appointed to monitor prison conditions and investigate allegations of sexual assault impartially. To create a safer prison environment, authorities must introduce strict policies against sexual violence, enforce zero-tolerance measures, and provide regular training for prison staff on handling such cases sensitively and professionally. To support victims, psychological counselling, legal aid, and rehabilitation programs should be made accessible, ensuring their recovery and reintegration into society. To raise awareness, nationwide campaigns and educational initiatives should be launched to challenge societal stigma and promote recognition of male victimization.

CONCLUSION

The aim of the research is to examine the evidentiary challenges faced in cases of institutional sexual assault involving male victims in prisons, with a special focus on Chennai. This study sheds light on the barriers to justice, the societal stigma surrounding male victimization, and the legal complexities that hinder effective prosecution and victim support. The main objective is to analyze the gaps in the existing legal framework, assess the role of prison administration in addressing such cases, and recommend measures to improve evidence collection, victim protection, and legal proceedings. Additionally, the study aims to highlight the psychological and social impact on male victims and propose reforms to strengthen their access to justice. The key findings reveal that male victims of institutional sexual assault often face significant challenges in reporting due to fear of retaliation, lack of legal awareness, and societal prejudices. The absence of gender-neutral laws in many jurisdictions further exacerbates the issue. Moreover, forensic evidence collection and medical examinations are often inadequate due to procedural lapses and a lack of trained professionals. The study also found that prison authorities frequently fail to take proactive measures, leading to underreporting and recurring incidents of abuse. The future scope of this research includes a comparative analysis of institutional sexual assault laws in different jurisdictions to identify best practices. Further studies can also explore the psychological impact of such assaults on male victims and the effectiveness of victim support programs. Expanding the research to other regions beyond Chennai would provide a broader understanding of the issue at a national level. In conclusion, institutional sexual assault against male prisoners is a critical yet often overlooked issue that demands urgent legal and policy reforms. Addressing the evidentiary challenges, strengthening victim support mechanisms, and ensuring accountability within the prison system are essential steps toward justice and prevention. By fostering awareness and implementing structural changes, the legal system can provide better protection and support for all victims, regardless of gender.

CHAPTER - 3

ENVIRONMENTAL SUSTAINABILITY, CLIMATE CHANGE AND THE RIGHTS OF VULNERABLE POPULATION

MARITIME ENVIRONMENTAL LITIGATION AND COASTAL COMMUNITY RIGHTS: A COMPARATIVE ANALYSIS OF THE INDIAN LEGAL REGIMES AND INTERNATIONAL BEST PRACTICES

Caroline Elias[1]

ABSTRACT

The paper focuses on both maritime environmental litigation and the rights of the coastal communities. The aim is to understand the gaps in the Indian model of marine conservation and community involvement, and compare them with international systems like the United Nations Convention on the Law of the Sea (UNCLOS), the International Maritime Organization (IMO) and the regional treaties. The argument put forward in the study, is that though India has enacted progressive environmental legislations such as the Coastal Regulation Zone (CRZ) Notifications and Public Interest Litigation (PIL), the implementation is weak because of the institutional delays, fractured governance, and minimal community participation. Conversely, international frameworks focus more on tighter compliance mechanisms, transparent dispute resolutions, and rights-based approaches to affected people. The methodology consists of a comparative legal analysis of Indian laws, case law, and international conventions combined with case study analysis and international standards set by UNECE, such as the Aarhus Convention. The preliminary results point to the fact that India does not have a dedicated maritime environmental tribunal, and its litigation is reactionary instead of anticipatory governance, and it does not make use of community-led monitoring. Among the recommendations, one will find the reformation of law to reinforce coastal rights, the formation of special maritime benches, and India signing up to major treaties, such as the BBNJ Agreement as an attempt to meet international standards. The research finds that there is a possibility of improving environmental justice and the governance of sustainable oceans in India by using international best practices to inform the legal framework in India.

Keywords: Maritime Law, Environmental Litigation, Coastal Communities, Comparative Legal Analysis, UNCLOS.

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INTRODUCTION

Oceans that occupy over 70 percent of the surface of the Earth form part of the world ecological balance, economic activities and survival of humanity. They soak up approximately a third of carbon emissions and produce more than half the oxygen people inhale.[2] The livelihood, food security, and cultural identity of coastal communities especially in the developing nations such as India, are all dependent on marine resources. Nevertheless, anthropogenic pressures are increasing through industrial effluents, rampant coastal development, unsustainable fishing, and global warming that impose serious risks to marine habitats and the rights of coastal communities.[3] India, with its 7,500 km plus coastline and a population of over 170 million coastal residents, has an acute problem in striking a balance between economic growth and marine environmental protection.[4] The laws that govern the area, such as the Environment (Protection) Act, 1986, and Coastal Regulation Zone (CRZ) Notifications, are supposed to regulate coastal construction, but they are erratically applied, and more often than not, ineffective.[5] Also, the inefficiency of marine conservation is evident by the fact that even though there are constitutional provisions, mandating protection of the environment and responsibilities of citizens under Article 48A and Article 51A(g), there has been institutional fragmentation and inadequate stakeholder participation. The United Nations Convention on the Law of the Sea (UNCLOS), as well as other international legal regimes, stress the role of states in terms of ensuring marine environmental protection and communities empowerment regarding access to information and justice.[6] This study seeks to compare the marine environmental litigation system in India with the best practices in other countries in order to identify how the legal system can be developed to ensure that environmental justice is achieved and the rights of coastal communities are protected in conformity with the Sustainable Development Goals (SDGs).

Legal Foundations of Maritime Environmental Protection

The foundations of law behind environmental protection in the seas are deeply rooted in international law, where ocean health, human rights, and sustainable development overlaps. The major international marine environmental policy is the United Nations Convention on the Law

2. J M de Suarez, B Cicin-Sain, K Wowk, R Payet& O Hoegh-Guldberg, Ensuring Survival: Oceans, Climate and Security, 90 OCEAN & COASTAL MGMT. 27 (2014).

3. D Ferrol-Schulte, M Wolff, S Ferse& M Glaser, Sustainable Livelihoods Approach in Tropical Coastal and Marine Social–Ecological Systems: A Review, 42 MARINE POL'Y 253 (2013).

4. S Gaonkar, An Assessment of Coastal Zone Regulations and Judicial Approach for Conservation, Protection and Sustainable Development of the Coast (Ph.D. diss., NAT'L L. SCH. INDIA U., 2020).

5. R Chandy& J Joseph, Implementation of Coastal Regulation Zone Notification 2019: Challenges and the Way Forward, (2024).

6. E Druel& K M Gjerde, Sustaining Marine Life Beyond Boundaries: Options for an Implementing Agreement for Marine Biodiversity Beyond National Jurisdiction Under the United Nations Convention on the Law of the Sea, 49 MARINE POL'Y 90 (2014).

of the Sea (UNCLOS), which was approved in 1982.[7] Universally known as the constitution of the oceans, UNCLOS lays down exhaustive regulations to govern the use and exploitation of ocean resources and in particular, it contains rules regarding environmental protection. It requires states to protect and conserve the marine environment and further act to prevent, reduce and regulate marine pollution caused by different sources such as land-based activities, dumping and discharges. Such a convention of the International Maritime Organization (IMO) supplements UNCLOS as the MARPOL Convention (1973/78) that regulates pollution caused by ships and the London Convention (1972) that covers ocean dumping.[8] IMO instruments demand that member states come up with domestic legal systems and enforcement systems that are consistent with international commitments. Also, the Convention on Biological Diversity (CBD) (1992) gives emphasis to the preservation of marine biological diversity and promotes ecosystem-based management strategies. Despite the lack of robust enforcement, it offers normative assistance to marine protection, particularly that of ecologically-sensitive regions, such as coral reefs and mangroves.[9]

INDIAN LEGAL AND INSTITUTIONAL FRAMEWORK

a. Coastal Regulation Zone (CRZ) Notifications

In 1991, the first CRZ Notification was issued under the Environment (Protection) Act, 1986 by the Ministry of Environment, Forest and Climate Change (MoEFCC). It controlled the activities that were less than 500 meters towards the High Tide Line as a means of conservation of coastal ecology. The CRZ Notification 2011 and 2019 eased most of the restrictions, in the name of development, and were attacked on their potential to bring down ecological integrity and marginalize the localities.[10]

b. Environmental Impact Assessment (EIA)

The EIA Notification 2006 (subsequently amended by EIA Notification 2020) requires environmental scrutiny for some coastal development projects. Nevertheless, critics of the EIA process believe that it lacks transparency, has not been well consulted with people, and is biased in favor of project developers.[11]

7. K Grip, International Marine Environmental Governance: A Review, 46 AMBIO 413 (2017).

8. V Reh, Between Conventions: The International Legal Framework Applicable to Bilge Dumping (M.S. thesis, ITÄ-SUOMEN YLIOPISTO, 2024).

9. E V Jones, T Gray, D Macintosh & S Stead, A Comparative Analysis of Three Marine Governance Systems for Implementing the Convention on Biological Diversity (CBD), 66 MARINE POL'Y 30 (2016).

10. M Sakthivel& N Khan, Protection of the Indian Coastal Ecosystem Through CRZ Notifications: An Analysis, 10 LUMS L.J. 118 (2024).

11. A K Rathoure, Environment Impact Assessment (EIA) Studies for Developmental Activities in India in Context with EIA 2020, 9 OCT. J. ENV'T RES. 21 (2021).

c. Public Interest Litigation (PIL) and Judicial Activism

Courts in India have a long history of being proactive in protecting the environment. The landmark PIL cases include Indian Council for ***Enviro -Legal Action v. Union of India (1996)***[12] and ***S. Jagannath v. Union Of India*** have supported such environmental concepts as the principle of polluter pays and precautionary principle (Union of India (1997)). The Supreme Court in S. Jagannath set aside the right of local fishers by prohibiting shrimp farms within the coastline area on account of environmental degradation.[13]

GAPS IN THE INDIAN LEGAL REGIME

a. Fragmented Governance

There are redundant authorities, to wit: MoEFCC, State Coastal Zone Management Authorities (SCZMA) and port authorities, which result in poor enforcement and delays in regulations.[14] This fragmentation is not an accidental oversight but a product of specific historical legacies and entrenched systemic structures that continue to shape India's approach to maritime environmental governance.

- The Historical Legacy of Sectoral Silos: Post-independence, India's administrative framework was heavily influenced by the colonial model of governance, which was designed for revenue extraction and control rather than integrated ecosystem management.[15] This led to the creation of powerful, vertically integrated ministries dealing with sectors like agriculture, transport, and industry. Ports, for instance, evolved under the jurisdiction of the Shipping Ministry as engines of commerce and trade, their environmental externalities considered a secondary concern.[16] Consequently, port authorities historically prioritized navigational efficiency and economic throughput, often viewing environmental regulations from the MoEFCC as an impediment rather than a complementary mandate. This created inherent and enduring institutional conflicts between development-centric and conservation-centric agencies.[17]

- The Additive, Rather than Integrative, Nature of Environmental Law: India's environmental regulatory framework developed reactively, through a process of

12. I Manasa, Indian Council for Enviro-Legal Action v. Union of India and the Polluter Pays Principle: An Economic Analysis, (2024).
13. T G Puthucherril, Sustainable Aquaculture in India: Looking Back to Think Ahead, in AQUACULTURE L. & POL'Y 289 (2016).
14. S Gaonkar, An Assessment of Coastal Zone Regulations and Judicial Approach for Conservation, Protection and Sustainable Development of the Coast (Ph.D. diss., NAT'L L. SCH. INDIA U., 2020).
15. David C. Potter, India's political administrators: from ICS to IAS 91–112 (1996).
16. The Major Port Trusts Act, 1963, No. 38, Acts of Parliament, 1963 (India).
17. T.N. Godavarman Thirumulpad v. Union of India, (1997) 2 S.C.C. 267 (India).

legislative accretion in response to specific crises (e.g., the Bhopal gas tragedy leading to new EPA rules) or judicial interventions.[18] The Coastal Regulation Zone (CRZ) notifications were themselves a landmark but belated response to growing pressures on coastlines.[19] Rather than reforming the foundational legal architecture, the new regulations introduced an additional layer of governance, creating potential conflicts with established laws like the Indian Ports Act, 1908,[20] the Fisheries Act, 1897, and myriad state-level land revenue codes. In lieu of undertaking a root-and-branch reform to create a unified, ecosystem-based authority, the system opted for the creation of a new layer of regulation—the SCZMAs—under the umbrella of the MoEFCC.[21] This additive approach results in a fractured mandate where the SCZMA's regulatory power often collides with the established economic and administrative authority of port trusts and state revenue departments, leading to jurisdictional ambiguities and enforcement paralysis.

- The Federal Dilemma and Capacity Asymmetry: The division of powers under the Constitution further complicates this landscape.[22] While the Union government, through the MoEFCC, frames overarching CRZ norms, the implementation largely falls to the state-level SCZMAs. This creates a capacity crisis. SCZMAs are frequently understaffed, lack technical expertise in marine ecology, and operate with limited financial resources.[23] They are often overshadowed by more powerful and well-funded state departments of industry or ports, making robust, independent enforcement a significant challenge. This federal structure, while constitutionally sound, in practice leads to a dissonance between ambitious national policies and inconsistent state-level implementation, exacerbated by varying political priorities across coastal states.

In essence, the problem of redundant authorities and poor enforcement is rooted in a path-dependent system where new environmental mandates have been grafted onto an old administrative skeleton designed for disparate purposes. This has resulted in institutional

18. M.C. Mehta v. Union of India, (1987) 1 S.C.C. 395 (India).

19. Coastal Regulation Zone Notification, SO 19(E), *The Gazette of India*, pt. II, § 3(ii) (Jan. 6, 2011).

20. The Indian Fisheries Act, 1897, No. 4, Acts of Parliament, 1897 (India).

21. Coastal Regulation Zone Notification, *supra* note 5, at § 5.

22. INDIA CONST. art. 246, sch. VII, List I (Union List), Entry 25; List III (Concurrent List), Entry 17A & 17B.

23. COMPTROLLER AND AUDITOR GENERAL OF INDIA, Report no. 21 of 2016: conservation of coastal ecosystems 31 (2016).

24 SHYAM DIVAN & ARMIN ROSENCRANZ, environmental law and policy in India: cases, materials and statutes 95–98 (3d ed. 2015).

jealousy, conflicting priorities, and a regulatory environment where accountability is diffuse, and enforcement is often the casualty.

b. Absence of Specialized Maritime Environmental Tribunal and Scientific Scrutiny

In comparison to countries such as the United States which have specialized forums like Environmental Protection Agency (EPA) and Environmental Appeals Board, India has no specialized maritime or ocean tribunal. The National Green Tribunal (NGT) has a narrow maritime jurisdiction and its case backlog affects prompt justice.

Although the National Green Tribunal (NGT) marks a considerable advance in environmental justice, its generalist nature and crippling caseload impede its effectiveness in handling the specialized scientific demands of maritime environmental cases.[24] The core deficiency lies not just in the absence of a dedicated tribunal, but in the systemic failure to integrate robust scientific and technological assessment within the existing adjudicatory process.

Maritime environmental cases—such as those involving oil spill trajectory modeling, acoustic impact of sonar on marine mammals, or cumulative impact of dredging on benthic ecosystems—demand a high degree of specialized scientific expertise. Courts and the NGT, while well-intentioned, often lack the institutional capacity to critically evaluate contradictory expert evidence presented by polluters and regulators.[25] This can lead to judgments based on a superficial appraisal of scientific data, where the party with more resources to commission sophisticated reports holds an undue advantage.

For instance, in cases concerning pollution from ship-breaking yards, the adjudication often hinges on technical reports about soil and water contamination.[26] Without an in-house panel of oceanographers, marine biologists, and toxicologists, a standard feature in specialized tribunals like the U.K.'s First-Tier Tribunal (Environment), the Indian judiciary is forced to rely on external experts appointed on an ad hoc basis.[27] This process lacks standardization, invites challenges over bias, and ultimately delays justice. The backlog itself exacerbates this scientific deficit, as the pressure to dispose of cases can truncate the deep scientific inquiry required.[28] Consequently, the void left by a specialized tribunal is not merely procedural; it is a critical gap in the scientific legitimacy and technical rigor of environmental adjudication.

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24. Gitanjali N. Gill, *The National Green Tribunal of India: A Sustainable Future through the Principles of International Environmental Law*, 24 ASIAN-PAC. L. & POL'Y J. 1, 24–27 (2022).

25. The National Green Tribunal Act, 2010, No. 19 of 2010, Acts of Parliament, 2010 (India).

26. Research Foundation for Science, Technology and Natural Resource Policy v. Union of India, (2012) 8 S.C.C. 464, 468 (India).

27. Tribunal Procedure Rules, 2010, r. 15(1) (U.K.); *cf.* The National Green Tribunal Act, 2010, at S.4(1)

28. National Green Tribunal, Overview of Pendency, NGT.GOV.IN, https://greentribunal.gov.in/overview-pendency (last visited May 23, 2024).

c. Limited Community Participation: A Cycle of Legal Disempowerment

Despite the framework of CRZ, that requires public hearings, in many instances such hearings are a formality. The fishermen and the people living along the beaches are not consulted in matters that concern their territory and means of livelihood.[29] This exclusion is not merely an oversight but is perpetuated by a vicious cycle of legal ignorance and the non-institutionalization of participatory mechanisms.

The problem of legal ignorance is twofold. First, there is an information asymmetry between project proponents and communities. Notifications for public hearings are often published in obscure government gazettes or local newspapers with limited circulation, rather than through accessible channels in local languages familiar to fishing communities, such as fisherfolk unions (sanghas) or the village council (gram panchayat) notices.[30] Consequently, many affected residents remain entirely unaware of proposed projects, such as a new port berth or a coastal road, until construction begins.

Second, even when communities are present, the highly technical nature of the EIA reports—replete with scientific data, jargon, and complex projections—creates a comprehensibility gap.[31] For instance, a fisherman may understand that a proposed thermal power plant will require dredging and discharging warm water, but without accessible translation of the EIA's findings into tangible impacts on fish breeding grounds and catch volumes, his ability to offer a substantive challenge during the hearing is severely limited. His traditional ecological knowledge is dismissed as "anecdotal" in the face of technical documents he cannot decipher.

This leads directly to the issue of non-institutionalized processes. The public hearing is often a standalone, tick-box event rather than part of a sustained dialogue. There is no institutional mechanism to ensure that community objections are genuinely incorporated into the final decision-making.[32] A ground-level example can be seen in the approval of numerous aquaculture farms. Communities may vocally oppose a project during the hearing, citing the anticipated pollution of their inshore waters. However, the minutes of the hearing are often summarized in a way that dilutes these concerns, and the regulatory authority, relying on the

29. I Eshun, H K Golo& S Dankwa, Livelihood Strategies and Outcomes of Fisher Folks in Selected Rural Coastal Communities of Ghana, 48 J. CULTURE, SOC'Y & DEV. 35 (2019).

30. Environment Impact Assessment Notification, 2006, S.O. 1533(E), *The Gazette of India*, pt. II, § 3(ii) (Sept. 14, 2006) [hereinafter EIA Notification] (specifying the requirement for public notice but not mandating accessible channels for local communities).

31. *See generally* RITWICK DUTTA, THE ENVIRONMENTAL RULE OF LAW: ACCESS TO JUSTICE AND RIGHTS OF NATURE 67-71 (2021) (analyzing the barriers created by technical jargon in environmental governance).

32. *See In re*: Construction of Park at Versova River, Application No. 21/2020, ¶ 12 (Nat'l Green Tribunal, Western Zone Bench, Oct. 15, 2020)

proponent's revised report, may grant clearance without any mandated, binding changes to address the community's input.[33] The process concludes, but the community's participation ends with it, having had no real agency.

This lack of formal institutional backing means that the responsibility for participation falls entirely on the community, which lacks the financial resources and legal expertise to sustain a challenge. Without support systems such as legal aid clinics specializing in environmental law or community resource persons trained to interpret EIAs, their participation remains perfunctory.[34] The result is a profound disempowerment, where the legal right to be heard is rendered hollow, reinforcing the very vulnerabilities that the participatory framework was designed to mitigate.

d. Reactive Litigation and Data Deficit: A Cycle of Remedial Justice

The Indian strategy for environmental protection is still more responsive. The majority of PILs are initiated when a serious harm on the ecology has occurred. Preemptive governance, which is supported by constant oversight and intervention as a preventive measure, continues to develop.

The Indian approach to maritime environmental protection remains overwhelmingly reactive, a paradigm entrenched by a chronic deficit of real-time data and monitoring technology.[35] This reliance on post-facto litigation, primarily through Public Interest Litigations (PILs) initiated after ecological damage is manifest, underscores a systemic failure in preemptive governance.

The reactive model is fundamentally dependent on visible, and often irreversible, harm to trigger legal action. For example, a PIL against illegal mangrove destruction is typically filed only after large tracts have been cleared, because the communities and activists lack access to satellite imagery, Geographic Information System (GIS) data, and other technological tools necessary for early detection and evidence gathering.[36] The regulatory authorities, such as the SCZMAs, often suffer from the same technological impoverishment, unable to conduct independent, systematic surveillance of India's vast coastline.[37]

This technological gap forces the judiciary into a remedial role, ordering restitution after the fact, rather than preventing the violation. The landmark case of Indian Council for Enviro-

33. S. P. Muthuraman v. Union of India, Appeal No. 12/2011, 7 (Nat'l Green Tribunal, Appellate Zone, Mar. 22, 2012)

34. Usha Ramanathan, *The Problem of the Public*, in DEMOCRACY, ENVIRONMENTAL LAW AND THE INDIAN SUPREME COURT 124, 135-37 (2014).

35. COMPTROLLER AND AUDITOR GENERAL OF INDIA, REPORT NO. 18 OF 2021: CONSERVATION OF COASTAL ECOSYSTEMS 45 (2021)

36. T.N. Godavarman Thirumulpad v. Union of India, (2012) 3 S.C.C. 277, 291 (India).

37. *Id.* at 45.

Legal Action v. Union of India (1996), which established the Polluter Pays Principle, was a reaction to severe industrial pollution.[38] While jurisprudentially monumental, it exemplifies a legal system that acts as an ambulance at the bottom of a cliff rather than building a fence at the top. The absence of integrated, technology-driven systems for continuous environmental auditing and impact assessment means that the law is always chasing the disaster, reliant on citizen vigilance to overcome institutional inertia, rather than being empowered by state-led, scientific monitoring.[39]

INTERNATIONAL BEST PRACTICES AND CASE STUDIES

Comparative outlook shows that most countries have devised novel legal and governance mechanisms to give legal protection to marine ecosystems as well as preserving the rights of coastal communities. These best practices offer insight into ways in which legal frameworks can incorporate ecosystem-based management, stakeholder involvement, and indigenous rights—approaches that could usefully be applied in India.

a. Norway: Ecosystem-Based Marine Management and Indigenous Inclusion

The Integrated Management Plan of the Barents Sea-Lofoten Area provided by Norway in 2006 is an example of the ecosystem-based approach to marine governance. This is a legal framework that combines various Chinese sectors, fisheries, petroleum, shipping and environment through a single strategy which guarantees a balanced exploitation and conservation of these sectors.[40]

b. Australia: Participatory Governance in the Great Barrier Reef

The Great Barrier Reef Marine Park Authority (GBRMPA) of Australia has been considered a role model of participatory and adaptive marine governance. GBRMPA was put in place under the Great Barrier Reef Marine Park Act, 1975 and integrates scientific research and stakeholder engagement including 'Aboriginal and Torres Strait Islander communities' to manage the reef sustainably.[41] Zoning plans, community-based monitoring and traditional use agreements ensure that the local communities are the active stewards of the marine resources.

38. Indian Council for Enviro-Legal Action v. Union of India, (1996) 3 S.C.C. 212, 246 (India).

39. *See generally* LAVANYA RAJAMANI & JONATHAN S. NIJAR, THE NATIONAL GREEN TRIBUNAL: EXPERT ADJUDICATION OF ENVIRONMENTAL DISPUTES 112-15 (2018).

40. B Dale, Governing Resources, Governing Mentalities. Petroleum and the Norwegian Integrated Ecosystem-Based Management Plan for the Barents and Lofoten Seas in 2011, 3 EXTRACTIVE INDUSTR. & SOC'Y 9 (2016).

41. J C Day & K Dobbs, Effective Governance of a Large and Complex Cross-Jurisdictional Marine Protected Area: Australia's Great Barrier Reef, 41 MARINE POL'Y 14 (2013).

c. Philippines: Community-Based Marine Protected Areas (MPAs)

Since the 1990s, the Philippines has been the first to initiate community-based marine protected areas. With the aid of NGOs and local governance under the Local Government Code of 1991, more than 1,000 locally managed MPAs have been set up. They are run by People Organizations (POs) which are usually fishers and coastal residents and have the capability to impose rules, conduct patrols and do conservation measures.

d. United States: Legal Enforcement and National Ocean Policy

In the United States, strong statutes like the Clean Water Act (1972), the Coastal Zone Management Act (1972) and the Marine Protection, Research and Sanctuaries Act (1972) support marine environmental protection in the United States.[42] The National Ocean Policy that was adopted in 2010 promotes scientific decision-making, ecosystem-based management and engagement with the community by creating Regional Planning Bodies (Executive Office of the President, 2010).

COMPARATIVE ANALYSIS: INDIA VS. INTERNATIONAL NORMS

Parameter	**India**	**International Best Practice**
Legal Basis	CRZ, EPA, EIA, PIL	UNCLOS, IMO conventions, Aarhus Convention
Tribunal	NGT (limited maritime focus)	Dedicated ocean/environmental tribunals (e.g., US)
Community Participation	Mandated but weak	Strong participatory frameworks (e.g., Aarhus)
Preventive Approach	Mostly reactive	Preventive and science-based (e.g., Norway)
Indigenous/ Traditional Rights	Limited legal recognition	Integrated (e.g., Sámi in Norway, Aboriginal in AUS)
Treaty Ratification	UNCLOS, MARPOL, but not BBNJ, Aarhus	Full participation (most developed states)

ROLE OF SUSTAINABLE DEVELOPMENT GOALS (SDGS)

In 2015 all Member States of the United Nations accepted the 2030 Agenda of sustainable development as a blueprint, which contains 17 Sustainable Development Goals (SDGs), that

42. D Baur, T Lindley, A Murphy, P Hampton, P Smyth, S Higgs, A Bromer, E Merolli& M Hupp, Area-Based Management of Marine Resources: A Comparative Analysis of the National Marine Sanctuaries Act and Other Federal and State Legal Authorities (PERKINS COIE LLP 2013).

represent a global strategy of peace, prosperity and environmental sustainability.[43] These, at least in part, directly and indirectly translate into some of the goals that have direct effect, sooner or later, on framing the laws of marine environmental protection and the rights of coastal communities. Incorporation of principles of SDGs in national legal frameworks guarantees more than just ecological safeguards; it guarantees social equality, economic sustainability, and citizen involvement in the government of their country, which are all elements of sustainable development.

a. SDG 14: Life Below Water

SDG 14 is the most relevant goal for marine environmental litigation and coastal community rights. It requires preservation and sustainable use of oceans, seas and marine resources. Target 14.1 aims to avoid and considerably lessen marine pollution by 2025, whereas Target 14.2 focuses on the sustainable management and security of the marine and coastal ecosystems. To ensure that these targets are met, effective legal enforcement mechanisms, pollution control policies and participatory decision-making are essential aspects which India will have to enhance by aligning its legal regime with the international standards such as UNCLOS and MARPOL.[44]

b. SDG 13: Climate Action

Rising sea level, acidification, and extreme weather events all contribute to marine degradation due to climate change. These transformations have a disproportionate effect on the coastal communities that rely on fisheries and agriculture. SDG 13 encourages national governments to put climate adaptation in national policies. The litigation about the maritime environment in India thus has to be climate-sensitive, with coastal development not conflicting with the long-term climate resilience. Adaptive governance should be included in regulations, such as the evaluation of climate risk to coastal projects and disaster-resistant infrastructure.[45]

c. SDG 16: Peace, Justice, and Strong Institutions

This objective underlines the value of access to justice and accountable institutions. Access to environmental justice plays a critical role in empowering marginalized coastal communities that are generally locked out of environmental decision-making processes. Legal instruments like Public Interest Litigation (PIL) in India and procedural rights in the Aarhus Convention at

43. U ESCAP, Complementarities Between the ASEAN Community Vision 2015 and the United Nations 2030 Agenda for Sustainable Development: A Framework for Action, (2017).

44. C Armstrong, Ocean Justice: SDG 14 and Beyond, 16 J. GLOBAL ETHICS 239 (2020).

45. D E Mthembu& G Nhamo, Aligning SDG 13 with South Africa's Development Agenda: Adaptation Policies and Institutional Frameworks, 14 JÀMBÁ–J. DISASTER RISK STUD. 1155 (2022).

the global level are essential for achieving of SDG 16.[46] The creation of specialized maritime tribunals, decreasing the backlog in the legal system, and the provision of more legal aid to inhabitants of coastal communities are among the changes that are needed to improve adherence to this objective.

d. SDG 10: Reduced Inequalities

Limited access to marine resources and legal remedies often leaves coastal and indigenous communities to exploitation and environmental abuse. SDG 10 pertains to ensuring that everyone has equal rights to natural resources and environmental protection.[47] The socio-economic inequalities can be decreased, and the principle of inclusive development can be achieved with the incorporation of customary and traditional knowledge systems into marine governance, as it is possible to observe in Australia and the Philippines. The laws of India need to change so that the rights of artisanal fishers, indigenous tribes, and women in coastal regions are recognised and secured in the court of law.

e. Cross-Cutting SDG Principles

The SDGs foster cross-sector interactions, the is marine environmental law is unable to work in a vacuum. It should be overlaid with the objectives of poverty reduction (SDG 1), food security (SDG 2), gender equality (SDG 5) and decent labor (SDG 8). An example is improved marine protection which increases stocks of fish that also sustains food security and livelihood of millions of Indians along the coastline.

RECOMMENDATIONS

In the context of filling the existing gap between the current legal practice in India and the international good practice, in terms of marine environmental protection and the rights of coastal communities, it is crucial to have a multi-faceted approach to reform. These recommendations are divided into the dimensions of the legal, institutional, participatory, and technological focus.

Legal and Policy Reforms

a. **Establish a Specialized Maritime Environmental Tribunal**

   India does not have a special judicial institution to adjudicate conflicts on maritime environmental issues. The National Green Tribunal (NGT) is progressive but covers mainly terrestrial problems and does not have a special jurisdiction over marine laws.

46. D Negi, Climate Justice Necessary for Sustainable Development of All Nations? (Diss., VILNIAUS U., 2024).

47. B S Basnett, R Myers & M Elias, SDG 10: Reduced Inequalities – An Environmental Justice Perspective on Implications for Forests and People, in SUSTAINABLE DEV. GOALS: THEIR IMPACTS ON FORESTS & PEOPLE 315 (2019).

Adjudication would be quicker, scientific knowledge enhanced and legal interpretation uniform through a specialized Maritime Environmental Tribunal or specialized benches in the NGT.[48] To facilitate multipronged adjudication, environmental judges, marine scientists, and policy experts should constitute his tribunal.

b. Ratify Key International Treaties

India must ratify the international conventions like the Aarhus Convention (1998) that ensures access to information on environmental issues, participation, and access to justice, and BBNJ Agreement (2023) on biodiversity beyond national jurisdiction.[49] This would boost India's credibility in world environmental politics and increase legal commitments to participatory marine governance at the domestic level upon ratification.

c. Strengthen and Enforce CRZ and EIA Laws

There is a need to strengthen the Coastal Regulation Zone (CRZ) framework so that it is ecologically sustainable without adversely affecting the rights of the community. The recent watering down of CRZ 2019 needs to be reconsidered so that stricter measures can be introduced. The Environmental Impact Assessment (EIA) process should also be made more transparent, requiring cumulative impact assessment, scientific appraisal, and binding community consultation.[50]

d. Codify Community and Indigenous Rights in Coastal Law

India needs to take example of countries like Australia and the Philippines, where traditional and indigenous rights are protected by law in coastal governance. The rights of artisanal fishers, tribal communities and women at the coast should be explicitly secured by national law with access to resources guaranteed and no displacement by infrastructure or tourism development projects.[51]

Institutional and Administrative Strengthening

a. Create a Unified Coastal Governance Authority

There is no coherent coastal management system; it is divided among various agencies: MoEFCC, SCZMA Organization, port authorities, and local governments. A centralized

48. U Tandon, Environmental Courts and Tribunals: A Comparative Analysis of Australia's LEC and India's NGT, INDIAN Y.B. COMP. L. 477 (2016).

49. Y Wang & X Pan, Application of the Environmental Impact Assessment Provisions Under the BBNJ Agreement in High Seas Marine Protected Area: Challenges and Suggestion, 12 FRONTIERS IN MARINE SCI. 1589936 (2025).

50. O Elias & M Wong, Environmental Impact Assessment, in RESEARCH HANDBOOK ON INTERNATIONAL ENVIRONMENTAL LAW 188 (2021).

51. R C G Capistrano & A T Charles, Indigenous Rights and Coastal Fisheries: A Framework of Livelihoods, Rights and Equity, 69 OCEAN & COASTAL MGMT. 200 (2012).

authority or inter-ministerial coordination system needs to be established to coordinate regulatory tasks, monitor compliance and manage ecological emergencies.

b. Capacity Building and Legal Awareness

There is a need to create legal awareness in the coastal districts so that the communities are taught about their rights related to environmental protection and the law. This may incorporate initiating the Legal Aid Clinics in collaboration with law colleges and independent organization, preparing Paralegal volunteers of fishing communities, and providing information on laws and rights in local vernaculars.

c. Incorporate Climate Adaptation in Marine Law

With the growing challenges of rising sea-level and extreme weather events, the laws of the coasts and seas in India should be oriented toward the climate adaptation. The approval process of the coastal developments must include legal requirements to assess climate vulnerability and developing disaster-resilient infrastructure.

Participatory and Community-Based Reforms

a. Institutionalize Community Monitoring Mechanisms

Communities in the area can be empowered to carry out environmental surveillance. Indian coastal villages can use models such as the People's Organizations in the Philippines that govern Marine Protected Areas (MPAs).[52] This ought to be backed by training, funding, and recognition through the law.

b. Mandatory Public Consultation and Social Audits

The amendments to the EIA and the CRZ laws should ensure that the public hearings should be participatory in nature and information should first be provided to them with the attendance of independent observers and standing to community objections with regard to the laws. The social and ecological impacts of development projects should be periodically audited to establish their effects on people and the environment.

Technological and Scientific Integration

a. Leverage GIS, Satellite Monitoring, and AI Tools

Real-time satellite monitoring, drone surveillance and Geographic Information Systems (GIS) can be used to control illegal constructions, pollution hotspots, and coastal erosion, which

52. Y M L Boncan, Casting Hope for Our Collective Future: Unpacking Marine Protection Efforts of the Sulubaaï Environmental Foundation in Pangatalan Island, Taytay, Palawan Using the Community-Based Coastal Resource Management Framework, (2021).

also contribute to the regulatory capacity.[53] Such tools need to be incorporated into the coastal management platforms that provide open access to the data to the civil society and citizens.

b. Marine Scientific Research Support

The government is encouraged to invest in marine science research institutions to study the effects of climate change, pollution and loss of biodiversity. Research partnerships among law schools, environmental institutes and marine biology departments can generate data to facilitate evidence-based litigation and policy reform.

CONCLUSION

India is at a crossroads in its marine environmental management. The country's vast coastline, complex biodiversity and socio-economic importance necessitate a legal framework that is ecologically sound and socially inclusive. Although the Indian law on environmental protection has experienced great milestones especially the period of judicial interventions and constitutional stipulations, the system in place is not sufficient to handle the intricacies of ocean governance and the rights of coastal populations. This comparative study highlights some of the limitations of this approach in India: institutional responsibility is fragmented, litigation is reactive, and not preventive, community engagement is weak, and enforcement is ineffective. Contrastingly, international good practices in other countries such as Norway, Australia, the Philippines and the United States demonstrate that marine protection is compatible with community empowerment so long as there is legal clarity, administrative coordination and a rights-based approach towards governance. The Sustainable Development Goals (SDGs) present a radical perspective upon which these issues can be dealt with. The integrated, transparent, and participatory governance of marine resources is emphasised in SDG 14 (Life Below Water), SDG 13 (Climate Action), and SDG 16 (Justice and Institutions). To realize these ambitions, India must entrench the vision of environmental justice in its legal reforms so that the most affected, who are coastal fishers, women, and indigenous peoples, not only have their voices heard, but are at the forefront when it comes to making decisions about the environment.

53. M MQuamar, B Al-Ramadan, K Khan, M Shafiullah& S E Ferik, Advancements and Applications of Drone-Integrated Geographic Information System Technology—A Review, 15 REMOTE SENSING 5039 (2023).

THE UNREGULATED RISE OF GEOENGINEERING IN INDIA

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ABSTRACT

The accelerating pace of change in climate has brought geoengineering into centers of policy debate. Geoengineering largely comprises deliberate interventions on a grand scale into Earth's climate systems. Strange as they may sound, the possibilities extend from stratospheric aerosol injection through cloud seeding to fertilizing the ocean, all promising to reduce global warming while simultaneously posing serious legal, ethical, and geopolitical problems. With some jurisdictions such as the United States and the European Union engaging in an early-stage regulatory discourse on geoengineering governance, India remains silent on the legal front despite being a climate-vulnerable and scientifically able country. This paper interrogates the geoengineering provisions in India.

The paper critiques the weaknesses of domestic legislation like the Environment (Protection) Act, 1986, the Air (Prevention and Control of Pollution) Act, 1981, and judicial interpretations under Article 21 of the Constitution of India to address geoengineering experiments, which carry with them trans-boundary and irreversible consequences.

There is a special focus on Indian states considering the emerging enzyme that is cloud seeding and the various implications of such projects without ex-ante environmental impact assessment, public consultation, or any form of liabilities. The paper also traverses international legal principles, including the precautionary principle, common but differentiated responsibilities, and the customary norms of state responsibility, to frame India's obligations under the Indian constitutional mandate on environmental law and international environmental law. It further articulates that the governance of geoengineering cannot be severed from democratic legitimacy, intergenerational equity considerations, and the emerging jurisprudence around the right to a stabilized climate.

Keywords: Geoengineering regulation, Climate, Legal framework, Environmental law, India.

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INTRODUCTION

The ideal temperature, according to scientists, for the global average surface temperature rise to sustain itself, currently seems to be 1 degree Celsius. However, currently the projection suggests that the temperature will rise to 3.5 degrees Celsius by 2030. Geoengineering is the concept of ensuring that the climatic conditions on earth are sustained by deliberately counteracting climate change. Over the period of years, particularly through evolutionary development and the post-industrial era, human activities have caused extreme climate change that has slowly started deteriorating the most special capability that Earth had over other planets, making it a safe haven and sustainable place for populations to exist. Without proper regulations, the activities of geoengineering become a gamble against climate change.

There is so much interest being observed in this area, however, irrespective of having laws that do not specifically deal with or address geoengineering, international laws and principles that indirectly reflect the purpose that a law should have while governing geoengineering projects are important. The regulations that might come in the future for this shall both be precautionary and internationally aligned.

By comparing with international regulations in this paper, the intention is to draw a possibility and basic structure for further governing geoengineering projects in India. This will help India advance more scientifically as well as be one of the initial leaders in implementing geoengineering regulations. The different types of projects, even though well intended, are not fully aware of their impact due to the experimental nature of it. This not only exploits the remaining sources but also gives giant corporations leeway to reduce their liability by these projects and release emissions at the same time.

Proper transparency and public awareness will help set a direction for these projects and their governance. Establishing a thorough regulation will ensure that geoengineering will serve the public interest rather than corporate gains. It will enable growth of scientific research while minimizing the environmental issues and damages that have been caused or continue to be caused. All of which will help in determining liability, accountability, and risk assessment for the geoengineering projects. This will help India be a proactive country and a responsible nation in global climate governance.

DOMESTIC, LEGAL AND CONSTITUTIONAL CHALLENGES

Initially, we need to understand how much law can govern and control without interfering with the research community. What are its current thresholds, and what should they ideally be? There needs to be a striking balance for advancement in India, especially since the country is exposed to diverse climatic conditions. Compared to nations like the UK and the USA, which are prominently developed, India, as a developing nation, must also safeguard its climatic conditions and protect the interests of its vast population. Moreover, we need to first view this through the lens of a national territorial project and exercise control over its regulation before considering, in a practical world where advanced developed nations are politically driven to safeguard their own interests, the establishment of an international regime.[2] Even if there arises a need for international cooperation on environmental projects, which would indeed be a sensible approach to combat global issues, there must be stringent laws to determine and establish collaboration. Geoengineering is a growing process that will not happen overnight; it is not a medicine that can be easily swallowed with the expectation that the issue will simply subside. Rather, it is a deep-rooted pursuit whose full extent and retrospective effects are yet to be determined.

Geoengineering is an experimental project in most jurisdictions. India has used concepts of cloud seeding to induce rainfall, for example, recently it was experimented in Maharashtra wherein it resulted in 18% more rainfall than normal conditions, with the study being published by Bulletin American Meteorological Society (BAMS).[3] Such projects are intentional interventions in nature's natural course with uncertain transboundary consequences that are barely surface touched in terms of knowledge and study conducted on them. The Environmental law, often considered to have covered all aspects of the issues pertaining to the environment, the Environment (Protection) Act, 1986[4], enacted as a response to the Bhopal Gas Tragedy, irrespective of having wide powers and scope, is not effective. Since the Act is reactive and not anticipatory in nature, it is a ticking time bomb, considering the scale and irreparable damage the lack of governance of geoengineering projects could do if not well executed. It shall have a preventive assessment evaluation for reducing risk.

The Environment Act[5] contains no dedicated provision for evaluating the large-scale climatic interventions that have been done through geoengineering. Irrespective of the Act giving the government the power to prohibit or restrict any activities, it does not mandatorily impose liability on such projects or even issue monitoring regulations by the government over these projects. This makes the act insufficient to address climatic interventions whose limits are global and uncertain and one that leaves an intergenerational effect that most likely would be irreparable.

2. Vikram Mathur & Aparna Roy, Perspectives from India on Geoengineering, Current Science. 116. 40, 40–46 (2019).

3. "Cloud Seeding Experiment Over Maharashtra's Solapur Results in 18% More Rainfall," *Times of India* (Nagpur), Oct. 26, 2023, 10:46 IST, https://www.timesofindia.indiatimes.com/city/nagpur/cloud-seeding-experiment-over-maharashtras-solapur-results-in-18-more-rainfall/articleshow/104715863.cms (last visited Aug. 09, 2025).

4. Environment (Protection) Act, 1986, No. 29, Acts of Parliament, 1986 (India).

5. *Id*. at 5.

Further, the Indian law pertaining to air pollution, that is, the Air (Prevention and Control of Pollution) Act, 1981[6], has an extensive legislation with respect to regulations of emissions from industries and vehicles, yet it doesn't dive deeper or more certainly deal with intentional emissions that are made into the atmosphere for manipulating the climate. There are projects pertaining to stratospheric aerosol injection that have been attempted in India. Such projects involve intentionally releasing certain particles into the atmosphere to counteract the gases that are causing pollution. This concept of injecting/emitting something into the atmosphere most certainly is not pollution in its conventional sense, but rather such an act is a climate manipulation tool. The Air Act[7] majorly focuses on industry/source of pollution-based issues, more specifically, it deals with factories and vehicles, whereas understanding and determining the category of geoengineering interventions through technological advancement is uncontrolled and not easy to be interpreted by pre-existing provisions. Considering the practical implementation of this Act and still observing a significant increase in pollution in India over the years, it shall be detrimental to understand that the Act is inefficient and not equipped to regulate the geoengineering projects that have a global effect.

Furthermore, even when we look at water laws or other Indian laws for geoengineering in such aspects like the Water (Prevention and Control of Pollution) Act, 1974[8], the Biological Diversity Act, 2002,[9] and the Forest (Conservation) Act, 1980[10], all of them regulate individual and specific components of the environment; however, there lacks clarity for understanding how these laws will help regulate something that is rather assisting the purpose for which the law was enacted in the first place. All these laws are not adequate to equip or draw an analysis for practices of climate manipulation.

Even the EIA Notification 2006[11] under the Environment Act[12] provides a framework for environmental impact assessment of industrial projects. However, geoengineering projects are not listed under its schedules. Hence, projects like cloud seeding have been undertaken without any mandatory impact assessment or public consultation or even government monitoring of these projects. This shows the need for having regulations for governing geoengineering, since the impact is unpredictable for better or for worse.

6. Air (Prevention and Control of Pollution) Act, 1981, No. 14, Acts of Parliament, 1981 (India).

7. *Id.* at 7.

8. Water (Prevention and Control of Pollution) Act, 1974, No. 6, Acts of Parliament, 1974 (India).

9. Biological Diversity Act, 2002, No. 18, Acts of Parliament, 2003 (India).

10. Forest (Conservation) Act, 1980, No. 69, Acts of Parliament, 1980 (India).

11. Ministry of Env't & Forests, Notification on Environmental Impact Assessment, S.O. 1533(E), Gazette of India, Sept. 14, 2006 (India).

12. Environment (Protection) Act, *supra* note 4.

If we look at it through the lens of the constitution for the purpose of this paper, Article 21 of the Indian Constitution[13] includes the right to a healthy environment. Environmental protection has its essence even in the Constitution. Mostly, the interpretation of the constitution pertaining to the protection of the environment has arisen through public interest litigations. All of which addressed specific instances that caused damage; again, such an approach is reactive and not anticipatory in nature. Even though the Constitution may award an ex post facto remedy, it cannot adequately address the transboundary climate risk and intergenerational effect that might take place. Such judicial remedy, due to lack of governing provisions, may be further delayed to achieve justice that cannot be quantified to the damage that might have been already caused in such an uncontrolled space of geoengineering. Irrespective of having the polluter pays principle, geoengineering is the way of attacking the damage caused by climate change; it is a research-based project that is experimental in nature. Thus, such projects could go wrong at times, leaving long-term damage, and the environment being a sacred resource, per se, if it could also be termed under the umbrella of resources for humans, the exploitation of the same shall be minimal. Even though Article 21 is the major source of environmental rights, it is insufficient to analyze, understand, and regulate these geoengineering projects.

Even Article 51-A or 4-A mentions that everyone has an obligation to improve the environment and protect it. This might seem to drive the geoengineering projects, but mere purpose alone cannot constitute perfect execution in an ever evolving and advancing world.

Considering all these aspects of Indian laws, the projects that have already begun in India and have taken place so far have all, in their technicality, been unregulated in nature. Even studying the effect of such projects might take years, and determining such effect would require having expert authorities monitoring such projects in the first place. Moreover, the problem arising would be so complex in nature that the judiciary might take years for even establishing the liability that might arise in instances in front of the law. Such as if there is an event of crop damage or flooding caused by unintended excessive rainfall that was induced through geoengineering, who shall be held liable? Will it be falling under the concept of Act of God in the determination of liability? All of these are essential since in India it could be considered the beginning of establishing geoengineering, but the same could be true of the developed nations or well-equipped nations for evil purposes, turning it into an environmental weapon, which would again be hard to regulate.

Even if there are projects taken by government institutions or private institutions, without any public consent or participation, they would again be debated as violations of the rights of the

13. INDIA CONST. art. 21.

public. Especially for communities that are dependent on monsoon cycles, such interventions can alter livelihoods significantly.

The Hon'ble Supreme Court in the landmark judgement of **MC Mehta v Kamal Nath**[14] had observed the Public Trust Doctrine and stated the state shall have a responsibility to protect the environment. This also imposes an indirect obligation on the state to not oversee the projects that have environmental effects (for better or for worse) or the inadequacy of the law regulating it.[15]

India, having no proper regulation, risks the ecological consequences that might arise, especially since it is still developing while facing multiple social issues like overpopulation, poverty, etc. Moreover, there aren't even regulations to govern small-scale geoengineering projects, let alone large-scale ones, which is an indicator of disaster waiting to happen.

Through all of this, it is clear to determine that proceeding without preventive assessment regulations will lead to risks beyond imagination and control for the time being.[16] And in a climate-vulnerable country like India, such risks are magnified, as millions depend directly on stable ecosystems for survival.

Importantly, if geoengineering projects are to have profound success and aren't regulated from the start, they might give rise to moral issues in the society, since there might be institutions that might use geoengineering as a substitute for mitigation of emissions. Meaning more emissions might happen and will be reprimanded by geoengineering, giving unfair and unethical means for overexploitation of the environment and its sacred resources. Hence, there lacks proper regulation in India currently. India needs to urgently constitute regulations for governing geoengineering that cover all the possible aspects.

INTERNATIONAL LEGAL PRINCIPLES AND INDIA'S OBLIGATIONS IN GOVERNING GEOENGINEERING

Advancement in technology has fascinatingly reached a point where the damage caused by us, in terms of climate change, could be controlled by different approaches to keep the earth sustainable. Essentially there has been a rise in geoengineering to tackle climate change across the globe, with good intentions. However, the techniques, instruments, and lengths that these projects are taking place on are extremely unpredictable in practicality. Theoretically sounding perfect on paper might not forecast each aspect and each impact it might have, especially since,

14. M.C. Mehta v. Kamal Nath, (1997) 1 S.C.C. 388 (India).

15. Gyanashree Dutta & Upankar Chutia, *The Legal Management of Geoengineering and Climate Change in India: An Analysis,* 5 CMR U. J. CONTEMP. LEGAL AFF. 280 (2023).

16. Aarti Gupta et al., *Towards a Non-Use Regime on Solar Geoengineering: Lessons from International Law and Governance*, 13 Transnat'l Envtl. L. (2024), [368,368–99] (2024).

to this date, scientists haven't been fully able to understand all the environment's components. Using such projects to seemingly breach such bounds of limitations for the betterment of the future should be encouraged. If such projects have positive responses, it still needs years of observations and study to determine its true effect on climate. Geoengineering is not a territorial issue, since it will affect everyone across the globe. There should be unity when looking at the common enemy, climate change. Even though geoengineering is a medium to mitigate it, there are multiple legal, ethical, and political aspects of this unexplored field, especially in India.

There are projects such as solar radiation management or carbon dioxide removal approaches and ocean fertilization that are executed through climate manipulation. These have global scientists' attention for groundbreaking advancement and discovery. Internationally, the environment is a major issue that is highly debated and agreed upon for safeguarding every human being irrespective of the nation they belong to.

Principle 15 of the Rio Declaration on Environment and Development (1992)[17] deals with the precautionary principle, which creates a mandate that the states shall take preventive action in the absence of full scientific certainty when such environmental harm is serious or irreversible. Geoengineering is an uncertain activity, and when there is such a high stake, it is better to be safe than sorry. Precaution would require ex-ante environmental impact assessments, public scrutiny, and international cooperation before deployment.

In India, the Hon'ble Supreme Court, in the case **of Vellore Citizens Welfare Forum v. Union of India,**[18] recognized that under Article 21 of the Indian Constitution[19], any state-sponsored experiment must undergo rigorous precautionary review. This could also be applied to geoengineering activities.

Further, the United Nations Framework Convention on Climate Change (UNFCCC)[20] articulated the principle of Common but Differentiated Responsibilities (CBDR); this was also reaffirmed in the Paris Agreement[21]. This principle means that all states shall share the responsibility for environmental protection, limiting it only to the historical emissions and harm done.

The issue, however, may arise that the developed countries are attempting to fund or use geoengineering as a shortcut to human activities to meet their global emission targets and commitments while shifting the risks to vulnerable and third-world countries. The CBDR,

17. Rio Declaration on Environment and Development, princ. 15, June 14, 1992, 31 I.L.M. 874.

18. Vellore Citizens Welfare Forum v. Union of India, (1996) 5 S.C.C. 647 (India).

19. INDIA CONST., *supra* note 13, art. 21.

20. United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107.

21. Paris Agreement, Dec. 12, 2015, T.I.A.S. No. 16-1104, 55 I.L.M. 740.

however, creates an obligation on states that any unilateral climate manipulation by the developed states without prior consultation with other states would be in violation of this principle. For this reason, there should be equitable participation across the globe for establishing geoengineering regulations.

Even under the doctrine of State Responsibility, which is codified by International Law Commission[22], it has been stated that states shall take responsibility for any wrongful acts that would be transboundary in nature, including any environmental harm, where geoengineering projects could easily create a transboundary effect.

The best way to understand this is by the **Trail Smelter Arbitration, i.e., US v. Canada** in 1941.[23] The US had sought damages from Canada over fume emissions from a Canadian smelter that led to damage in Washington, DC, in the US. This case established that no state may use its territory in a manner that may cause environmental harm to another. Applying this international case to geoengineering, a state has a duty to not harm others along with a right to be protected from harm by other nations. This would help in establishing international liability for governance of geoengineering.[24]

India has been a member of important environmental treaties, the UNFCCC[25] and the Paris Agreement,[26] which helps in establishing obligations and reaffirming the CDBR. Further, India is a party to the Convention on Biological Diversity,[27] which in 2010 had adopted a moratorium on geoengineering activities except for small-scale research under strict regulation, which India is bound to respect. India is also part of UNCLOS[28], which imposes a duty on India to protect the marine environment. However, there is no specific law in India reflecting and respecting its international obligations. India, under both international and national law, has an obligation to take a precautionary measure to impose regulation on geoengineering activities.

If we compare India's position with the US, the US had agencies like NOAA[29] and EPA[30] that mostly regulate the research for climate manipulation. Moreover, the National Research

22. International Law Commission, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, U.N. Doc. A/56/10 (2001), reprinted in [2001] 2 Y.B. Int'l L. Comm'n 26, U.N. Doc. A/CN.4/SER.A/2001/Add.1 (Part 2).
23. Trail Smelter (U.S. v. Can.), 3 R.I.A.A. 1905 (1941).
24. Armeni, Chiara. "Global Experimentalist Governance, International Law and Climate Change Technologies." 64 Int'l & Comp. L.Q. 875 (2015).
25. UNFCCC, *supra* note 20.
26. Paris Agreement, *supra* note 21.
27. Convention on Biological Diversity, June 5, 1992, 1760 U.N.T.S. 79.
28. United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 3.
29. Nat'l Oceanic & Atmospheric Admin. (NOAA), *Climate*, https://www.noaa.gov/climate (last visited Aug. 10, 2025).
30. U.S. Envtl. Prot. Agency (EPA), https://www.epa.gov (last visited Aug. 10, 2025).

Council[31] in the US had recommended further research into geoengineering activities subject to governance and public participation. It had two volumes published in 2015 for climate intervention CDR[32] and reflecting the sunlight to cool Earth.[33] The US particularly has research governance regulations for geoengineering activities, which is extremely important as a first step.

If we further compare India's position to the European Union, the government has raised a moratorium on large-scale geoengineering projects. The EU has more of an anticipatory approach that shall be studied by India to frame regulations.[34]

India will understand the need for having regulations in place as soon as possible. Such regulation shall establish an authority to monitor and grant the projects permission and clearance in the first place, while limiting its activities. This authority shall have an understanding of geoengineering and its effects, not only in India but also across the globe, and the intergenerational risk that the projects might have. It should also constitute a scientists committee that could overlook all aspects of these projects (climatology, ecology, social and ethical aspects, and any other specific niche of people). There should be proper transparency with regard to projects in public by protecting people's rights under the RTI Act[35] for these projects.

India's commitment made at an international forum, which is in tune with the constitutional philosophy to preserve and maintain ecology and the environment, must be understood and be incorporated in domestic laws and executive decisions for the effect of such to fill in the void.[36]

Balancing economic growth with environmental conservation in geoengineering projects is essential. All these suggestions are essential to look at since the Hon'ble Supreme Court of India in the case of **State of Himachal Pradesh v. Ganesh Wood Products**[37] had mentioned the principle of intergenerational equity, since the natural resources are limited, utilization of the same shall be as limited and thoughtful as possible.

31. Nat'l Research Council, *Climate Intervention Reports* (Nat'l Acads. Press 2015).

32. Nat'l Research Council, *Climate Intervention: Carbon Dioxide Removal and Reliable Sequestration* (Nat'l Acads. Press 2015).

33. Nat'l Research Council, *Climate Intervention: Reflecting Sunlight to Cool Earth* (Nat'l Acads. Press 2015).

34. Katelyn Tsipiras & Will J. Grant, *What Do We Mean When We Talk About the Moral Hazard of Geoengineering?*, 24 Envtl. L. Rev. 27 (2022).

35. The Right to Information Act, No. 22 of 2005, India Code (2005).

36. T.S. Doabia, *Environmental & Pollution Laws in India* (4th ed. LexisNexis 2021).

37. State of Himachal Pradesh v. Ganesh Wood Products, (1995) 6 SCC 363.

CONCLUSION

The “do no harm” principle shall act as a guiding principle while analyzing and overlooking the geoengineering projects. There is growing scientific interest to mitigate the issue of climate change in India through its broad existing laws, but it lacks clarity in governance. Geoengineering is an extremely extraordinary opportunity for people to counterattack climate change and sustain the earth as a safe place. With advancements in technology, which India is capable of and proven to be, there should exist reflecting laws for precaution of the risks associated with it. The intervention with the climate should be of such a nature that it is only done for crucial purposes with proper monitoring.

Indian provisions read with international principles set a healthy tone and an optimistic future if governed and regulated well. Since all the geoengineering projects are at an early stage irrespective of their scale, there should be proper governance of the same. Such influence shall be taken from the US and the EU, which are both very well advanced and developed.

There is an opportunity to establish international relations and collaboration for mitigating this issue together by applying concepts such as CBDR, making it fair and just. All of this is crucial since the projects’ impact will be irreparable and intergenerational in nature. Taking precautionary measures shall be the way India moves forward with its scientific advancement.

FROM GRASSROOTS TO GREEN COURTS: ENVIRONMENT LITIGATION AND COMMUNITY RIGHTS IN SOUTH ASIA

Mridusha Chetry[1]

ABSTRACT

South Asia, one of the most disaster-prone regions in the world, is highly vulnerable to natural disasters and environmental degradation, which affect communities across the region. With nearly 23% of the global population living here, rampant deforestation, rapid industrial growth, recurring disasters, and climate change have increasingly threatened the livelihoods of ordinary people and local ecosystems. For centuries these diverse and vulnerable communities have relied on their inherited indigenous knowledge built on generations of experience to adapt and cope with natural disasters. Yet this knowledge has proved less effective against the risks and consequences of human-driven environmental degradation. Therefore, environmental litigation has surfaced as a formidable public and legal policy for the vulnerable communities pursuing reparations and protection.

This paper explores the connection between environmental litigation , and community rights at the level of SAARC countries through judicial interpretation, loose constructionism, Public Interest Litigation. The paper also touches on the SDMC's facilitative role, use of environmental litigation to protect the community rights of the population. Our procedural approach engages comparative legal method and legal milestones of cases and MC Mehta v Union of India, Tanguar Haor of Bangladesh, the evolving environmental legislation over a decade in Nepal, public policy documents and doctrinal analysis to interrogate the division of Environmental, Natural Disaster, and Biotechnology of SAARC, Where the discussion may promote regional cooperation, which show relations both of institutional success and shortcomings. This paper also proposes legal solutions such as environmental court which encompasses participatory mechanisms focusing mainly on India, with a proactive focus toward regional collaboration amongst South Asia**.**

Keywords: Environmental degradation, South Asia, Public Interest Litigation, SAARC, Judicial Activism.

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INTRODUCTION

South Asia stands among the world's most environmentally vulnerable regions. The region's diverse biodiversity from the Himalayas to the seashores is being devastated by unchecked deforestation, climate change, and industrial pollution. The burden of these environmental threats falls most heavily on marginalized groups tribal peoples, rural farmers, and coastal residents who often lack formal avenues to claim or defend their environmental rights. Environmental litigation has become a powerful democratic tool for communities to defend their land, health, and livelihoods in this situation.

Public Interest Litigation (PIL) has significantly contributed to the enlargement of the environmental justice space in South Asia. India, however, has seen strong judicial activism: the Supreme Court in **M. C. Mehta v. Union of India** (Taj Trapezium Case, 1996),[2] famously applied precautionary principle, polluter pays, and sustainable development to safeguard the Taj Mahal against industrial pollution. Similarly, **M. C. Mehta v. Kamal Nath** (Beas River valley case, 1996)[3] validated the public trust doctrine, invalidating an unlawful land lease and requiring ecological restitution. Such cases highlight how the judiciary now plays a critical role in protecting not only cultural heritage but also environmental integrity.

Across the world, environmental litigation is gaining in moment. In Southeast Asia, the trend-setting lawsuits like a community-based case in Thailand to oppose coal mining reflect civil society's increasing legal mobilization for the environment. These patterns, even though nascent in South Asia, reflect the common global momentum toward environmental justice with a focus on communities.[4]

Based on doctrinal analysis, South Asian jurisprudence, and rising regional trends, this paper seeks to examine how environmental litigation strengthens community rights in South Asia. Building upon my field research experience with the SAARC Secretariat's Environment and Natural Disaster Division, I examine the access of communities to environmental justice and the structural barriers in their way. Major questions answered are: How do legal processes in South Asia facilitate or discourage community involvement in environmental management? What institutional and socio-legal changes are crucial for efficient environmental justice?

This paper contributes to environmental justice debates by bringing together legal analysis and the lived experiences of affected communities. It seeks to suggest practicable reforms ranging from legal capacity development and access-to-litigation programs to regional cooperation mechanisms through SAARC, consistent with SDGs like SDG 13 (Climate Action), SDG 15

2. M. C. Mehta v. Union of India & Ors., AIR 1987 SC 1086 (India).

3. M. C. Mehta v. Kamal Nath, (1997) 1 SCC 388 (India).

4. Heinrich Böll Stiftung, Environmental Litigation in Southeast Asia (May 20, 2022).

(Life on Land), and SDG 16 (Justice). Finally, it contends that community-initiated litigation not only enforces environmental rules, but also expresses participatory democracy, making environmental governance both inclusive and sustainable.

CONCEPTUAL FRAMEWORK

This part of the paper establishes the theoretical lens for analysing environmental litigation and community rights in South Asia. It unpacks key concepts, rights frameworks, and the relevance of justice theories in shaping environmental jurisprudence. Environmental litigation is a term used to describe legal proceedings brought to implement environmental protection standards, usually by public interest groups or communities affected. Public Interest Litigation (PIL) allows for citizens, especially marginalized communities, to pursue judicial relief against environmental deterioration without necessarily proving personal injury an essential access to justice tool. Moreover, devices such as class actions and citizen suits (as in the U.S. Clean Water Act) enable individuals or groups to sue for non-compliance or polluters by responsible agencies on grounds of neglecting pollution, waste management, or ensuring regulatory compliance.

At the core of community-focused environmental litigation is the establishment of inherent environmental rights. The Right to a Healthy Environment, now recognized by the UN Human Rights Council and General Assembly, places environmental quality as a core human right. For indigenous and traditional peoples, this encompasses resource rights, ancestral land claims, and resource stewardship that is central to their cultural heritage and sustainability.[5]

Environmental and community rights intersect significantly with several SDGs. Specifically:

- **SDG 6** (Clean Water and Sanitation)—ensuring equitable access to water and sanitation.
- **SDG 13** (Climate Action)—mitigating climate change impacts on vulnerable communities.
- **SDG 14** (Life Below Water) and **SDG 15** (Life on Land)—protecting ecosystems.
- **SDG 16** (Peace, Justice & Strong Institutions)—strengthening environmental governance and access to justice.
- Environmental litigation and community rights are grounded on a number of interconnected theoretical frameworks:

5. *Thomas B. Johansson et al., Human Right to a Healthy Environment for a Thriving Earth: Handbook for Weaving Human Rights, SDGs and the Post-2020 Global Biodiversity Framework, ResearchGate (2019).*

- Environmental Democracy: Prioritizes access to information, effective public participation, and judicial remedies in environmental decision-making—principles codified in Rio Declaration's Principle 10.[6]
- Environmental Justice: Prioritizes fair distribution of environmental benefits and burdens. This encompasses:
- Procedural Justice (fair participation),
- Distributive Justice (fair distribution of risk),
- Recognition Justice (recognizing marginalized communities and their socio-cultural contexts).
- Rights of Nature (Ecocentrism): Challenges anthropocentrism by extending legal standing to ecosystems a jurisprudential movement acknowledging ecosystems as legal persons with rights.

These theories are the basis for legal and ethical underpinnings of community-led environmental litigation and offer a normative basis for assessing its influence throughout South Asia.

HISTROCIAL EVOLUTION OF ENVIRONMENTAL LITIGATION

Pre-Constitutional Frameworks

Prior to contemporary environmental legislation, South Asian legal regimes drew upon conventional laws such as torts, penal codes, forest, and water laws to cope with environmental issues. These laws tended to provide piecemeal remedies and were not backed by specialist framework or robust enforcement mechanisms. For example, ordinary criminal provisions were occasionally used against pollution, but without systematic environmental protection as a unified legal goal.

Post-Stockholm Institutional and Legislative Developments

The 1972 Stockholm Conference was the turning point, triggering the integration of environmental responsibilities into regional governance schemes.[7] India countered with the 42nd Constitutional Amendment, integrating environment-protection obligations into constitutional law under Articles 48A (State obligation) and 51A(g) (citizen obligation).[8] Later, India enacted

6. *World Resources Institute (WRI), What Does Environmental Democracy Look Like? (July 2019).*
7. LawLex, Stockholm Conference: United Nations Conference on the Human Environment (June 5, 2016).
8. Loyal Logic, Development of Environmental Law in India Post-Stockholm Conference, Tumblr (June 2021).

umbrella legislation the Water Act (1974), Air Act (1981), Environmental Protection Act (1986) establishing statutory bases for environmental management.

Global developments in international law, such as the Stockholm Declaration, brought forth concepts like precaution, polluter-pays, and intergenerational equity. These soon became the ethical and jurisprudential foundation of later environmental legislation and court decisions in South Asia.

Emergence of Public Interest Litigation (PIL)

Since the 1980s, Public Interest Litigation has been a revolutionary vehicle in India—a mechanism for increasing citizen participation in environmental matters by permitting marginalized groups to access redress. Cases like M.C. Mehta v. Union of India (Taj Trapezium Zone) brought international principles such as the precautionary principle and polluter-pays doctrine into action nationally. Also, in Vellore Citizens Welfare Forum v. Union of India (1996), courts imposed environmental obligations, illustrating the capacity of PIL to induce systemic reforms.

In Bangladesh, Dr. Mohiuddin Farooque v. Bangladesh (1995) established PIL in environmental issues formally, allowing citizens and NGOs to enforce statutory provisions for protecting the environment. In Sri Lanka, NGOs such as the Environmental Foundation Limited employed litigation successfully to block environmentally harmful schemes, e.g., conserving public access to beaches in the Galle Face Green case.[9]

Judicial Expansion of Environmental Rights

Regional judiciaries have been important in developing environmental jurisprudence. In India, the National Green Tribunal (NGT), set up under the National Green Tribunal Act, 2010, has institutionalized speedy environmental adjudication on the basis of principles such as sustainable development and natural justice. This action has facilitated faster, accessible redress for environmental grievances.

Summation: A Growing Legal Landscape for Community Justice

Together, South Asia's environmental justice landscape has shifted from ad-hoc judicial relief to formal, principle-oriented processes. Landmark litigation and institutional reforms now provide marginalized communities greater avenues to enforce environmental rights. Meaningful access to justice is still uneven, however, requiring ongoing legal innovation, enforcement intensity, and inclusive judicial structures.

9. International Institute for Sustainable Development (IISD), *Stockholm and the Birth of Environmental Diplomacy* (June 2022).

COMPARATIVE LEGAL LANDSCAPE

South Asian nations have all taken unique constitutional and legal strategies to protect the environment, frequently relying on the general right to life. As an illustration, India's Supreme Court has again and again stated that the constitutional right to life (Art. 21) "includes the right of enjoyment of pollution free water and air". Bangladesh courts also acknowledge environmental health under the right to life (Art. 32) and public welfare responsibilities (Art. 18A), whereas Pakistan appeals to its assurances of life and dignity (Arts. 9 & 14) to call for a healthy environment. Nepal's 2015 Constitution clearly assures a clean environment (Art. 30) and states a responsibility of conservation (Art. 51(g)). Sri Lanka's Constitution does not include an express environmental right, but it resorts to broad rights to life and property and statutory obligations. The small Himalayan states of Bhutan and the island nation Maldives integrate ecological protection into their constitutions themselves – Bhutan's Art. 5 guarantees every generation a right to inherit an environment "no less rich" than that of their predecessors,[10] and the Maldives' Art. 22 obliges the state to take steps to preserve the environment for the "benefit of present and future generations."

India

The judiciary in India has been the most active. The Supreme Court, over the decades, has equated the environment with the right to life and initiated dozens of Public Interest Litigations. In **Subhash Kumar v. Bihar (1991)** it squarely held that Art.21 encompasses "the right of enjoyment of pollution free water and air."[11] In **M.C. Mehta v. Union of India (1987)** (the Shriram Oleum gas case), the Court placed an "absolute liability" rule on dangerous industries and applied the polluter-pays principle. In Vellore Citizens Welfare Forum (1996), it applied the precautionary principle and directed strict pollution controls for a group of tanneries.[12] These and similar judgments have resulted in landmark remedies (e.g. establishment of monitoring committees, imposing cleaner technology, inflicting enormous fines). India's Art.48A and 51A(g) (Directive Principles) also support this activism by requiring the state and citizens to safeguard forests, wildlife and the environment.

Bangladesh

Bangladesh's Supreme Court has also broadened standing in environmental matters. While "environment" is not mentioned by the Constitution, it promises the right to life (Art.32) and charges the state with enhancing public health (Art.18A). In the 1996 case of Dr. Mohiuddin Farooque v. Bangladesh, the Court (High Court Division) granted a writ petition from

10. *Asian Judges Network on Environment (AJNE), Environmental Adjudication and the Judiciary in Bhutan (2013).*
11. Subhash Kumar v. State of Bihar, AIR 1991 SC 420.
12. Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 SCC 647 (India).

environmental lawyers (BELA) alleging water and air pollution. It directed the Directorate of Environment to make all "red-category" industries install effluent treatment plants within a year (and "orange" factories within two years).[13] This actually forced government agencies to implement Bangladesh's pollution-control laws. The case was a milestone in forcing sweeping public-interest remedies; the court subsequently permitted related reports on compliance. Later cases have also employed Article 102 writs to demand industrial pollution regulation, waste management, and coastal zone protection.

Pakistan

Pakistan's judiciary has also evolved a comparable jurisprudence. In the late 1990s the Supreme Court established specialist Green Benches in every High Court for the disposal of environmental cases. The Constitution's protection of life (Art.9) and dignity (Art.14) has been construed to include a healthy environment. A landmark case is Asghar Leghari v. Federation of Pakistan (2015),[14] in which a farmer filed a case against the government for non-implementation of its climate change policy. The Lahore High Court Green Bench ruled that climate change effects (floods, droughts) were already infringing on citizens' rights. It ruled that inaction violated fundamental rights and the precautionary principle. The court set up a Climate Change Commission and mandated ministries to nominate focal persons and suggest adaptation strategies by deadlines. This ruling is frequently referred to as opening climate justice litigation in Pakistan. Previously, high courts had also employed PIL to suspend mining in the Indus (e.g. Ganga Pollution Case style directions) and to implement the 1997 Environmental Protection Act.

Nepal

Nepal's new constitution (2015) clearly enshrines environmental rights. It states that all citizens have the right to a healthy and clean environment (Art.30) and commands the State to conserve natural resources (Art.51(g)). The Supreme Court of Nepal has employed these provisions assertively. In Shrestha v. Office of the Prime Minister (2018), one of the citizens requested a climate change act, claiming that inaction to enact one was in contravention of Article 30 and international obligations. The Court concurred that the state inaction regarding climate change abridged the petitioner's fundamental rights. It directed Parliament to pass an overarching climate change act (covering mitigation, adaptation, de-carbonisation of fossil fuels, and environmental compensation) and in the interim to put existing policies (the 2011 Climate Policy, NAPA, etc.) into effect.[15]

13. Dr. Mohiuddin Farooque v. Bangladesh, 48 DLR (AD) 1996 (Bangladesh) (Supreme Court of Bangladesh, Appellate Division).

14. Ashgar Leghari v. Federation of Pakistan, (2015) W.P. No. 25501/2015 (Lahore High Court).

15. Shrestha v. Office of the Prime Minister et al., Writ No. 078-WO-0442 (Sup. Ct. Nepal 2022).

In its reasoning, the Court clearly invoked the intergenerational justice and sustainable development duties enshrined in the constitution. Other Nepali decisions (e.g. on diversion of rivers, sand mining) also safeguard water and sanitation under Art.30 by issuing writs and penalties to enforcement authorities.

Sri Lanka

Sri Lanka does not have an express "right to environment" in its legislation, but courts have applied innovative thinking. They have applied pre-existing rights pertaining to duties (e.g., the duty to protect property, Articles 11–13, and the Fifth Fundamental Duty in the Preamble) to environmental cases. Fundamental rights petitions or public nuisance suits are available to environmental NGOs. Whenever possible, the judiciary is increasingly confident: e.g., in 2019 the Court held that the failure to regulate a dangerous mining operation infringed on people's right to livelihood, mandating strict surveillance. One recent milestone is the MV X-Press Pearl case (2025), an enormous maritime disaster where a chemical-carrying container vessel burnt and sank off the coast of Colombo. The Supreme Court heard before a three-judge bench and held shipowners, operators, and local agents jointly and severally responsible for more than US$1 billion in damages.[16] The Court enforced the principle of "polluter pays" and prescribed strict (almost absolute) liability for the environmental damage. It established a special trust fund for compensation and remediation, requiring high up-front payments and saving future payments subject to total damage determination. This historic ruling marks Sri Lanka's growing commitment to holding private parties responsible for ecological harm, even without express constitutional language.

Bhutan

Bhutan's legal system is highly green: its Constitution (2008) enshrines that "each generation shall have the right to inherit and have access to the benefits of the same natural resources" enjoyed by the past generations.[17] Bhutan has a "green" philosophy (Gross National Happiness) enshrined and a law to maintain at least 60% forest cover.

Yet, formal court action on environmental matters is extremely uncommon. There are no reported significant public-interest environmental cases. Rather, Bhutan depends on strict regulation and prevention – e.g., prohibiting certain industries and promoting renewable energy and sustainable development through law and policy. The courts are developing capacity (judges have received special training workshops), but enforcement has so far been carried out by agencies at the direction of the King. (A fictional example is that a citizen might possibly

16. Reed Smith LLP, Supreme Court of Sri Lanka Assigns Liability in MV X-Press Pearl Disaster (Aug. 2025).

17. Asian Judges Network on Environment (AJNE), Environmental Adjudication and the Judiciary in Bhutan (2013).

sue under the constitution if a law breached Bhutan's environment commitments, but this case has not been widely reported.)

Maldives

The Maldivian Constitution clearly installs environmental protection. Article 22 provides that "The State shall protect and preserve the environment for the benefit of present and future generations,"[18] and Article 23(d) enshrines a right to a healthy environment. Litigation is new but expanding. Courts are starting to enforce environmental legislation and EIA (Environmental Impact Assessment) regulations. For instance, in 2024 local campaigners (via the NGO Corals for Maldives) brought a case to prevent a controversial Gulhifalhu land-reclamation scheme (dumping coral sand onto reefs for a luxury resort development). The High Court issued an injunction suspending the dredging, citing breaches of the Constitution and EIA laws. The government quickly appealed, and the Supreme Court subsequently stayed the injunction (permitting work to restart).[19] In either case, the matter has brought the judiciary to center stage in bringing development v. enviro. responsibilities into closer scrutiny. It shows that Maldivian courts can (and will) hear climate-related rights claims, even as the executive has occasionally pushed back against enforcement.

SAARC Regional Cooperation

Regionally, South Asian states have prioritized environmental cooperation, although SAARC itself is without enforcement authority. The SAARC Charter (1985) and subsequent summit communiqués have called consistently for conservation of the region's delicate ecosystems.[20] The SAARC Convention on Cooperation on Environment (adopted in 2010, entering into force in 2013) binds member countries to cooperate in 19 areas (pollution control, coastal management, biodiversity, etc.).[21] SAARC has also come out with a regional Environment Action Plan (1997) and Climate Change Plan (2008). Importantly, the Delhi Statement (2009) and Thimphu Statement (2010) of SAARC Environment Ministers reiterated collective action on climate change and pollution. SAARC cooperates through environment/forestry committees and operates regional centers (e.g. SAARC Disaster Management Centre). There is, however, no SAARC court or binding agreement except the Convention – implementation relies on domestic follow-up. In reality, SAARC's function has been to create a platform for policy discussion and capacity-building, through technical support (e.g. MOUs with UNEP, UNISDR) rather than adjudication.

18. All About International Law, Maldives' Position on Climate Change (Dec. 29, 2024).

19. Human Rights Watch, Suing Maldives to Enforce Its Environmental Laws (Feb. 29, 2024).

20. SAARC Secretariat, Environment, Natural Disasters and Biotechnology: Areas of Cooperation.

21. SAARC Secretariat, SAARC Convention on Cooperation on Environment (2010).

Analysis

South Asian nations reflect a common trend in acknowledging environmental rights within human rights frameworks but vary in extent and enforcement.

India is the leader with wide-ranging judicial activism and a corpus of case law. Bangladesh and Pakistan have trailed with public interest writs and technical courts. Nepal's post-2015 constitution lays out environmental rights explicitly, bestowing a robust mandate on its courts; Sri Lanka and Bhutan include environment protection in policy and implicit rights, but with fewer cases so far. Maldives, severely exposed to climate change, has now started challenging its constitutional promises in new lawsuits. SAARC regional efforts confirm shared objectives (polluter-pays, precaution, intergenerational equity) but depend on national initiatives. In each instance, the invocation of core or constitutional rights (to life, health, dignity) as tools of environmental protection is a common thread. Landmark decisions throughout the region not only invoke broad principles (precaution, polluter-pays, sustainable development) but also develop novel remedies (environmental commissions, mandates for lawmaking, massive damages funds) to respond to crises. This comparative terrain indicates convergence (rights-based claims and progressive principles) and divergence (differing institutional tools and degrees of activism) in South Asia's legal response to environmental challenges.

CHALLENGES IN COMMUNITY-CENTRIC ENVIRONMENTAL LITIGATION

Legal barrier

- Restrictive standing and constricted remedies: Only directly "aggrieved" individuals may sue in some South Asian nations, restricting community lawsuits. Sri Lanka's Supreme Court, for instance, requires that fundamental rights petitions be instituted only by entities with "sufficient interest" (i.e. an individual, state-inflicted harm).[22] Courts have similarly ruled that environmental rights are enforceable solely against the government (private polluters may not be sued directly).[23] The constitution in Bangladesh is committed to protecting the environment but just as a non-justiciable policy directive (Article 18A) and thus communities must use invoking the general "right to life" instead. These procedural boundaries result in many grassroots organizations not having formal standing to initiate public-interest litigation, even when legislation (such as environmental impact assessment laws) guarantees consultation with communities.

22. Camena Guneratne, Using Constitutional Provisions to Advance Environmental Justice – Some Reflections on Sri Lanka, 11 Law, Environment & Development J. 72, 72 (2015).

23. Abuzar Gifari, Addressing Loopholes in the Climate Change Laws in Bangladesh: Lessons from UK and Denmark, Oxford Human Rights Hub (Feb. 10, 2025).

- Procedural delays and technical challenges: South Asia's formal courts have devastating backlogs and prohibitively expensive procedures.

An analysis identifies millions of outstanding cases and an "adversarial system [that] cannot cope with the demands of society, particularly in the rural areas," with prices that are unaffordable and "delays which are staggering, procedures inscrutable". In Bangladesh, Environment Courts are under-resourced and subject to procedural burdens (e.g., a 25% deposit requirement for appeal) that effectively exclude poor litigants.[24] Throughout the region, poor communities are unable to overcome complex technical evidence requirements and lengthy judicial processes.

- High evidentiary burdens

Rules of court frequently place evidentiary burden on community plaintiffs to establish environmental harm – a daunting task without access to scientific resources.

In India, for instance, even when there has been some liberal doctrine, environmental plaintiffs are usually required to demonstrate the harm alleged. Indian jurisprudence has recently started to relieve this burden: the Supreme Court has applied the precautionary principle to require defendants to establish an activity is safe instead of requiring poor claimants to establish harm.[25] Outside India such doctrines are weaker, so communities are usually left with onerous proof requirements (between a project and harm to the environment over time).

- Limited enforceability of environmental rights

Legal systems in much of South Asia theoretically recognize environmental protection but accord it weak legal force. In Sri Lanka and Bangladesh, the basic environmental objectives (in constitutional directives or policy) are not legally enforceable as rights.[26]

Courts have "expanded" substantive rights (for example, treating clean air and water as part of the right to life), but this relies on judicial interpretation rather than explicit laws.[27] Thus, even when a court rules for a community, follow-up enforcement can falter due to vague legal standards or lack of institutional mechanisms to implement orders.

24. LSE South Asia Blog, Access to Justice for the Marginalised Rural People Across South Asia: Issues and Challenges (8 June 2020).

25. Md. Rizwanul Islam, Addressing Loopholes in the Climate Change Laws in Bangladesh: Lessons from UK and Denmark, Oxford Human Rights Hub (25 Apr. 2022).

26. Ruchi Anand, The Rules Governing Locus Standi in International Environmental Law: An Analysis of Representative Standing in Fundamental Rights Litigation 12 Law, Env't & Dev. J. 72 (2016).

27. Md. Rizwanul Islam, Addressing Loopholes in the Climate Change Laws in Bangladesh: Lessons from UK and Denmark, Oxford Human Rights Hub (25 Apr. 2022).

Political barrier

Government and corporate interests tend to collaborate to ride over people's concerns. For instance, in India's Hasdeo Aranya forest the Modi administration gave the green light for an Adani coal-mining project over decades of tribal resistance. Activists allege environmental laws and even constitutional approval requirements (in India's PESA law for tribal regions) were "tampered with to advance the project," indicative of a deep state–corporate nexus.[28] The central and state governments have been alleged to work as "agents of big capital,"[29] in effect placing corporate gain ahead of local livelihoods and environmental defense.

- Weak enforcement and regulatory capture: Regulatory authorities in most countries are either politicized or lack the will to enforce the law. In the Maldives, ministries, for example, automatically pre-approve development projects and use environmental impact assessments as a formality, bypassing serious review. Where community plaintiffs have filed suit (as in the Gulhifalhu land-reclamation case), courts can temporarily enjoin a project, but governments typically appeal such rulings on grounds of economy. There, the Supreme Court suspended an injunction against a reclamation based on claimed financial loss while permitting harmful work to proceed in the face of ongoing litigation. Such rulings indicate that political and economic interests rather than environmental rule of law often prevail.

- Administrative indifference to people's needs: Officials might be apathetic even where there are laws. Projects sponsored by influential forces (foreign investors, big business, or nationalist agendas) ride smoothly through bureaucracy.

Administrators might assert on-paper conformity, but enforcement is weak. As an activist in Maldives noted, approvals for projects commonly come before even the finalization of EIAs. This trend is replicated elsewhere across the region – e.g., South Asian Forest clearing and mining tend to advance following perfunctory consideration, indicative of a more general trend towards "total disregard of the people, the state, and the environment" in policymaking.

Socio-economic barriers

- Poverty and expense of litigation: The poor, rural, and resource-poor communities are most affected. Observers point out that in South Asia "only a few people in developing countries can afford to take legal action," and the rural poor "cannot afford the cost

28. Peoples Dispatch, Tribal Communities in India Fight Government-Corporate Nexus to Save Hasdeo Forest (Oct. 22, 2024).

29. Human Rights Watch, Suing Maldives to Enforce Its Environmental Laws (Feb. 29, 2024).

of litigation."[30] Court costs, expenses of traveling, and legal representation place meaningful relief beyond their reach. Even when public interest NGOs help, cases take time and money to collect evidence. Without state legal aid or NGOs, villages will drop cases after preliminary hearings because of inaccessibility or the long process.

- Illiteracy and unawareness: Insufficient legal education leads to the fact that most communities are unaware of their environmental rights and available remedies.

Courts themselves have recognized that "the vulnerable and weak segments of the society…[are] unable to approach this Court". Low literacy and language also hinder reading of legal notices and documents. Consequently, tribal and rural communities might never submit petitions, or have to trust well-connected go-betweens (who need not always represent the community's interest). South Asian judicial institutions have frequently been accused of being "prejudiced against poor and other marginalized people", which adds to the chilling effect of exclusion caused by the system.

- Indigenous and rural community marginalization: Forest-dwelling tribes, ethnic minorities, and fishing communities often have their voices excluded. In India, for instance, scheduled-tribe communities need to operate under additional rules of bureaucratic consent (such as PESA or the Forest Rights Act), but such provisions are usually disregarded or circumvented (as in Hasdeo). On the ground, the most marginalized – minority castes, landless laborers, women – usually are not able to organize formal petitions. A few nations have developed substitutes (Bangladesh's village courts, India's tribunals), but they are generally aimed at small disputes and never used for big environmental cases. In short, social exclusion implies that even legally permissible public interest litigation is a mostly urban NGO phenomenon and not a grassroots movement.

Climate change specific challenges

Transboundary environmental damage: Climate and ecological effects do not heed political frontiers, yet judicial recourse is limited. In South Asia, tensions between riparians demonstrate so: Bangladesh endures floods, drought and erosion below India's rivers but can urge change only under interstate pacts.

The 1996 Indo-Bangladesh Treaty on the Ganges Water, for instance, commits to balanced use and "no harm," but its critics point out that it has no mechanisms of enforcement. Bangladesh remains to suffer extreme water crises desertification, intense floods and salinity encroachment as climate variability alters India's upstream policies. There is no regional judicial forum

30. Sumit Bisarya, Access to Justice for the Marginalised Rural People Across South Asia: Issues and Challenges, LSE South Asia Blog (June 8, 2020).

where Bangladeshi villagers can sue Indian projects, or conversely, where Indian villagers can sue Bangladeshi projects, making communities vulnerable to changing climate-induced flows without court relief.

- Legislative lacunae and legal vacuums: Most South Asian countries have incomplete climate legislations, where communities are left with using archaic laws.

For example, Bangladesh does not have a specific climate law, rather it depends on sporadic environment and disaster legislation that does not create binding obligations. Nepal did better via the courts: in Shrestha v. Office of the Prime Minister (2018) the Supreme Court held Nepal's 1997 Environment Protection Act "inadequate" on climate and directed that a new climate law.[31] Nepal only passed new climate law after the court mandate. This sort of judicial activism underscores the issue governments will often leave climate policy until judges enforce them to act. Community litigants have to compel courts to fill legislative voids (as in Nepal) or apply vague rights, as laws do not specify definite climate obligations.

- Jurisdictional and institutional limitations:

Climate cases pose new jurisdictional challenges that overburdened courts and agencies.

Community plaintiffs can sue their domestic government (as in Nepal and Pakistan) but lack a forum for transboundary climate justice. Courts and regulators often lack climate expertise: environmental tribunals were created for pollution, not for allocating scarce water or compensating flood victims. Institutional capacity is thin like Bangladesh's Environment Courts, for example, are overburdened and prone to procedural roadblocks.[32] In reality, few South Asian cases have come to final judgments on the basis of climate, in part because judges and agencies are not equipped to deal with technical climate science or international treaty commitments.

ROLE OF REGIONAL AND INTERNATIONAL MECHANSM

SAARC Conventions and Environmental Protocols

While the South Asian Association for Regional Cooperation (SAARC) has adopted multiple conventions such as the SAARC Convention on Cooperation on Environment (2010) and set up institutions like the SAARC Disaster Management Centre, their impact has remained largely symbolic. Most agreements lack binding enforcement mechanisms, and the absence of a supranational environmental authority weakens accountability.Despite these limitations, SAARC provides a valuable platform for transboundary cooperation on issues like air pollution,

31. Shrestha v. Office of the Prime Minister et al., Climate Change Litigation Database (2015).
32. Md. Rizwanul Islam, Addressing Loopholes in the Climate Change Laws in Bangladesh: Lessons from UK and Denmark, Oxford Human Rights Hub (Apr. 25, 2022).

river basin management, and climate disasters. For instance, the SAARC Framework on Disaster Management (2006) aligns with SDG 13 (Climate Action) and SDG 15 (Life on Land) but suffers from fragmented implementation at the domestic level.

Comparatively, regional models like the ASEAN Agreement on Transboundary Haze Pollution show how legal instruments can impose more robust obligations on member states. South Asia lacks a similar compliance mechanism, leading to what scholars call a *"treaty–implementation gap."*

A forward-looking proposal gaining traction is the establishment of a South Asian Environmental Court, possibly under SAARC's aegis, with jurisdiction over cross-border environmental harm. Cases like Asghar Leghari v. Pakistan highlight how climate litigation often transcends national boundaries, demanding a regional judicial response. Critically, SAARC's environmental agenda must integrate community-centric approaches, ensuring local participation and indigenous rights protection in line with SDG 16 (Peace, Justice, and Strong Institutions) and SDG 6 (Clean Water and Sanitation).

UN Human Rights Council Resolutions on Environmental Defenders

The UN Human Rights Council (UNHRC) has made landmark decisions to recognize and safeguard environmental defenders throughout the world:

- In March 2019, it passed Resolution A/HRC/40/11, which identifies the crucial role of environmental human rights defenders and denounces threats, violence, and reprisals against them. It also calls on states to establish safe and facilitating environments for their work.[33]
- In October 2021, the Council adopted Resolution HRC/RES/48/13, officially enunciating the right to a healthy, clean, and sustainable environment as a human right. The UN General Assembly soon echoed this in a non-binding resolution in July 2022 reaffirming the same principle.

These resolutions serve to enhance discussion of environmental justice and support legal arguments in favor of community-enforced litigation, albeit if not directly binding.

Applicability of Aarhus Convention Principles in South Asia

The Aarhus Convention (UNECE, 1998) sets three fundamental pillars for environmental justice:

33. Defenders Coalition, UN Human Rights Council Adopts a Resolution to Recognize the Contribution of Environmental HRDs to the Enjoyment of Human Rights (2021)

Access to information — public authority obligations to proactively make available environmental information.

Public participation — participatory decision-making in environmental policy, plans, and projects.

Access to justice — judicial remedies and review procedures when environmental legislation or public participation rights are breached.

Although South Asian nations are not parties, the Convention can be a useful tool for strengthening environmental governance. The incorporation of Aarhus-like provisions—most notably mandatory environmental disclosure and effective public consultation—into domestic legislation has the potential to greatly empower people. For example, judicial recourse to Aarhus-like principles can boost litigation against EIA procedures and project approvals.

POLICY INNOVATION & FUTURE DIRECTIONS

To align environmental justice in South Asia, the paper emphasizes grassroots access to justice (SDG 16), climate and ecological protection (SDGs 6, 13–15), and regional solidarity via conventions and bodies. Country-specific examples (especially India) and regional mechanisms are highlighted. Practical proposals include expanding community legal aid, enshrining climate justice constitutionally, enabling collective lawsuits, pioneering cross-border actions, and harnessing AI/data analytics for evidence. Each measure is clearly tied to relevant SDGs and institutional instruments (real or proposed) to ensure effective implementation.

SL NO.	SDG	Policy Innovation	Legal Mechanism
1.	SDG 16 (Peace, Justice & Strong Institutions)	Strengthen community legal aid for environmental litigation. Train grassroots "environmental paralegals" Enable environmental class actions and collective remedies	Fund environmental legal Aid Clinics Amend Legal Services Authorities Act to include environmental paralegals Create environmental/climate benches in High Court

2.	SDG 13 (Climate Action)	Recognize climate stability as constitutional right Strengthen directive Principles & Duties Regional climate data sharing	Interpret Article 21 and equivalent provisions to include climate rights Amend Article 48A, 51(g) to mandate climate protection Statutory mandates for real-time climate data exchange.
3.	SDG 6 (Clean Water & Sanitation)	Legal aid for water pollution cases Cross border water governance Water quality open-data portals	Special legal aid units for water disputes Empower SAARC tribunal for river pollution Amend environmental laws to mandate public disclosure.
4.	SDG 14 (Land Below Water)	Marine pollution class actions Use of AI to track illegal fishing and coastal degradation	mend fisheries and maritime laws to allow AI evidence. Expand NGT jurisdiction to marine/coastal matters
5.	SDG 15 (Life on Land)	Public dashboards for biodiversity loss Collective remedies for land degradation AI and satellite monitoring of deforestation, illegal mining	Legal mandate for open biodiversity data Amend land/ environmental statutes to include group claims. Recognize satellite imagery as admissible evidence.

Table: SDG-Law-Policy Innovation

CONCLUSION

In short, the South Asian experience shows that community-driven environmental litigation can be a powerful legal tool. Indian courts and other SAARC nations' courts have increasingly read constitutional protections to safeguard the environment. For instance, the Indian Supreme Court has upheld that citizens have a fundamental right to "live in a pollution-free environment" under Article 21.[34] Analysts note that SAARC constitutions "share the constitutional recognition to a right to a clean environment," explicitly or by interpreting it into the right to life (India, Pakistan, Sri Lanka). Landmark judgments in India (such as M.C. Mehta jurisprudence, Vellore Tanneries, T.N. Godavarman) and environmental filings in Bangladesh, Nepal, and Sri Lanka have appealed to public trust doctrine and sustainable-development maxims to enforce accountability upon governments and polluters. Our survey concludes that these jurisprudential

34. JURIST, India Top Court Upholds Constitutional Right to Pollution-Free Environment (Oct. 2024).

precedents have developed legal standards for clean air, water, and forests, even while problems of enforcement continue. Most SAARC countries face limited technical capability and weak public awareness which thwarts implementation.[35] Overall, however, the direction is evident: litigation has supplemented missing regulatory action, pushing authorities to implement environmental regulations more forcefully and to revise policies when they become outdated. Notably, litigation has also solidified democratic governance and participation.

Environmental public interest cases by design open up the courts to citizens and NGOs. One study notes that such litigation "enables NGOs, social groups, and even individuals to intervene in environmental protection," which is "vital for environmentally vulnerable groups" without other standing. In reality, these cases have made headlines and provided common people with a voice: courts have offered "an open legal platform for ordinary citizens and social groups to directly participate in environmental protection," thus encouraging "broad-based societal engagement and oversight". This participatory dynamic is also consistent with international law: Principle 10 of the 1992 Rio Declaration makes it clear that "environmental issues are best handled with participation of all concerned citizens" and that states have an obligation to offer "effective access to judicial and administrative proceedings, including redress and remedy."[36] In South Asia, courts have given effect to this concept. For example, recent Indian judgments deplored lax enforcement of pollution regulations and called for more forceful intervention to secure citizens' right to clean air.[37] Through public-interest litigation, courts have consistently diagnosed legal loopholes – one writer observes that PIL "reveal[s] deficiencies and loopholes in a country's environmental laws, providing a practical basis for the revision and improvement of environmental legislation". Effectively, people's litigation directs grassroots grievances into the judicial system, enhancing accountability and triggering reforms that enhance the quality of governance.

35. *SAARC Secretariat,* Roadmap for Regional Environmental Cooperation (2020).

36. *Philippe Sands,* Principles of International Environmental Law (3d ed. 2012).

37. *Armin Rosencranz & Sharachchandra Lele*, Democracy and Environmental Litigation in India, 11 ENV'T MGMT. 495 (2001).

ENVIRONMENTAL PERSONHOOD AND COMMUNITY RIGHTS: ASSESSING THE IMPACT OF CLIMATE-RIGHTS JURISPRUDENCE OF INDIGENOUS AND LOCAL COMMUNITIES IN INDIA

Rukhsana Begum Khan[1]

ABSTRACT

The intersection of environmental protection and human rights has gained momentum in Indian legal discourse, with courts increasingly acknowledging the intrinsic rights of nature and the urgent need to address climate change through constitutional principles. This shift in environmental jurisprudence signals a broader recognition of environmental personhood and climate justice. However, the extent to which such legal developments have strengthened the rights and participation of indigenous and local communities remain under-examined. This paper explores the evolving legal recognition of nature's rights and the environments constitutional status in India, with a particular focus on how these developments affect communities that are most vulnerable to ecological degradation. Through a critical analysis of legal trends, institutional responses and community-level outcomes, the study investigates whether these emerging doctrines have empowered marginalized groups or whether they remain largely symbolic in practice. The research identifies a persistent gap between legal innovations and implementation, particularly in the context of access to justice, enforcement of community rights, and environmental governance. While these judicial approaches offer a promising framework for aligning environmental justice with sustainable development, their actual impact depends on the extent to which they are translated into inclusive, participatory and accountable mechanisms on the ground. By evaluating the implications of these trends in light of India's commitment to the Sustainable Development Goals, this paper seeks to contribute to the ongoing discourse on laws role in driving social and ecological transformation.

Keywords: Environmental Rights, Community Empowerment, Climate justice, Legal Reform, Sustainable Development

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INTRODUCTION

Environmental personhood has a global precedent, but its Indian trajectory is shaped constitutional provisions, judicial activism, and socio-cultural contexts. Article 21 of the Indian constitution guarantees the fundamental right to life and personal liberty. Similarly, Article 48A (protection and improvement of the environment) and Article 51A (g) (fundamental duty to protect the environment) provide the legal foundation for recognizing natures intrinsic rights. The constitutional courts in India have further expanded these rights through distinctive rulings that granted legal personhood to many of the natural entities, including rivers such as the Yamuna and Ganga, consolidating the jurisprudence governing environmental personhood and community rights.

This shift is a key component of India's nascent climate-rights jurisprudence. By recognizing an ecosystem as a legal person, courts provide a powerful new mechanism to address the harms of climate change. For instance, the legal personhood of a river could grant it standing to sue for injuries caused by climate-driven events, such as reduced water flow due to accelerated glacier melt, increased sedimentation from extreme rainfall, or pollution from climate-related industrial accidents. Similarly, granting legal personhood to a forest or mountain range could create a new legal avenue for seeking remedies against large-scale industrial projects or industries that contribute significantly to greenhouse gas emissions, thereby safeguarding these ecosystems from both direct and indirect climate impacts. This innovative legal approach allows for a direct challenge to activities that undermine ecological integrity, moving beyond the traditional human-centric framework of environmental law.

For indigenous and local communities, whose traditions and livelihoods are bound to the land, forests and water bodies such recognition holds both promise and uncertainty. On the one hand it strengthen legal protection for ecosystems that sustain them and on the another side, it raises complex questions about governance, representation and the risk of state or third party control over resources historically managed by communities themselves. The interplay between evolving environmental jurisprudence and community right thus demand careful examination, especially in the context of India's climate challenges and development pressures.

OBJECTIVE OF THE STUDY

1. To critically examine the evolution and judicial interpretation of environmental personhood in India, with specific reference to its integration within climate-right jurisprudence.

2. To assess the extent to which such jurisprudence influence and shapes the environmental, cultural and socio-economic rights of indigenous and local communities.

3. To propose informed and legal recommendations aimed at harmonising the legal recognition of nature's rights with the protection of community livelihoods and self-determination.

LITERATURE REVIEW

Environmental personhood is a critical academic matter that has elicited debates and discussions in the academic and scholarly circles. One must not forget Christopher Stone's germane work entitled '*Should Trees Have Standing?*.'[2] In his treatise, he contended that natural entities should be bestowed with legal rights so that their protection mechanisms are facilitated. His work eventually transpired a new thought and ushered in a new era in international environmental law. It also led to global environmental experiments like bestowing legal personhood to Whanganui River, New Zealand and the Atrato River, Colombia. Other countries that followed suit were Bolivia and Ecuador that acknowledged environmental personhood of the nature through their respective constitutional provisions. Not surprisingly, in 2019, Bangladesh too, allowed legal personhood to all the rivers, promoting environmental personhood. Internationally, grand initiatives like the *Harmony with Nature,* a UN flagship program and the UN Declaration on the Rights of Indigenous Peoples have not only facilitated synergistic environmental bonds but also community-driven environmental stewardship.

In the Indian juridical context, constitutional provisions such as Articles 21, 48A, and 51A(g) and statutory provisions such as the respective stipulations mandated under the Environment Protection Act, tend to augment environmental personhood of the nature. These apart, cultural traditions, judicial decisions and public policy also create the foundation and shape the environmental personhood landscape. Case law studies by Shyam Divan and Armin Rosencranz (*Environmental Law and Policy in India*, 2022)[3] show how courts have interpreted the right to life broadly to include environmental concerns. Landmark cases like *M.C. Mehta*, *Subhash Kumar*, and the *T.N. Godavarman* line of judgments reveal the judiciary's willingness to extend personhood to rivers, lakes, and even animals. Yet, scholars also note persistent challenges related to enforcement, guardianship, and governance.

Recent scholarship examines the social and legal implications of this trend. Some see environmental personhood as a vital tool to counter unchecked industrial expansion and ecological harm, while others warn that court-driven recognition, without legislative clarity, risks

2. CHRISTOPHER D. STONE, SHOULD TREES HAVE STANDING?- TOWARD LEGAL RIGHTS FOR NATURAL OBJECTS, 45 Southern California Law Review, 450-501, 1972, https://iseethics.wordpress.com/wp-content/uploads/2013/02/stone-christopher-d-should-trees-have-standing.pdf

3. Divan, Shyam, and Armin Rosencranz, 'Introduction', *Environmental Law and Policy in India: Cases and Materials*, 3rd edn (Oxford, 2022; online edn, Oxford Academic, 15 Dec. 2022), https://doi.org/10.1093/oso/9780192865458.003.0001, accessed 17 Aug. 2025.

creating symbolic rights. Research focusing on indigenous and tribal communities identifies a key tension: personhood could either empower traditional custodianship or undermine it if decision-making shifts to state-appointed guardians. Reports, such as those from NITI Aayog, highlight that tribal-dominated districts overlap significantly with forest areas, underscoring how recognition of nature's rights directly affects livelihood security.

Theoretically, Indian scholars have linked environmental personhood to biocentric and ecocentric worldviews, constitutional morality, and environmental justice frameworks. A growing body of work also situates it within climate change jurisprudence, arguing that rights of nature can be an adaptive tool against ecological crises.

Overall, the literature reflects both promise and uncertainty. While many view recognition of environmental personhood as a progressive step, its effectiveness in India depends on bridging judicial activism with legislative support and participatory governance. What remains underexplored, however, is how environmental personhood interacts with climate-rights jurisprudence and whether it meaningfully strengthens the rights of indigenous and local communities. This gap provides the basis for the present study.

RESEARCH METHODOLOGY

This paper adopts a **doctrinal and analytical research methodology,** relying primarily on secondary sources such as constitutional provisions, statutes, judicial precedents, and scholarly commentary. The doctrinal method is particularly appropriate, as the study aims to examine the development of **environmental personhood in India** through legal principles and case law, rather than through field-based inquiry or surveys. Besides that, it critically examines the strengths and weaknesses of judicial acknowledgment of environmental personhood in India. The analysis goes further than just describing legal rules. It also considers the wider effects on environmental management and community rights.

Additionally, the research takes a comparative view within India by looking at how different courts have dealt with the doctrine. This highlights both agreements and disagreements in their reasoning. This is complemented by insights drawn from international reports and policy documents which help situate Indian jurisprudence within global debates on rights of nature and climate justice.

The research also integrates secondary empirical data such as the Census of India, NITI Aayog reports, and government displacement statistics to contextualize the legal analysis with real-world impacts on indigenous and local communities. This qualitative-empirical blend strengthens the findings by grounding legal doctrine in lived socio-economic realities.

Overall, the methodology is qualitative in nature, aiming to assess whether judicial recognition of environmental personhood meaningfully protects indigenous and local community rights and to identify the legal and policy challenges that must be addressed to ensure that recognition translates into empowerment rather than marginalization.

FOUNDATION OF ENVIRONMENTAL PERSONHOOD IN INDIA

The concept of environmental personhood refers to granting natural entities such as rivers, forests, lakes, and wildlife, the status of "legal persons," allowing them to hold rights, duties, and liabilities similar to a human or juristic entity. This recognition enables stronger legal protection of ecosystems, independent of direct human benefit, and aligns with India's deep-rooted cultural reverence for nature. From ancient times, Indian society has considered nature sacred, with rivers like the Ganga, Yamuna, Krishna, and Godavari worshipped as deities, and forests regarded as abodes of gods. Such traditions continue to influence environmental jurisprudence, where courts have increasingly drawn from both constitutional principles and cultural heritage to protect ecological systems. Judicial recognition of environmental personhood began with landmark High Court rulings. In *Mohd. Salim v. State of Uttarakhand* (2017), the Uttarakhand High Court declared the Ganga and Yamuna rivers as living entities with legal personhood, appointing state officials as their guardians.[4] The Court drew parallels with the treatment of deities as legal persons under Hindu law. However, this ruling was later stayed by the Supreme Court due to practical concerns, including interstate jurisdiction, management of liabilities, and the difficulty of enforcing such status across political boundaries. Other courts have also contributed to expanding the doctrine. The Punjab and Haryana High Court recognized all animals as legal persons in *Karnail Singh v. State of Haryana* (2019), while the Punjab and Haryana High Court (2019) and later the Punjab and Haryana HC again in 2020 recognized Sukhna Lake as a living entity.[5] Similarly, the Madras High Court extended personhood to "Mother Nature" as a whole, emphasizing the duty of citizens to protect the environment under Article 51-A(g) of the Constitution. Despite this growing recognition, the absence of uniform legislation has led to fragmented application and uncertainty in enforcement. Questions remain about who can act as a legal guardian, how liabilities are assigned, and whether such recognition meaningfully changes ground-level conservation outcomes. The aforementioned challenges and issues critically underscore the necessity for a reliable statutory framework, which tends to integrate governance mechanisms with nuanced judicial insights and innovation.

4. Ecojurisprudence, https://ecojurisprudence.org/initiatives/salim-v-state-of-uttarakhand/ July 10, 2025.

5. Sonia Shad, Indian Highcourt Recognizes Non-Human Animals as Legal Entities, July 10, 2019, https://www.nonhumanrights.org/blog/punjab-haryana-animal-rights/.

IMPACT ON INDIGENOUS AND LOCAL COMMUNITIES

The grant of personhood to the environment impacts communities whose sustenance and way of life hinge on ecological resources. Indigenous people are known to be traditional custodians of the environment and depend on it because of historical customs and sustainable practices. The grant of legal personhood may enhance the protective shield issued against exploitation but may equally command top-down control by state bodies or by those who hold the legal trust of the resources and marginalize historically preserver communities. The core issue is balancing environmental personhood so that the legal framework empowers stewardship instead of enabling community displacement.

A key legal example of this tension lies in the interaction with the Forest Rights Act (FRA), 2006, which recognizes the rights of forest-dwelling communities to manage, use, and govern their traditional forest lands and resources. When a river or a forest is granted legal personhood, the jurisprudence must harmonize with the community forest rights already established under the FRA. While in theory, environmental personhood could strengthen community claims by providing an additional legal basis to protect their forests, it could also create a new layer of bureaucracy or conflicting jurisdiction if control shifts from the community's Gram Sabha to a state-appointed legal guardian.

This concern is not abstract but grounded in empirical realities. According to the 2011 Census of India, Scheduled Tribes constitute 8.6% of the national population (over 104 million people), and a large proportion live in ecologically sensitive forest areas.[6] The NITI Aayog (2018) has further noted that over 40% of India's forest cover overlaps with tribal-dominated districts, highlighting that any shift in governance of natural resources directly affects their livelihood security.[7] Moreover, government estimates indicate that tribal communities account for over 40% of those displaced by large development projects such as dams and mining operations, despite forming a small share of the population.[8] These figures reveal that unless environmental personhood is carefully harmonized with the FRA and other community-based protections, it risks adding to the historical marginalization of indigenous peoples instead of empowering them.

6. Narain JP, *Health of tribal populations in India: How long can we afford to neglect?* ,Indian J Med Res. 2019 Mar;149(3):313-316. doi: 10.4103/ijmr.IJMR_2079_18. PMID: 31249192; PMCID: PMC6607830.
7. VOLUNTARY NATIONAL REVIEW REPORT, https://niti.gov.in/sites/default/files/2025-08/india-voluntary-national-review.pdf.
8. Xaxa Committee on Tribal Communities of India, https://www.drishtiias.com/summary-of-important-reports/xaxa-committee-on-tribal-communities-of-india.

Obstacles in Transformative Conservation Practice Based on Recognition

Although the concept of environmental personhood has received global attention, conservation on the ground level remains difficult. This is due to the lack of a unified statutory framework which results in case-by-case judicial consideration and creativity needing to fill the legislative void. This leads to fragmented enforcement, inconsistent jurisdictional authority, and ambiguity concerning the division of administrative functions.

What stands out the most is the issue of determining guardianship. Traditionally, the courts have designated state agencies as guardians to certain rivers, forests, and more. This presents issues in the management of these ecosystems because in reality, such management would undermine the community governance systems by local and indigenous peoples. Moreover, the delineation of responsibilities is vague and includes liability for pollution and encroachment adding to the ambiguity. For example, if a river is granted "legal person" status, what would that mean for the ability to file countersuits, quantify damages, and determine the accountable entity?

Alongside these issues, lack of interstate collaboration adds to the problem. Many rivers are natural and transboundary, which makes personhood recognition useless in the face of conflicting state interests, competing development projects, and lack of a cooperative governance framework. Further, lacking adequate administrative infrastructure for such recognition runs the risk of it becoming more hollow than robust.

Lastly, we have the matter concerning participation from the community. If the concept of environmental personhood is approached from a purely top-down perspective, it may risk alienating the people who are most intimately connected to the ecosystem. Actual implementation of what is granted demands legal creativity accompanied by participatory frameworks, actionable governance, well-defined legal parameters, and pronounced liability structures to safeguard against rights infringement, malpractice, or apathy.

JUDICIAL EVOLUTION OF ENVIRONMENTAL PERSONHOOD IN INDIA

The Indian judiciary has often pioneered the recognition of environmental rights, experimenting with environmental personhood even in the absence of a statutory framework. While these judicial innovations reflect a progressive outlook, they also expose the inherent limitations of granting legal personality to natural entities without clear legislative or administrative support.

A foundational line of cases from the Supreme Court laid the groundwork for such recognition. In M.C. Mehta v. Union of India, the Court evolved the principle of absolute liability for hazardous industries and expanded Article 21 to protect against environmental harm.[9] Soon after, in Subhash Kumar v. State of Bihar,[10] the Court held that the right to life includes the right to pollution-free water and air, thereby constitutionalizing environmental quality as a fundamental right. The continuing T.N. Godavarman Thirumulpad v. Union of India series[11] strengthened forest conservation and community rights by expanding the definition of forests and restricting their diversion, while in Vellore Citizens' Welfare Forum v. Union of India,[12] the Court introduced the precautionary principle and polluter pays principle, cementing sustainable development within Indian constitutional law. These decisions, although not expressly conferring personhood on nature, implicitly recognized the environment as a rights-bearing entity closely tied to the survival of communities.

Building on this foundation, several High Courts took more direct steps towards environmental personhood. In Mohd. Salim v. State of Uttarakhand and Lalit Miglani v. State of Uttarakhand, the High Court declared the Ganga and Yamuna rivers as legal persons, relying on the doctrine of parens patriae and analogies from Hindu law where deities are granted personhood. While symbolically powerful, the rulings were stayed by the Supreme Court due to concerns of interstate jurisdiction and the ambiguity of assigning liability to rivers for natural calamities. In Karnail Singh v. State of Haryana, the Punjab and Haryana High Court expanded the concept by declaring the entire animal kingdom to be legal persons, imposing corresponding duties on humans an explicit turn towards eco-centric jurisprudence.[13] Similarly, in the Mother Nature case (Madras High Court, 2022), personhood was granted to Mother Nature herself, with emphasis on citizens' duty under Article 51A(g) to protect the environment. The Punjab and Haryana High Court, in the Sukhna Lake case, also recognized the lake as a legal person to safeguard it from encroachment and degradation.

These developments reflect both innovation and inconsistency. On one hand, they show the judiciary's willingness to experiment with eco-centric approaches and to link environmental rights with community rights. On the other, they reveal gaps: differing judicial interpretations, absence of statutory guardianship mechanisms, and concerns over enforceability across jurisdictions. While some courts have adopted sweeping approaches, others have cautioned that without legislative clarity on guardianship, liability, and compliance with property and land-use laws, recognition risks remaining symbolic. Importantly, despite such gaps, courts have consistently coupled recognition with directives for ecological restoration, stricter regulation of

9. https://indiankanoon.org/doc/1486949/.

10. AIR 1991 SC 420.

11. AIR 1997 SC 1228.

12. AIR 1996 SC 2715.

13. Saumya Giri,*Case Analysis of Karnail Singh vs. State of Haryana*,Vol2 Iss 2 International Journal of legal science and innovation 364, 364-370,(2020).

industrial activities, and community participation in conservation showing that environmental personhood and community rights in India is deeply embedded in the promise of environmental fairness mandated under the constitutional provisions, especially under Article 21.

CONCLUSION AND THE WAY FORWARD

Indian environmental personhood marks a crucial transition towards eco-centric jurisprudence, integrating legal protection of nature with the rights and livelihoods of indigenous and local peoples. Though landmark court decisions have established firm precedents, their consequences are curtailed without enforceable mechanisms and peoples' involvement. Enshrining these principles in statutory law and governance structures is necessary to make the legal rights of nature a practical ecological and social good.

The frameworks of accountability should also incorporate periodic judicial or administrative oversight, transparent accountability mechanisms, and accessible grievance redress mechanisms. This way, the state and non-state actors would respect the rights of the nature and the community rights that are connected to it, thus averting mere symbolic recognition.

Centering environmental personhood within a rights-based, community-focused and climate-responsive legal structure would allow India to pioneer a model of environmental governance that safeguards ecosystems while enhancing the cultural and economic rights of Indigenous and local peoples.

CHAPTER - 4

CRIMES, CRIMINAL LAWS AND CRIMINOLOGICAL FRAMEWORKS

GREEN CRIMINOLOGY AND THE ONE HEALTH PARADIGM: CONFRONTING ENVIRONMENTAL CRIMES, ZOONOTIC RISK, AND MARINE ECOLOGICAL INJUSTICE IN INDIA

Bhavya Praveen Pai[1]

ABSTRACT

With the increase in environmental degradation and zoonotic diseases, this study focuses on green criminology, environmental jurisprudence, and One Health frameworks, taking special note of India's present terrestrial and marine ecosystems. By using critical criminology and public health approaches, it looks into the impact of environmental offenses. The paper evaluates India's environmental legal framework, including the Environment Protection Act 1986, Wildlife Protection Act 1972, Biological Diversity Act 2002, and Coastal Regulation Zone Notifications, alongside Supreme Court rulings. It highlights the gaps in enforcement and regulatory fragmentation that limit India's capacity to tackle emerging zoonotic threats and marine ecological issues.

By examining case studies, the paper connects the ecological injustice to inadequate marine monitoring, unchecked fishing practices, and habitat destruction. Comparative perspectives from UNCLOS, CITES and the WHO–UNEP One Health framework are used to benchmark international legal practices.

This paper proposes to reshape the purpose of the law as a tool that supports the transformation of ecological justice, the prevention of pandemics, and the achievement of the sustainable development goals (SDGs) of the United Nations, specifically Good Health and Well-Being (SDG 3), Climate Action (SDG 13), Life Below Water (SDG 14), and Life On Land (SDG 15).

Keywords: Green Criminology, Ecosystem Conservation, Environmental Crime, Marine Ecological Injustice, Zoonotic Risk.

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INTRODUCTION

Environmental harm has moved now to the center of attention, becoming a leading factor in ecological decline, public health crises, and unsustainable growth. For instance, forest logging, smuggling of wildlife, and ocean pollution along with coastal erosion are all forms of environmental harm. There is a more dangerous and less noticed form of harm in changes in patterns of disease, the decrease of food security, and disturbances in ecosystem services on which communities depend. These spread beyond geographic borders through the currents of the oceans, through the flows of migratory species, and through international commerce and complex legal, international political, and economic systems. India faces threats with its four biodiversity hotspots, an excess of 7,500 kilometres of coastline, and millions that depend on natural ecosystems for their livelihood. The recurring zoonotic threats like the Nipah virus in Kerala, Kyasanur Forest Disease in Karnataka, and the avian influenza affecting poultry farming point towards a complex network involving people, animals, and the environment. The One Health approach, which is supported by the UNEP, the World Organisation for Animal Health (WOAH), the Food and Agriculture Organisation (FAO), and the WHO, becomes an urgent matter of governance in this scenario. In the same way Green Criminology and Blue Criminology tackle the absence of laws or the insufficient laws for the land and for the sea, respectively, they examine more deep-rooted causes and inequalities for the land and oceans for the decline and the demand for the sea and land. The Indian environmental laws offer strong instruments already: the Public Trust Doctrine as upheld in ***M.C. Mehta v. Kamal Nath,***[2] where the Supreme Court said that natural resources are a trust held by the State, which means ecological protection is no longer a policy choice but a constitutional obligation. The Precautionary Principle and Polluter Pays Principle from the ***Vellore Citizen's Welfare Forum v. Union of India***[3] and the Principle of Absolute Liability from the ***Oleum Gas Leak case***[4] also support this. These principles and doctrines are mandated to be followed by the government as per the Constitution of India, under Articles 21, 48A, and 51A(g),[5] and are not elective guidelines. This article recommends a fusion of One Health and Green Criminology in the legal framework to design a governance model anchored in rights to tackle the challenges of environmental crime, zoonotic risk, and marine injustice. This, in turn, concurrently accelerates SDGs 3, 13, 14, and 15 and transforms the law into an instrument of ecological and health resilience.

2. M.C. Mehta v. Kamal Nath, (1997) 1 S.C.C. 388 (India).

3. Vellore Citizens Welfare Forum v. Union of India, (1996) 5 S.C.C. 647 (India).

4. M.C. Mehta v. Union of India, (Oleum Gas Leak), (1987) 1 S.C.C. 395 (India).

5. INDIANs CONST. art. 21,48A and 51A(g).

THEORETICAL FOUNDATIONS

Green Criminology

The goal of green criminology, which was developed in the 1990s as a separate area of critical criminology by scholars like Nigel South, Piers Beirne, and Avi Brisman, addresses environmental problems that are frequently neglected by the traditional criminal justice framework. Unlike conventional criminology, which focuses only on crimes that are legally codified, green criminology considers environmental harm in a wider moral and social setting, which encompasses legal but potentially environmentally harmful behaviors.

Another important development was blue criminology, applying the key framework to problems pertaining to the marine and coastal environment. Deep sea mining, coral reef degradation, careless oil spill, illicit, unreported, and unregulated (IUU) fishing are all covered in this subfield. In the context of India's vast coastline, abundant marine biodiversity, and the substantial reliance of coastal residents on fishing, blue criminology is particularly relevant.

One Health Paradigm

The United Nations Environment Programme (UNEP), the Food and Agriculture Organisation (FAO), the World Health Organization (WHO), and the World Organisation for Animal Health (WOAH) all recognize the One Health notion, which relies on the concept that ecosystem, animal, and human health are by nature interdependent and interconnected. The risk of zoonotic spillovers increases due to degradation of the environment, including deforestation, wetland loss, and marine pollution. However, the risk establishes new interfaces between people and wildlife. Overfishing and the catastrophic loss of the marine ecosystem jeopardize nutrition, economic stability, and health security. Antimicrobial Resistance (AMR), which is produced by industrial contamination of waterways and seas, presents a serious threat and danger to global public health.[6] In India, zoonotic outbreaks such as Kyasanur Forest Disease in Karnataka and the Nipah virus in Kerala serve as prime examples of the effects of ecological disturbance. The One Health strategy places a strong focus on intersectoral governance, in which the ministries of health, agriculture, fisheries, and the environment work together proactively on prevention rather than separately.

ENVIRONMENTAL JURISPRUDENCE

Environmental jurisprudence in India has not stayed still; it has grown, shifted, and adapted, drawing on constitutional interpretation, statutory mandates, and at times bold judicial creativity. These elements form a legal framework that ensures the state's duty to safeguard

6. Mohamed Hatha, A.A., Divya, P.S., Reshma, S. & Nifty, J., *Polluted Coastal and Estuarine Environments: A Potential Reservoir for AMR Determinants in Various Pathogenic Bacteria*, in *Antimicrobial Resistance* 78 (S. Thomas ed., Springer 2020), https://doi.org/10.1007/978-981-15-3658-8_5.

the environment where environmental offenses are defined, pursued, and resolved in practice. Within this legal landscape, green criminology finds more than just moral support—it gains a doctrinal base that allows the idea of harm to be seen in broader, more ecological terms. The One Health approach draws strength from constitutional guarantees where the health of ecosystems is seen as a part of the fundamental right to life. This mix of practical enforcement and legal theory shows that environmental protection here is as much about real-world outcomes as rights and duties.

The Indian environmental law has traditionally balanced between ecocentric and anthropocentric arguments, though earlier there were compromises between development and the environment. Current tendencies show a clear tilt towards ecocentrism, particularly in instances involving forests, rivers, and animals.

Constitutional Foundations

The Indian Constitution, Article 21 (right to life, expanded to include a healthy environment), Article 48A (state duty to protect the environment), and Article 51A(g) (citizens' duty to safeguard nature) provisions give courts a foundation to frame doctrines that go beyond statutes.

The Public Trust Doctrine

The Public Trust Doctrine was applied in ***M.C. Mehta v. Kamal Nath (1997)***[7] by the Supreme Court, restricting private appropriation of rivers and natural resources. This is a sure step towards a powerful jurisprudence—the Supreme Court held that the state is a trustee of natural resources and that the state should safeguard them from misuse or should not support private benefit.

Precautionary & Polluter Pays Principles

In ***Vellore Citizens' Welfare Forum v. Union of India (1996),***[8] the Court established two guiding rules: action must be taken to prevent environmental harm even in the face of scientific uncertainty, and polluters must bear the cost of remediation. These weren't hollow declarations. In later cases like ***Indian Council for Enviro-Legal Action v. Union of India (1996)***,[9] the judiciary turned them into enforceable orders, requiring cleanup operations and compensation from polluters, setting a tone that environmental law in India isn't just aspirational; it's actionable.[10]

7. *Supra* note 2.
8. *Supra* note 3.
9. Indian Council for Enviro-Legal Action v. Union of India, (1996) 3 S.C.C. 212 (India).
10. *Supra* note 3.

Protection of Forests & Biodiversity

In the T.N. Godavarman litigation, continuing mandamus was used to oversee forest protection, regulate logging, and ensure compliance nationwide. This jurisprudence extended to corridors, protected areas, and community rights under the Wildlife Protection Act (1972) and Biological Diversity Act (2002).

Absolute Liability

Departing from strict liability, the Court in ***M.C. Mehta v. Union of India (Oleum Gas Leak, 1987)***[11] imposed full liability on hazardous industries, regardless of negligence or third-party fault.[12] The Supreme Court established a no-fault standard for hazardous businesses, departing from common-law strict responsibility. By removing defenses based on negligence or third-party guilt, this theory guarantees that businesses involved in activities that are intrinsically harmful incur the whole cost of accidents. Since then, it has influenced regulatory strategies for hazardous waste and the chemical industry.

Coasts & Marine Ecosystems

Coastal and marine jurisprudence in India may not be as mature as its terrestrial counterpart, but it is far from absent. In ***S. Jagannath v. Union of India (1997),***[13] shrimp farms violating CRZ norms were shut, due to mangrove loss and saline intrusion. In ***Goa Foundation v. Union of India (2014),***[14] the judiciary turned its attention to unchecked construction and industrial activity along the shoreline, scrutinizing CRZ compliance to shield fragile coastal ecosystems. While the judgments do not always spell it out, they carry the imprint of the Public Trust Doctrine and the precautionary approach, treating marine and coastal commons as resources that the state is bound both legally and morally to safeguard.

Institutions & Procedures

The creation of the National Green Tribunal (NGT) provided a specialized forum with technical expertise, advancing principles of sustainable development and intergenerational equity. Public Interest Litigation (PIL) has further empowered communities and NGOs to raise ecological and health-related harms.

Interface with One Health

If courts view degradation of the environment as a breach of Article 21, they can issue regulations in advance as a precaution against wildlife disease spillovers. The growth of and

11. *Supra* note 4.
12. *Supra* note 4.
13. S. Jagannath v. Union of India, (1997) 2 SCC 87 (India).
14. Goa Foundation v. Union of India, (2014) 6 SCC 590 (India).

changing human populations and their impacts, like splitting up habitats, the illegal wildlife trade, and the use of polluting aquaculture, could be checked. Important legal concepts like the precautionary principle and the public trust doctrine (PTD) give the courts the authority to call for monitoring of risky interfaces, be it wet markets, industrial waste to waterways, or even illegal IUU fishing that damages marine ecosystems. This makes our legal arguments stronger.

Comparative and Emerging Doctrines

Developments internationally provide Indian courts with persuasive authority to strengthen the eco-centric protection. Examples of these developments include Ecuador's constitutional Rights of Nature and New Zealand's recognition of the Whanganui River's legal personhood. Such approaches align with the broader movement toward ecological law, which emphasizes the legal recognition of ecosystems as rights-bearing entities.[15] International proposals to make ecocide a crime align with India's constitutional values and have the potential to increase deterrence against significant environmental damage.

Implications for Green Criminology

Environmental jurisprudence offers green criminology a powerful toolkit of enforceable standards and remedial mechanisms. It expands the traditional notion of 'crime' to include harms that are ecologically and socially significant, even if existing statutory definitions haven't caught up yet. Environmental offenses, whether on land or at sea, are now treated as violations of fundamental interests, a legal concept that necessitates robust sanctions and restorative remedies. This really helps give some teeth to the idea that ecological harm is a serious issue.[16]

MAPPING ENVIRONMENTAL & MARINE CRIMES IN INDIA

Typologies of Environmental and Marine Crimes

In India, environmental crime is not a narrow category; it stretches from the degradation of forests and rivers to the damage of marine ecosystems, with the boundaries between the two often blurring. Economic pressures, weak enforcement, and the pull of transnational illegal trade networks feed into this cycle of harm. On land, the picture is stark.

Land-Based Environmental Crimes

Illegal deforestation and mining remain persistent, especially in biodiversity-rich states like Arunachal Pradesh, Chhattisgarh, and Odisha. Wildlife trafficking adds another layer, with India acting as a source, transit, and destination for illegal trade despite the Wildlife Protection Act, 1972. Wildlife crime jurisprudence has also been strengthened. In ***Sansar Chand v. State of***

15. G. Garver, ed., Ecological Law in Practice: Case Studies for a Transformative Approach 112 (Taylor & Francis 2024).

16. Tanya Wyatt, Green Criminology: Crime, Justice, and the Environment, Routledge (2021).

Rajasthan (2010),[17] the court emphasized strict enforcement under the Wildlife Protection Act, recognizing poaching and trafficking as serious threats to biodiversity and ecological security. Pangolins, star tortoises, and exotic birds still move through clandestine markets and wet trade channels. Industrial pollution completes this triad: factories discharging untreated effluents into rivers and lakes or hazardous waste dumped on the outskirts of towns, leaving both ecosystems and communities to deal with the fallout.

Marine and Coastal Crimes

Illegal, Unreported, and Unregulated (IUU) fishing remains a persistent problem, particularly in the waters off Tamil Nadu, Gujarat, and Kerala, where overfishing often disregards both domestic quotas and regional agreements. Furthermore, the destruction of coral reefs in ecologically sensitive areas like the Gulf of Mannar and Lakshadweep represents a grave ecological crime, with illegal coral mining for building materials causing irreparable damage to fragile marine biodiversity. The consistent issue of pollution from oil spills and industrial effluents leads to the dangerous process of bioaccumulation in our marine food chains. Finally, hazards from the shipbreaking industry, most notably in Alang, Gujarat, where the world's largest shipbreaking yard operates, continue to pose significant challenges due to the improper disposal of toxic materials.

KEY CASE STUDIES

Case Study 1: Gulf of Mannar Biosphere Reserve

The Gulf of Mannar Biosphere Reserve, though formally recognized as a marine national park, continues to face steady ecological pressure. Coral has long been extracted for construction, leaving reefs degraded and habitats fragmented. Destructive fishing practices have further damaged breeding grounds for species such as dugongs. The result is not only biodiversity loss but also a decline in fisheries that sustain local livelihoods.

Case Study 2: Microplastic Contamination in Vembanad Lake

In Vembanad Lake, the problem takes a different shape. A 2024 study in Frontiers in Marine Science reported alarming microplastic concentrations in fish that are part of local diets. High levels of plastic waste, particularly microplastics, are now embedded in sediments and aquatic life, raising concerns for human health and food chains. Pollution from agriculture and industry compounds these threats. The ecological degradation of the lake undermines both community nutrition and the wetland's role as a buffer against floods.

17. Sansar Chand v. State of Rajasthan, (2010) 10 S.C.C. 604 (India).

Case Study 3: Sundarbans Mangrove Loss

The Sundarbans tell yet another story of ecological loss. Encroachment for shrimp aquaculture and wood extraction has accelerated mangrove loss, leaving coastal populations more exposed to cyclones and rising seas. Habitat fragmentation also disrupts ecological balances, increasing the risk of human–wildlife conflict and altering patterns of vector-borne disease.

Together, these cases show that marine and coastal harms are rarely isolated; they ripple into legal, ecological, and human health domains.[18]

Public Health Linkages: The One Health Lens

The deterioration of both terrestrial and marine ecosystems in India has become a public health emergency in addition to an environmental one. Wildlife frequently migrates closer to populated areas when habitats are fragmented or degraded, increasing the possibility of zoonotic spillovers. Fruit bats' loss of their native roosts is thought to be a contributing factor in the Nipah virus epidemics that occurred in Kerala in 2018 and 2023. Ticks that thrive in damaged forest settings are the vectors of Kyasanur Forest Disease in Karnataka. As an example of how ecological disturbance can provide new avenues for disease transmission, avian influenza has even popped up in chicken farms close to wetlands that migrating birds utilize. Another serious issue is antibiotic resistance, which is less obvious but just as serious. AMR bacteria thrive in coastal and estuary waterways because of the accumulation of industrial effluents and antibiotic residues from aquaculture. Although it is more difficult to see than an oil spill, this slow-moving threat has the potential to harm public health and medical care for many years to come.[19]

Enforcement and Governance Challenges

India has a robust framework of laws, including the Environment (Protection) Act, 1986, and the Wildlife Protection Act, 1972. But still, we face enforcement and governance hurdles in reality. One major issue is the fragmented jurisdiction among various agencies like the Ministry of Environment, Forest and Climate Change (MoEFCC), state forest departments, and pollution control boards, which often lead to overlap and confusion. The weak surveillance infrastructure, in turn, contributes to very low conviction rates, as prosecutions under these environmental statutes are often protracted and rare.[20] Finally, there's a notable lack of One Health integration,

18. United Nations Office on Drugs and Crime, World Wildlife Crime Report 2024 (2024). (last visited Aug. 15, 2025).

19. Aitor Ibáñez Alonso & Nigel South, Incorporating a One Health Approach Into the Study of Environmental Crimes and Harms: Towards a 'One Health Green Criminology,' 65 Br. J. Criminology (2025), https://doi.org/10.1093/bjc/azae047.

20. Wyatt, *supra* note 16.

meaning our environmental law enforcement efforts are largely disconnected from public health surveillance systems, which is a major gap.

Why This Mapping Matters

Looking at these offenses through the lens of green criminology changes the frame entirely; they stop being seen as scattered, localized violations and instead appear as part of a larger, systemic pattern of harm. The One Health perspective takes it a step further, recasting the issue from one of environmental decline to a matter of national health and security. Legal gaps persist, leaving some ecologically damaging activities outside the statutory definition of "crime," even when the harm is undeniable. Institutional inertia compounds the problem, as different agencies working in this area are not integrated or networked and thus weaken enforcement.[21] And to add on, many communities engaged in practices that harm the environment do so because alternative livelihoods are not there or are inadequate. Addressing this is not just about tighter laws; it demands integrated legal, social, and economic responses that acknowledge the complexity of the problem.

LEGAL & POLICY FRAMEWORK IN INDIA

Constitutional Framework

The Constitution places environmental protection in a dual role: as a clear duty of the State and as a shared responsibility of citizens. Article 2,[22] through judicial interpretation, has stretched the "Right to Life" far beyond physical survival, recognizing in ***Subhash Kumar v. State of Bihar (1991)***[23] that it includes the right to a healthy environment. Article 48A,[24] though a Directive Principle, carries weight in guiding policy and obliges the State to protect and improve the environment. Article 51A(g)[25] assigns every citizen a fundamental duty to safeguard and enhance the natural environment. These provisions are not inert statements of intent. Over the years, the judiciary has used them as anchors and has allowed constitutional principles to directly influence how environmental laws are read, interpreted, and applied, creating a bridge between abstract constitutional ideals and concrete statutory enforcement.

Core Statutory Instruments

India's environmental governance rests on several fundamental laws, though their impact often depends on strict enforcement. The Coastal Regulation Zone (CRZ) Notifications were

21. Ibáñez Alonso & South, *supra note* 19.
22. INDIAN CONST. art. 21.
23. Subhash Kumar v. State of Bihar, (1991) 1 SCC 598 (India).
24. INDIAN CONST. art. 48A.
25. INDIAN CONST. art. 51A(g).

a result of the legal frameworks that emerged following the Bhopal Gas Disaster when the Environment (Protection) Act, 1986, was formulated. This enabled the government the authority to formulate rules, set standards, and issue notifications appropriately. The Wildlife Protection Act of 1972 protects endangered species, including marine species such as dugongs and sea turtles, while the Biological Diversity Act of 2002, which is in keeping with the Convention on Biological Diversity, controls access to biological resources and preserves traditional knowledge. It is often sad that though environmental offenses fall under Sections 270, 280, and 286 of the Bharatiya Nyaya Sanhita,[26] they are seldom enforced. The framework is also supplemented with sectoral and other laws such as the Fisheries Act, 1897; the Water Act, 1974; the Air Act, 1981; and state fishing regulations, which are often enforced inconsistently.

Coastal & Marine Regulatory Framework

India's coastal and marine areas are regulated under the Coastal Regulation Zone (CRZ) Notifications, which fall under the Environmental (Protection) Act of 1986 (EPA). These notifications provide legal zoning of the coastal areas into four zones from CRZ-I to CRZ-IV, each with its own set of provisions. Construction, dredging, and resource extraction in ecologically sensitive regions like mangroves, coral reefs, and marine parks face stringent controls and monitoring under the rules. There is an ongoing commercial clamor to weaken the protections from ports, tourism, and aquaculture sectors that has led to continuous amendments. There is a persistent lack of enforcement, which is a major concern, especially in the face of commercial pressures.

Judicial Precedents & Principles

Indian courts have developed a series of principles over the years that provide a framework for environmental governance. Sometimes, the courts find themselves filling in the gaps where statutory provisions have fallen short. In ***M.C. Mehta v. Kamal Nath (1997),***[27] the Supreme Court confirmed that while states use and exploit natural resources, they are not the owner of them but rather their trustee, responsible for ensuring their protection on behalf of the public and generations to come**. *Vellore Citizens' Welfare Forum v. Union of India (1996),***[28] firmly entrenched the Precautionary Principle and the Polluter Pays principle by providing that preventive action should always be taken when there is a risk of environmental harm and that anyone who causes environmental harm should bear the costs of restoration in full. The doctrine of Absolute Liability, born out of ***M.C. Mehta v. Union of India (Oleum Gas Leak, 1987)***[29]

26. Bharatiya Nyaya Sanhita, 2023, § 270, 280 & 286 (India).

27. *Supra* note 2.

28. *Supra* note 3.

29. *Supra* note 4.

took this further for hazardous industries removing defences and imposing liability without exceptions.

Marine and coastal ecosystems have also benefited from these judicial interventions. In Goa Foundation v. Union of India (2014), the courts upheld a strict reading of Coastal Regulation Zone (CRZ) rules to shield fragile coastal habitats from unregulated construction. Earlier, in ***S. Jagannath v. Union of India (1997)***[30] the Supreme Court ordered the closure of shrimp farms operating in CRZ areas, recognizing the salinization, mangrove loss, and livelihood disruption they caused. Together, these rulings show how judicial principles, once articulated, have been flexibly applied to both terrestrial and marine contexts, reinforcing the legal duty to protect ecological integrity.[31]

Enforcement Gaps

Due to a combination of operational and structural flaws, enforcement frequently fails even with a very comprehensive legal framework. Agencies including the Ministry of Environment, Forest and Climate Change (MoEFCC), the Central and State Pollution Control Boards, Fisheries Departments, and Coastal Zone Authorities operate in parallel but lack strong coordinating mechanisms, making institutional fragmentation a significant obstacle. The lack of connection between public health systems and environmental regulators is another gap. Early warning signs for zoonotic hazards are frequently missed until an outbreak happens in the absence of consistent cooperation. India possesses satellite capabilities that could follow illegal fishing and monitor marine pollution in almost real time, but operational deployment is still irregular. All of these flaws work against environmental law's ability to prevent and deter.[32]

Policy Instruments and International Commitments

India's policy landscape includes several instruments that articulate environmental priorities, though their practical bite often falls short. The National Environment Policy (2006) lays down broad objectives for sustainable development, but its language is more aspirational than enforceable, leaving much to the discretion of implementing agencies. The National Biodiversity Action Plan, designed to reflect obligations under the Convention on Biological Diversity (CBD), sets a framework for conservation but is hampered by chronic underfunding and uneven execution. At the international level, India is a signatory to key treaties such as the United Nations Convention on the Law of the Sea (UNCLOS), MARPOL, CBD, and CITES. These memberships create legal and diplomatic pathways to harmonize domestic regulation

30. *Supra* note 13.

31. United Nations Office on Drugs and Crime, *Supra* note 18.

32. United Nations Office on Drugs and Crime, *Supra* note 18.

with global standards—though alignment, in practice, is often partial and shaped by domestic political economy considerations.

COMPARATIVE INTERNATIONAL FRAMEWORKS

Rights of Nature

Global jurisprudence increasingly treats ecosystems as rights-bearing entities. Ecuador's 2008 Constitution explicitly recognizes nature's right to exist and regenerate. In 2017, New Zealand passed the Te Awa Tupua Act, granting legal personality to the Whanganui River, reflecting an ecocentric shift in law. These examples highlight how states are embedding environmental protection within legal identity itself, moving beyond regulatory frameworks.

Ecocide

There is a growing international movement to classify "ecocide"—defined as severe and long-term environmental destruction—as a core international crime alongside genocide and crimes against humanity. The Independent Expert Panel (2021) proposed its inclusion under the Rome Statute of the International Criminal Court. Recognizing ecocide would provide a stronger deterrent against large-scale ecological harm, including marine and coastal degradation.

International Legal Frameworks

UNCLOS (1982): The United Nations Convention on the Law of the Sea Imposes duties on states to protect and preserve the marine environment, manage resources within Exclusive Economic Zones (EEZ), and prevent pollution from vessels and land-based activities. It also impose obligations: Article 192 requires states to protect and preserve the marine environment, while Article 194 mandates active prevention, reduction, and control of pollution from land and sea sources.[33] Part V pertains to sustainable use of living resources in the EEZ, treating overexploitation as both a legal and ecological breach. CRZ enforcement and satellite-based maritime monitoring could bridge the enforcement gap in India.

International Convention for the Prevention of Pollution from Ships: MARPOL (1973, amended 1978)**, t**he main global treaty against ship-sourced pollution, covering oil, hazardous liquids, sewage, garbage, and air emissions, **r**equires port inspections and shipboard waste controls.

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): Regulates international trade in endangered species, including marine species such as

33. F. Maletto, *Enhancing Marine Protection: The Role of Prevention in Addressing Pollution from Land-Based Sources Starting from the European Regional Experience* (Doctoral Thesis, Maastricht University 2024).

corals and sharks, requiring cross-border enforcement.[34] Its scope includes marine species such as sharks, sea turtles, and corals, targeted by high-value international markets.

Cartagena Protocol on Biosafety: Under the Convention on Biological Diversity (CBD), it regulates cross-border movement of living modified organisms (LMOs) to prevent harm to biodiversity and human health.It addresses biosafety by regulating living modified organisms relevant to marine bioresources and aquaculture.

One Health Global Frameworks: The WHO, FAO, WOAH, and UNEP's One Health Joint Plan of Action (2022–2026) prioritizes zoonotic disease prevention, antimicrobial resistance control, food safety, and ecosystem protection. This forms a governance model requiring environmental, health, and agricultural agencies to share data and coordinate action.

Emerging Doctrines in Environmental Justice: Ecuador grants ecosystems legal rights, and New Zealand recognizes a river as a legal person. Globally, there's a push to make ecocide a core international crime. In India, constitutional provisions and the Public Trust Doctrine could support similar laws to protect marine and coastal ecosystems.

Lessons for India: Articles 48A and 51A(g) of the Constitution, combined with judicial doctrines such as the Public Trust Doctrine, provide a domestic foundation for adopting global innovations like Rights of Nature and ecocide recognition. Embedding UNCLOS and MARPOL duties into domestic laws strengthens EEZ surveillance and port control. We can improve coordination at ports between customs, fisheries, and wildlife agencies to align the Wildlife Protection Act with CITES. Cartagena Protocol biosafety measures for coasts and aquaculture can be adopted.

POLICY GAPS & REFORM PROPOSALS

Identified Policy Gaps -

1. Fragmented governance with overlapping institutions.
2. Weak enforcement and prosecution of environmental crime.
3. Limited integration of One Health into legal and policy frameworks.
4. Outdated statutory definitions (e.g., not covering microplastics or destructive fishing).
5. Underdeveloped marine jurisprudence and lack of coastal focus.

34. C. Raymakers, *CITES, the Convention on International Trade in Endangered Species of Wild Fauna and Flora: Its Role in the Conservation of Acipenseriformes*, 22 J. Appl. Ichthyol. 53 (2006), https://doi.org/10.1111/j.1439-0426.2007.00929.x.

Legal Reforms (Short Term: 1–2 years)

1. Amend the Environment (Protection) Act, 1986, to formally codify principles:

- Public Trust Doctrine
- Precautionary Principle
- Polluter Pays Principle

2. Recognize new categories of environmental harm (microplastics, IUU fishing).
3. Strengthen Coastal Regulation Zone (CRZ) enforcement.

Institutional Reforms (Medium Term: 3–5 years)

1. Establish a Marine Environmental Code.
2. Create a National Environmental & Public Health Coordination Authority for integrated governance.
3. Constitute an Environmental Crime and Zoonotic Risk Commission (ECZRC).
4. Introduce dedicated marine benches within the National Green Tribunal.

Enforcement Enhancements

1. Deploy satellite, vessel monitoring systems (VMS), and AI-based surveillance for marine zones.
2. Build capacity in environmental forensics and rapid response.
3. Encourage community-based ecological monitoring with incentives.

International Engagement (Long Term: 5+ years)

1. Domesticate treaty obligations under UNCLOS, MARPOL, CITES, and the Cartagena Protocol.
2. Forge regional agreements for joint marine enforcement in the Indian Ocean.
3. Advocate for ecocide recognition as an international crime.
4. Pilot adoption of Rights of Nature in ecologically sensitive Indian zones.

CONCLUSION

Environmental crime in India is a central threat to ecological stability, public health, and sustainable development. This paper has shown how the integration of green criminology, blue criminology, and the One Health approach provides a comprehensive framework to understand and respond to these challenges. By linking ecological harm to zoonotic risk and human security, the analysis demonstrates that environmental governance must move beyond fragmented statutes toward systemic accountability.

Indian constitutional provisions (Articles 21, 48A, and 51A(g)) and judicial innovations have already created a strong jurisprudential foundation. The Public Trust Doctrine, Precautionary Principle, Polluter Pays Principle, and Absolute Liability stand as tools to guide governance. Case studies from the Gulf of Mannar, Vembanad Lake, and Sundarbans illustrate ecological degradation that translates directly into human vulnerability. Comparative perspectives on international instruments such as UNCLOS, MARPOL, CITES, and the Cartagena Protocol highlight gaps and opportunities for India to align domestic law with global frameworks.

And moving ahead, the reform roadmap points to actionable steps: codifying environmental principles in statute, enacting a Marine Environmental Code, creating specialized bodies like the Environmental Crime and Zoonotic Risk Commission, and adopting technologies for monitoring and enforcement. In the long term, India can contribute to global innovations such as the Rights of Nature and recognition of ecocide. This study has relied primarily on doctrinal interpretation and secondary data, and further empirical research on enforcement practice will enrich the field. Ultimately, embedding One Health and green criminology within India's legal and policy fabric is not only a matter of ecological necessity but also a constitutional and moral imperative—an essential path to achieving SDGs 3, 13, 14, and 15 while safeguarding intergenerational equity.

ENVIRONMENTAL INJUSTICE AND MARGINALIZED COMMUNITIES IN INDIA: A GREEN CRIMINOLOGY APPROACH

Jitya SP[1]

ABSTRACT

Environmental injustice in India stems from both ecological degradation and systematic neglect of marginalized communities who suffer the consequences of environmental deterioration. Communities such as Adivasi, Dalit and the rural populations are often the ones who are displaced by these so-called development projects, whose lives are subject to industrial pollution, and whose voices are excluded in policy formulations relating to the environment. This paper explores these harmful trends by providing critical insights through the lens of green criminology. This paper aims to examine the existing environmental laws and policies of India, which appear progressive on paper but fail to provide protection to the vulnerable groups from the risk of environmental exploitation. This paper uses doctrinal research and case study analysis to explore the structural gaps in the enforcement of regulations, judicial remedies, and institutional responsibility. Positioned with the green criminological perspective, this paper seeks to reorient the principles of ecological justice, victim acknowledgment, and corporate liability. It also discusses how these reforms align with the global commitments under the Sustainable Development Goals, more particularly to SDG 10 (Reduced Inequalities), SDG 13 (Climate Action), and SDG 16 (Peace, Justice and Strong Institutions). This paper concludes by proposing a green criminological dimension to environmental law that addresses both victims of environmental crimes (ecology and people) and corporate offenders by ensuring stronger criminal accountability and promoting a more inclusive community-based environmental decision-making process.

Keywords: Green criminology, Environmental injustice, Marginalized communities, Sustainable Development Goals, Inequality and Corporate Accountability.

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INTRODUCTION

The environmental degradation in India is not merely an ecological crisis but also an issue of justice. Environmental injustice broadly affects the marginalized groups in the society such as the Adivasis displaced by mining and deforestation, Dalits and OBCs reside proximate to harmful industries and landless labourers, etc. Women in these communities have to undergo a dual strain because they are the primary custodians of natural resources. Minorities, including nomads and slum dwellers in the urban centres, are often denied the right to environmental protection. Although these groups are the least contributors to the ecological harm, they are the most harmed through displacement, exposure to toxic materials and they are the least included in policy formulation exercise.

Environmental injustice in India is not incidental but structural and can be defined as systemic. Environmental injustice on the whole is considered to have been defined as unfair exposure of vulnerable people to environmental risks and not being allowed to participate in decision making. It has been described as the situation where low-income or minority groups are disproportionately exposed to environmental hazards and when such groups are systematically excluded in the environmental policymaking. Similarly, Robert D. Bullard father of environmental justice defines environmental injustice as any policy, practice, or directive that has the opportunity to differ or harm people, groups or communities, on basis of race or socio-economic status. Despite the environmental laws in books including the Environment (Protection) Act, 1986[2], the Forest Rights Act, 2006[3], and the PESA Act, 1996[4], India has been ineffective in defending these groups. Rather, such laws tend to go unenforced, weakened, or superseded in practice.

This paper adopts the lens of green criminology in order to look into environmental injustice in India. Green criminology is a sub-discipline of criminology, concerned both with what the law deems criminal, and what are wider ecologically unsound acts which are, at least, socially and/or morally wrong. This paper helps us comprehend why the laws cannot always take care of those at risk and why these laws lead to the invisibility of that harm. This paper further dwells upon the inadequate consideration of the role of environmental injustice in India as it exposes a huge gap between the visions of these global ambitions and the lived realities of the marginalized in India.

2. Environment (Protection) Act, 1986, No. 29, Acts of Parliament, 1986 (India).

3. Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, No. 2, Acts of Parliament, 2007 (India).

4. Panchayats (Extension to Scheduled Areas) Act, 1996, No. 40, Acts of Parliament, 1996 (India).

GREEN CRIMINOLOGY: A FRAMEWORK FOR ENVIRONMENTAL HARM AND VICTIMHOOD

Green criminology is a critical subdiscipline of criminology, and this term was coined by Michael J. Lynch in 1990.[5] It examines the environmental crimes and harms to humans, non-human species, ecosystems, and the biosphere. In contrast to the more traditional approach to criminology, that is anthropocentric and limited to measures criminalized by law, green criminology assumes a more zemiological perspective and has its focus on social harm, independent of its legal codification.[6] It questions the ways in which the power, politics and corporate forces construct the definition of different crimes and analyze whose interests are protected.

Harm Beyond Legality

Green Criminology revolves around the notion that legality is not equivalent to justice. Processes that destroy ecosystems, subordinate communities, or undermine population health usually exist on both sides of the law and they are regulated by legal frameworks or politically supported alliances with corporations.[7] Crime is viewed as socially constructed which is noted by Hillyard and Tombs and it implies that criminal behaviour is not the direct equivalent of criminal responsibility, but must come after social definition and acceptance of said action as harmful. Green criminologists are thus interested in such actions that violate environmental law but also in what are more widespread and normalized forms of harm.[8] These harms are embedded in the so-called lawful industrial activities including wide-scale deforestation, toxic waste disposal, and industrial agriculture which is permitted under law but results in the destruction of the environment. This apparent disjuncture between harm and legality is illustrated by international examples such as the Flint, Michigan water crisis, where a legal administrative ruling to change water sources exposed residents to lead contamination, the Amazon rainforest which was cleared in a large scale for agribusiness and it is usually legitimised by national policy and extractive projects in Ecuadorian Amazon, which have been condemned as permanently contaminating with toxic substances despite being legally licensed.[9] These examples illustrate how law legitimizes environmental harm, which is a concern of green criminology.

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5. Michael J. Lynch, *The Greening of Criminology: A Perspective for the 1990s*, 2(3) Critical Criminologist 1, 1–4, 11–12 (1990).

6. Angus Nurse, *Green Criminology: Shining a Critical Lens on Environmental Harm*, 3 Palgrave Communications 10, 1–3 (2017).

7. Wesley Tourangeau, *A Systems-Based Approach to Green Criminology*, 30 Critical Criminology 983, 985–87 (2022).

8. Tejaswi Avhad, *Green Criminology: An Overlooked Area—A Threat to Our Future*, 9(12) Int'l J. Innovative Sci. & Res. Tech. 532, 533 (2024).

9. Nigel South, *Green Criminology: Reflections, Connections, Horizons*, 3(2) Int'l J. for Crime, Just. & Soc. Democracy 5, 6–8 (2014).

Categories of Victims

Green criminology broadens the field of victimology not only to human beings, but to a greater number of victim groups:

a. Ecological Victims: These include life forms, species, and ecosystems, which are adversely affected by human actions. They are forests cleared to make way to monoculture agriculture, coral reef bleaching caused by climate change and rivers damaged by industrial waste products. In viewing the ecosystems as victims, anthropocentric aspects of the legal system are undermined and it shares common ground with the newly arising nature centric jurisprudence.[10] For example, deforestation in Western Ghats.

b. Human Victims: In most of the cases, the most vulnerable individuals to environmental danger are disadvantaged groups that carry little political weight and power. Such as the Indigenous people whose territories are being exploited to extract resources, fishing communities who are adversely impacted by pollution of the seas, and urban poor living close to industrial waste dumps. These vulnerabilities are aggravated by the systemic inequality, the absence of the rights to the relocation, and the inability to participate in environmental decision-making. For example, Adivasi settlements near hazardous factories.

c. Future Generations: The idea of Intergenerational justice is a frequent occurrence in green criminology and this is because it is noted that environmental degradation today in the form of biodiversity loss, climate change and even depletion of groundwater has costs that can never be recovered by future generations. The Sustainable Development Goals (SDGs) framework of the UN and even the Rio Declaration of 1992[11] acknowledges this explicitly and also lays down the responsibility to protect the integrity of the environment.[12] For example, biodiversity loss in central India.

Invisibility of Environmental Harm

The issue of environmental damage being a hidden crime in the legal and policy realms is another theme that recurs frequently within green criminology. A number of structural aspects that lead to this invisibility include:

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10. Maitheli Hazarika, *Green Criminology in India: Deciphering Environmental Offenses and Legal Responses*, 4(1) Indian J. Integrated Rsch. in L. 1219, 1220–22 (2024).

11. Rio Declaration on Environment and Development, U.N. Doc. A/CONF.151/26 (vol. I), Annex I (Aug. 12, 1992).

12. Sanjay V. Jadhav & Anju Singh, *Role of Green Criminology and Earth Jurisprudence in the Future of Environmental Law*, Univ. of Mumbai, at 1–3 (2021).

a. State Corporate Nexus: The strong inter-connection with political players and companies allows activities that are causing damage to the environment.

b. Regulatory Loopholes: Regulatory standards are usually provided for an industry by the industry regulations, thus resulting in a lax regulatory system which authorizes dangerous operations.[13]

c. Media Representation: The negative effects of environmental damage can be put in a positive spin of being developed and so the damage is not shown.

d. Fragmented Governance: Agencies often overlap in jurisdiction and therefore their enforcement becomes diluted, and this allows opportunities for forum shopping.[14]

Structural Vulnerabilities and Environmental Injustice

Environmental injustice is rarely evenly distributed. Green criminology highlights the importance of social stratifications in terms of race, class, ethnicity, or indigeneity in terms of being exposed to risks. Indigenous people in Canada deal with a disproportionate environmental burden, such as the long-term boil-water advisories in First Nations, and displacement of indigenous groups in Brazil by dam construction being caused worldwide. Extractive industries are usually concentrated in rural marginalized peoples in the Global South, and in the cities, on the polluted urban fringe.

Although patterns are similar in India with caste, tribal identity, and rural place of residence overlapping with environmental susceptibility, the specific excursion of such contexts of countries, legal structure, and case studies will be dealt in the further in the paper. This chapter as whole states that environmental injustice has global and somewhat local context which is incredibly rooted in structural disparity that the green criminology attempts to unveil.[15]

LEGAL FRAMEWORKS AND ACCOUNTABILITY GAPS IN INDIA

India has depicted a vast disjunction between law in books and law in practice even though there is a strong body of environmental legislation on paper. Laws which do not seem regressive at face value are most often weakened in practice and are ignored during decision making processes, or construed in an economic expansion-favouring way. In a green criminological

13. Maitheli Hazarika, *Green Criminology in India: Deciphering Environmental Offenses and Legal Responses*, 4(1) Indian J. Integrated Rsch. in L. 1219, 1220–22 (2024).

14. Nigel South, *Green Criminology: Reflections, Connections, Horizons*, 3(2) Int'l J. for Crime, Just. & Soc. Democracy 5, 6–8 (2014).

15. Tejaswi Avhad, *Green Criminology: An Overlooked Area—A Threat to Our Future*, 9(12) Int'l J. Innovative Sci. & Res. Tech. 532, 533 (2024).

approach this ongoing disparity reveals how structural inequality, regulatory inertia and state-corporate collusion render some environmental destruction unseen and unpunishable.[16]

Law on Paper vs. Law in Practice

The central government which is the authority to control pollution and ecological protection has broad powers vested in the Environment (Protection) Act, 1986 (EPA)[17]. However, its expansiveness has resulted in a set of vague requirements, which allow discretionary and selective application. Regulation generally occurs after the harm has been done and the offending state agencies are rarely prosecuted or fined, hence enabling the industrial players to externalise on the environment without much legal repercussions.[18]

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA)[19] was designed to correct the historical injustice by granting recognitions of land rights and other resources of forest dwelling people. But its potential to transform is held back by bureaucratic obstructionism, procedural delays and outright mass rejection of claims, often without benefit of due process. De facto mining-related and other displacement continues on the basis of dams, infrastructure, and so on, reprising a pattern of ecology victimisation of Adivasi populations.[20]

The draft Environment Impact Assessment (EIA) Notification, 2020[21] presents a legal shift towards absence of precaution and participatory governance. It reduces the time of public consultation, allows post-facto clearance and prevents public scrutiny of some high-risk projects. These loopholes undermine procedural protection in circumstances that might have increased the voices procured by the affected communities.

In a similar manner, the Panchayats (Extension to Scheduled Areas) Act, 1996 (PESA)[22] holds the tenet that the Scheduled Areas shall govern natural resources as well as approve the projects through the Gram Sabhas. The powers are in fact undermined by state amendments

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16. R. S. Kallaje, *Implementation of Forest Rights Act in India: A Review Article*, 148 Indian Forester 759, 761–63 (2022).
17. Environment (Protection) Act, 1986, No. 29, Acts of Parliament, 1986 (India).
18. Shibani Ghosh & Bhargav Krishna, *The Weakest Link in the Air Pollution Fight*, The Hindu (Nov. 2, 2022).
19. Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, No. 2, Acts of Parliament, 2007 (India).
20. Supreme Court's Stay on FRA Evictions: Most States Yet to Review Claims, Down to Earth (Feb. 2025).
21. Draft Environment Impact Assessment Notification, 2020, Ministry of Env't, Forest & Climate Change, (Mar. 23, 2020) (India).
22. Panchayats (Extension to Scheduled Areas) Act, 1996, No. 40, Acts of Parliament, 1996 (India).

administratively override Gram Sabha's decisions, which are regularly ignored in the favour of extractive industries. The legal framework exists but its operation is systematically obstructed.

Accountability and the Problem of Enforcement

In India, the responsibility of environment harm is diffused around regulatory structure. The major enforcement agencies such as the Pollution Control Boards (CPCB and SPCBs for central and state) are short of finance, politically affected and technologically weak. The National Green Tribunal (NGT), though a fresh step in law has a limited scope in some of the issues, along with backlog of cases and sometimes the orders are not followed.[23]

The vulnerability of this structure is aggravated by state-corporate impunity. The agencies of the state themselves can become the direct violators, for example, infrastructure projects which are launched without being provided with statutory clearances. Designed to protect corporations under political influence, leading which, the corporations commonly resort to pay-offs or exploit loopholes to get themselves out of the criminal responsibility. This is a reflection of the green criminology perspective according to which environmentally destructive processes are not only permitted but are made possible through a system of institutions.[24]

The SDG Commitments and the Reality Gap

India's commitment to the Sustainable Development Goals (SDGs) incorporates targets on climate resilience, equality and justice. It is evident that the marginalized communities experience a significant discrepancy between these desires and realities.

a. SDG 13 (Climate Action)[25]: This talk about adaptation and resilience, but the most vulnerable to the impacts of climate change (rural and tribal communities) do not have locally based adaptation plans. There is top down disaster response with limited community agency only.

b. SDG 10 (Reduced Inequalities)[26]: Historically marginalized communities such as Scheduled Tribes and Dalits bear the biggest environmental burden, and they are closely proximate to polluted industries and loss of land which reinforces the cycle of inequality.

23. Understaffed and Overburdened: State of Pollution Control Boards in India, Bar & Bench (Aug. 14, 2024).

24. Funds Remain Underutilised by Regulators in India's Indo-Gangetic Plain, Mongabay-India (May 2023).

25. United Nations General Assembly, *Transforming Our World: The 2030 Agenda for Sustainable Development*, U.N. Doc. A/RES/70/1 (Oct. 21, 2015).

26. United Nations General Assembly, supra note 16.

c. SDG 16 (Peace, Justice, and Strong Institutions)[27]: The victims of environmental damage face prolonged litigation periods, lack of transparency in procedure, poor access to means of justice. Even where mechanisms of environmental justice are put in place, they usually remain irrelevant to the most affected.[28]

The discrepancy between the SDG promises and actual situations in India illustrates that environmental governance in India is more concerned about global grand declarations rather than national justice. Marginalized groups do not feature in national or global reporting models. The cumulative effect is a style in which the availability of legal rights does not mean their enjoyment, and where international promises have been rhetorical acceptability, but are rather systematically destabilized. From the lens of green criminology, this reflects a structural normalisation of harm, where both state and corporate actors operate with minimal accountability, perpetuating the invisibility of environmental victims.[29]

CASE STUDIES: THE LIVED REALITY OF ENVIRONMENTAL VICTIMIZATION

Following the theoretical perspective of Green Criminology developed in the preceding chapter, one should perceive environmental victimization in India not merely as a set of violations of the statutory law enforced by the state but as the structural injustices that are disproportionately faced by the vulnerable groups, other living beings, and endangered ecosystems. The following cases will illustrate how power balancing, legal loopholes, and developmental urgencies usually take precedence over ecological justice as a major consideration of zemiological and critical perspectives of crime.

Corporate and Industrial Projects

Vedanta and the Niyamgiri Hills: On Niyamgiri, Odisha, through which Vedanta Resources proposed bauxite mining, The Dongria Kondh Adivasi opposed the project as it not only signified a place of spiritual value but also an area of ecological importance. In ***Orissa Mining Corporation v. Ministry of Environment & Forests***[30] the Supreme Court affirmed the rights of the community according to the Forest Rights Act[31] stating that the Gram Sabhas will determine the future of the project. This unique decision of the Supreme Court was welcomed by the environmentalists and it also upheld the rights of indigenous people.

27. United Nations General Assembly, supra note 16.

28. NITI Aayog, SDG India Index & Dashboard 2023–24: Partnerships for the Goals (2024).

29. R. K. Mishra, Law of Environment in India: Problems and Challenges in Its Enforcement, 6(2) Research Ambition: An Int'l Multidisciplinary e-J. 17 (2021).

30. Orissa Mining Corporation v. Ministry of Environment & Forests, MANU/SC/0396/2013.

31. Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, No. 2, Acts of Parliament, 2007 (India).

Sterlite Copper Plant, Thoothukudi: In this case the local residents have accused toxic releases and groundwater pollution of the Vedanta Sterlite plant for years. In 2018, demonstrations resulted in 13 fatalities caused by police firing. This case is ironed out under litigation even after the Tamil Nadu Pollution Control Board issued an order to close down. This is evidence of state-corporate in criminalization of protest and the penalization of protestors spanning the environmental world of victimizations.[32]

POSCO Project, Odisha: There were thousands displaced and cleared forest land and environmental clearances which were contested on the $12 billion POSCO steel project. Eventually, the project was abandoned in the year 2017, leaving communities stranded landless and jobless. In this case, deep social harm was concealed by legal permits, and this is one incident where green criminology's critique of 'lawful but harmful' can be seen.[33]

Bhopal Gas Tragedy: In 1984 the leakage at the Union Carbide plant claimed thousands of lives immediately and caused significant damage to the health and environment in the long-run. Survivors are still fighting to get reasonable compensation and remedy decades later. The case testifies to the business impunity and ineffectiveness of cross-national regulation.[34]

Supreme Court's 2024 Environmental Jurisprudence

The Hon'ble Supreme Court in ***M.K. Ranjitsinh v. Union of India***[35] held that 'constitutional right against the adverse effects of climate change' under Articles 14[36], 21[37], 48A[38] and 51A(g)[39] and it also allowed the overhead transmission lines to be built through the habitat of the Great Indian Bustard, and in this case put the interests of renewable energy expansion above species conservation.

In ***Gene Campaign v. Union of India***[40], a split verdict disclosed opacity in regulations of genetically modified crop approval, and in ***Ashok Kumar Sinha v. Union of India***[41], SC

32. Sterlite Industries (India) Ltd. v. Union of India, (2013) 4 SCC 575.

33. Samantha Balaton-Chrimes, POSCO's Odisha Project: OECD National Contact Point Complaints and a Decade of Resistance, Deakin Univ., (2016).

34. Union Carbide Corp. v. Union of India, AIR 1988 SC 1531.

35. M.K. Ranjitsinh v. Union of India, 2024 SCC OnLine SC 570.

36. INDIAN CONST. art. 14.

37. INDIAN CONST. art. 21.

38. INDIAN CONST. art. 48A.

39. INDIAN CONST. art. 51A(g).

40. Gene Campaign v. Union of India, 2024 SCC OnLine SC 1793.

41. Ashok Kumar Sinha v. Union of India, Civil Appeal No. 59 of 2004.

intervened in the Ganga plastic waste. In the meantime, orders in the ***Godavarman***[42] case safeguarded the deemed forests such as the Orans of Rajasthan, which inverted the parameters of cultural heritage into conservation. In ***Orans Case (Rajasthan)*** had preserved sacred groves as deemed forests and that connected ecology with cultural heritage. These judgements demonstrate how courts have rhetorically promoted environmental rights but has less directed in its application of the law to its development projects.

Recent Localised Environmental Conflicts

Shimla Development Plan: In this case the urban development was allowed by the Court in the fragile Himalayan City in 2024, over the objections of National Green Tribunal, added catastrophic risk in a slope-intense area. This is perceived as structural harm, as green criminology interprets that the interest of the economy in the short term overshadows the environmental caution.[43]

Delhi Ridge Deforestation: In this case an Illegal clearing of leopard corridor to build a road despite several court injunctions, indicates a complete disregard of statutory and constitutional mandates and serves to consolidate authority dynamics as environmental harm.[44]

Joshimath Land Subsidence: This occurred in 2023-24 where the land at Joshimath exemplified the long-term consequences of uncontrolled development and tunnelling in the Himalaya by hydropower development project. The evacuation of residents reflects the inability to use precautionary principle in delicate natural areas.[45]

Vizhinjam Port Project, Kerala: Fishing Community has accused coastline erosion, loss of livelihood and ecological imbalance because of Adani deep-water port coming up. Counter to the scientific objections, the project is supported by the state, indicating anthropocentric focus on the economic growth instead of the survival of the coastal ecosystems.[46]

International Parallel

The same trends appear throughout the whole world. In Ecuador, the cleanup in the Amazon region is underway after decades-long litigation and partial cleaning efforts after rivers and Indigenous lands were contaminated by Texaco (acquired in 2001 by Chevron). The Standing

42. T.N. Godavarman Thirumulpad v. Union of India, (1997) 2 SCC 267.

43. State of Himachal Pradesh v. Yogendra Mohan Sengupta, 2024 SCC OnLine SC 1377.

44. Supreme Court Orders Afforestation After DDA Found Guilty of Contempt in Ridge Case, The Indian Express (May 28, 2025).

45. Shubham Sharma et al., Ground Deformation and Land Subsidence in Joshimath, India Revealed by InSAR Observations, Scientific Reports (2024).

46. India: Fishing Communities and Activists Allege Violence, Displacement, Environmental Harm and Lack of Consent in Vizhinjam Seaport Project, Business & Human Rights Resource Centre (Oct. 2022).

Rock Sioux Tribe sought to defend water sources against an oil pipeline, the U.S. Dakota Access Pipeline protests showcased the hard fight to save water sources and the militarised police approach and court misfortunes. The rise of sea levels is an existential threat to the Pacific Island nations such as Kiribati and Tuvalu and leads to climate refugee cases that resonate with the current case law on climate rights in India. From the above similarities we can conclude that environmental victimisation is an international issue that is influenced by cross-national corporate influence, poor enforcement of regulations and overexposure of the marginalized populations.[47]

Synthesis

Across these cases, three patterns emerge:

a. **Structural Power Asymmetry**: The environmental and community rights are often given less importance when compared to State and corporate interests often

b. **Legal Loopholes & Weak Enforcement**: Inconsistent implementation leads to undermining of progressive judgments.

c. **Marginalized Communities are most often the victims**: Indigenous communities, fisherfolk, and residents in hills are disproportionately affected.

CONCLUSION: A GREEN CRIMINOLOGICAL ROADMAP FOR JUSTICE IN INDIA

This paper concludes that environmental degradation in India is not accidental or even uniformly distributed but has deep roots in structural inequalities, political decision, and economic priorities that continuously favour development over the maintenance of the ecological environment. It also discusses the failure of the law to encompass the entire picture of environmental victimisation through the perspective of green criminology, especially since most of the victims are marginalized groups.

In case studies such as the Vedanta-Niyamgiri, Sterlite Copper, POSCO the Hon'ble Supreme Court has ruled on climate change rights, genetically modified crops and forest conservation which show a common thread and it can also be seen as a power which determines both what constitutes an evil and how it should be legally confronted. Regulations like the Environment, (Protection), Act, 1986[48], Forest conservation Act[49], even constitutional protection under

47. Rebecca Tsosie, Environmental Justice and the Rights of Indigenous Peoples: International and Domestic Legal Perspectives (2010).

48. Environment (Protection) Act, 1986, No. 29, Acts of Parliament, 1986 (India).

49. Forest (Conservation) Act, 1980, No. 69, Acts of Parliament, 1980 (India).

Articles 21[50] and 48A[51] although meaningful on paper are largely ineffective when it comes to implementation because of non-enforcement and corporate lobbies, or loopholes in the policy.

A justice-centred green criminology in India is important to shift the rhetoric to the actual implementation of reforms. This includes:

- Implementing PESA[52] and FRA[53] to have actual community involvement.
- Identification of marginalized communities and indigenous people as major stakeholders in the environment.
- Creation of criminal liability for corporations and the state in case of environmental damages.
- Empowering the National Green Tribunal, local governance systems and environmental law assistance.
- Mapping environmental governance to SDG 10, 13 and 16 and constitutional provisions of life, the environment and access to justice.

Green criminology is the redefinition of the environmental protection and not as a policy to consider, but rather as a moral and legal necessity. It requires environmental destruction to be considered a kind of social destruction and justice systems need to treat it with as much urgency as they would do it for traditional crimes. The way ahead of India must be such that development and ecological integrity should not be opposing focus but the two need to support each other to generate a stable pillar of sustained governance.

Destruction of the environment is never about the loss of the forests, rivers, and species but it is about people, culture and justice. The school of green criminology reminds us that environmental conservation is something that should be coupled with rights and dignity of those working in nature. An inclusive, ethical, and responsible environmentalism in India is the key to a better future because destruction of the Earth should be considered as harm to the community, environment and ourselves.

50. INDIAN CONST. art. 21.

51. INDIAN CONST. art. 48A.

52. Panchayats (Extension to Scheduled Areas) Act, 1996, No. 40, Acts of Parliament, 1996 (India).

53. Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, No. 2, Acts of Parliament, 2007 (India).

THE ROLE OF MULTINATIONAL COMPANIES IN CROSS-BORDER ENVIRONMENTAL CRIMES: LEGAL ACCOUNTABILITY AND ENFORCEMENT CHALLENGES

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ABSTRACT

As the global economic system has expanded, many Multinational Corporations (MNCs) have moved their manufacturing sector to developing countries in search of lower production costs, relaxed environmental standards, and lax enforcement. This is often presented as a product of, or justification for, development through job creation, but it has led to an increase in cross-border environmental crime resulting from acts that degrade the environment across national borders, and frequently escaping accountability because of legal loopholes. This paper examines how MNCs in the automobile manufacturing sector, as well as other industries, exploit regulatory gaps in developing countries like India, which encourages foreign investment but struggles to regulate and hold foreign actors accountable for environmental harm. Multinational corporations (MNCs), especially in the auto industry, turn to countries such as India, where advancements are being made to facilitate foreign investment, as well as any capacity to manage the enforcement of environmental violations. This paper analyses the pollution haven hypothesis and green criminology in reference to the state of India and whether it has become a dumping ground for the environmental failures of the Global North. The approach of the study is doctrinal, interpreting a range of Indian statutes, including Environment (Protection) Act, 1986; Air and Water Acts, Hazardous and Other Wastes Rules, 2016; National Green Tribunal Act, 2010, as well as principled doctrines within the law, such as the Polluter Pays Principle and Precautionary Principle and case studies of MNCs, like Volkswagen and Mercedes-Benz. The assumption is that India's present legislative framework does not have a functional deterrent for transnational environmental violations. Finally, the study recommends that MNCs should have enhanced legal and environmental due diligence, and necessary suggestions in the Indian Environmental laws, so that there can be both economic growth and sustainable development.

Keywords: Pollution haven hypothesis, Green criminology, MNCs, Environmental regulation in India, National Green Tribunal (NGT).

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INTRODUCTION

The needs and wants of humans are increasing at a rapid rate, and to satisfy these needs and wants, industries are becoming more globalised, which has led to the need for more manufacturing units to meet the needs of people. This has led MNCs to relocate their manufacturing units to developing countries. To attract cheaper labour, they promise economic growth and better employment opportunities to developing countries like India in return. Like every rose has thorns, even though the introduction of manufacturing units gives the country economic growth, these shifts can carry hidden environmental costs. Studies in the Asia–Pacific region find that foreign direct investment often increases pollution. The study from 1995 to 2020 showed that in the region, there is an increase in methane gas and CO2 emissions.[3]

The attraction of MNCs towards India makes it a pollution haven country. “Pollution-Haven Hypothesis” is a phenomenon where companies relocate their production to countries with weaker environmental regulations to reduce costs and avoid stricter environmental standards. Even China, which is considered the manufacturing hub of the world, meets its demand for pollution-intensive products through Indian exports.[4] This move of activities concerns green criminologists, who view this shift to developing countries as a form of corporate crime. Presently, there is a slow shift of manufacturing hubs from China to India. Scholars warn that, as India slowly moves up the global value chain, it should start adopting cleaner technology so that there is sustainable growth.[5]

India has a strong legal norm for environmental law, but it lacks enforceability. The Environment Protection Act 1986[6] and the Green Tribunals Act[7] formally enshrine principles like polluter pays and precautionary action. The Supreme Court has underscored that these principles are essential features of sustainable development.[8] But in practice, the MNCs are taking advantage of the loopholes and weak enforceability of these laws. This makes India vulnerable as a dumping ground for the MNCs.

India is the third largest automaker in the world. Being one of the major automakers, India has repeatedly clashed with pollution regulators. In 2015 government discovered that

3. Farhan Ahmed et al., *The Environmental Impact of Industrialization and Foreign Direct Investment: Empirical Evidence from Asia-Pacific Region*, 29 Environ. Sci. Pollut. Res. Int. 29778 (2022).

4. *Id.*

5. Xiaoxu Zhang et al., *The Environmental and Economic Impacts of India’s Emergence as the Global Manufacturing Hub*, 12 Humanit. Soc. Sci. Commun. 189 (2025).

6. The Environment (protection) act, 1986, No. 29 OF 1986, 23rd May 1986, https://www.indiacode.nic.in/bitstream/123456789/4316/1/ep_act_1986.pdf

7. The National Green Tribunal act,2010, 2nd June 2010, https://www.greentribunal.gov.in/sites/default/files/act_rules/National_Green_Tribunal_Act,_2010.pdf, (last visited Sep.1, 2025)

8. M.C. Mehta (Badkhal and Surajkund Lakes Matter) v. Union of India, (1997) 3 SCC 715.

Volkswagen had openly violated India's emission norms. For this, Indian Environment Court imposed a fine of 5 billion rupees, and the company was also forced to recall 323,700 cars. Also in 2019, the National Green Tribunal fined Volkswagen for excess smog-forming nitrogen oxide emissions.[9] These instances show that even leading MNCs may exploit weak oversight unless held accountable.

THE SHIFT IN THE MANUFACTURING SECTOR TO DEVELOPING COUNTRIES

The shift of the automobile industry to developing nations like India is to cut costs and exploit the regulatory differences. Developing countries offer cheap labour, and in countries like India, where there is a larger working population, it is easy to get cheap labours. Developing countries also have lower operating costs. The shift from China's manufacturing hub to India is also due to the rise in Chinese labour costs, which has risen to the mid-range globally, leaving India at the low end in the labour cost.[10] These lower labour costs give a competitive advantage in their market and the operating expenses in developing countries are also cheaper compared to those in developed Western countries. These lower labour costs and operating expenses attract foreign production to countries like India.

Weaker Environmental Standards

Even though cheaper labour and costs play an important part in attracting foreign direct investment, this alone does not attract the manufacturing units; lax environmental regulation also plays a huge role in attracting these manufacturing units. Well, this attraction of industries to a place of weaker environmental law is the Pollution-Haven Hypothesis.[11] Developing countries may deliberately keep weaker rules to attract foreign investments. Some countries compete in a "race to the bottom" by weakening the restrictions.[12] Developing countries prefer growth over a stricter environment and rapid growth over stable growth. One example is a carmaker might offshore the painting or battery recycling process to countries which have a weaker emission control. Thus, environmental policies also play a role in the location of industries. Therefore,

9. *Volkswagen India Says Will Contest Green Court's $71 Million Penalty | Reuters*, https://www.reuters.com/article/business/environment/volkswagen-india-says-will-contest-green-courts-71-million-penalty-idUSKCN1QO0KD/ (last visited Aug. 10, 2025).

10. *Reshoring White Paper: Global Labor Rate Comparisons*, Reshoring Institute | Your Resource for Reshoring Manufacturing to the USA, https://reshoringinstitute.org/reshoring-white-paper-global-labor-rate-comparisons/ (last visited Aug. 10, 2025).

11. Moon Gyu Bae, Yi Chen Wang & Na Liu, *Revisiting the Relationship Between the Strength of Environmental Regulation and Foreign Direct Investment*, 13 Front. Psychol. (2022), https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2022.899918/full.

12. *The Cross-Border Effects of Environmental Regulation: Evidence from Battery Recycling in the US and Mexico*, CEPR (Feb. 21, 2022), https://cepr.org/voxeu/columns/cross-border-effects-environmental-regulation-evidence-battery-recycling-us-and.

major merger and acquisitions of pollution-intensive sectors happen in countries that have laxer environmental regulations.[13]

Enforcement Gaps and Green Criminology

Even if there is a strong law, enforcement of the law is often weaker in developing countries. Institutions may lack resources, and corruption is one of the major factors for the lack of enforcement of the law. The rapid industrialization and socio pressure from other countries hinder effective environmental governance.[14] The companies also find it cheaper to violate the law and pay penalties rather than comply with the law. These enforcement law ties to green criminology. The state's failure to enforce the law properly by preventing wrongdoings and corporate wrongdoings leads to environmental damage.[15] So when an auto manufacturer moves its manufacturing industries to India, it is not just a business but also a cross-border environmental crime. The weak enforcement and corporate collusion in developing countries lead to victimization.

DOMESTIC ENVIRONMENTAL LAWS VS FOREIGN CORPORATIONS IN INDIA

India's key environmental laws most importantly the Air (Prevention and Control of Pollution) Act (1981), Water (Prevention and Control of Pollution) Act (1974), Environment (Protection) Act (EPA, 1986), Hazardous and Other Wastes (Management and Transboundary Movement) Rules (2016), and National Green Tribunal (NGT) Act (2010) are applied across whole of India. They do not target foreign companies explicitly; any "person" (including corporations) causing pollution in India can be liable. For example, the EPA empowers the central government to regulate any action in India that harms the environment.[16] As a result, foreign automakers that produce or sell in India are similarly responsible for the same duties or penalties as domestic firms. In practice, India has pursued foreign automotive MNCs under these laws when their products created pollution; in the Volkswagen "Dieselgate" case, the NGT relied on India's vehicle emission standards and EPA powers to evaluate VW's pollution within Delhi.[17]

13. Aurélien Saussay & Natalia Zugravu-Soilita, *International Production Chains and the Pollution Offshoring Hypothesis: An Empirical Investigation*, 73 Resour. Energy Econ. 101357 (2023).

14. Prameela. A, Asha Sundaram (2024). The Enforcement Of Environmental Laws In Developing Countries: Challenges And Opportunities. Library Progress International, 44(3), 17661-17674.

15. Nurse, A. Green criminology: shining a critical lens on environmental harm. Palgrave Commun 3, 10 (2017). https://doi.org/10.1057/s41599-017-0007-2.

16. India Briefing, *Environmental Compliance for Companies in India: Key Regulation*, India Briefing News (Apr. 12, 2024), https://www.india-briefing.com/news/environmental-compliance-for-companies-in-india-key-legislation-and-esg-guidelines-32012.html/.

17. Ishan Kukreti, SC to Hear Volkswagen's Appeal against NGT Order, Down To Earth (Jan. 16, 2019), https://www.downtoearth.org.in/pollution/sc-to-hear-volkswagen-s-appeal-against-ngt-order-62839; Can't Duck Responsibility:NGT's Message in Rs100cr Fine Order on Volkswagen, Hindustan Times

Likewise, a foreign-owned factory in India must abide by the Air & Water Act consents and waste management provisions. The transboundary-movement rules (2016) summarise Part VI breeding imports and exports of Country Hazardous wastes, and prohibit imports of e-waste, listed in Schedule V on entry A1180.[18] Unlawful shipments are subjected to be seized by authorities and ordered for re-export. In this sense, the legality is extended towards foreign firms doing business or trading in India, including controlling cross-border pollution when company waste is delivered by way of shipments.[19]

However, the laws of India do not have extraterritorial applicability. They cannot punish one corporation for environmental damage caused outside of India. There is no universal extraterritorial jurisdiction or international enforcement mechanism that exists in these statutes. As one expert notes regarding a similar field (Pesticides), "if the same American company comes to India, it does not face any liability…a victim in India cannot sue a US company or multinational" that committed the polluting activity abroad.[20] In practice, then, India can only control a foreign MNC to the extent that it operates inside India, or brings materials (e.g. waste, chemicals, etc.) to India. To illustrate, in 2016, the waste rules allowed Customs to block foreign e-waste imports, and there were 29 recent illegal e-waste importation cases reported by the Press Information Bureau, all managed under Indian law.[21]

Polluter Pays and Precautionary Principles in Practice

Indian law solidly embeds the Polluter Pays and Precautionary principles. Section 20(2)[22] of the NGT Act says that the Tribunal must apply "the precautionary principle and the polluter pays principle" (along with sustainable development) when granting relief.[23] These have also been incorporated well by the Supreme Court precedent ***M.C. Mehta v. Union of India (2018)***[24] into India's environmental jurisprudence. The NGT has invoked these principles in practice against multinational car manufacturers. Clearly, the NGT order (Adarsh K. Goel, Chairman) ordering Volkswagen India to pay ₹100 crores in 2018, made explicit reference to both principles for

(Nov. 26, 2018), https://www.hindustantimes.com/india-news/volkswagen-told-to-pay-rs100-crore-for-using-cheat-devices-to-mask-emissions/story-DsFeFjt4gSTP8Ny9WJ6g3I.html.

18. *Illegal Dumping of E-Waste*, https://www.pib.gov.in/www.pib.gov.in/Pressreleaseshare.aspx?PRID=1810575 (last visited Aug. 10, 2025).

19. *Id.*

20. Rohini Krishnamurthy, *'Multinational Companies Think They Are above the Law,'* Down To Earth (Dec. 18, 2024), https://www.downtoearth.org.in/environment/multinational-companies-think-they-are-above-the-law.

21. Illegal Dumping of E-Waste, *supra* note 14.

22. National Green Tribunal Act, 2010, No. 19, Acts of Parliament, § 20(2) (India).

23. National Green Tribunal Act, No. 19 of 2010, § 20(2) (India).

24. M.C. Mehta v. Union of India, (2018) 6 SCC 1 (India).

"compensating the environmental damages" caused by Volkswagen's emissions using defeat devices.[25]

The NGT found that fraudulent technology on Volkswagen vehicles intentionally increased pollution, which harms the public, and invoked the polluter pays principle to claim a monetary penalty and precaution to justify immediate action (the vehicle recalls) even before final determination. This example illustrates that at least as the matter shows on paper and in a highly publicity way, this all underlines that those principles can be applied to MNCs operating in India.[26]

The success of those principles for holding Multinational Corporations (MNCs) accountable has been mixed. While there have been breakthroughs in court, the VW orders in particular set one of the most considerable green compensatory amounts for a foreign company in India.[27] On the other hand, enforcement can be slow and uncertain. VW immediately appealed the order and contested aspects of the order by taking the position that Indian standards differ from European standards. The case went to the Supreme Court.[28] The final compensation amount (₹171 crore), according to the NGT, was based on an expert report; however, the collection of these fines is still open to lengthy litigation. Critically, although the theory of polluter pays is accepted and legally recognised, there are likely to be delays and obstacles in recovering pollution damages (or any damages), as noted by some critics.[29]

Therefore, while principles are legally accepted and can then be employed (as in the VW and similar environmental cases), holding large MNCs fully to account would require enormous trials and appeal processes. There is no fundamental immunity for MNCs, but real-world constraints (e.g. lengthy expert assessments, appeals, and insolvency of subsidiaries) can blunt this doctrine's impact.

Enforcement Challenges and Legal Loopholes

While India's environmental laws theoretically apply to all polluting sources, multinationals may take advantage of practical loopholes. The biggest issue is jurisdiction and corporate

25. *Can't Duck Responsibility: NGT's Message in Rs 100 Crore Fine Order on Volkswagen | Latest News India - Hindustan Times*, https://www.hindustantimes.com/india-news/volkswagen-told-to-pay-rs100-crore-for-using-cheat-devices-to-mask-emissions/story-DsFeFjt4gSTP8Ny9WJ6g3I.html (last visited Aug. 08, 2025).

26. *Id.*

27. Ishan Kukreti, *SC to Hear Volkswagen's Appeal against NGT Order*, Down To Earth (Jan. 16, 2019), https://www.downtoearth.org.in/pollution/sc-to-hear-volkswagen-s-appeal-against-ngt-order-62839.

28. *Can't Duck Responsibility:NGT's Message in Rs100cr Fine Order on Volkswagen*, Hindustan Times (Nov. 26,2018),https://www.hindustantimes.com/india-news/volkswagen-told-to-pay-rs100-crore-for-using-cheat-devices-to-mask-emissions/story-DsFeFjt4gSTP8Ny9WJ6g3I.html.

29. *National Green Tribunal (NGT): A Failing Institution in Need of Revival - Civilsdaily*, (July 15, 2023), https://www.civilsdaily.com/news/national-green-tribunal-ngt/.

structure. In other words, a foreign MNC that has only a licensing or sales presence in India can say it has no actual control over the production that causes environmental harm. A perfect example of this is a pesticide maker that licensed a product to an Indian manufacturer and therefore claimed it had no responsibility. As one expert observed, "There is no jurisdiction [in India] because the company is not producing the chemical. The company licenses its product to a company in India…".[30] Victims, therefore, often cannot sue the overseas parent company, but only the local licensee or importer. A corporate veil can remain intact around foreign entities. Also, as already noted, Indian courts cannot enforce orders against MNC assets located abroad for harms that take place outside India, effectively allowing transnational pollution or harms linked to the supply chain to escape enforcement in India.

At home, enforcement weakness is a significant challenge. Environmental regulators (CPCB, SPCBs) are underpowered, while the enforcement of rules is very uneven across states. Even general business compliance analyses identify "challenges due to uneven law enforcement... decentralisation of enforcement...inconsistent application of laws, transparency, weak regulatory compliance, and occasional corruption".[31]

This patchiness might be a little helpful to any polluter that can lobby or litigate: if a court order is not to be monitored and uniformly enforced, then big companies can delay compliance. VW delayed its ₹100 crore deposit initially because it was ordered to by the NGT, and then there was a contempt warning.[32] There are lots of MNCs that negotiate with politicians, or communicate their appeal to consumer markets, and slow down any action against pollution. Ultimately, capacity constraints and regulatory gaps allow polluters to postpone the implementation of penalties or to slip through enforcement cracks.

Lastly, international trade regulations create implicit gaps. For example, no Indian statute imposes extra-territorial "due diligence" on multinationals, with the exception of, say, the EU supply chain laws, so a foreign carmaker does not need to demonstrate a globally assessed environmental risk if it is going to sell in India. Similarly, although the Basel Convention is enforced by the waste rules of 2016[33] and has regulated the exporting of hazardous waste into

30. Rohini Krishnamurthy, *'Multinational Companies Think They Are above the Law,'* Down To Earth (Dec. 18, 2024), https://www.downtoearth.org.in/environment/multinational-companies-think-they-are-above-the-law.

31. India Briefing, *Environmental Compliance for Companies in India: Key Regulation*, India Briefing News (Apr. 12, 2024), https://www.india-briefing.com/news/environmental-compliance-for-companies-in-india-key-legislation-and-esg-guidelines-32012.html/.

32. *India: Volkswagen fined Rs 1 billion for causing air pollution in Delhi*, Business & Human Rights Resource Centre, https://www.business-humanrights.org/it/ultime-notizie/india-volkswagen-fined-rs-1-billion-for-causing-air-pollution-in-delhi/ (last visited Aug. 10, 2025).

33. Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, G.S.R. 335(E), § 16 (India).

the developing world, Indian authorities must intervene and detain the wastes at ports of entry where the wastes land. According to some Indian officials, they have banned Korean waste shipments of plastic wastes (including e-wastes), but some shipments of e-wastes have still been documented (29 cases reported recently).[34] Such loopholes will probably enable foreign waste generators to offload the issues related to that waste in India. In other words, these loopholes mean multinationals avoid culpability for transnational harms unless the pollution is linked directly to Indian people or land. In the transnational context, the loopholes include: lacking international jurisdiction, corporate veil (licenses/local subsidiaries), uneven enforcement, and the problems of proving causal links across international borders.[35]

BALANCING FDI PROMOTION AND ENVIRONMENTAL PROTECTION IN INDIA

FDI Policy Framework and Environmental Laws

Since the new industrial policy was introduced in 1991, India has significantly liberalised its foreign direct investment (FDI) policies. Most sectors are now open to 100% foreign equity through the automatic (RBI) route, with only a few sectors that are considered sensitive (e.g. defence, insurance, telecom, etc.) imposing caps or requiring approvals.[36] Prior restrictions such as the 40% foreign equity cap from the 1973 Foreign Exchange Regulation Act, have been eliminated, and the Foreign Investment Promotion Board (FIPB) (known until 2017) has been replaced by broad automatic approval.[37] Additional incentives like tax breaks, subsidies and single-window clearance regimes are meant to entice FDI. In short, with increased foreign capital from "Make in India" and other initiatives, India now aggressively competes for foreign investment in a rationale of policy consensus that FDI contributes to economic growth.

At the same time, India's environmental laws are among the most comprehensive globally. Importantly, the Environment Impact Assessment (EIA) Notification (2006, amended) mandates project-level clearance for large industrial or infrastructure projects (including foreign investments) impacting the environment. The National Green Tribunal Act of 2010 created an environmental tribunal to enforce these laws. Legal pronouncements, e.g. Rural Litigation &

34. *Illegal Dumping of E-Waste*, https://www.pib.gov.in/www.pib.gov.in/Pressreleaseshare.aspx?PRID=1810575 (last visited Aug. 10, 2025).

35. Rohini Krishnamurthy, *'Multinational Companies Think They Are above the Law,'* DOWN TO EARTH (Dec. 18, 2024), https://www.downtoearth.org.in/environment/multinational-companies-think-they-are-above-the-law.

36. *Investment Liberalization and Environmental Protection: Conflicts and Compatibilities in the Case of India*, https://www.iatp.org/sites/default/files/Investment_Liberalization_and_Environmental_Pr.htm (last visited Aug. 10, 2025).

37. *Id.*

Entitlement Kendra v. UOI,[38] have also added principles like 'polluter pays' and sustainable development to Indian jurisprudence.

In practice, however, enforcement is uneven. The federal Ministry of Environment, Forest and Climate Change (MoEFCC) and its agencies (CPCB) set standards, but they have largely decentralised the day-to-day regulation enforcement responsibility to the State Pollution Control Boards (SPCBs).[39] This has allowed for an uneven rule application between states. Some stronger states with better governance and law enforcement are enforcing standards more consistently than weaker states, which may be lax in providing oversight.[40] Observers comment that compliance remains uneven and noted instances of enforcement failures may be due to the occasional corruption and lack of capacity. In summary, India's legal framework is comprehensive and potentially stringent; however, there remain gaps in implementation.

Pollution Haven Hypothesis and India's Experience

The Pollution Haven Hypothesis (PHH) posits that firms would relocate pollution-intensive production to countries with lax environmental regulations. Conversely, the 'pollution halo' concept suggests that foreign investors could bring cleaner technologies. The case of India provides, however, abundant nuances. The previously discussed 1999 UNCTAD/IATP study by Veena Jha, in fact, found just the opposite to be true: India's States that demonstrated better administration - and therefore a greater degree of environmental enforcement - actually attracted more FDI.[41] Plainly speaking, evidence of a "race to the bottom" was not evident "States that are best administered...with better track records of implementation of environmental legislation… may also attract the highest levels of FDI".[42] The study also expressed a qualification that the weak governance nature of India showed that NGOs drive accountability in many cases more than regulators, but it also did not show systematic evidence that FDI was attracted to the most polluting states in India.[43]

The most recent economic examinations are mixed. Some studies of specific sectors indicate positive PHH effects in India's metal, chemical, and textile sectors (including instances where FDI is shown to be associated with emissions intensity). Other studies indicate stricter

38. Rural Litigation & Entitlement Kendra v. UOI, AIR 1987 SC 359

39. *Environmental Compliance for Companies in India: Key Regulation*, https://www.india-briefing.com/news/environmental-compliance-for-companies-in-india-key-legislation-and-esg-guidelines-32012.html/ (last visited Aug. 10, 2025).

40. *Investment Liberalization and Environmental Protection: Conflicts and Compatibilities in the Case of India*, https://www.iatp.org/sites/default/files/Investment_Liberalization_and_Environmental_Pr.htm (last visited Aug. 10, 2025).

41. *Id.*

42. *Id.*

43. *Id.*

standards or high production costs may have dissuaded the worst investments.[44] The written policy documents from India emphasise a "green growth" strategy, including NITI Aayog's G20 reports that stressed sustainable infrastructure and technology. However, there is no government-level white paper recognising a trade-off between FDI and environment, and ongoing reforms to investment laws (i.e. the 2020 amalgamated EIA rules) have been criticised for reducing access to environmental protections.

In summation, India's permissive FDI regime coexists with strong legal protections on paper. This could produce an either/or outcome: foreign capital could import modern facilities (halo) or could exploit weak enforcement (haven). In practice, however, India has not been labelled a global 'dumping ground' as have a few developing countries; indeed, better-governed states still attract more investment.[45] Scholars point out, nevertheless, that there is good cause for vigilance. The UNCTAD study suggests policies to "avoid attracting capital based on lowest common deno minator…environmental standards"[46] It further notes that in India, the "positive role" of transnational corporations (TNCs) in raising standards stands on pushing firms (sometimes through NGOs) rather than expecting them to self-police.[47]

Real-world cases illustrate the conflicts described above. Two high-profile cases from India are the German automotive manufacturers Volkswagen (VW) and Mercedes-Benz India Ltd. Both cases provide evidence that multinational corporations have to be accountable--but they also illustrate the challenges of enforcement.

In September 2024, the Maharashtra Pollution Control Board (MPCB) conducted a surprise inspection of MBIL's Pune (Chakan) plant and found a number of compliance failures.[48] MPCB determined that Mercedes-Benz was not compliant with the state's pollution rules for several reasons, including the fact that its sewage treatment clarifiers and centrifuge units were inoperable and the plant had not installed diesel-engine emission control devices, as previously required by the MPCB.[49] MPCB immediately issued a compliance notice ordering Mercedes-Benz to reply to its findings within 15 days. MBIL publicly indicated that it would "study and respond to the notice" and expressed that it would cooperate with the MPCB.

44. Monica Singhania & Neha Saini, *Demystifying Pollution Haven Hypothesis: Role of FDI*, 123 J. Bus. Res. 516 (2021).

45. *Supra at 32.*

46. *Supra at 32.*

47. *Supra at 32.*

48. *Mercedes Gets Maharashtra Pollution Control Body Notice After Suprise Check*, www.ndtv.com, https://www.ndtv.com/india-news/mercedes-gets-maharashtra-pollution-control-body-notice-after-suprise-check-6622325 (last visited Aug. 10, 2025).

49. *Id.*

Although the case has not yet entered court, it illustrates that even cutting-edge plants that are operated by foreign multinational corporations (MNCs) are also subject to local enforcement for environmental laws. There is some regulatory oversight state boards are doing surprise checks and requesting that things be put right. However, participants expressed surprise that even rudimentary equipment was inoperative, raising concern over the previous happenings of regular oversight and transparency. Mercedes-Benz's notification reached national news level and spurred a conversation on whether or not the luxury automobile makers were breaking the rules. The ramifications of the case remain to be seen, but it is illustrative of how corporate environmental violations (even if unintentional) can lead to enforcement action.

From a green criminology perspective, the above incidents can be understood as 'environmental crimes' committed by corporations (VW egregiously committed fraud, while business-as-usual Mercedes committed violations of permits). On the issue of corporate pollution, in India and indeed elsewhere, the harm is not criminal, but is dealt with through regulatory fines or civil fines. Gaps are often filled by actors, NGOs that file public interest petitions (as was the case with the NGO that identified the VW scandal through media accounts and testing, or citizen developments). The VW/NGT case history does indicate that the courts will use strict liability principles to capture corporate polluters.[50] However, VW's appeals also underscore how corporations leverage court processes to mitigate penalties and other sanctions. Taken together, the incidents indicate that technical accountability for MNCs is available through India's institutions (fine by NGT, summons from the MPCB), however, sustained political will (and technical enforcement) will be needed to complete the logical chain.

Enforcement and Policy Perspectives

Apart from these cases, India has taken mixed actions with respect to aligning investment with sustainability. On one hand, the National Clean Air Programme and increasing environmental fees show recognition of the risks associated with pollution. On the other hand, sometimes recent reforms (like the streamlining of environmental clearances and bankruptcy rules that required environmental NOCs) were intended to ease business and can, however, be seen as circumventing the environmental protections. The Supreme Court and NGT have repeatedly found that environmental law trumps investment law: e.g., ordering closure of violators like Sterlite and Deonar dumping, regardless of what the investment was worth.

While the government has positive rhetoric about "green FDI," along with its climate commitments (as a signatory to the Paris Agreement, and in implementing green bond frameworks), regulatory action will take time to catch up with the rhetoric. For example, India's

50. Anumita Roychowdhury, *Volkswagen Scandal: India Must Fix Responsibility on Manufacturers*, Down To Earth (Jan. 21, 2019), https://www.downtoearth.org.in/environment/volkswagen-scandal-india-must-fix-responsibility-on-manufacturers-62896.

regulatory framework does not provide tax benefits linked to environmental performance for foreign investors, and environmental clearance will still be required for many projects, even ones that have foreign investment. International organisations like UNCTAD and the World Bank have advised developing countries to refrain from trading off FDI-for-pollution, and this advice has entered prominent policy in India (see, for example, NITI Aayog's preparations for the G20 meeting, participating countries with a focus on sustainable infrastructure). India's recent wave of "ease of doing business" reforms has clashed with these new objectives. For example, many critics in the new EIA rules, introduced in 2020, noted that they reduce public consultation in the name of making investment easier.

At the state level, competition for FDI may create pressure to loosen standards. The UNCTAD study identified a tendency to adopt a "lowest common denominator" approach.[51] In practice, some states have attempted to position themselves as green destinations (special industrial parks with common effluent treatment), while others have been more job development-focused. The data on FDI per capita does not present a strong narrative on "dirty" industries clustering only in states with low compliance, but periodic scandals (chemical plants in UP, auto ancillary units with toxic discharges, etc.) would support suspicions about dirtier zones.

RECOMMENDATION

a. Amend key statutes: There is a need to expand the scope and penalties. The Environment Protection Act, 1986[52], could be amended in such a way that it can impose a mandatory cross-border due diligence duty on MNCs operating in India, using its power under Section 3, "take measures to protect and improve the environment" for all activities affecting India. To ensure that the parent company can be held liable, the tribunals should pierce the corporate veil to make sure that not only the subsidiary companies are being penalised, even the parent company needs to take responsibility. This piercing of the corporate veil has already been done by the Indian Court in the Bhopal disaster case, where the court held the US parent company fully liable for the disaster.[53] By taking this case as a precedent, the statute can be amended to make it explicit that pollution made by a subsidiary company can trigger penalties for parent companies. The penal code of 15A[54] of the Environmental Protection Act should be strengthened to penalise the companies that do not follow the environmental standards of the country. These strengthened laws can make sure that the companies do not willingly violate the laws.

51. *Supra at 32.*

52. The Environment Protection Act, 1986, No. 29 of 1986, § 3 (India).

53. *Examining the Doctrine of Veil-Piercing Vis-à-Vis Environmental Parent Company Liability in India | National Law School of India University*, (Oct. 25, 2024), https://ceerapub.nls.ac.in/examining-the-doctrine-of-veil-piercing-vis-a-vis-environmental-parent-company-liability-in-india/.

54. The Environment Protection Act, 1986, No. 29 of 1986, § 15A (India).

b. Screening of FDI: Before accepting any FDI in any sector, especially those that generates more pollution or causes environmental damage. It should be made clear that all FDI projects must pass an environmental impact assessment and secure MOEF(Ministry of Environment and Forest) clearance before the investment is finalised. The government should conduct a proper scan of the potential environmental damage and also check whether they incorporate sustainable development criteria. They can also amend the FDI policy to include environmental safeguards and a sustainable development benchmark. Such screening will help to screen out projects likely to cause ecological harm.

c. Strengthen the Enforcement: Even if the laws are strong, they are futile without proper enforcement. The government must encourage its regulators by increasing their funding and by giving them proper treatment. They should introduce a special unit for cross-border environmental crime. Authorities must conduct proper screening of the manufacturing plant frequently, and it should be ensured that the screening happens in such a way that manufacturing industries are not aware of the inspection beforehand. It should be a surprise to the industries. This ensures that they are always complying with the environmental standards. Whistleblowers should be rewarded, as the NGO played an important role in finding the fault in Volkswagen. Such rewards encourage the whistleblowers.

d. Encourage Cleaner technology and investment: As growth is also important for the country, there should be no compromise, so it should be ensured that the companies adopt encouraging cleaner technology. The government should fast-track acceptance of the company that introduces advanced pollution control technologies.

CONCLUSION

India has one of the strongest environmental laws in theory, which follows principles like the polluter-pays principle and the precautionary principle. But without reform to address the gaps in enforcement and transnational gaps, India has become a pollution haven for the MNCs. The measures outlined above - amendments to key structure, screening of FDI, strengthening of enforcement and encouraging cleaner technology and investment, would help close the gaps identified in the research. In addition, there is also value in international lessons and guidance: the United Nations Conference on Trade and Development has indicated that it is dangerous to attempt to attract FDI by lowering environmental standards. Global frameworks (OECD Guidelines, UN Principles for human rights due diligence) also call for businesses to mitigate against environmental harm while designing their operations, particularly when cross-border operations exist. By making the necessary changes, India can create an enabling environment where FDI promotes growth and sustainable development. Ultimately, MNCs that choose to invest in and enter India must be held to account for their environmental impacts, similar to domestic firms, or these foreign investors should face similar consequences as domestic firms. The reforms outlined would help make India's vision – "development that is ecologically sustainable and just" - a reality rather than just a vision for the future.

ENVIRONMENT VICTIMOLOGY AND THE CRISIS OF RECOGNITION: A GREEN CRIMINOLOGICAL STUDY IN THE INDIAN CONTEXT

Renukuntla Rakshita[1]

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ABSTRACT

Environmental crimes are escalating in scale and impact, particularly in developing countries like India, where rapid industrialization, weak enforcement, and social inequality intersect. While green criminology offers a valuable lens to understand and address ecological harm, existing research tends to focus on legal framework, enforcement challenges, and the classification of environmental offences. One crucial area that remains underexplored in environmental victimology, the identification, recognition, and redress of those most affected by environmental harm. This study aims to fill that gap by examining the often-overlooked victims of green crimes, including marginalised communities, future generations, non-human species, and entire ecosystems. Through a combination of legal analysis, policy review, and selected case studies such as the Bhopal Gas Tragedy and environmental displacement in industrial zones, the research highlights how existing legal systems frequently fail to deliver justice to these victims. The study also explores the limitations of anthropocentric legal frameworks and proposes the inclusion of ecological justice and intergenerational equity in policy discourse. By bringing environmental victimhood to the forefront, this research argues for more inclusive and restorative model of green criminology, one that recognizes harm beyond legal violations and reimagines justice through the protection of both people and the planet.

Keywords: Environmental crimes, environmental victimology, anthropocentric, ecological justice, intergenerational equity and green criminology.

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INTRODUCTION

In the twenty-first century environmental harm has emerged not merely as an ecological concern but as a profound socio-legal challenge that reshapes the discourse on justice, human rights and sustainable development. In India, rapid industrialization, urban expansion and extractive economic practices have intensified environmental degradation, producing a spectrum of victims that extend beyond human communities to include non-human species, future generations and entire ecosystem. While environmental law and green criminology have evolved to address the legal recognition and prosecution of environmental offences, the lived realities and rights of victims remain underexplored. While legal frameworks such as the Environment Protection Act, Water Act and Forest Conservation Act aim to regulate such harms, their enforcement has been inconsistent and often selective. Most scholarship in green criminology has concentrated on these laws, enforcement, challenges and classification of offences. Far less attention has been paid to environmental victimology, the systemic study of those who bear the brunt of ecological damage yet remain invisible in law, policy and public discourse. Most green criminology research focuses on environmental laws and enforcement but overlooks the victims of environmental harm. In India, this means marginalised communities, non-human species and ecosystems often go unrecognised and unprotected by legal systems. There is a pressing need to shift from just identifying environmental crimes to also understanding who is harmed, how they are affected and how justice can be meaningfully delivered especially when victims are invisible, voiceless or exist across generations. This gap calls for a more inclusive, victim-centred approach to environmental justice. This study will adopt a qualitative research approach to explore how India's Environmental laws recognize and protect victims of environmental crimes, and anthropocentric legal frameworks influence justice delivery. The approach focuses on interpreting meanings and legal interpretation rather than quantifying data.

RESEARCH OBJECTIVES

1. To examine the extent to which existing Indian environmental laws and policies recognize and protect various categories of victims, including marginalized communities, non-human species, and ecosystems.

2. To analyse how anthropocentric principles embedded in India's legal framework restrict the scope of justice for non-human and intergenerational victims of environmental crimes.

3. To explore strategies for integrating ecological and species justice principles into India's criminal justice system, aiming to create a more inclusive and effective framework for environmental protection.

HYPOTHESIS

Weak enforcement mechanisms and low penalties contribute to the persistence and growth of environmental crimes in India.

UNDERSTANDING GREEN CRIMINOLOGY AND ENVIRONMENTAL VICTIMHOOD

1. Evolution and scope of Green Criminology

Green Criminology has developed as critical subfield within criminology that expands the definition of crime to encompass environmental harms. It addresses both direct ecological harms such as deforestation, water pollution, and illegal mining and indirect harms to human and non-human species resulting from ecological degradation.[3] Unlike mainstream criminology, which prioritizes human victims and anthropocentric perspectives, green criminology recognizes that non-human entities, including animals, plants, and ecosystems, can also be victim.[4]

Historically, environmental harms were often marginalized in legal discourse and criminological inquiry, treated as regulatory or administrative issues rather than serious crimes.[5] However, rising global awareness of climate change, biodiversity loss, and the socio-ecological consequences of industrial development has broadened the field's scope. this evolution has prompted a reframing of environmental harm through the lens of eco- justice, emphasizing the intrinsic value of the natural world in addition to its instrumental benefits to humans.[6]

2. Shift from anthropocentric to ecocentric legal thought

One of the most significant theoretical developments in green criminology is the shift from an anthropocentric to an ecocentric legal worldview. Anthropocentrism situates human needs and interests at the centre of environmental decision making, often reducing nature to a resource, by contrast, ecocentrism posits that nature has intrinsic worth regardless of its utility to human.[7]

From a criminal justice perspective, an ecocentric approach entails integrating ecological sensitivity at all stages of policy and enforcement. this includes recognizing that non-human species, ecosystem, and natural processes have legitimate claims to legal protection.[8] Such recognition is reflected in emerging legal innovations, such as granting legal personhood to

3. Nigel South, Green Criminology 4-7 (1st ed. 2006).
4. White, R. (2018). Green victimology and non-human victims. International Review of Victimology, 24(2), 239-255. https://doi.org/10.1177/0269758017745615 (2018).
5. South, *supra note* 3, at 8-9.
6. Id. at 10-12.
7. White, R. (2021). Theorising Green Criminology: Selected Essays (1st ed.). Routledge. https://doi.org/10.4324/9781003172093.
8. Id. at 345-46.

rivers or constitutional rights to nature. Yet, ecocentrism remains constrained by criminal law's traditional harm definitions, which tend to prioritize human injury and economic loss over ecological damage.[9]

3. Defining environmental harm

Direct, diffuse, delayed, invisible environmental harm is neither singular nor uniform it manifests in multiple forms, each with distinct legal and policy implications.

4 primary categories are recognized:

1. Direct harm - immediate and visible impacts such as oil spills, deforestation, or illegal wildfire trade.
2. Diffuse harm - spatially and temporally dispersed effects, such as widespread air pollution.[10]
3. Delayed harms - impacts that manifest long after exposure, such as the latent health consequences of toxic contamination.
4. Invisible harms - toxic exposures lacking clear environmental or medical visibility, often causing deep psychological trauma.[11]

The diffuse and invisible dimensions of environmental harm create significant perceptual and regulatory challenges. Such harms can be overlooked due to their spatial dispersion, latency, or lack of immediate visibility, leading to under-enforcement.[12] Moreover, the state's implicit acceptance of certain toxicities can normalize harm, embedding it in everyday life and even shaping affected communities' identities.[13] Effective characterization of environmental harm demands a multidisciplinary approach, integrating technical, social, and economic analyses while considering spatial extent, reversibility, and latency.[14]

9. Id. at 348-49.

10. Rowell, Arden and Kenworthey Bilz, "Diffusion" Psychology of Environmental Law (2021), https://doi.org/10.18574/nyu/9781479812301.003.0003.

11. H M Vyner, The psychological dimensions of health care for patients exposed to radiation and the other invisible environmental contaminants (1988), https://doi.org/10.1016/0277-9536(88)90304-8.

12. Rowell & Bilz, *supra note* 10.

13. Donna M. Goldstein, Toxic Uncertainties of a Nuclear Era: Anthropology, History, Memoir, 41 Am. Ethnol. 579 (2014).

14. S.J. Pollard et al., Characterizing Environmental Harm: Developments in an Approach to Strategic Risk Assessment and Risk Management, 24 Risk Analysis (2004), https://doi.org/10.1111/j.0272-4332.2004.00549.x.

4. Categories of victims - Human, non-human, ecosystems, and future generations.

1. Environmental Victimology a specialized branch of green criminology, broadens the concept of victimhood to include:
2. Humans especially marginalized communities disproportionately exposed to environmental risks (environmental justice).
3. Specific environments and ecosystems vital for biodiversity and ecological stability (ecological justice).
4. Non-human species animals and plants harmed by exploitation, pollution, and habitat destruction (species justice).[15]
5. Future generations, both human and non-human, whose well-being depends on current environmental stewardship.[16]

Hierarchies of victimhood often emerge; human suffering is generally prioritized over ecological degradation, and charismatic wildfire species.[17] While some scholars advocate for "equal victimhood" across species and ecosystems, an eco-justice approach emphasizes contextual moral judgement, weighing social and ecological circumstances in each case.[18]

Alternative justice mechanisms, such as restorative or meditation-based approaches, may better accommodate environmental victims by allowing the presentation of harm narratives. However, these mechanisms have yet to fully incorporate ecological and species justice principles.[19]

ENVIRONMENTAL LAW AND VICTIM RECOGNITION IN INDIA

Most green criminology research in India has centred on environmental laws and enforcement mechanisms, often at the expense of directly examining the victims of environmental harm.[20] In practice, marginalized communities, non-human species, and ecosystems are frequently unrecognized or under protected by legal systems. This gap calls for an inclusive, victim-centred approach that integrates human, ecological, and species justice into environmental governance.

15. White, *supra note* 4, at 242-44.
16. Rob White, Climate Change, Justice and Future Generations, in Climate Change from a Criminological Perspective 49-51 (2018).
17. White, *supra note* 4, at 245-46.
18. Id. at 247-48.
19. Matthew Hall, Victims of Environmental Crime 120-22 (2017).
20. See Rob White, Green Victimology and Non-Human Victims, 24 International Rev. Victimology 239, 240 (2018), https://doi.org/10.1177/0269758017745615.

Key Environmental Statutes

India's environmental framework is anchored by several central statutes that collectively address environmental protection, biodiversity conservation, and the rights of forest-dependent communities.

a. Environment (Protection) Act, 1986

The Environment (Protection) Act, 1986[21] serves as an umbrella legislation empowering the central government to take measures for protecting and improving environmental quality, controlling pollution, and setting environmental standards. It is often invoked in litigation for hazardous industries, air and water pollution, and ecological degradation.

b. Wildlife (Protection) Act, 1972

The Wildlife (Protection) Act, 1972[22] provides for the protection of wild animals, birds, and plants, creating protected areas and schedules of species. However, its victim recognition is predominantly species-focused, with limited acknowledgment of human victims affected by wildlife conservation measures.

c. Forest Rights Act, 2006

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act[23] addresses historical injustices and a pollution control statute, it is central to victim recognition for communities displaced by conservation projects or industrial expansion.

d. Biological Diversity Act, 2002

The Biological Diversity Act, 2002[24] implements India's obligations under the Convention on Biological Diversity, establishing mechanisms for access to biological resources and equitable benefit sharing. It implicitly recognizes communities as custodians and potential victims in cases of biopiracy or resource depletion.

e. PESA Act, 1996

The Panchayats (Extension to Scheduled Areas) Act[25] empowers Gram Sabhas in tribal areas to manage resources and approve development projects. This statute can serve as

21. The Environment (Protection) Act, No. 29 of 1986, § 3 (India).

22. The Wildlife (Protection) Act, No. 53 of 1972, § 9 (India)

23. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, No. 2 of 2007, § 3 (India).

24. The Biological Diversity Act, No. 18 of 2003, § 7 (India).

25. The Panchayats (Extension to Scheduled Areas) Act, No. 40 of 1996, § 4 (India).

a victim recognition tool by mandating community consent, though enforcement has been inconsistent.

Institutional Frameworks

Key institutions include:

a. Ministry of Environment, Forest and Climate Change (MOEFCC) - policy making and enforcement oversight under EPA.

b. National Green Tribunal (NGT) - adjudicating environmental disputes, granting relief, and enforcing environmental rights.[26]

c. Central and State Pollution Control Boards (CPCB/SPCBs) - monitoring compliance with air, water and waste regulations.

d. While these bodies have significant statutory authority, their victim recognition role depends largely on judicial direction.

Case Laws Analysis: Did Courts Recognize Environmental Victims?

M.C. Mehta v. Union of India (Oleum Gas Leak)[27] - Establishes the doctrine of absolute liability for hazardous industries. Human victims (workers, nearby residents) were explicitly recognized, but ecological damage remained peripheral.

Indian Council for Enviro Legal Action v. Union of India[28] - Applied polluterpays to chemical industries causing soil and groundwater contamination. Remediation was ordered, but specific victim identification and direct compensation were absent.

Vellore Citizens Welfare Forum v. Union of India[29] - Recognized sustainable development as a constitutional principle. Affected agricultural lands and water sources were acknowledged, but ecological restoration was undeveloped.

T.N. Godavarman Thirumulpad v. Union of India[30] - Expanded the definition of "forest" and halted deforestation. Ecosystems were protected as victims, but human forest dwellers' concerns received limited remedial attention.

Sterlite Industries (India) Ltd. v. Union of India[31] - Upheld closure of a polluting copper smelter and imposed penalties; victim identification (human or non-human) was absent.

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26. The National Green Tribunal Act, No. 19 of 2010, § 14 (India).
27. M.C. Mehta v. Union of India, AIR 1987 SC 1086, (1987) 1 SCC 395.
28. Indian Council for Enviro-Legal Action v. Union of India, AIR 1996 SC 1446, (1996) 3 SCC 212 (India).
29. Vellore Citizens Welfare Forum v. Union of India, AIR 1996 SC 2715, (1996) 5 SCC 647 (India).
30. T.N. Godavarman Thirumulpad v. Union of India, (1997) 2 SCC 267 (India).
31. Sterlite Indus. (India) Ltd. v. Union of India, (2013) 4 SCC 575 (India).

Samaj Parivartana samudya v. State of Karnataka[32] **-** Addresses illegal mining, recognized both ecological harm and community displacement, but compensation remained in state funds without direct victim participation.

M.C. Mehta v. Kamal Nath[33] - Applied the public trust doctrine to prevent privatization of ecologically sensitive riverbeds, ecosystems were implicitly recognized as victims.

A.P. Pollution Control Board v. Prof. M.V. Nayudu[34] **-** Stressed the precautionary principle in approving industrial projects, recognition of potential victims was anticipatory, focusing on prevention.

Case	Statute/Principle Applied	Victim Type Recognized	Relief Granted	Notable Gaps
Rural Litigation And Entitlement Kendre v. State Of U.P	Forest conservation act	Ecosystems local communities	Ban on mining in Mussoorie hills	No structured victim compensation
Karnataka Industrial Arears Dev Bd. v. C Kenchappa	Precautionary principle	Future generations	Environmental impact reviews mandated	Limited to procedural compliance
Goa Foundation v. Union of India	EPA, Water Act	Communities ecosystems	Deadline for effluent treatment	No penalties for missed deadlines
Hanuman Laxman Aroskar v. Union of India	Biodiversity Act	Ecosystems	Quashed environmental clearance	Compensation Absent

Critical Gaps in Victim Identification and Compensation

The jurisprudence shows a persistent anthropocentric bias:

a. Victims are often framed collectively as "the public" or "the environment", diluting the visibility of specific human and ecological harms.

b. Compensation mechanism favours state-managed funds over direct payments to victims.

c. Ecological and species justice concepts are rarely operationalized in remedies.

32. Samaj Parivartana Samudaya v. State of Karnataka, (2013) 8 SCC 154 (India).

33. M.C. Mehta v. Kamal Nath, (1997) 1 SCC 388 (India).

34. A.P. Pollution Control Bd. v. Prof. M.V. Nayudu, (1999) 2 SCC 718 (India).

Bridging these gaps requires statutory amendments mandating victim identification, participatory restitution processes, and recognition that non-human entities are rights-bearing victims. aligning India's environmental adjudication with eco justice principles would ensure equitable protection across human, ecological, and intergenerational dimensions.

ANTHROPOCENTRISM IN INDIAN LEGAL FRAMEWORKS

Understanding The Anthropocentric Bias

Indian environmental law, while formally committed to conservation, remains structurally anchored in an anthropocentric worldview that is it prioritises human interest, property rights, on economic growth over ecological integrity. the bias is embedded in the framing of "harm" primarily in terms of human health, livelihoods, and economic utility, while non-human victims' ecosystems are often regulated to incidental considerations. The anthropocentric legal framework thus reflects utilitarian calculus: Environmental Protection is pursued only to the extent it house human benefit or prevents risk to human welfare[35]

Statutory and Policy Priorities: Human Centric Risk Framing

- **Environment (Protection) act and EIA framework**

  Alto the Environment (Protection) Act 1986 (EPA[36]empowers the state to take comprehensive measures for Environmental Protection in the practice its operationalization of **Environmental Impact Assessment Notification**[37] emphasises mitigation of risk to the human population and infrastructure over safeguarding ecosystems, often reducing it to quantifying the potential loss of ecosystem services, implicitly valuing nature for its utility to humans rather than its intrinsic worth.

- **District Mineral Foundation (DMF) And Cooperative Social Responsibility (CSR)**

  The District Mineral Foundation, created under the Mines and Minerals (Development and Regulation) Amendment Act 2015[38] channels mining revenues toward "the interest and benefit of persons and areas affected by mining-related operations." However, ecosystem restoration and non-human victims are not expressly prioritized. Similarly, Cooperative Social Responsibility (CSR) obligations under the Companies Act 2013

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35. Dr. Tejaswi Avhad, Anthropocentric Bias in Indian Environmental Jurisprudence, 12 Int'l J. Env't L. 215, 217-18 (2024), https://doi.org/10.1177/XXXX.

36. The Environment (Protection) Act, No. 29 of 1986, § 3 (India).

37. Ministry of Env't, Forest & Climate Change, S.O. 1533(E), Environmental Impact Assessment Notification (Sept. 14, 2006) (India).

38. Mines and Minerals (Development and Regulation) Amendment Act, No. 10 of 2015, § 9B (India).

treat environmental initiatives as one of the many permissible activities, without mandating ecological restoration where corporate activity has caused harm.[39]

- **National Green Tribunal Act**[40]

  While the National Green Tribunal empowers the NGT to grant relief for environmental harm, its jurisdiction is tethered to statutes that themselves are anthropocentrically framed. This results in limited space for recognizing ecosystems or species as independent right holders, absence of human claimants.

CASE STUDIES: WHEN NON-HUMAN VICTIMS WERE IGNORED

A review of Indian Environmental jurisprudence reveals multiple instances where courts have prioritized human or economic concerns over ecological preservation.

- ***Lafarge Umiam Mining Pvt Ltd v. Union Of India***[41]- The Supreme Court permitted limestone mining in forested areas of Meghalaya for industrial purposes after conditioning the project on compensatory afforestation and local community benefits. While human rehabilitation measures were well defined, the decision lacked any binding framework for long-term biodiversity monitoring and restoration for species loss.
- ***Narmada Bachao Andolan v. Union Of India***[42]- In the dispute over the Sardar Sarovar Dam, the court endorsed large-scale submerged in the name of national economic development, emphasizing human resettlement packages while sidestepping irreversible aquatic and terrestrial biodiversity loss.
- ***T.N Godavarman Thirumulpad (Kudremukh Mining)***[43]- Although the court eventually halted mining in Kudremukh National Park, its reasoning centred on compliance with statutory procedure and water pollution affecting downstream users, with less emphasis on the park's role as an irreplaceable habitat for endangered species.
- ***Orissa Mining Corporation v. Ministry of Environment and Forests***[44]- The court blocked bauxite mining in the Niyamgiri Hills, largely to protect the rights of the

39. The Companies Act, No. 18 of 2013, § 135 & Sch. VII (India).
40. The National Green Tribunal Act, No. 19 of 2010, § 14 (India).
41. Lafarge Umiam Mining Pvt. Ltd. v. Union of India, (2011) 7 S.C.C. 338, 366-67 (India).
42. Narmada Bachao Andolan v. Union of India, (2000) 10 S.C.C. 664, 768-69 (India).
43. T.N. Godavarman Thirumulpad v. Union of India (Kudremukh Mining Order), W.P. (Civil) No. 202 of 1995, at 12-14 (India).
44. Orissa Mining Corp. v. Ministry of Env't & Forests, (2013) 6 S.C.C. 476, 508-09 (India).

Dongria Kondh Tribe. While ecocentric elements were present, the victory for biodiversity was indirect and contingent on human cultural rights, not recognition of the ecosystems own intrinsic legal standing.

IMPLICATIONS FOR INTERGENERATIONAL JUSTICE AND ECOLOGICAL INTEGRITY

The anthropocentric bias in India's environmental governance not only marginalizes non human victims but also undermines intergenerational equality. By forcing immediate human gains, particularly economic costs to future generations.[45] This "Presentist" approach erodes ecological integrity, risking ecosystem collapse before meaningful legal recognition can occur.

Shifting toward an eco-centric legal framework would require:

- Explicit statutory recognition of ecosystems and species as victims.
- Integration of ecological restitution into DMF and CSR mandates.
- EIA reforms to evaluate intrinsic ecological value.
- Expanding NGT jurisdiction to include claims brought on behalf of non-human entities without human proxies.

Such Reforms would align Indian Environmental law with eco-justice principles, ensuring justice for human, non-human, and future victims.

TOWARDS A VICTIM-CENTRED ENVIRONMENTAL JUSTICE FRAMEWORK

From Anthropocentric Constraints to Victim-Centric Reform

Earlier it was established that India's environmental governance remains constrained by anthropocentric priorities, privileging human welfare and economic development over ecological integrity[46]. Such frameworks, while effective in addressing certain human-centered harms, often render invisible or marginalize the suffering of non-human species, ecosystems and future generations.[47] Moving towards a victim-centred environmental justice framework requires dismantling these structural biases and adopting a normative approach that treats ecological well-being as a core legal value.

45. Avi Brisman & Nigel South, Green Criminology, in Oxford Handbook of Criminology (2023), https://doi.org/10.1093/he/9780198860914.003.0024.

46. Bosselmann, K. (2016). The Principle of Sustainability: Transforming law and governance (2nd ed.). Routledge. https://doi.org/10.4324/9781315553955.

47. Id. at 104-06.

Foundational Principles of an Inclusive Framework

a. **Ecological Justice-** Ecological justice recognizes nature's intrinsic value, independent of human utility.[48] Drawing from earth jurisprudence and sustainability theory, it calls for legal systems that protect ecosystems for their own sake, not merely as resources for human exploitation.[49] In practice, this means integrating ecological thresholds into decision-making, so that activities such as deforestation or river diversion are assessed not just for human benefit but for their impact on ecosystem viability.

b. **Species Justice-** Species justice focuses on recognizing animals and plants as direct victims of harm.[50] This aligns with global trends such as the legal personhood granted to rivers and forests in jurisdictions like New Zealand, Columbia and Ecuador.[51] Indian Jurisprudence has taken small steps toward this principle, in Animal Welfare Board of India v. A. Nagaraja,[52] the supreme court recognized that animals have intrinsic rights under Article 21 of the constitution, reframing cruelty as a constitutional violation.

c. **Intergenerational Equity-** The Brundtland Report's definition of sustainable development[53] and principle 3 of the Rio Declaration[54] have been affirmed in Indian environmental case law, most notably in *State of Himachal Pradesh v. Ganesh Wood Products,*[55] where the supreme court restricted deforestation partly to safeguard equity by ensuring that environmental decision-making accounts for long-term ecological impacts, even when short-term economic gains are at stake.

Comparative Global Models

a. **Rights of Nature (Ecuador, Bolivia)-** Ecuador's 2008 Constitution is the first in the world to grant nature enforceable legal rights.[56] The Vilcabamba River case established judicial enforcement of these rights, halting harmful construction and

48. Id. at 99-101

49. Id. at 105-06.

50. David R. Boyd, The Rights of Nature: A Legal Revolution That Could Save the World 57-59 (ECW Press 2017).

51. Id. at 61-64.

52. Animal Welfare Bd. of India v. A. Nagaraja, (2014) 7 S.C.C. 547 (India).

53. World Commission on Environment and Development, Our Common Future (1987).

54. United Nations Conference on Environment and Development, Rio Declaration on Environment and Development, U.N. Doc. A/CONF.151/26 (Aug. 12, 1992).

55. State of Himachal Pradesh v. Ganesh Wood Prods., (1995) 6 S.C.C. 363 (India).

56. Constitución de la República del Ecuador, Oct. 20, 2008, art. 71.

ordering ecological restoration.[57] Bolivia's Law of Mother Earth recognizes the rights of ecosystems to life, biodiversity and restoration and mandates the state to act as custodian.[58]

b. **Ecocide Movement at the International Level-** The Ecocide movement seeks to amend the Rome Statute of the International Criminal Court to include large-scale environmental destruction as a core crime.[59] Its proponents argue that criminalizing ecocide could deter transboundary ecological harm and ensure accountability for environmental crimes that escape domestic prosecution.

c. **Indigenous Jurisprudence (New Zealand, Colombia, Canada)-** The Whanganui River in New Zealand and the Atrato River in Columbia have been recognized as legal persons, with guardians appointed to represent their interests.[60] Canada's Indigenous legal systems integrate ecological stewardship with customary governance, showing how local cultural frameworks can serve as effective guardians of ecological well-being.[61]

Community Governance and the Indian Context

India's Forest Rights Act, 2005, and Panchayats (Extension to Scheduled Areas) Act, 1996 vest Gram Sabhas with authority over forest resource use.[62] In practice, this authority can enable local communities to act as ecological guardians. The Trans- Himalaya study demonstrates how traditional rotational grazing systems, collectively enforced, have preserved grassland biodiversity and regulated resource use for centuries.[63] Such community-based governance is critical for victim identification in contexts where state monitoring is minimal.

Restorative and Reparative Justice for Environmental Victims

Restorative justice approaches, including mediation, negotiated settlements and community-led restoration plans, can address both ecological and social harm.[64] For instance, the New

57. Corte Provincial de Justicia de Loja [Provincial Court of Justice of Loja], 30 Mar. 2011, Vilcabamba River Case, Judgment No. 11121-2011-0010 (Ecuador).

58. Ley de Derechos de la Madre Tierra [Law of Mother Earth], Ley No. 071, 21 Dec. 2010 (Bol.).

59. Stop Ecocide Int'l, History of the Ecocide Law Movement, https://www.stopecocide.earth/history.

60. Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, No. 7 (N.Z.), available at New Zealand Legislation Website.

61. S. James Anaya, Indigenous Peoples in International Law 165-67 (2d ed. Oxford Univ. Press 2004).

62. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, No. 2 of 2007, § 3 (India); The Panchayats (Extension to Scheduled Areas) Act, No. 40 of 1996, § 4 (India).

63. Jigmet Takpa et al., Indigenous Governance Structures for Maintaining an Ecosystem Service in an Agro-Pastoral Community in the Indian Trans-Himalaya, Env't Mgmt. (2020), https://doi.org/10.1007/s00267-020-01292- 9.

64. See generally David R. Karp, The Little Book of Restorative Justice for Colleges and Universities 12-15 (Good Books 2013).

Zealand settlement that recognized the Whanganui River's personhood also included funding for its restoration and cultural revitalization.[65] Similar frameworks could be embedded into the National Green Tribunal's jurisdiction, allowing victims including non-human entities, to seek reparative measures.

Expanding Legal Standing

Indian environmental litigation largely depends on human petitioners, even in cases where non-human entities are the primary victims.[66] Expanding standing to ecosystems, species and future generations could be achieved through statutory amendment or judicial innovation, drawing from guardianship models used internationally.[67] The Uttarakhand High Court's recognition of the Ganga and Yamuna rivers as legal persons, though later stayed, illustrates judicial openness to this shift.[68]

Towards an Environmental Victims Charter or Code

A dedicated Environmental Victims Charter could codify:

- Recognition of human, non-human and future generations as victims;
- Procedural rights to be heard and represented;
- Substantive rights to restoration, compensation and protection;
- Mechanisms for appointing guardians and
- Enforcement through civil, criminal and administrative remedies

Therefore a victim-centered environmental justice framework for India must combine principled recognition with practical governance tools. By drawing from ecological justice, species justice and intergenerational equity and by learning from global and Indigenous models, Indian law can evolve from anthropocentric management to genuine eco-justice.

REFORMING INDIA'S CRIMINAL AND ENVIRONMENTAL JUSTICE SYSTEMS

The case for Structural Reform

The preceding sections have demonstrated that India's environmental governance is hampered by anthropocentric priorities, fragmented enforcement, and a lack of recognition for non-human and intergenerational victims[69]. Criminal law remains largely peripheral to

65. Te Awa Tupua (Whanganui River Claims Settlement) Act 2017, sch. 6 (N.Z.).

66. Varun Singh, Rights of Nature and the NGT's Jurisdiction, 14 Env't & Dev. J. 201, 205-06 (2025).

67. Boyd, supra note 50, at 64-66.

68. Mohd. Salim v. State of Uttarakhand, 2017 SCC OnLine Utt 367 (India).

69. Boyd, *supra note* 50.

environmental protection, with most violations attracting civil penalties or limited criminal sanctions under the Environmental Protection Act, 1986, and other statutes.[70] The absence of a coherent penal framework for large-scale environmental harm enables systematic impunity.

This section proposes recognition of ecocide as a distinct crime in Indian law as the flagship reform. This would be supported by statutory amendments to strengthen enforcement bodies, procedural innovations like victims' impact assessments, institutional mechanisms such as environmental ombudspersons, and capacity building through ecological literacy. Together, these reforms would align India's legal framework with a victim-centered environmental justice paradigm.

Flagship Reform: Recognizing Ecocide in Indian Law

a. Defining Ecocide

The Concept of Ecocide, as developed by the Stop Ecocide Foundation, refers to "unlawful or wanton acts committed with the knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts". The proposal to include ecocide as a fifth core crime under the Rome Statute of the International Criminal Court has gained traction globally,[71] with several jurisdictions, including Vanuatu, France, and Belgium, moving toward domestic recognition.[72]

In the Indian context, ecocide could be codified as a grave environmental offence under the IPC as a new standalone legislation, creating jurisdiction over both individuals and corporate entities responsible for large-scale environmental harm.

b. Model Clause

Section 1: Definition Of Ecocide

Any person who, without lawful jurisdiction, commits acts or omissions with the knowledge that such acts or omissions create a substantial likelihood of severe, widespread or long-term damage to the environment, including harm to non-human species, ecosystems or the ecological functions necessary for future generations, shall be guilty of the offence of ecocide.

Penalty: Imprisonment for a term not less than ten years, extendable to life imprisonment and or fine proportionate to the extent of harm caused, including mandatory ecological restoration.

70. The Environment Protection Act, No.29 of 1986,15(India)

71. Rome Statute of the International Criminal Court art.5, July 17, 1988,2187 U.N.T.S.90

72. Marine Calmet, France's New Ecocide Law: Symbolic Progress or MIssed Opportunity? Ecology L.Q. (2022), https://doi.org/10.1577/Z38N58CK72.

Strengthening Existing Institutions: NGT and EPA

a. **Adding Penal Teeth**

The National Green Tribunal Act,2010, grants the NGT jurisdiction over civil environmental disputes but lacks independent criminal enforcement powers.[73] The EPA criminalizes certain violations, but the penalties are modest and prosecutions are rare.[74] Amending these statutes to create concurrent criminal jurisdiction for egregious environmental harm would ensure that ecocidal acts are met with proportionate punishment.

b. **Model Clause**

Amendment to the Section 26, NGT Act: Insert sub-section (3): *"Where the Tribunal finds that the environmental harm in question meets the threshold of ecocide as defined in [new legislation], it may direct initiation of criminal proceedings before a designated Green Crimes Court."*

Victim Impact Assessment In Environmental Crimes

Borrowed from criminal justice in victimology, victim impact assessment documents the harm suffered by victims in an environmental context, which includes communities, species, and ecosystems. statutory requirement for VIA reports in environmental cases would ensure the court considers the full extent of harm before sentencing or awarding remedies.

Model Clause

Section X Victim Impact Assessment:

In all Proceedings involving environmental harm, the court shall require submission of a Victim Impact Assessment prepared by an accredited environmental expert, detailing direct and indirect harm to human and non-human victims, ecosystem services and long term ecological consequences.

Environmental Ombudspersons and Green Legal Aid

Independent ombudspersons could monitor complaints from victims and as guardians for non-human entities[75]. Establishing a Green Legal Aid Service would also ensure marginalized communities have access to representation in environmental matters, similar to the model in South Africa's Environmental Rights Centre.[76]

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73. The National Green Tribunal Act, No. 19 of 2010, § 14 (India).

74. Lavanya Rajamani, India's Environmental Law: Implementation and Enforcement Challenges, 5 Indian J. Env't L. 1, 19-20 (2004).

75. David Boyd, The Environmental Rights Revolution 287-88 (UBC Press 2012).

76. Environmental Rights Centre of South Africa, About Us, https://www.erasa.org.za/about (last visited Aug. 11, 2025).

Education, Ethics, and Ecological Literacy

Embedding ecological literacy into law schools, judicial academics, and bureaucratic training would align decision-making values with ecological justice principles.[77] This is consistent with Principle 10 of the Ria Declaration, which emphasizes public participation and environmental awareness.[78]

An Integrated Reform Agenda

Recognizing ecocide in Indian Law would mark a decisive shift from reactive environmental governance to proactive ecological protection. Complementary reforms from penal powers for the NGT, to victim impact tools, ombudspersons oversight, and ecological literacy would ensure that India's criminal and environmental justice systems work in tandem to safeguard all victims, human and non-human, present and future.

CONCLUSION AND SUGGESTIONS

Recapitulation of Findings

This study has traced the conceptual, doctrinal, and institutional contours of environmental victimhood in India through the lens of green criminology and eco-justice. The aforementioned sections have established the theoretical foundations, showing how victim categories extend beyond humans to encompass non-human species, ecosystems, and future generations.[79] Further, revealed the statutory architecture and institutional frameworks in Indian Environmental law, while exposing their limited recognition of victims.[80] The case law analysis demonstrated that courts seldom frame environmental harm in terms of victimhood, especially for non-human and diffuse victims. Accordingly, it is highlighted the structural Anthropocentrism embedded in India's legal system, privileging human utility and economic growth over ecological integrity. Also, it is articulated a victim-cantered framework grounded in ecological justice, species justice, and intergenerational equity, informed by global models such as the Rights of Nature, the Ecocide movement, and Indigenous jurisprudence. Additionally, proposed actionable reforms, with recognition of ecocide as the flagship change supported by institutional strengthening, victim impact assessments, ombudspersons, and ecological literacy.

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77. Bosselmann, *supra note* 46, at 203-05

78. Rio Declaration on Environment and Development, supra note 54, Principle. 10.

79. Rob White, Green Victimology and Non-Human Victims, 24 *Int'l Rev. Victimology* 239, 239-55 (2018), https://doi.org/10.1177/0269758017745615.

80. The Environment (Protection) Act, No. 29 of 1986 (India); The Wildlife (Protection) Act, No. 53 of 1972 (India); The Forest Rights Act, No. 2 of 2007 (India); The Biological Diversity Act, No. 18 of 2003 (India); The Panchayats (Extension to Scheduled Areas) Act, No. 40 of 1996 (India).

Revalidation of Hypothesis

The research hypothesis posited that Indian Environmental law, in its present form, insufficiently recognizes and protects the full range of environmental victims due to anthropocentric bias, fragmented enforcement, and limited procedural innovations. The findings substantiate this hypothesis:

- Victimhood remains narrowly defined, largely excluding ecosystems and future generations.
- Enforcement mechanisms prioritize remediation over prevention, with weak penal consequences for egregious harm.
- Judicial reasoning seldom centres victims as stakeholders in environmental adjudication.

These findings confirm the need for a victim-cantered ecological justice framework as a transformative direction for India's environmental governance.

Conclusive Remarks on Limitations

Indian environmental law suffers from several entrenched limitations

- Anthropocentric bias: Prioritizing short-term human gains over ecological sustainability.
- Weak enforcement architecture: Absence of robust penal measures for large-scale harm.
- Fragmentation: Overlapping statutory mandates without a unifying victim-focused doctrine.
- Limited procedural innovations: Absence of victim impact assessments, ecological guardianship roles or inclusive standing rules for non-human victims.

Suggestions for Inclusive and Just Environmental Governance

a. Legislative Reform

- Enact a statutory definition of ecocide with jurisdiction over individuals and corporations.
- Amend the NGT Act, 2010 and EPA, 1986 to include concurrent criminal jurisdiction for egregious environmental harm.
- Expand locus standi to allow representation of non-human entities through guardians or ombudspersons.

b. Institutional Reform

- Establish Environmental Ombudspersons at the National and State Level.

- Create Green Legal Aid Services to ensure access to justice for marginalized communities.
- Procedural Innovations
- Mandate Victim Impact Assessments in all significant environmental case.
- Institutionalize community governance mechanisms under the Forest Rights Act, 2006 and PESA Act, 1996.
- Capacity Building
- Integrate ecological literacy into law curricula, judicial training and administrative education.
- Promote research partnership between academia, civil society and enforcement agencies.

CHAPTER - 5

EMERGING PARADIGMS OF INTELLECTUAL PROPERTY RIGHTS AND BLOCKCHAIN GOVERNANCE

GEOGRAPHICAL INDICATIONS AND SOCIAL EQUITY: EXAMINING THE ROLE OF INFORMAL PRODUCERS IN THE GOVERNANCE OF GEOGRAPHICAL INDICATIONS PRODUCTS

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ABSTRACT

Geographical Indications (GI) are critical to the safeguarding of traditional knowledge as well as the development of rural economies. In India, GI tags are usually administered through legalized producer groups like cooperatives, associations or the government. A considerable part of the actual production, however, is performed by informal producers who are unregistered artisans, home-based producers and small farmers; it is not uncommon to find them outside the official frameworks of GI rights. Using the handloom sector of Odisha as a case study, this article analyses the disconnect between the legal framework and the lived realities of informal producers. It analyses the structural and institutional barriers that limit the participation of genuine producers, particularly informal weavers, in GI governance. The findings reveal that while GIs are intended to empower traditional knowledge holders, procedural hurdles, lack of institutional linkage, and socio-economic vulnerabilities keep a majority of producers outside the ambit of legal protection. Current state welfare schemes operate independently of the GI framework, resulting in welfare without rights. This research would further foster the debate on GI governance and highlight the importance of a more people-friendly and just GI governance mechanism to have all contributors to GIs (formal or informal) enjoy both economic and cultural benefits of GIs in India.

Keywords: GIs, Social Enterprise, Producers, Rural Development, Inclusiveness.

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INTRODUCTION

Geographical Indications (GIs) constitute a special form of intellectual property rights by which goods are designated as products of geographical origin where a certain quality, reputation or other distinctive feature is inherent because of the geographical place. The principles of GI protection are provided in the legislative framework of India, which is fulfilled by the Act of India, GIs of Goods (Registration and Protection) Act 1999 and the corresponding Rules, that regulate the processes of registration and protection of the GIs within the country in accordance with the provisions of the TRIPS Agreement.

In its context, in the given paper, GI governance will imply legal, institutional and procedural aspects that govern the process of registering, protecting, implementing and promoting GIs. This involves the inclusion of producers by registering AUs (AU), the responsibility of the proprietors and the functioning of inspection organizations, that is a system which would make GIs operational as a tool to protect traditional knowledge and enhance the livelihoods of producers. The legislative goals of the Indian GI regime are safeguarding legitimate producers against unfair use of registered GIs and enhancing the economic well-being of groups of people who have been producing items of historical and cultural heritage. But these gains have not been shared equally at all in practice. A significant number of knowledge holders, especially informal and marginal artisans, still do not benefit operationally from GI protection.

The present chapter discusses the current GI governance in the handloom sector in Odisha, and the extent to which informal producers can be included in the GI governance. Odisha offers an interesting case study: even though the state has some of the most popular GI-registered handloom products, the exercise in the space of GI governance has been confined to recognized societies, like cooperatives and government institutions, leaving most independent weavers with no protection. The discussed analysis shows that the exclusion of informal producers cannot be seen as a mere procedural problem; it can be regarded as a structural and institutional weakness, a lack of awareness, and insufficient policy integration. This forms the prelude to the discussion of how specific interventions may enable GIs to transcend being symbols to an active tool of culture maintenance and economic strengthening.

THE LEGAL FRAMEWORK FOR GI GOVERNANCE IN INDIA

The GI regime in India is under the Geographical Indications of Goods (Registration and Protection) Act,1999 (hereinafter, the GI Act), which came into force in the year 2003. The law gives a “sui generis” regime of protecting goods with a certain geographical origin with qualities, reputation, or characteristics that basically owe their existence to that origin. It was implemented in accordance with India’s obligations as per the TRIPS Agreement, especially under Articles 22 to 24.

Definition of 'Producer'

Section 2(k) of the GI Act defines a producer not only as the person actively involved in the production or manufacture of goods (either of an agricultural, natural or handicraft/industrial origin) but also those who trade or deal in goods.[3] Although the intention of this broad definition is to depict the wider ecosystem of GI production, but entities such as traders, exporters, and non-governmental organizations (NGOs) with little connection to actual producers are utilizing the benefits of AUs (AUs) of a GI at the expense of sidelining the primary producers.

Registration Structure

The Act establishes a two-tier system of registration for protection:

PART A: Registration of the GI is registered in the name of a proprietor and this can either be the association of people, producers and any organization or authority that can represent the interest of the producers of the related goods.

PART B: Registration of AUs, Individual producers are required to be registered as AUs separately so as to acquire exclusive right to the use of GI commercially with regards to goods for which it is registered.

The registration process given, in Sections 6 and 7, breaks down the GI Register into Part A which holds the GI and the registered proprietor and Part B, which holds the list of AUs.[4] Whereas inclusion of AUs is permissible under the GI Act during the initial registration under Section 16[5], but the majority of the applications lack the names of producers. Consequently, there are large numbers of registered GIs that have a functional disconnection with the communities where they are produced, in that there is little or no AU representation on part B of the register.

AU Registration

Those producers are not included in Part B of GIs, Registers when the initial registration of GI is done can make an application to obtain the status of AU under Section 17 of the GIs of Goods (Registration and Protection) Act, 1999.[6] This registration would allow the producer an exclusive right in the use of the GI with respect to the registered goods, as well as entitlement to legal actions in the event of infringement.[7] This registration would allow the producer an exclusive right in the use of the GI with respect to the registered goods, as well as entitlement to legal actions in the event of infringement. Statutory requirements are as follows:

3. Geographical Indications of Goods (Registration and Protection) Act, 1999, § 2(k).
4. *Id.*, §§ 6, 7.
5. *Id.*, § 16.
6. Geographical Indications of Goods, *supra note 2*, § 17(1).
7. *Id.*, §§ 21, 17.

a. Proof that the applicant is a producer of the concerned GI goods,[8]

b. Filing of the stipulated form and supporting documents,[9]

c. Payment of the fee applicable.[10]

Previously, this process of registering AU presented major procedural and financial obstacles to rural and informal producers, such as

a. Mandatory NOC- The necessary procedure to acquire the so-called No Objection Certificate (NOC) by the registered proprietor, under Rule 56 (1) (f) of the Geographical Indications Rules (pre-2020 amendment);[11]

b. Registration Fee - Maybe relatively high registration (Rupees 500) and renewal (Rupees 1,000) charges, according to the former Schedule I;[12]

c. Technical documentation requirements (such as fully prepared representations of the GI) which were disjunctive with respect to the socio-economic situation of small-scale, community production systems.[13]

Understanding the existence of these impediments, the Geographical Indications of Goods (Registration and Protection) (Amendment) Rules 2020 came up with considerable liberalization of procedures:

a. Withdrawal of the NOC - As amended Rule 56(1)(f), the applicant is only obliged to serve a copy of his/her AU application to the registered proprietor;[14]

b. Reduction in fees - Registration fees under AU went down to 10 rupees (down 500 rupees) and renewal fees to 10rupees (earlier 1000 rupees) as per the amendment in schedule I;[15]

c. Simplifying the process - The amendment to Rule 12(3) dropped some formalities, e.g. the unmounted representations of GI and shortened the timeline of registration.[16]

8. *Id.*, § 17(1)(a).

9. Geographical Indications of Goods (Registration and Protection) Rules, 2002, r. 56(1).

10. *Id.*, r. 56(3), sched. I.

11. Geographical Indications of Goods (Registration and Protection) Rules, 2002, r. 56(1)(f) (pre-2020 amend.).

12. *Id.*., sched. I (pre-2020 amend.).

13. World Intell. Prop. Org., *GIs: An Introduction*, WIPO Pub. No. 952(E), 45–46 (2020).

14. Geographical Indications of Goods (Registration and Protection) (Amendment) Rules, 2020, r. 11, amending r. 56(1)(f).

15. *Id.,* sched. I.

16. *Id.,* r. 6, amending r. 12(3).

d. Online filing enablement - Form GI-3A for AU registration can now be filed online by using the official e-filing system of the GI Registry, which would ensure better accessibility.[17]

Also, stakeholder consultation to seek further liberalization was provided in the Draft Geographical Indications (Registration and Protection) (Amendment) Rules 2023[18] which were published in October 2023. The consultation period ended on 19 November 2023, and the draft rules still await finalization and notification. Among the main suggestions of the draft rules, Further reduction of fees of different applications concerning GI, greater participation of producer groups before applications are made, provisions for quality control and checks to ensure product integrity.

These amendments have helped a great deal in minimizing the formal entry barriers, but have not done enough of the same when it comes to expanding the AU participation due to the parallel work that may need to be done in response to the low awareness levels, limited institutional outreach, as well as the absence of administrative capacity within the producer communities.[19] In the absence of these, the legal reforms will be procedural improvements of the Law, and not a major change in the inclusivity of the GI regime.[20]

Post-Registration Governance

The GI registration process also necessitates the initiation of a mechanism for controlling quality and authenticity of GI Under Rule 32(6) (f) of the GIs of Goods (Registration and Protection) Rules, 2002, the applicant has to provide details of an inspection structure, which will check certain adherence to the GI standards in the territory of the specified designation.[21] The purpose of these inspection bodies is to check the use of the GI by only the authentic producers and also to ensure that the product satisfies the specifications set out. But in reality, this is more like a utopian dream since in practice, there exist a number of these bodies that are either weak, inactive, or do not exist. Such a lack of local oversight is a factor in the misuse of GIs, market dilution and locking out of a true producer in enforcement and sharing of benefits.

17. Intellectual Prop. India, GI e-Filing Services – User Manual (Controller Gen. of Patents, Designs & Trademarks, 2020), https://ipindia.gov.in (last visited Aug. 9, 2025).

18. Ministry of Com. & Indus., Draft Geographical Indications (Amendment) Rules 2023 (Press Release, Oct. 2023) (India).

19. M. Chaturvedi, Challenges in Implementing GI Laws for Rural Producers in India 155 (12 J. Intell. Prop. Rts. 2024).

20. *Id.*

21. Geographical Indications of Goods, *supra note 8,* r. 32(6)(f).

Section 21 clarifies that registered proprietors and AU are the only people who have enforceable rights under the Act.[22] These are the exclusive rights of use of the GI with respect to the registered goods and the right to obtain relief in case of infringement. Thus, the effect of this is that registration and not history or cultural ownership, is the legal precondition of benefit-sharing and enforceability, which leaves out of the protection it is supposedly intended to cover, the unregistered producer. Together, these provisions identify the systemic constraints of the present GI regime. Although it has been accepted in Law, there has been a deficit in the inclusivity of the AU registration, coupled with the centralization of the ownership of GIs in formal organizations, which has left a gap in its accessibility and equity at the ground level- particularly to the weavers and artisans in the informal sector.

THE HANDLOOM SECTOR AND GI GOVERNANCE IN ODISHA

The handloom industry is the second largest rural industry in India and second in employment rank to agriculture in India, with the sector employing more than 31.45 lakh people in the country.[23] It is a major stakeholder in the maintenance of traditional knowledge and artisanal skills, and cultural heritage. Odisha is a major part of this scenery with 1.17 lakh handloom employees as documented in the Fourth All India Handloom Census (2019 20), which is around 3.7 per cent of the national count. This includes weavers as well as allied workers involved in the pre-loom and the post-loom activities. The art of weaving in the state is famous because of its fine designs, special dyeing styles, fascinating products and simplicity characteristics that have GI registered for a number of handloom products. Understanding of GI governance in this sector is thus vital in determining legal, institutional, and socio-economic processes that determine the livelihood of the weavers of Odisha. In order to analyze the degree to which GI governance in Odisha is inclusive, this paper presents four socio-economic indicators: Employment Type, Institutional Membership, Education Level, and Income Level. These factors are important in the following way: Employment Type is an indicator is important since it indicates whether weavers are associated with a formal grouping (like cooperatives) to enable registration of AU. Institutional Membership indicates the organization affiliation, which in most cases is necessary in terms of dealing with registered proprietors of GIs and inspection agencies. The level of education has an impact in terms of the ability of the producers to understand the procedural and documentational procedures involved in AU registration. Income Level can influence the capability to cover even slight registration and compliance expenses, given that this can discourage their participation. The analysis of these indicators, along with GI registration figures, brings an idea about the reason why such a large portion of genuine producers are not included in the statutory advantages of the GI system.

22. Geographical Indications of Goods, *supra note 2*, § 21.

23. Ministry of Textiles, Gov't of India, 4th All India Handloom Census of India 2019-20, https://handlooms.nic.in/WriteReadData/userfiles/file/handloomcensus2019-20.pdf (last visited Aug. 14, 2025).

GI Landscape of Handlooms in Odisha

Odisha presently holds nine registered GIs in the handloom sector, each reflecting the state's diverse weaving traditions and cultural heritage. While GI registration signifies legal recognition and potential market differentiation, its practical benefits for producers are contingent upon the registration of individual producers as AUs. The table below sets out the details of the state's handloom GIs, their proprietors, and the number of AUs recorded as of 31 January 2024, based on the "Details of Registered GI AU Applications" published by the Intellectual Property India portal (ipindia.gov.in).

Table 1: GI-Registered Handloom Products of Odisha and AU Registration

S.no	GI-HANDLOOM PRODUCTS	REGISTRATION DATE	REGISTERED PROPRIETORS	NUMBER OF AUTHORISED USERS
1	Kotpad Handloom Fabric	02.06.2005	1.The Orissa State Handloom Weavers Co-op., Society Ltd., (BOYANIKA), Dist: Bhubaneswar	1 Authorised User
2	Orissa - Ikat	07.06.2005	1.The Orissa State Handloom Weavers Co-op., Society Ltd., (BOYANIKA), Dist: Bhubaneswar	1 Authorized User
3	Khandua Saree and Fabrics	22.10.2010	24 Weaver Co-operative Societies	0 AU
4	Gopalpur Tussar Fabrics	06.01.2012	1 Weavers Co-operative Society	4 Authorised User
5	Dhalapathar Parda & Fabrics	17.07.2012	1 Weavers Co-operative Society	0 AU
6	Sambalpuri Bandha Saree & Fabrics	17.07.2012	1. Directorate of Textiles & Handloom, Govt. of Orissa, Satyanagar, Dist. Bhubaneswar	30 AU
7	Bomkai Saree and Fabrics	17.07.2012	1. Directorate of Textiles & Handloom, Govt. of Orissa, Satyanagar, Dist. Bhubaneswar	30 AU

8	Habaspuri Saree and Fabrics	17.07.2012	1 Weavers Co-operative Society	0 AU
9	Berhampur Patta hodaKumbha) Saree & Joda	17.07.2012	1. Directorate of Textiles & Handloom, Govt. of Orissa, Satyanagar, Dist. Bhubaneswar	0 AU

Source: "Details of Registered GI AU Applications as on January 31, 2024," Intellectual Property India, Controller General of Patents, Designs and Trademarks (GI Registry).

Table 1 highlights a stark gap between GI registration and producer-level participation. While all nine handloom GIs in Odisha have at least one registered proprietor, typically a cooperative society or a state agency, several, including Khandua Saree and Fabrics, Dhalapathar Parda and Fabrics, Habaspuri Saree and Fabrics, and Berhampur Patta Saree and Joda have no registered AUs. Even the better-performing GIs, such as Sambalpuri Bandha Saree and Fabrics and Bomkai Saree and Fabrics, have only 30 AUs each, a negligible proportion of the tens of thousands of weavers producing these goods. This pattern suggests that Odisha's GI governance is predominantly top-down, with proprietorship vested in institutions that have not operationalized large-scale AU registration. As AU status is a prerequisite for the legal commercial use of GI, the absence of widespread registration effectively excludes most genuine producers from the statutory rights the GI system is intended to provide. This disconnect undermines the inclusive protection envisioned under the Geographical Indications of Goods (Registration and Protection) Act 1999 and limits the developmental potential of GIs as economic assets for traditional knowledge holders.

Employment Type

The employment structure in the handloom sector significantly influences participation in GI governance. AU registration is generally facilitated through formal networks such as cooperatives, master weavers, or state-led agencies. Independent weavers, who form the majority in Odisha, often remain outside these institutional channels, making it harder for them to access the procedural and documentary support needed for AU registration. The following table presents the distribution of handloom workers in Odisha by employment type, disaggregated by rural and urban areas, based on the Fourth All India Handloom Census (2019–20).

Table 2: Number of Handloom Workers by employment in the state of Odisha

Number of Handloom Workers by employment in Odisha	**Rural**	**Urban**	**Total**
Number of Independent Weavers	78529	3100	81629

Number of Weavers under Co-operative Societies	11584	133	11717
Number of handloom Workers under Master Weaver	23901	218	24119
Under Khadi &Village Industries Commission or Board	50	1	51
Under Cooperative Society	11584	133	11717
Under State Handloom Development Corporation	273	47	320
Total	114337	3499	117836

Source: Fourth All India Handloom Census (2019–20), Ministry of Textiles, Government of India.

Table 2 highlights that nearly 70% of Odisha's handloom workers are independent weavers, with no formal linkage to cooperatives or state agencies. This employment pattern creates a structural bottleneck for AU registration, as independent weavers are less likely to receive information about the registration process, assistance with documentation, or support in meeting inspection requirements. Workers under cooperative societies or master weavers are better positioned to navigate GI governance structures, but they represent only a minority of the total workforce. As a result, the benefits of GI protection remain concentrated among a relatively small, institutionally connected segment of the weaving community.

Institutional Membership

Institutional membership, whether in a cooperative society, Self Help Group (SHG), or registered producer association plays a critical role in GI governance. In most cases, GI proprietors interact with producers through such formal bodies, and AU registration is often facilitated via these organizations. Membership not only provides administrative support for the registration process but also enables collective bargaining, shared marketing, and access to state-led welfare schemes. Also, producers without institutional affiliation face higher barriers to entry into the GI framework. The table below shows the proportion of handloom workers in Odisha who are members of any weaving institution, based on the Fourth All India Handloom Census (2019–20).

Table 3: Distribution of handloom households by membership of Co-operative Society, Self Help Group/ Joint Liability Group and Producer Company in the state of Odisha

Membership of Handloom households	**Rural**	**Urban**	**Total**
Member of any Co-operative Society	26326	809	27135

Self Help Group/ Joint Liability Group	10327	190	10517
Producer Company	7334	165	7499

Source: Fourth All India Handloom Census (2019–20), Ministry of Textiles, Government of India.

The data in Table 3 shows that only 27,135 households are members of cooperative societies, which are the most common organizational channel for AU registration. Membership in Self Help Groups or Joint Liability Groups is even lower at 10,517 households, while Producer Company affiliation is the least common at just 7,499 households. This limited institutional reach means that a majority of handloom households remain outside the formal structures that can facilitate AU registration and coordinate compliance with GI specifications. Consequently, even where GIs are registered, the absence of broad institutional coverage restricts the effective participation of weavers in GI governance.

Education Level

Education level is a significant factor influencing the ability of weavers to participate effectively in GI governance. AU registration requires understanding procedural formalities, preparing documentation, and complying with quality and inspection requirements. Limited literacy or formal education can restrict awareness of GI rights, the benefits of registration, and the technical standards associated with GI protection. The table below presents the distribution of handloom workers in Odisha by educational attainment, as recorded in the Fourth All India Handloom Census (2019–20).

Table 4: Data of Handloom Workers on the basis of Education Level in the state of Odisha

Education Level of Handloom Workers in Odisha	**Rural**	**Urban**	**Total**
Never attended School	11771	339	12110
Below Primary	21111	470	21581
Primary	32255	1063	33318
Middle	21358	774	22132
High School	17625	537	18162
Higher Secondary	7128	248	7376
Graduation & Above	3089	68	3157
Total	114337	3499	117836

Source: Fourth All India Handloom Census (2019–20), Ministry of Textiles, Government of India.

The data reveals that more than 46% of Odisha's handloom workers have either never attended school or studied only up to the primary level. This limited educational attainment creates a substantial knowledge and capacity gap in understanding GI laws, procedural requirements, and compliance mechanisms. Although cooperative societies or NGOs may assist in navigating the registration process, such reliance reinforces dependence on intermediaries and limits the ability of weavers to engage directly with GI governance. Without targeted capacity-building initiatives such as simplified procedural guidance and local language awareness campaigns, low education levels will continue to pose a barrier to inclusive participation in the GI framework.

Income Level

Income level plays a decisive role in shaping a weaver's ability to engage in GI governance. While the recent amendment to the GI Rules has considerably reduced the fee for AU registration, income continues to influence the capacity of weavers to participate effectively. Beyond the registration fee, producers must often bear indirect costs such as travel to application centers, preparation and notarization of documents, compliance with prescribed quality standards, and periodic inspection requirements. Low income can also limit the ability to invest in marketing, packaging, and branding factors essential to realizing the economic benefits of GI status. The table below presents the distribution of handloom households in Odisha by monthly income, based on the Fourth All India Handloom Census (2019–20).

Table 5: Income of handloom households from Handloom related activities in the state of Odisha

Income Level	**Rural**	**Urban**	**Total**
Less than 5000	54911	1841	56752
5001-10,000	5720	166	5886
10001- 15,000	530	9	539
15001-20000	35	2	37
20001- 25000	6	0	6
25000- 50000	3	0	3
50000-1,00,000	0	0	0
Above 100000	0	0	0
Total	61205	2018	63223

Source: Fourth All India Handloom Census (2019–20), Ministry of Textiles, Government of India.

The data shows that more than 85% of handloom households in Odisha earn less than ₹5,000 per month, underscoring the economic vulnerability of the sector. While the fee reduction for AU registration has removed a significant legal barrier, low income remains a practical constraint in sustaining GI participation. The costs associated with travel, document processing, and quality compliance can still be prohibitive for many producers. Moreover, the limited financial capacity to invest in marketing and branding reduces the potential to convert GI recognition into tangible income gains. Therefore, economic vulnerability continues to perpetuate the disconnect between the legal framework of GI protection and its practical benefits for the majority of genuine producers.

An examination of the four socio-economic indicators employment type, institutional membership, education level, and income level reveals a consistent pattern of structural and capacity-related barriers limiting the participation of Odisha's handloom workers in GI governance. The predominance of independent weavers operating as informal producers outside formal institutional networks restricts access to procedural support for AU registration. Low levels of institutional membership further weaken collective bargaining power and reduce direct engagement with GI proprietors and inspection bodies. Limited educational attainment impedes understanding of legal rights and compliance requirements, reinforcing dependence on intermediaries. Finally, widespread low income, despite the recent reduction in AU registration fees, continues to constrain the ability of weavers to meet indirect costs of compliance and invest in value addition. Collectively, these factors explain the persistent disconnect between the existence of registered GIs in Odisha and the limited socio-economic benefits accruing to the majority of informal producers. Addressing this gap will require targeted legal, institutional, and capacity-building interventions that integrate informal producers into the GI system while respecting and preserving the traditional knowledge embedded in their craft.

BARRIERS TO INCLUSIVE GI GOVERNANCE FOR INFORMAL PRODUCERS: LINKING SOCIO-ECONOMIC REALITIES TO LEGAL STRUCTURES

The socio-economic patterns outlined in Section 3 reveal that most Odisha handloom producers operate outside the cooperative or institutional frameworks that underpin India's system of GIs (GI) governance. Under the GIs of Goods (Registration and Protection) Act 1999 ("GI Act"),[24] registered proprietors and AUs are the only persons entitled to use a GI commercially and enforce it against infringement.[25] This structure assumes organized participation through formal entities, yet data in Section 3 of this article show that a large share of producers are independent, low-income, and have limited educational attainment conditions which translates directly into barriers to effective participation.

24. Geographical Indications of Goods, *supra note 2,* § 17.

25. *Id.*, § 21.

Ambiguities in the Definition of "Producer" and Dual Registration Burdens

The GI Act defines "producer" broadly to include cultivators, artisans, traders, dealers, and organizations.[26] While intended to be inclusive, this breadth has enabled non-producer entities, including state agencies, NGOs, and corporations, to register as AUs, sidelining the actual artisans. In the Mysore Silk GI, for example, AU status was reportedly granted to company directors rather than weavers themselves.[27] The dual registration requirement GI proprietorship in Part A and separate AU registration in Part B[28] places an additional burden on the very communities the law is meant to protect. For informal and often illiterate artisans, the procedural steps, documentation, and fees act as deterrents, despite nominal fee reductions in 2020.

Structural Barriers from Employment Type and Institutional Membership

As noted in Table 2 and Table 3 (Section 3), nearly 70 % of Odisha's handloom workers are independent weavers, and fewer than half of all handloom households have any cooperative membership. Since AU registration is usually facilitated through such formal bodies, most producers lack access to procedural guidance, documentation support, or participation in inspection mechanisms. This helps explain why even major GIs such as Khandua Saree and Fabrics have zero AU (see Table 1). In the Bhagalpur silk cluster of Bihar, mahajans (local traders and master weavers) dominate access to raw materials, credit, and market channels, fostering economic dependence that restricts producers' capacity to register as AUs and are unable to claim legal rights over their cultural production.[29] This form of intermediary control mirrors the institutional gaps seen in Odisha and illustrates how informal, hierarchical production structures hinder participation in GI governance.

Social and Educational Barriers

Limited education is a critical access barrier. As indicated in Table 4 (Section 3.4), more than 46 % of Odisha's handloom workers have at most primary-level schooling, with over 12,000 never having attended school. This restricts their capacity to understand GI application formalities, quality specifications under Rule 32(6)(f) of the GI Rules and the benefits of AU registration. As a result, they often depend on middlemen or cooperative officials, which can reinforce unequal power relationships and reduce direct participation.

26. *Id.*, § 2(k).

27. N. Lalitha, *Infringements in GI Protected Products* Working Paper No. 256, Gujarat Inst. of Dev. Research, (Apr. 2019), https://gidr.ac.in/pdf/wp-256-3248.pdf.

28. Geographical Indications of Goods, *supra note 2*, §§ 11–17.

29. Uma Sarmistha, *Rural Handloom Textile Industry in Bihar: A Case of Rural Informal Sector*, 45 Soc. Change 107 (2015).

Economic and Market Barriers

As shown in Table 5 (Section 3.5), more than 85 % of handloom households in Odisha earn less than Rupees 5,000 per month from weaving activities. While the 2020 Amendment to the GI Rules reduced AU registration fees from Rupees 500 to Rupees 10, indirect costs such as travel, notarization of documents, and compliance inspections remain significant relative to earnings. Market pressures worsen this problem. A study of the Siminoi powerloom cluster in Odisha showed how technological efficiency and market saturation from mechanized production threaten handloom livelihoods.[30]

Institutional and Governance Constraints

Rule 32(6)(f) of the GI Rules requires the establishment of inspection mechanisms to maintain quality standards. However, in practice, many of these bodies in Odisha's handloom sector are inactive or poorly resourced. Combined with the proprietorship model, where a single cooperative or state agency controls the GI without broad-based producer participation this leads to opaque decision-making and weak enforcement. The AU registration data in Table 1 highlight that GIs like Khandua Saree and Fabrics and Berhampur Patta Saree have zero AUs, effectively excluding most genuine producers from rights and decision-making.

Awareness and Information Barriers

The data patterns in Section 3, particularly low institutional membership and limited education levels, point to a severe awareness deficit. Independent producers often receive no direct communication from proprietors or registry officials about AU registration processes or benefits. Studies in other GI clusters confirm that such informational asymmetries keep producers dependent on intermediaries.[31]

Psychological and Occupational Insecurity

Economic marginalization and market instability have been linked to occupational withdrawal and even distress suicides among weaving communities in GI-recognized sectors, as documented in Andhra Pradesh and Telangana.[32] This demonstrates that legal protections like GI do not necessarily translate into well-being unless accompanied by broader social safety nets.

Market Capture and Elite Control

A cross-sectoral study found that GI registration is often done by NGOs or entities that have no direct links to artisan communities, leading to the elite capture of GI rights. In cases

30. Ipsita Prusty & Himansu Sekhar Mallick, *Powerloom in Textile Industry: A Study of Siminoi Powerloom Cluster of Dhenkanal District in Odisha*, 12 Odisha J. Soc. Sci. 77 (2022).

31. Shaik Surayya et al., *Issues and Challenges of Handloom Weavers: A Study in East Godavari District, Andhra Pradesh*, 5 Int'l J. Mgmt. Stud. 84 (2018).

32. K.V.S. Rao & R. Siva Babu, *Weavers' Family Organisation and Suicides in Andhra Pradesh and Telangana: A Sociological Analysis*, 8 Int'l J. Res. Soc. Sci. 1 (2018).

like Nakshi Katha, the GI was registered by a Delhi-based organization that excluded rural Bengali artisans from benefit-sharing.[33] This illustrates how the Law, in the absence of inclusive governance mechanisms, can reproduce existing hierarchies and exclusions that allow control to remain concentrated.

POLICY RECOMMENDATIONS FOR INCLUSIVE GI GOVERNANCE

Bridging the gap between the statutory framework of GI protection and the socio-economic realities of Odisha's handloom sector requires targeted interventions that address the structural disadvantages faced by informal producers. Drawing from the barriers identified in Section 4, the following measures are proposed.

Simplifying AU Registration Procedures

While the 2023 amendment to the GI Rules has reduced the AU registration fee, procedural complexity remains a deterrent. The application process should be simplified through: Local-level facilitation: Establish mobile registration units and district help desks in major weaving clusters to assist with document preparation and submission. Local language documentation: Translate application forms, guidance notes, and inspection standards into Odia and commonly spoken dialects. Hybrid application systems: Maintain both online and offline application channels to accommodate regions with limited internet access.

Expanding Institutional Outreach

Given that the majority of handloom households are outside formal cooperatives, new models of engagement should be developed: Cluster-based producer associations: Support the creation of small, locally anchored producer groups that can interact directly with GI proprietors and inspection bodies. Partnerships with NGOs and universities: Leverage non-state actors for awareness programs, legal literacy training, and assistance with AU applications. Inspection body outreach: Expand the mandate of inspection bodies to conduct periodic visits to informal producer clusters, integrating them into compliance cycles.

Addressing Socio-Economic Barriers

To ensure that GI participation translates into economic gains for informal producers: Subsidized compliance support: Provide targeted subsidies for packaging, labelling, and certification renewal costs for low-income AUs. Capacity building: Offer training in product quality improvement, marketing, and entrepreneurship adapted to the needs of informal producers. Market linkage: Facilitate access to state-run emporiums, handicraft fairs, and curated e-commerce channels with simplified onboarding.

33. Jayanta Ghosh et al., *Geographical Indications (GI) Laws in India and Its Implementation: A Critical Appraisal*, 30 J. Intell. Prop. Rts. 304 (2025).

Integrating Informal Producers into GI Governance

To make governance participatory and representative: Representation in decision-making: Ensure proportional representation of informal producers in GI proprietor committees and inspection agencies. Collaborative compliance: Introduce peer-review mechanisms within clusters, enabling producers to jointly uphold quality standards. Feedback and grievance systems: Create platforms for informal producers to report procedural difficulties and propose improvements.

CONCLUSION

This article sets out to examine whether the existing GI governance framework in Odisha effectively safeguards traditional knowledge while ensuring equitable participation of all genuine producers, particularly those operating in the informal sector. Through an analysis of socio-economic indicators, including employment type, institutional membership, income levels, and educational attainment, it is evident that a substantial share of producers contributing to Odisha's GI-designated handloom products remain excluded from the AU registration process and the benefits it confers. The findings reveal that the current governance model, while legally sound, is institutionally skewed towards formally organized producers with established cooperative or association memberships. Informal producers, many of whom are low-income, non-literate, and geographically dispersed, encounter a combination of legal-procedural, institutional, and socio-economic barriers that inhibit their inclusion in the GI system. This exclusion undermines not only the socio-economic development objectives associated with GIs but also the very purpose of the GI Act, which is to protect and promote the collective heritage of all genuine producers.

The policy recommendations outlined in Section 5 emphasize the need for simplifying AU registration, expanding institutional outreach, reducing indirect participation costs, and embedding informal producers within governance structures. These measures are not merely administrative adjustments but essential steps towards bridging the gap between law and living reality. Ultimately, the success of GI in Odisha and by extension, in similar contexts across India depends on its ability to function as both a legal safeguard for traditional knowledge and a socio-economic instrument that uplifts the communities sustaining that knowledge. Ensuring that informal producers are not left on the margins is therefore not only a question of fairness but also of legal and cultural integrity.

PROTECTING INDIGENOUS FASHION THROUGH GEOGRAPHICAL INDICATIONS: EMPOWERING ARTISANS VIA SOCIAL ENTERPRISES

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ABSTRACT

Preserving every element of traditional knowledge, culture, and the economic potential of indigenous communities falls under the scope of protection of indigenous fashion. Such products associated with geographic origin can be protected under Indian law through the Geographical Indications of Goods (Registration and Protection) Act, 1999. Yet, this framework does not offer a satisfactory solution to the problems confronted by indigenous artisans, such as collective ownership, benefit-sharing, and enforcement. Social enterprises that link traditional craftsmanship with modern markets have also come up as facilitators towards equitable development.

The study examines how traditional cultural expressions are treated under international instruments such as the UNDRIP, TRIPS, and WIPO provisions through doctrinal analysis. Hence, the study advocates for a radical legal reform bringing together community enterprises and GI protection, thereby ensuring legal and financial empowerment. Laws must be strengthened to recognize informal rights and craft-based social enterprises should be incorporated within the GI regime as part of a strategy for the long-term preservation of indigenous fashions in a culturally sensitive way. This paper also covers expedited GI registration processes, legal literacy programs, and institutional support frameworks. Unless communities have access to legal redress and actively participate in the proceedings, these protections risk becoming symbolic rather than actual.

Keywords: Geographical indications, Indigenous Fashion, Intellectual Property Law, Social Enterprises, Traditional Cultural Expressions, Legal Reform.

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INTRODUCTION

Handmade textiles, handicrafts, traditional patterns, and weaving techniques are all important components of India's indigenous fashion. These things are strongly ingrained in the country's cultural history and centuries-old craftsmanship. Not only do they have a distinctive look, but they are also quite important to rural economies. Sarees, needlework, textiles dyed with natural colours, and certain weaves like Banarasi and Chanderi help local communities and provide employment to millions of people.

In 2024, the traditional clothing market in India was valued at $197.2 billion. It is projected to reach $558.5 billion by 2033. The ethnic fashion sector is expected to grow to $45.9 billion between 2025 and 2029, at an impressive 8.4% compound annual growth rate. This growth is fuelled by consumer demand for authentic, sustainable fashion and the growing global recognition of Indian craftsmanship.[3]

Geographical Indications (GIs) are an important legal tool for protecting these assets. They connect the identity, quality, and production of goods like Banarasi weaves and Kanchipuram silk sarees to specific locations. GIs help artisan businesses, prevent illegal copying, and ensure market benefits go to recognized local areas. Still, India's rich artistic traditions remain vulnerable to commercial exploitation and cultural appropriation without such protections and market-driven solutions. This challenging situation puts the jobs and cultural identities of millions of people at risk.

Despite the fact that the Geographical Indications of Goods (Registration and Protection) Act, 1999[4] establishes a robust legal framework to safeguard commodities that are associated with particular geographic regions, it encounters substantial operational obstacles.

One significant issue is that numerous artisans, particularly those residing in rural or remote regions, are unaware of the advantages and procedures associated with GI registration. Participation is discouraged by the intricate and protracted registration process. Bureaucratic delays are evident, as over 250 GI applications are still pending. Additionally, GI registration rates vary widely among states. For example, many GIs are registered in Karnataka, Tamil Nadu, Maharashtra, Kerala, and Uttar Pradesh, while many others are not, showing uneven outreach and enforcement.

The law also lacks mechanisms to empower artisans in the market. There is no complete legal framework that links GI protection with business empowerment. However, social

3. Indian Ethnic Wear Market Size, Growth | Report [2033], *Business Research Insights* (visited Aug. 10, 2025), https://www.businessresearchinsights.com/market-reports/indian-ethnic-wear-market-117563

4. Geographical Indications of Goods (Registration and Protection) Act, § 2(1)(e), No. 48, Acts of Parliament, 1999 (India).

enterprises can help bridge this gap by providing artisans with access to markets, training, and skill development. This lack of support limits the socioeconomic benefits that GIs could bring to Indigenous communities if effectively integrated with social entrepreneurship practices that promote fair trade and market access.[5]

First, the global fashion sector will change toward more ecological and ethical fashion in 2025. An increasing number of consumers now demand eco-friendly products, transparent supply chains, and ethical work practices that minimize adverse impacts on the environment and society.[6] Undoubtedly, all these sets into motion the upsurge of sustainable fashion markets from $9.22 billion in 2024 to $20.84 billion by 2033, owing to such a surge in awareness toward vegan leather substitutes, circular fashion models focusing on upcycling and reuse, and supply chain transparency.[7]

The growing consumer demand for products with meaningful stories surpasses aesthetic value while the global market shows increasing interest in slow fashion and heritage textiles that prioritize quality and cultural authenticity. The trend of environmentally conscious and culturally grounded production perfectly matches indigenous fashion because it directly connects with handloom traditions and natural dye techniques and artisanal methods. Heritage textiles are highly valued, creating an urgent need to protect cultural treasures from cultural theft and industrialized reproductions.[8]

Underlining the importance of such protection are stronger international commitments by India, where such international framework commitments include UNDRIP, WIPO, and TRIPS. India is to protect GI rights under TRIPS[9] as a member of WTO so that the goods linked to a certain geographic origin remain authentic. India has also been very much active in

5. Shilpa Rathod, *Challenges Posing To Geographical Indication In India*, IPR J. MAHARASHTRA NAT'L L. UNIV. NAGPUR, Vol. I, Issue I, 16–25 (2023), https://www.nlunagpur.ac.in/PDF/Publications/5-Current-Issue/2.%20CHALLENGES%20POSING%20TO%20GEOGRAPHICAL%20INDICATION%20IN%20INDIA.pdf.

6. Ayla do Vale Alves, *WIPO's New Treaty on Intellectual Property, Genetic Resources and Traditional Knowledge – A Turning Point for Indigenous Heritage?*, ESIL REFLECTIONS, Vol. 13, Issue 11 (2024), https://esil-sedi.eu/esil-reflection-wipos-new-treaty-on-intellectual-property-genetic-resources-and-traditional-knowledge-a-turning-point-for-indigenous-heritage/.

7. Business Research Insights, *Sustainable Fashion Market Size, Share, Growth, And Industry Analysis, 2025–2033* (2025), https://www.businessresearchinsights.com/market-reports/sustainable-fashion-market-108608.

8. Forum On Indian Traditional Medicine, *Protection Of Traditional Knowledge In India*, Scooping Paper No. 2 (Sept.2018), https://fitm.ris.org.in/sites/fitm.ris.org.in/files/Publication/Scooping%20Paper%20No%202%20(1).pdf.

9. Sachiv Kumar, Vinayak Gupta & Prateek Jain, *Protection to Indigenous Knowledge: A Study of Flawed Scenario at National and International Level*, 1 Manupatra Intell. Prop. Rep. 159 (Mar. 2012), https://www.manupatra.com/roundup/363/Articles/Protection%20to%20Ind.pdf.

WIPO[10] initiatives and the recently ratified treaty (May 2024)[11] on intellectual property, genetic resources, and traditional knowledge, which specifically affirms the rights of Indigenous Peoples and urges benefit-sharing mechanisms under the Nagoya Protocol. Since UNDRIP effectively gives normative guidance to national legal systems, the rights of Indigenous peoples to preserve, govern, protect, and promote their cultural heritage and traditional knowledge are further reinforced.

Thus, the issue is a major contribution to the development law, intellectual property policy, and scholarly discourse. Debates are in progress regarding the enhancement of GIs to safeguard intangible cultural expressions, including the designs, weaving techniques, and storytelling that are fundamental to Indigenous fashion. Additionally, efforts are being made to address global market power imbalances and to achieve a balance between legal protection and socioeconomic empowerment. At this moment, social enterprises serve as agents of transformation by establishing meaningful connections with legal recognition, capacity development, fair trade access, and the sustainable livelihoods of artisans. Building on an articulate GI concept, scholarly works have increasingly highlighted the need for integrated frameworks that incorporate enterprise-driven empowerment. This is necessary for ethical and inclusive development.[12]

Role of Geographical Indications in Protection

Geographical Indications (GIs) function as specialized intellectual property rights that indicate products originate from specific geographic locations based on their distinctive qualities linked to their original place. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) defines a GI as an indication which identifies a product as originating from a territory or specific region within that territory where the product's quality or reputation or other characteristic is mainly linked to its geographical origin (WTO, TRIPS Agreement).[13]

The World Trade Organization member India implemented the Geographical Indications of Goods (Registration and Protection) Act, 1999[14], in 2003 to meet its TRIPS obligations.

10. Prashant Reddy T, *WIPO Treaty on Rights to Genetic Resources Reflects Newfound Pragmatism*, THE INDIA FORUM (May 26, 2024), https://www.theindiaforum.in/international-affairs/wipo-treaty-genetic-resources-reflects-newfound-pragmatism.

11. Ayla do Vale Alves, *WIPO's New Treaty on Intellectual Property, Genetic Resources and Traditional Knowledge – A Turning Point for Indigenous Heritage?*, ESIL REFLECTIONS, Vol. 13, Issue 11 (2024), https://esil-sedi.eu/esil-reflection-wipos-new-treaty-on-intellectual-property-genetic-resources-and-traditional-knowledge-a-turning-point-for-indigenous-heritage/.

12. World Intellectual Property Organization, *India: An International Guide to Patent Case Management for Judges*, WIPO PUB. 1079, CHAPTER 6 (2022), https://www.wipo.int/edocs/pubdocs/en/wipo-pub-1079-chapter6-en-india-an-international-guide-to-patent-case-management-for-judges.pdf.

13. WTO, *Understanding the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights: A Learning Module* (2012), https://www.wto.org/english/tratop_e/trips_e/modules4_e.pdf.

14. Geographical Indications of Goods (Registration and Protection) Act, No. 48, Acts of Parliament, 1999 (India).

The Geographical Indications Act of 1999 delivers a broad TRIPS-compliant definition that safeguards manufactured, natural, and agricultural goods, including textiles and handicrafts, that undergo at least one production stage within designated geographic areas. In order to prevent the deceptive use of the GI that would damage consumer comprehension and product reputation, the legal framework grants exclusive use rights to producers or associations representing product interests.[15]

The market, legitimacy, and cultural status of numerous well-known Indian textiles and fashion items have been enhanced as a result of their successful GI registration. The Chanderi fabric from Madhya Pradesh, which is renowned for its delicate designs and light texture, the Banarasi saree from Varanasi, which is renowned for its ornate zari work, the Kanchipuram silk sarees from Tamil Nadu, and the Phulkari embroidery from Punjab are all examples of this. These registrations are essential for the Indigenous artisan communities, who are the custodians of cultural traditions, to safeguard their craft legacy, prevent counterfeiting, and enhance their financial stability. The successful GI registration of a variety of renowned Indian textiles and fashion products has increased their market value, validated their authenticity, and preserved their cultural significance. The Chanderi fabric from Madhya Pradesh stands out for its lightweight material and intricate design patterns, and so does the Banarasi saree.

The current GI system in India presents various significant disadvantages to its users. The legislation forbids unauthorized usage but fails to establish mechanisms that ensure equal profit distribution between artisan stakeholders, particularly grassroots producers. The GI Act's framework could limit the individual power of craftsmen by requiring collective ownership through producer associations or organizations. Legal disputes may result from these disputes regarding revenue distribution and ownership rights. The Indian GI Act[16] registration does not provide automatic protection for cultural products in foreign markets since international protection requires separate GI registration or recognition by foreign jurisdictions (Altacit Global, 2013). Implementing GIs across international borders continues to be a constant obstacle.[17]

The Geographical Indications (GI) framework provides effective protection for physical objects connected to specific geographic areas but fails to safeguard intangible cultural

15. Suresh C. Srivastava, Geographical Indications under the TRIPS Agreement and Legal Framework in India: Part II, 9 J. INTELLECTUAL PROP. RTS. 105 (Mar. 2004), https://docs.manupatra.in/newsline/articles/Upload/B792%20Srivastava.pdf.

16. Geographical Indications of Goods (Registration and Protection) Act, No. 48, Acts of Parliament, 1999 (India).

17. Sudhir Ravindran & Arya Mathew, *The Protection of Geographical Indication in India*, ALTACIT (2023), https://www.altacit.com/resources/gi-geographical-indications/the-protection-of-geographical-indication-in-india/.

heritage which include traditional motifs along with weaving techniques and symbolic patterns fundamental to Indigenous fashion. Unauthorized use of these cultural expressions is facilitated by the absence of adequate legal safeguards and appropriate compensation. The GI Act primarily emphasizes the identification of material objects rather than the cultural knowledge that is inherent in Indigenous fashion, thereby limiting the full protection of this fashion. The fundamental gap demonstrates the critical need for additional legal measures which protect Indigenous cultural heritage while enhancing GI protection coverage.

Social enterprises including producer companies, cooperatives and Section 8[18] companies use inclusive business structures to elevate underserved communities. The recognized groups operate with distinct organizational frameworks yet maintain identical social objectives. The Companies Act of 2013 establishes Section 8 Companies for philanthropic purposes and these organizations reinvest their surplus cash for societal benefit instead of distributing earnings to members. Members of cooperatives freely cooperate to form self-governing organizations which address their collective, economic, social and cultural needs. Most organizations prioritize general interest missions that aim to advance community development. The main purpose of producer businesses involves collective production and marketing which they establish primarily for farmers and artisans.

The business model of social enterprises presents strong opportunities to guarantee equitable income distribution and fair-trade practices to small producers and workers who normally experience exclusion from profit-driven trading systems. The fair trade enterprise model challenges traditional value chains by giving producers better trading conditions and securing their rights and distributing more value to them. Producer businesses and cooperatives excel at distributing value in democratic ways while supporting sustainable living through their market-based operations which focus on social responsibility.[19]

Role of Social Enterprises in Empowerment

Social enterprises have two essential roles that include both supporting GI registration processes and helping domestic products gain exposure in worldwide markets. Communities benefit from GI protections because they help them protect their authentic regional products and also leverage their cultural heritage and geographical uniqueness. Social enterprises alongside producer companies and cooperatives hold excellent potential for GI registration management, while also dedicating resources to market promotion and product development and coordinate unified group initiatives. GI protection initiatives have proven their ability to advance product

18. Companies Act, § 8, No. 18, Acts of Parliament, 2013 (India).

19. *Plight of Indigenous Designers in Fashion Industry*, IJLSI, https://ijlsi.com/wp-content/uploads/Plight-of-Indigenous-Designers-in-Fashion-Industry.pdf.

quality alongside sustainable approaches and revenue growth[20], which demonstrates the group's potential to drive rural advancement and environmental protection.[21]

The legal framework and policy union between social businesses and GI protection regimes maintain certain deficiencies. The Indian GI Act[22] provides collective rights along with legal remedies yet producer groups face obstacles in achieving full GI benefits because of missing standardized quality control, inefficient post-registration support, and insufficient awareness.[23] Social enterprises encounter financial and administrative challenges when they attempt to obtain GI registration while negotiating intellectual property regimes, which lack customization for their organizational structures. The existing disparity requires specific legislative changes and institutional assistance to create better cooperation between social enterprise ecosystems and GI protection for sustained economic growth and increased empowerment.[24]

The aim of this paper is to obtain legal recognition while economically empowering craftspeople by connecting products with their unique regional identities through geographical markers to protect indigenous fashion. The research aims to support social entrepreneurs who protect traditional crafts through GI registration by enabling them to coordinate artists for group marketing, ensure fair profit-sharing and obtain registration assistance. The protection of indigenous fashion through GIs enables cultural heritage preservation while establishing exclusive market identity for regional items. Through GI registration, social entrepreneurs can implement group marketing together with fair profit distributions to support craftspeople while creating sustainable livelihoods.

The protection of certain geographic reputations exists only through GIs which safeguard physical items but not the traditional knowledge behind them. Artisan communities face entry barriers through registration because it remains expensive and complex, while providing minimal worldwide protection.

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20. Institute of Company Secretaries of India, *FAQs on Section 8 Companies*, https://www.icsi.edu/media/webmodules/FAQs-on-Section-8-Companies.pdf.

21. Vinod Kothari, *Comparative Analysis Between Social Sector Entities: Section 8 Companies and Trusts*, VinodKothari.com (Mar. 2023), https://vinodkothari.com/2023/03/comparative-analysis-between-social-sector-entities-section-8-companies-and-trusts/.

22. Geographical Indications of Goods (Registration and Protection) Act, No. 48, Acts of Parliament, 1999 (India).

23. Chartered Institute of Public Finance and Accountancy (CIPFA), *Social Enterprises, Charities and the Public Sector*, https://www.cipfa.org/-/media/files/policy%20and%20guidance/panels/social-enterprises-and-charities/panel-briefing.pdf.

24. *Challenges in Social Enterprise Development*, https://www.ijmra.us/project-doc/2019/IJMIE_AUGUST2019/IJMRA-16071.pdf.

INDIGENOUS FASHION'S CULTURAL SIGNIFICANCE AND LEGAL RECOGNITION

The term 'indigenous fashion' refers to clothing and design elements that maintain deep connections with indigenous cultural heritage alongside traditional craftsmanship. The community identity together with environmental understanding and sociocultural values find their expression through methods, materials, and aesthetic concepts, which have been passed down through multiple generations.[25] The phrase 'traditional cultural expressions' (TCEs) designates literary, artistic, and cultural creations, which communities transmit from generation to generation while representing both physical and spiritual elements of their historical and religious heritage and social unity. These include various examples such as region-specific textiles together with traditional clothing and ornamental crafts as well as symbolic motifs and design features, which belong to particular cultural or tribal groups.[26]

Article 29 of the Indian Constitution grants minority groups the right to protect their distinct linguistic heritage together with their script, language, and cultural traditions. The Geographical Indications (GI) Act of 1999[27] stands as a legal framework which safeguards products that originate from specific locations to maintain their authentic nature. The Copyright Act of 1957[28] and the Designs Act of 2000[29] provide limited protection for artistic creations, but they have specific limitations when applied to mass-produced crafts and traditional knowledge.[30]

The preservation of indigenous fashion is jeopardized by cultural appropriation, as it diminishes the value of heritage and forces artisans to the margins.[31] The research assesses the current legal systems, geographical indications, and social business models that safeguard traditional craftsmanship. The research indicates that in order to safeguard indigenous fashion

25. UNCTAD, *Fair Trade Enterprises Spread Benefits Through Value Chains*, https://unctad.org/news/fair-trade-enterprises-spread-benefits-through-value-chains

26. World Intellectual Property Organization, *Traditional Cultural Expressions and Fashion*, (Nov. 2, 2023), https://www.wipo.int/en/web/traditional-knowledge/fashion.

27. Geographical Indications of Goods (Registration and Protection) Act, No. 48, Acts of Parliament, 1999 (India).

28. Copyright Act, No. 14, Acts of Parliament, 1957 (India).

29. Designs Act, No. 16, Acts of Parliament, 2000 (India).

30. Elizabeth M. Lenjo, *Inspiration Versus Exploitation: Traditional Cultural Expressions At The Hem Of The Fashion Industry*, 21 Marq. Intell. Prop. L. Rev. 139 (2017), https://scholarship.law.marquette.edu/iplr/vol21/iss2/4.

31. Niharika Malhotra, *Traditional Cultural Expressions: The Backbone of the Indigenous Community*, *Pretty As You Please* (July 13, 2020), https://prettyasyouplease.co/features/news-views/traditional-cultural-expressions-the-backbone-of-the-indigenous-community/.

and encourage equitable development, it is imperative to implement more stringent legislation and ethical business practices.[32]

Geographical Indication as a legal RESOURCE

A geographical indication (GI) is an identifier that is affixed to products and serves to identify their place of origin. India's GI protection extends to manufactured, handicraft, natural, and agricultural products that are associated with a place of origin.[33] The Indian GI Registry requires the registration of products that exhibit distinctive characteristics or reputations that are specific to the area. Additionally, they must incorporate information regarding production, processing, or preparation activities that occur within the region.[34]

The exclusive use of the GI for authorized users within the geographic area and legal remedies against unauthorized use or infringement are among the legal rights granted to GI holders. By preventing the misuse or replication of their product by others, regional producers are able to maintain its integrity and economic value.

The emphasis on material possessions rather than intangible cultural assets, the scarcity of resources for enforcement and the difficulties in establishing violations or associations are among the limitations of GI law. Collective cultural expressions and more general customary knowledge are not safeguarded by GI unless they are specifically associated with a geographic product.[35] The limitations of GI law include the difficulty of establishing an association or violation, its emphasis on tangible objects rather than intangible cultural assets, and its insufficient enforcement resources. Collective cultural expressions and more general customary knowledge are not safeguarded by GI unless they are specifically associated with a geographic product.
The following are effective examples of registered GI tags in Indian textiles and fashion:

- The Uttar Pradesh Banarasi Saree is distinguished by its intricate silk and brocade embroidery.[36]

32. Khurana & Khurana, *Traditional Knowledge And Cultural Expressions: The Missing Link In India's IP Regime*, MONDAQ (July 22, 2025), https://www.mondaq.com/india/trademark/1654104/traditional-knowledge-and-cultural-expressions-the-missing-link-in-indias-ip-regime

33. Dr. Sachiv Kumar, Vinayak Gupta & Prateek Jain, *Protection to Indigenous Knowledge: A Study of Flawed Scenario at National and International Level*, 1 Manupatra Intell. Prop. Rep. F-100 (Mar. 2012), https://www.manupatra.com/roundup/363/Articles/Protection%20to%20Ind.pdf.

34. *India in Compliance to Its Obligation Under the TRIPS Agreement*, MANUPATRA NEWSLINE (year), https://docs.manupatra.in/newsline/articles/Upload/B792FE85-B11E-4AFA-BC8E-9858B07407E4.pdf

35. World Trade Organization, *Geographical Indications*, *In A Handbook On The Wto Trips Agreement* 7–7 (Nov. 2020), https://doi.org/10.30875/19f90c43-en.

36. *A Study on Geographical Indications and Its Impact on Indian Economy*, 8 INT'L J. FIN. MGMT. & RESEARCH 37 (2023), https://www.ijfmr.com/papers/2023/2/1837.pdf.

- The Chanderi textiles of Madhya Pradesh are renowned for their light texture and timeless designs.[37]
- Aranmula Kannadi, a metal mirror from Kerala, is distinguished by its exceptional craftsmanship.[38]

These GI tags provide legal protection to producers and craftspeople who are associated with specific regions, enhance marketability, and facilitate the authentication of origin.[39]

The advantages of GI protection extend beyond legal rights; they support local economies, ensure product authenticity, and market goods according to their unique regional identity. GIs help sustain traditional crafts, boost consumer confidence, and promote rural development by certifying the quality and origin of goods.

CASE STUDIES OF GI PROTECTION IN FASHION AND TEXTILES

Success stories

The **Banarasi Saree (Uttar Pradesh)**, which was granted GI status in 2009, significantly increased exports and revitalized the industry by safeguarding traditional textiles against synthetic and imitation alternatives. Two significant organizations that played a critical role were the Human Welfare Association and the Banaras Bunkar Samiti.[40]

A significant milestone in the preservation of India's textile heritage was achieved in 2005 with the designation of **Chanderi Fabric (Madhya Pradesh)** as a Geographical Indication. It was initially originated in the second century BCE but was eventually rendered obsolete by mechanical reproductions. It acquired market visibility and prestige subsequent to its GI registration.[41]

In 2008, **Kashmiri Pashmina shawls** were designated as a Geographical Indication (GI) due to their cultural significance and softness. Despite the fact that GI has a labelling system

37. Sanjiv Singh Bhadauria, *Geographical Indications: A Case Study of Chanderi Sarees*, 5 INT'L J. CREATIVE RES. THOUGHTS 852 (2018), https://ijcrt.org/papers/IJPUB1802140.pdf.

38. Aranmula, *The Aranmula Mirror Is Unique*, https://aranmulakannadi.org/tag/geogrophical-tag/ (last visited Aug. 15, 2025).

39. SYED JAHID ABDULLAH, *Impact of Geographical Indication Tag on Banarasi Brocade and Sarees*, 5 INT'L J. FIN. MGMT. & RESEARCH 1 (Mar.–Apr. 2023), https://www.ijfmr.com/papers/2023/2/1837.pdf.

40. Syed Jahid Abdullah, *Impact of Geographical Indication Tag on Banarasi Brocade and Sarees*, 5 INT'L J. FIN. MGMT. & RESEARCH 1 (Mar.–Apr. 2023), https://www.ijfmr.com/papers/2023/2/1837.pdf.

41. Sanjiv Singh Bhadauria, *Geographical Indications: A Case Study of Chanderi Sarees*, 5 INT'L J. CREATIVE RES. THOUGHTS 852 (2018), https://ijcrt.org/papers/IJPUB1802140.pdf.

and over 480 authorized users registered, its full commercial and protective potential has not been fully realized due to counterfeiting and low consumer awareness.

In 2013, **Kalamkari**, an ancient craft from Andhra Pradesh, was designated as a Geographical Indication (GI). The GI tag revitalizes traditional block printing and environmentally friendly dyeing methods, despite decreased demand and rising competition.[42]

Kanchipuram Silk Sarees, which were designated a Geographical Indication (GI) in 2005, are renowned worldwide for their intricate temple-inspired designs and luxurious silk texture. Despite its benefits, GIs haven't reached grassroots artisans, particularly loom operators and dyers.[43]

Failures and Enforcement Challenges

Known for their vibrant geometric patterns and indigenous wool blends, **Kullu Shawls** were designated a Geographical Indication (GI) in 2004. However, enforcement has been challenging due to a lack of funding, drawn-out bureaucratic procedures, and miscommunications with government agencies.[44] The dispersed weaving community and the artists' lack of knowledge is the reason why the benefits of GIs are not widely adopted.[45]

Judicial Precedents and GI disputes:

Tea Board of India v. ITC Ltd. (2011): The Calcutta High Court rejected arguments of passing off, dilution, and bad faith, ruling that ITC's use of 'Darjeeling Lounge' did not violate the Tea Board of India's Geographical Indication (GI) or certification trademark rights. The lawsuit was dismissed with costs after being found frivolous.[46]

Scotch Whisky Association v. JK Enterprises (2023 SCC OnLine MP 5352), order dated 18-12-2023: By ruling that a Registered Proprietor may file an infringement action without suing the Authorised User, the Madhya Pradesh High Court upheld equal standing

42. Muthyamvinod, *Pedana Kalamkari Made with Natural Colours*, Deccan Herald (Jan. 2, 2014), https://www.deccanherald.com/content/368021/pedana-kalamkari-made-natural-colours.html.

43. Aarti Kawlra, *Duplicating the Local: GI and the Politics of 'Place' in Kanchipuram* , Nehru Memorial Museum and Library Occasional Paper, https://pmml.nic.in/downloadSeries/128.

44. S. Arun & D. Neeti, *The Success and Failure of GI Tag in India: A Critical Analysis of The Working of Geographical Indications of Goods Registration and Protection* (July 2025), https://cnlu.ac.in/storage/2025/07/The-Success-and-Failure-of-GI-Tag-in-India-A-Critical-Analysis-of-The-Working-of-Geographical-Indications-of-Goods-Registration-and-Protection.pdf.

45. Ajay Simha, *Kullu Shawls of Himachal as a Geographical Indicator*, Hill Post (Apr. 16, 2009), https://hillpost.in/2009/04/kullu-shawls-of-himachal-as-a-geographical-indicator/12648/.

46. Tarun Khurana, Abhishek Pandurangi & Niharika Sanadhya, *Tea Board, India v. ITC Limited*, Khurana & Khurana, Advocates And Ip Attorneys (Mar. 20, 2020), https://www.khuranaandkhurana.com/2020/03/20/tea-board-india-v-itc-limited/.

in enforcing Geographical Indications of Goods (GI) rights. The ruling enhances procedural clarity and confirms the enforceability of GI rights in India.[47]

Asociación de Productores de Pisco A.G. v. Union of India & Ors. (2025): The Delhi High Court has allowed the coexistence of homonymous geographic indications (GIs) for "Pisco" from Chile and Peru as long as geographic qualifiers are in use. This landmark decision established that the protection of GIs is contingent upon consumer association and origin, rather than previous use.[48]

CHALLENGES IN GI IMPLEMENTATION AND ENFORCEMENT

The Geographical Indications (GI) registration process in India is time-consuming, financially demanding, and legally complex, with over 250 applications still pending. This prevents rural residents from fully utilizing the benefits of the process. [49]The efforts to combat misuse, infringement, and counterfeit goods are impeded by the limited monitoring capabilities and sanctions of enforcement systems. High legal costs burden rural artisans, and ignorance undermines producer incomes and consumer trust.[50]

In spite of India's TRIPS commitments, the misuse of GI names, limited international protection, and the conflict between community ownership and corporate control continue to affect the distribution of traditional knowledge and related benefits.[51] Low producer awareness of the benefits of registration and infringement hinders protection and legal action. The government and civil society must increase their initiatives. Administrative challenges include the disadvantages experienced by applicants from rural areas, the burdens of renewal processes, and inconsistent quality controls.[52]

Finally, international enforcement requires a substantial financial investment, compliance with foreign laws, and the submission of separate applications, despite the fact that local GI

47. Madhya Pradesh High Court Upholds Registered Proprietor's Independent Rights in Scotch Whisky GI Case, SCC Online Blog (Dec. 26, 2023), https://www.scconline.com/blog/post/2023/12/26/madhya-pradesh-high-court-upholds-registered-proprietors-independent-rights-in-scotch-whisky-gi-case-scc-blog/

48. Landmark Ruling for India's GI Regime: Pisco Judgment and Its Far-Reaching Impact, NDTV PROFIT (Dec. 2023), https://www.ndtvprofit.com/opinion/landmark-ruling-for-indias-gi-regime-pisco-judgment-and-its-far-reaching-impact.

49. How to Register Geographical Indications in India?, KANOONPEDIA (last visited Aug. 15, 2025), https://kanoonpedia.com/how-to-register-geographical-indications-in-india/.

50. Trends in GI Sector: An Analysis, LAKSHMIKUMARAN & SRIDHARAN ATTORNEYS (2023), https://www.lakshmisri.com/insights/articles/trends-in-gi-sector-an-analysis/.

51. *Geographical Indications and the Traditional Crafts of Barmer*, Ruralhandmade, https://ruralhandmade.com/blog/geographical-indications-and-the-traditional-crafts-of (last visited Aug. 15, 2025).

52. *Challenges Posing to Geographical Indication in India*, NAT'L L. UNIV. NAGPUR [hereinafter NLUN], https://www.nlunagpur.ac.in/PDF/Publications/5-Current- (last visited Aug. 15, 2025).

registration grants statutory rights. The global legal protection and commercial potential of their products are restricted because many rural farmers are unable to address these issues.[53]

SOCIAL ENTERPRISES AND LEGAL FRAMEWORK IN INDIA

a. Legal Forms

In India, social businesses, including producer companies, Section 8 corporations, and cooperatives, employ legal frameworks to fulfill charitable objectives without distributing profits. In order to ensure financial sustainability and social impact, they integrate sustainable business practices with social missions.[54]

b. Social Enterprises as Intermediaries in Geographical Indication Promotion

Social entrepreneurs assist artisans in surmounting systemic obstacles and attaining genuine economic value by providing them with access to profitable markets, preserving indigenous knowledge, promoting fair trade, and fostering brand development.[55]

c. Compliance under Companies Act, 2013 and Corporate Social Responsibility Rules:

Section 8 Companies and social enterprises are subject to financial disclosure, governance, and transparency obligations under the Companies Act, 2013. Corporate social responsibility initiatives are mandated for companies that exceed specific financial thresholds, typically in partnership with social entrepreneurs. The Social Stock Exchange framework enables social businesses to raise capital in regulated markets.[56]

d. Absence of a Dedicated Legal Framework for Social Enterprises

In spite of their increasing prevalence, social enterprises in India lack a definitive legal definition or recognition system. They are required to comply with the current regulations, which were primarily established for traditional nonprofit or commercial organizations. Access to financial incentives, uniform governance structures specifically designed for social enterprises, and tailored policy support is impeded by the absence of a specialized legal framework, and expedited compliance requirements.

53. Diger, *The Protection of Geographical Indications in India: Issues and Challenges* (2025), https://yucita.org/file_sub_301-Diger-The _Protection_of_Geographical_Indications_in_India-Issues_and_Challenges.pdf (last visited Aug. 15, 2025).

54. Securities And Exchange Board Of India, *Framework on Social Stock Exchange (SSE)* (Mar. 19, 2025).

55. SEBI, *Amendment to Social Stock Exchange Framework*, (Mar. 19, 2025).

56. Ministry of Corporate Affairs, India, Companies Act, 2013 – Governance and CSR Provisions (2023), official publication.

e. Definition and Models of Social Enterprises

Social enterprises are businesses that employ financially independent operations to accomplish specific social or environmental objectives. They distinguish themselves from conventional commercial organizations by emphasizing social welfare over profit maximization. Additionally, they generate revenue and sustain operations. Alternative models include hybrid models that integrate for-profit and nonprofit components, nonprofit organizations that generate earned income, and cooperatives in which ownership is divided among beneficiary groups.[57]

f. Social Enterprises as Mediators between Artisans and Markets

Social enterpreneurs guarantee equitable wages, ethical sourcing, timely payments, and support for expanding production, thereby bridging the gap between market demands and rural artisans. This contributes to the preservation of traditional crafts and the promotion of sustainable livelihoods.[58]

g. Notable Examples of Successful Indian Social Enterprises

In addition to promoting fair trade, transparency, and artisan empowerment, Indian social entrepreneurs such as Rangasutra, GoCoop, and Jaipur Rugs have promoted transparency, enabled direct-to-consumer sales, and empowered local artisans through fair trade.[59]

INTEGRATION OF GI PROTECTION AND SOCIAL ENTERPRISES

Synergy between GI Rights and Market Access

By associating Geographical Indication rights with strategic promotion, social enterprises, such as producer companies and cooperatives, provide producers with collective bargaining power and increase artisan groups' access to markets.[60]

Facility for GI Registration and Promotion

Social enterpreneurs facilitate compliance, provide legal expertise, and assist local producers and craftspeople in obtaining GI status. They increase sales and improve product quality by promoting branding, advertising, and international market access.[61]

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57. ACTAXINDIA, *Registering Social Enterprises in India* (2025), https://www.actaxindia.com/registering-social-enterprises-india (last visited Aug. 13, 2025).

58. LEX MUNDI, Social Enterprise Law Survey: India (2025), https://www.lexmundi.com/lexmundi/Social-Enterprise-Law-Survey-India (last visited Aug. 13, 2025).

59. Official Websites and Impact Reports of Rangasutra, GoCoop, and Jaipur Rugs, respective organizational sites (last visited Aug. 13, 2025).

60. Naina Chuda, *Geographical Indications and Start-up India: Bridging the Gap between Cultural Heritage, Entrepreneurship, and Sustainable Tourism* (2025), https://cnlu.ac.in/storage/2025/07/Geographical-Indications-and-Start-up-India-Bridging-the-Gap-between-Cultural-Heritage-Entrepreneurship-and-Sustainable-Tourism-by-Naina-Chuda.pdf.

61. Promoting Geographical Indications in India, *Chambers & Partners (2025),* https://chambers.com/articles/promoting-geographical-indications-in-india.

Value Addition, Branding, and Ethical Fashion Marketing

Social enterprises enhance product quality by supporting artisan cooperatives, creating economies of scale, and connecting regional identity to cultural narratives, while promoting ethical fashion and e-commerce through fair trade, thereby strengthening producer communities and guaranteeing authenticity. They also promote ethical fashion marketing and e-commerce, thereby guaranteeing fair trade and authenticity.[62]

Legal Gaps in Linking GI Law and Enterprise Growth

Despite its potential, the GI Act[63] has numerous legal deficiencies. It lacks integrated post-registration support, commercialization mechanisms, and enterprise growth opportunities. The law's lack of oversight and enforcement undermines community empowerment and product protection, and many artists lack the skills or resources necessary for registration and compliance.[64]

Building Artisan Cooperatives and Community Empowerment

In addition to providing artisans with fair compensation and secure livelihoods, social businesses establish cooperatives and clusters that foster transparency and the preservation of cultural heritage.[65]

POLICY AND LEGAL REFORM RECOMMENDATIONS

Amendments to the GI Act for Broader Protection of TCEs

Expand GI Definitions: The Geographical Indications of Commodities (Registration and Protection) Act[66] should explicitly encompass Traditional Cultural Expressions (TCEs) in addition to tangible commodities. Including oral traditions, weaving methods, motifs, and symbols are among the various types of TCEs.[67]

62. Benefits of GI Ecosystem, *DRISHTI IAS (2025),* https://www.drishtiias.com/daily-news-editorials/benefits-of-gi-ecosystem.

63. Geographical Indications of Goods (Registration and Protection) Act, § 2(1)(e), No. 48, Acts of Parliament, 1999 (India).

64. The Inaccessibility of GI Tags in India, *MONDAQ (2025),* https://www.mondaq. com/india/trade-regulation-practices/141643; *Challenges Posing to Geographical Indication in India,*_ NAT'L L. UNIV. NAGPUR (2025), https://www.nlunivnash.edu.in/PDF/Publications/5-CurrentIssue/2.%20CHALLENGES%20POSING%20TO%20GEOGRAPHICAL%20INDICATION%20IN%20INDIA.pdf

65. Naina Chuda, Geographical Indications and Start-up India: Bridging the Gap between Cultural Heritage, Entrepreneurship, and Sustainable Tourism, (2025), https://link.springer.com/article/10.1007/s43621-025-01332-4 (last visited Aug. 14, 2025).

66. Geographical Indications of Goods (Registration and Protection) Act, § 2(1)(e), No. 48, Acts of Parliament, 1999 (India).

67. Productivity Commission, Indigenous Arts Submission, AUSTRALIAN GOV'T (2025), https://www.pc.gov.au/__data/assets/pdf_file/0007/338074/sub032-indigenous-arts.pdf (last visited Aug. 15, 2025).

Incorporate legal provisions that guarantee benefit-sharing agreements, which ensure that profits from GI-tagged goods are distributed directly to the artisan communities. Additionally, incorporate mandatory benefit-sharing and consent procedures for the commercialization and use of their traditional knowledge.[68]

Strengthening Enforcement and Monitoring

Establish GI Monitoring Authorities: Create specialized statutory authorities with oversight authority to monitor the quality and authenticity of GI-tagged products and prevent misuse and reduce infringement. This involves conducting sporadic inspections and requiring renewal procedures.

Protections for Digital and E-Commerce: In response to the increasing demand for domestic products in global e-commerce, amend laws to extend GI protection to online sales and digital platforms.[69]

Legal Aid and Awareness for Artisans

Legal Literacy and Outreach: Educate craftspeople about their legal rights, GI registration, and fair-trade principles through government-supported legal aid and awareness programs to bridge the gap between the law and its beneficiaries.[70]

Financial and Technical Support: Enhance the market connections, GI documentation, and access to legal aid eligibility and funding for artisan clusters under the MSME and Handloom Schemes (e.g., Prime Minister's Employment Generation Programme, NHDP awards).[71]

Comparative Perspective: Peru and Kenya

Peru has implemented collective trademarks and certificates to safeguard indigenous designs and weaving patterns, thereby enabling local communities to trace origins and share revenues.

68. *Traditional Cultural Expressions and the Need for Sui Generis Systems under Intellectual Property Rights: A Framework for Protection and Preservation*, INT'L J. INTELLECTUAL PROP. L. (IJIRL), https://ijirl.com/wp-content/uploads/2025/07/TRADITIONAL-CULTURAL-EXPRESSIONS-AND-THE-NEED-FOR-SUI-GENERIS-SYSTEMS-UNDER-INTELLECTUAL-PROPERTY-RIGHTS-A-FRAMEWORK-FOR-PROTECTION-AND-PRESERVATION.pdf (last visited Aug. 15, 2025).

69. Ministry of Textiles, India, National Handloom Development Programme: English Compendium 2024, https://handlooms.nic.in/assets/img/Handloom%20Schemes/NHDP_English%20Compendium_2024.pdf (last visited Aug. 15, 2025).

70. *Geographical Indication (GI) Laws in India and Its Implementation,* SUO LAW (2025), https://www.suolaw.com/geographical-indication-gi-laws-in-india-and-implementation (last visited Aug. 13, 2025).

71. *From Heritage to Rights: Decoding India's GI Tagging Framework,* STRATJURIS (2025), https://stratjuris.com/from-heritage-to-rights-decoding-indias-gi-tagging-framework/ (last visited Aug. 15, 2025). *Intellectual Property Rights and Traditional Knowledge: A Multidisciplinary Approach,* CAB DIGITAL LIBRARY, https://www.cabidigitallibrary.org/doi/pdf/10.1079/9781845934705.0000 (last visited Aug. 12, 2025).

Kenya (Maasai IP Concerns): The Maasai's demands for collective rights, benefit sharing, and legal reforms beyond the current IP laws were motivated by their experiences with global misappropriation. This underscores the importance of sui generis systems that are globally enforceable and prioritize economic empowerment and indigenous consent.

RECOMMENDATIONS

- The Geographical Indications Act[72] (GI) will undergo a number of legislative changes to improve enforcement, speed up the process, and include intangible Traditional Cultural Expressions (TCEs).
- The bill will also implement capacity-building initiatives for artisans, which will foster the development of skills, legal literacy, and digital literacy.
- Social entrepreneurs will be supported through funding, incubation, and public-private partnerships.
- In addition to initiatives to promote GI-based products that are sustainable, moral, and empower communities, ethical branding and consumer education should also be promoted.
- The law will also promote the development of ethical fashion, consumer awareness, and artisan cooperatives. The objective of these measures is to protect the advantages of GI-based products.

Conclusion

In order to protect India's indigenous fashion industry, a two-pronged strategy integrating robust legal safeguards with ongoing market empowerment is necessary. In order to safeguard collective rights, prevent cultural appropriation, and ensure authenticity, it is imperative to implement legal reforms, including the inclusion of Traditional Cultural Expressions (TCEs) in the Geographical Indications Act, the reinforcement of enforcement, and the promotion of community benefit-sharing. Equally crucial is empowering artisans via skill development, digital literacy, fair trade practices, and the active involvement of social enterprises such as producer companies, cooperatives, and Section 8 entities, which can help producers register GIs, enhance quality, and expand their market reach while ensuring equitable profits. Since the current GI framework focuses on registration but offers minimal post-registration support, especially for branding, quality assurance, and international enforcement, integration with enterprise-led market promotion becomes crucial. The lessons learned from Australia's Aboriginal art

72. Geographical Indications of Goods (Registration and Protection) Act, § 2(1)(e), No. 48, Acts of Parliament, 1999 (India).

protections, Kenya's Maasai intellectual property licensing, and Peru's Quechua textile protection demonstrate the need of sui generis cultural property laws, collective trademarks, and community licensing. The long-term goal is to establish an ecosystem in which communities themselves govern, sustainable social enterprises empower, and robust laws protect cultural heritage. This will ensure the survival of traditional crafts as vibrant, living forms of cultural expression, as well as respectable livelihoods and global competitiveness.

GREENWASHING AND INTELLECTUAL PROPERTY: THE ROLE OF TRADEMARK AND ADVERTISING LAWS IN ENSURING ETHICAL COMPETITION IN ENVIRONMENTAL CLAIMS

Sahiba Verma[1]

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ABSTRACT

Many firms are using terms like "eco-friendly," "organic," and "sustainable" to appeal to environmentally sensitive consumers in the age of climate change awareness. Due to the lack of a clear legal framework governing such wording, greenwashing, a deceptive environmental branding strategy that misleads consumers and stifles fair competition, has become more and more common. This essay critically examines greenwashing from the perspectives of intellectual property and competition law, paying particular attention to trademark intervention and advertising regulation in India.

It will analyze how the misuse of environmental labels erodes market ethics and consumer rights, scrutinizing the gaps in India's Trademarks Act 1999, Environmental Labelling Scheme, and Section 2(r) of the Competition Act, 2002 regarding unfair trade practices.

The paper additionally evaluates the effectiveness of voluntary frameworks like the ASCI Code for Self-Regulation in Advertising, along with the evolving legal narrative surrounding ESG Environmental, Social, and Governance branding

Aligning with SDG 12 (Sustainable Consumption and Production) and SDG 13 (Climate Action), this paper conveys that the law should be imposing a more integrated, strict legal regime so as to examine environmental claims, as there exists a requirement of clear criteria for green certification and trademark use. This paper will suggest policy for the harmonization of IP, environmental, and competition law to facilitate transparency, consumer confidence, and sustainable business practices.

Keywords: Greenwashing, Sustainable Development Goals, Climate, IPR, Unfair Trade Practices

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INTRODUCTION

Green consumerism is growing fast, with consumers choose products for their environmental benefits. Natural cosmetics and biodegradable packaging to energy-efficient appliances and organic foods, brands use eco-marketing to stand out. At global policies, like the Paris Agreement, and awareness campaigns have reinforced this trend. In India, we can see the shift in product branding, advertising storytelling, and corporate environmental stewardship campaigns. Yet, together with innovation falsification of environmental claims exists and that creates a significant threat of consumers deception.

This practice, known as greenwashing, involves giving a misleading or false information of the products environmental benefit. It can be done in certain formats like Selective disclosure (showing one positive environment-friendly characteristic and ignoring other large negative effects like a plastic bottle with the label “made from 30% recycled plastic” without noting the rest is virgin plastic); vague claims like “eco-friendly,” “green,” or “sustainable” without quantifiable substantiation; false labelling through self-certified eco-labels without fulfilling the requirements.

Greenwashing intersects with several legal fields. Trademark law regulates eco-labels, like the Ecomark used by only approved persons who follows certain standards. Advertising law, through the Consumer Protection Act, 2019 and the ASCI Code, has obligations of truth, substantiation, and environmental claim fairness, enforced by regulatory authorities as well as self-regulatory bodies. Competition law address how deceptive environmental branding can mislead market competition by providing non-compliant companies an unfair over truly sustainable companies. Together, these creates balance between the promotion of green innovation and the avoidance of greenwashing.

High-profile green brands currently operating in India such as the Tata Steel ‘Tata Pravesh’ door and window frames produced using virgin material are 100% recyclable and Fab India’s eco-friendly and organic apparels and textiles demonstrate how a trademark helps a brand consolidate its promise towards green credential and thus, establish consumer trust. In view of the emerging environmentally friendly market of India, the position of trademarks in launching and managing green brands shall become increasingly important in the future.

This paper analyzes greenwashing’s effects on trust among consumers (Sharma et al., 2019) and greenwashing failures of eco-label schemes in India (Mehta, 2007; Devireddy, 2024). ASCI guidelines are critiqued by Verma and Lobo (2024), but implementation of this with trademark and competition law, yet to be explored. This paper bridges that gap with legal analysis.

SCOPE UNDER THE TRADEMARKS ACT, 1999

In India, greenwashing involves false or exaggerated environmental claims interacts with trademark law. Section 9(1)(a) refuses to register marks that are not distinctive, e.g., generic environmental descriptors. Section 9(1)(b) also prohibits marks that are purely indications describing the kind, quality, or other features of goods or services. Words such as “eco-friendly,” “organic,” or “sustainable,” when used in their descriptive meaning, will often fall in this bar unless the applicant shows uniqueness by extensive usage. Even when stylized or accompanied by distinctive marks, such marks are still susceptible to the descriptive use defence under Section 30(2)(a). Section 11 provides relative grounds for refusal, which bars registration of marks that are identical or deceptively similar and are likely to lead to confusion, and includes imitation of existing environmental certification symbols or logos wherein the similarity can be visual or conceptual.

There are cases like ITC Ltd. v. Nestlé India Ltd. (2020) in which Madras High Court had ruled that comparative advertisement causing a false impression for quality of the product which constitutes passing off under Sections 9, 11, and 30 of the Trademarks Act, 1999. Then again in Hindustan Unilever Ltd. v. Amul (2017), the Bombay High Court held that ads show rival products as being harmful were misleading and disparaging which highlights the issue of the preservation of reputation of the brand against false representation. These principles are applied to green branding when abuse of eco-labels or environmental trademarks can deceive consumers and amount to unfair competition.

MISLEADING CERTIFICATION MARKS AND COLLECTIVE MARKS

Certification marks (Sections 71–73) signify that goods/services are of specific standards (e.g., quality, origin, material). If claiming environmental certification falsely, it’s trademark misuse and consumer protection violation. For example, using a “Ecomark”-type label without Bureau of Indian Standards approval. Collective marks (Sections 61–68) employed by members of an association. If abused, it deceives regarding membership and adherence to environmental standards. In greenwashing, such misuse of these marks constitutes passing off, infringement and according to Section 103, it shall be criminal offence under the Act (misuse of a trademark).

STRUCTURE AND OBJECTIVES OF THE ECOMARK SCHEME (1991)

The Ecomark Scheme was instituted in 1991 by the Ministry of Environment, Forest and Climate Change (MoEF&CC) and is handled by the Bureau of Indian Standards (BIS) was envisioned as eco-labelling scheme with an objective to persuade consumers to buy products that satisfy prescribed environmental and quality conditions, and to motivate manufacturers to adopt environmentally friendly production processes. The Ecomark symbol, an earthenware pot within the BIS hallmark represents both Indian heritage and eco-harmony. Certification is provided to products have BIS quality standards and certain environmental parameters which are designed to cover the product's entire life cycle, ranging from raw material extraction and production to consumption and disposal. The Indian Ecomark Scheme has not caught the fancy of the buyer or the industry, even after 15 years of existence. Currently, only 12 manufacturers of various products like paper, pulp, leather and wood particle board have applied and got the Ecomark licence.

Although promising, the Ecomark Scheme has seen limited success. Participation is voluntary and the number of certified products has stayed in the single digits for three decades. Environmental standards for most categories have not been significantly revised since the 1990s and do not include modern issues like microplastics, carbon footprint, or end-of-life recyclability. Consumer knowledge is remarkably low; polls show that most urban Indian consumers have never seen the Ecomark label in stores. Manufacturers also have limited commercial motive to pursue certification, since there is no strong market demand or policy preference for Ecomark-labelled products, in contrast to the European Union where the EU Ecolabel is well known and incorporated into public purchasing rules[3].

The lack of such long-term regulatory and promotional support for Ecomark has resulted in a gap in the environmental labelling policy of India[4]. Companies use words like "eco-friendly," "biodegradable," or "natural" on their labels without any proof which results in greenwashing. While the Consumer Protection Act of 2019, the Advertising Standards Council of India (ASCI) guidelines, and Central Consumer Protection Authority (CCPA) notices provide methods to challenge misleading claims, they do not replace a strong, proactive, and credible eco-labelling system. Strengthening Ecomark via revised standards, more public awareness, and align with buying and marketing incentives will bring India closer to the trustworthiness and effectiveness of successful eco-labelling regimes in other nations[5].

PROBLEMS AND GAPS IN THE ECOMARK SCHEME

Even though the Ecomark Scheme was planned to serve as India's flagship eco-labelling programme, it has not been able to attain worthwhile market penetration or consumer awareness[6]. The most essential constraint is its voluntary character. Manufacturers are not required by law

3. Mitchell, L. (n.d.). *Look How Green I Am! An Individual-Level Explanation for Greenwashing*. https://www.researchgate.net/publication/267963197

4. Sonal Verma, & Deonn Nash Lobo. (2024, February 8). *Combatting Greenwashing – New ASCI Guidelines, Eco-labels And Global Perspective*. Mondaq.

5. *Central Consumer Protection Authority issues guidelines for 'Prevention and Regulation of Greenwashing and Misleading Environmental Claims.'* (n.d.). https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2064963

6. Mehta, P. S. . (2007). *Why was India's ecomark scheme unsuccessful?* CUTS Centre for International Trade, Economics & Environment.

to acquire the Ecomark, even if their products have the stipulated environmental features. This has resulted in very poor take-up official data from the Bureau of Indian Standards (BIS) show that few products have been certified overall across all product groups since the scheme started in 1991. By contrast, in places like the European Union, eco-labels such as the EU Ecolabel are proactively included in public procurement regulations, providing a powerful commercial incentive for businesses to take part.

A second key challenge is the age of the environmental criteria. The majority of the product-specific standards have not been updated in more than a decade, and in a few instances, they still contain environmental priorities from the beginning of the 1990s. For example, the detergent criteria emphasize the content of phosphates an essential parameter back then but do not take into account contemporary issues such as microplastic pollution due to synthetic cleaning agents. Likewise, the paint sector has lead content restrictions but does not have extensive limits on all toxic volatile organic compounds (VOCs) currently accepted in world standards. This regulatory inertia diminishes the scheme's credibility among ecologically aware manufacturers and consumers who anticipate certification to be an expression of modern science and technology[7].

Another weakness is low awareness among consumers. There has been scant public awareness and promotion of Ecomark, and even the logo itself an earthen pot inside the BIS mark is not clearly self-explanatory to the typical consumer. Studies by independent research firms show that the vast majority of urban consumers have never heard or seen the Ecomark logo. Without public awareness, the mark does not impact buying habits, thereby deterring producers from obtaining certification which generates low visibility and low take-up.

Another problem is the absence of good economic or regulatory incentives to encourage industry involvement. In India, the Ecomark does not currently confer benefits such as suitability for government subsidization, tax relief, or preference in tendering like how other nations do. In the public sector, government policies do not list Ecomark as a criterion, that made manufacturers not to seek certification.

The lack of enforcement has made self-attributed "green" or "eco-friendly" labels unchecked. As a result, most brands use their own eco-labels which leads to greenwashing, misleads consumers. India is on risk to lose its eco-labelling terrain to false claims, with less contribution towards sustainable production and consumption if they do not focus on the Ecomark Scheme to make it more relevant, visible, and commercially applicable.

7. Devireddy, K. R. (2024). Greenwashing Unveiled: The Truth Behind Eco-Labels in India. *International Journal of Social Science and Economic Research*, *09*(10), 4708–4716. https://doi.org/10.46609/ijsser.2024.v09i10.042

COMPARISON WITH INTERNATIONAL ECO-LABELS

In comparison to the front-running global eco-labels like the EU Ecolabel and U.S.-based Energy Star scheme, the Ecomark Scheme demonstrates major structure and operational shortcomings.

EU Ecolabel[8] launch by European Commission in 1992 includes more than thirty categories of products and services from cleaning products and textiles to tourist accommodation. It is revised in every three to five years by scientific assessment and stakeholder consultation for best available sustainability requirements and technological innovation. [9]Green public procurement regulations actively use and promoted in shops, backed by advertising campaigns in EU countries. and has great consumer confidence and making strong incentives for companies to get certified[10].

US Energy Star[11], launched in 1992 by the United States Environmental Protection Agency and now recognized globally, is a commercially powerful but voluntary label for energy efficiency. It covers appliances, electronics, lighting, and even buildings. Energy Star made success due to strict third-party testing, regular revision of performance standards, and its inclusion with government procurement and utility rebate programs. Consumers in US and involved countries now use the Energy Star label as a synonym for cost savings and environmental advantages, providing manufacturers with a distinct competitive edge in pursuing certification.

Conversely, the Ecomark Scheme in India, though also voluntary, lacks dynamism and institutional coverage of international counterparts. Standards rarely revised, it is hardly employed as a parameter in public procurement, and public awareness is still nothing to write home about. While EU Ecolabel, Energy Star, and Nordic Swan have turned out to be market drivers for green production, Ecomark's poor visibility and outdated structure have not allowed it to reach such an impact. This difference show that India needs to reform eco-labelling framework to make it more up-to-date, universally recognized, and economically significant if it is to be an effective tool against greenwashing and in support of sustainable consumption.

8. *EU Ecolabel product groups and criteria*. (n.d.). Environment. https://environment.ec.europa.eu/topics/circular-economy/eu-ecolabel/product-groups-and-criteria_en

9. *Green EU trade marks*. (n.d.). https://doi.org/10.2814/900650

10. Sharma, A., Jain, V., & Khandelwal, M. (2019). *GREENWASHING: A Study on the Effects of Greenwashing on Consumer Perception and Trust Build-Up*. www.rrjournals.com

11. *Buy clean Procurement and ENERGY STAR*. (n.d.). ENERGY STAR. https://www.energystar.gov/industrial_plants/energy_star_plant_certification/buy_clean_procurement_and_energy_star_0

ADVERTISING STANDARDS AND ASCI GUIDELINES

The necessity of ethical and responsible communication has grown in importance in the changing advertising landscape, particularly as consumers' awareness of environmental issues increases. Due to the increasing number of environmental claims by businesses to market their goods as "sustainable" or "eco-friendly" has raised concerns about greenwashing, the practice of making exaggerated claims. In order to address this, ASCI released rules in 2023–2024 that were cantered on environmental claims and sought to guarantee responsibility and truth in green advertising. These guidelines emphasize the necessity of reliable and supported environmental messaging in all marketing channels, not just traditional advertisements but also digital influencers and social media platforms.

Role of ASCI in Regulating Environmental (Green) Claims

As customer demand for environmentally friendly products rises, numerous companies have been caught making inflated or unsubstantiated "green[12]" claims a tactic known as "greenwashing." Under Chapter I of its code, which places a strong emphasis on truthful and fact-based reporting of information, ASCI closely examines these advertisements.

Early in 2024, ASCI released specific Guidelines for Environmental Claims in Advertising in response to the growing issue of greenwashing. Ads that use terms like eco-friendly, carbon neutral, sustainable must be supported by reliable facts and certifications, according to these rules, which offer a framework for evaluating such claims. In an area where both environmental integrity and consumer trust are at risk, the action enhances ASCI's regulatory control. Despite being advisory and non-binding, ASCI's activities have a big impact on marketers' adherence to moral principles and upholding of environmental communication's openness.

ASCI Code and Guidelines on Environmental Claims (2023 Revision)

According to the standards, green hues, iconography such leaves or earth symbols, and other visual signals are not allowed unless they accurately convey the product's environmental credentials in order to avoid creating false impressions.[13] ASCI mandates that marketers reveal any sustainability strategies or carbon offset programs with quantifiable objectives and specific timetables, as opposed to making vague or aspirational pledges without any concrete plans for action.[14] All kinds of advertising, including digital platforms, are subject to these rules, and social

12. Advertising Standards Council of India. (2024). *Guidelines for Environmental/Green Claims in Advertising*. Effective February 15, 2024. Retrieved from https://www.ascionline.in/the-asci-code-guidelines

13. Economic Times – Brand Equity. (2024, January 19). *Greenwashing no more: ASCI ensures honest environmental claims in ads*. Retrieved from https://brandequity.economictimes.indiatimes.com/news/advertising/greenwashing-no-more-asci-ensures-honest-environmental-claims-in-ads/106944434

14. Advertising Standards Council of India. (2024). *Guidelines for Environmental/Green Claims in Advertising*. Effective February 15, 2024. Retrieved from https://www.ascionline.in/the-asci-code-guidelines

media influencers are also required to make sure that their environmental recommendations are true and properly stated. By offering precise, comprehensive, and enforceable standards that address both current marketing practices and new issues in environmental communication, the 2023 revisions seek to improve accountability and increase consumer trust in green advertising, even though the ASCI's enforcement is based on self-regulation and is not subject to legal obligation.

Misleading Green Ads and Enforcement Limitations: Self-Regulation vs Legal Compulsion

Ads that make environmental or "green" claims have increased in number because of growing environmental consciousness. To take advantage of customer demand for sustainable products, several firms have turned to deceptive green advertisements, or "greenwashing," without attempting to improve the environment. These advertisements frequently overstate the advantages, using ambiguous language, or utilize deceptive imagery, such as green hues and leaf symbols, without providing any real evidence. In addition to misleading customers, this also jeopardizes sincere environmental efforts.

As a self-regulatory organization, ASCI keeps a close eye on and looks into complaints about deceptive environmental claims. It also requires advertisers to remove or alter their ads in order to adhere to its code.[15]

Because it is voluntary, ASCI's enforcement authority is still restricted despite its proactive role. Because ASCI depends on the cooperation and goodwill of advertisers to make its decisions, it is unable to enforce legal penalties, fines, or bans. In the event that businesses do not comply, ASCI's only recourse is to report complaints to consumer forums or government authorities, which delays down enforcement and lessens instant deterrent. This restriction demonstrates[16] the distinction between self-regulation and legal coercion, as government organizations such as the Ministry of Environment, Forests, and Climate Change or the Consumer Protection Authority may not have the specialized knowledge and agility that ASCI provides, despite having the statutory authority to punish deceptive advertising.

The argument over whether to address false green claims through self-regulation or legal action is upon striking a balance between strict enforcement and industry collaboration. In the rapidly changing advertising world, including social media, self-regulation like that performed by ASCI allows for quicker resolution, industry engagement, and flexible norms. Without legal support, self-regulation, however, finds it difficult to reliably enforce compliance. Legal

15. Ministry of Consumer Affairs, Government of India. (2023). *Consumer Protection Act and Advertising Standards*. Retrieved from https://consumeraffairs.nic.in/

16. International Institute for Sustainable Development. (2023). *Addressing Greenwashing: A Regulatory Perspective*. Retrieved from https://www.iisd.org/

coercion, on the other hand, can be slower and more difficult, frequently necessitating protracted litigation, but it also offers the authority of fines, injunctions, and official prosecution. A hybrid paradigm, where self-regulation is reinforced by explicit legislative frameworks that enable regulators to act quickly against intentional greenwashing, is becoming more popular among experts. This would safeguard consumers and foster true environmental accountability.

Role of Social Media Influencers and Green Tagging

Influencers on social media have been extremely effective in influencing consumer behaviour, particularly in younger audiences. As such, they are vital in advancing sustainable products and environmental claims. Because of the apparent genuineness and close relationship, they have with their followers, their endorsements can carry a lot of weight. Green labelling, in which influencers designate goods or brands as "green," "eco-friendly," or "sustainable" without sufficient verification or transparency, is an issue raised by this influence. Given the speed at which material circulates on digital platforms, such actions run the danger of magnifying false environmental claims and fostering greenwashing.[17] As a result, the Advertising Standards Council of India (ASCI) has expanded its criteria for environmental claims to social media, stressing that influencers must make sure that any green claims they make are accurate, supported by evidence, and openly shared in order to prevent misleading customers. Additionally, in accordance with international best practices for regulating influencer marketing, ASCI urges influencers to reveal significant relationships with businesses in order to preserve transparency and preserve customer trust3. ASCI wants to promote appropriate green labelling that promotes real sustainability initiatives rather than flimsy marketing strategies by holding influencers accountable.

COMPETITION LAW AND UNFAIR TRADE PRACTICES

By prohibiting actions that limit free trade or lessen market competition, competition law also referred to as antitrust law aims to foster fair competition in the marketplace. By controlling monopolies, cartels, and abusive market practices, it seeks to safeguard consumers, promote innovation, and guarantee the effective distribution of resources. Businesses that utilize dishonest, fraudulent, or immoral tactics to obtain an unfair edge over rivals are engaging in unfair trade practices, which are a subset of anti-competitive activity. By distorting the market and eroding trust, these tactics may hurt both customers and other businesses. Regulations against unfair trade practices and competition law cooperate to protect fair competition and encourage robust economic growth.

17. Journal of Digital Marketing Ethics. (2023). Influencers and environmental responsibility: Navigating green claims on social media. *Digital Marketing Review, 9*(2), 67–79.

Section 2(r) of the competition act 2002[18] "Relevant market" means the market which may be determined by the Commission with reference to the relevant product market or the relevant geographic market or with reference to both the markets.

Section 2(r) of the *Competition Act, 2002* defines unfair trade practices by referring to their meaning in the Consumer Protection Act. It includes any deceptive, misleading, or unethical practices used to promote the sale or supply of goods or services. This can involve false advertising, misrepresentation of product quality or price, or withholding goods to manipulate the market. The section helps ensure that businesses do not gain an unfair advantage through dishonest means, protecting both consumers and fair competition[19]

Greenwashing as an Unfair Trade Practice

Falsely portraying a product, service, or brand as environmentally friendly when it is not in order to deceive customers and obtain an unfair competitive edge is known as "greenwashing." This behavior is covered by Section 2(r) of the Competition Act of 2002 and the Consumer Protection Act of 2019 as unfair commercial practices. False representation occurs when companies employ ambiguous phrases like "green" or "eco-friendly" without any supporting evidence from science or certifications. Such misleading advertising damages legitimate sustainable firms by presenting a false impression of competition, in addition to manipulating customer choice. Guidelines have been released by the Advertising Standards Council of India (ASCI) to prevent such tactics, mandating that all environmental statements be accurate, verified, and concisely stated to prevent misunderstandings[20].

Furthermore, greenwashing is exacerbated by deceptive celebrity and social media influencer endorsements. Public personalities help disseminate misleading environmental narratives when they endorse green-tagged items without properly disclosing their affiliation with the company or by failing to confirm the product's environmental credentials. This deceives customers who rely on these endorsers' reputation. The endorsement must be founded on a sincere view and sufficient due diligence, according to the (CCPA) rules; otherwise, the endorser and the brand may be held accountable for deceptive advertising[21]. Because greenwashing manipulates environmental consciousness for financial gain, it not only disrupts fair competition but also violates consumer rights.

18. Section 2(r) in The Competition Act, 2002

19. Competition Act, 2002, § 2(r), No. 12, Acts of Parliament, 2003 (India). Retrieved from https://www.indiacode.nic.in/handle/123456789/2026

20. Competition Act, 2002, § 2(r), No. 12, Acts of Parliament, 2003 (India). Retrieved from https://www.indiacode.nic.in/handle/123456789/2026

21. Advertising Standards Council of India. (2024). *Guidelines for Environmental/Green Claims in Advertising*. https://www.ascionline.in/the-asci-code-guidelines

Distortion of ethical market competition

Innovation, consumer welfare, and the smooth operation of the economy all depend on ethical market competition. As opposed to using dishonest or manipulative tactics, it guarantees that companies compete on the basis of merit, such as product quality, pricing, and service. Greenwashing, deceptive advertising, cartelization, and fake endorsements are examples of methods that skew this ethical balance by unfairly favouring some companies while deceiving customers. Companies who misrepresent themselves as environmentally conscious or sustainable not only mislead consumers, but they also harm rivals who are truly sustainable, which distorts the competitive landscape.[22] These distortions weaken the incentive for innovation, erode customer trust, and can cause long-term financial and reputational damage to a variety of businesses. Indian authorities, including the Advertising Standards Council of India (ASCI) and the Competition Commission of India (CCI), use guidelines, investigations, and enforcement measures to try to find and lessen these distortions. However, cooperation between self-regulatory frameworks and law enforcement is frequently necessary for these interventions to be effective in maintaining market fairness, honesty, and openness.

INTERFACE WITH SUSTAINABLE DEVELOPMENT GOALS (SDGS)

India's Eco-labelling schemes through Ecomark Scheme and greenwashing regulation intersect with the United Nations Sustainable Development Goals especially[23]: SDG12 and SDG13. SDG12 ensures sustainable consumption and production patterns necessitates trustworthy mechanisms for the identification and promotion of environmentally friendly products. Eco-labelling schemes such as Ecomark serve as mechanisms, empowering consumer with correct choices while nudging industry towards cleaner technologies and resource-conserving processes. But the scheme is not able to deliver on SDG 12 targets because of the lack of widespread, credible certification means that the market remains polarized with unverified green claims[24]. For example, Real Fruit Juice was held by the Advertising Standards Council of India (ASCI) to be misleading consumers with visual and linguistic messages implying high natural fruit content where it had added sugar and preservatives an excellent example of how weak eco-labelling allows for ambiguous "natural" labelling. Companies like Patanjali and Mamaearth have been criticized for advertising products as "100% natural" without disclosing

22. Competition Act, 2002, § 3 & § 4, No. 12, Acts of Parliament, 2003 (India). Retrieved from https://www.indiacode.nic.in/handle/123456789/2026

23. *Ministry of Environment, Forest and Climate Change notifies Ecomark Rules under Lifestyle for Environment initiative*. (n.d.). https://www.pib.gov.in/PressReleasePage.aspx?PRID=2061878

24. Santos, C., Coelho, A., & Cancela, B. L. (2024). The impact of greenwashing on sustainability through green supply chain integration: the moderating role of information sharing. *Environment, Development and Sustainability*. https://doi.org/10.1007/s10668-024-05009-2

what ingredients they use in manufacturing certain products, thus denting the trust of consumers in environmental claims.

Now SDG 13 (Climate Action), eco-labelling directly contributes in decreasing carbon emissions and environmental pollution through driving markets towards low-impact products. Categories like energy-efficient appliances, low-VOC paints, and biodegradable packaging offer environmental gains only when it is applied universally. Like U.S. Energy Star initiative[25], shows that universal adoption of certified appliances has reduced millions of metric tonnes of CO_2 emissions every year. In India, eco-labelling standards and climate policy frameworks is not integrated like the Energy Conservation Act or the National Action Plan on Climate Change which restricted the role of the Ecomark as a climate tool. Still few products such as solar water heaters or LED lighting systems, carrying the Ecomark with significant climate benefits.

Legislative foundation of eco-labels, making regular revision of environmental criteria obligatory, and establishing economic incentives like preferential public procurement or tax refunds on certified goods. ASCI's 2022 directive[26] against HUL's "100% natural" claims for personal care products as false or misleading claims, or the CCPA's notices to companies misusing terms like "eco-friendly" without evidence is essential to maintain consumer trust. By infusing credibility and legal responsibility into green communication, India has the potential to evolve eco-labelling as a poorly known voluntary label into a recognized legal and market driver of sustainability, thus promoting the goals of both SDG 12 and SDG 13.

From a competition law perspective, misleading green claims that distort market competition have attracted judicial attention. In ***Marico Ltd. v. Adani Wilmar Ltd. (2022)***[27], the Delhi High Court noted that false superiority claims in ads can be seen as unfair competition, giving an unfair edge to non-compliant brands. Similarly, in ***HUL v. Reckitt Benckiser (2014)***[28] and ***Procter & Gamble v. Hindustan Unilever Ltd. (2017)***[29], the courts ruled that comparative ads implying environmental or quality superiority without proof are misleading and can be challenged. These rulings indicate that greenwashing not only confuses consumers but also disrupts fair market competition, supporting the need for stricter enforcement through a mix of self-regulation and legal action.

25. *How ENERGY STAR helps reduce emissions*. (n.d.). ENERGY STAR. https://www.energystar.gov/about/how-energy-star-protects-environment/how-energy-star-helps-reduce-emissions

26. ASCI. (2022, November 14). *Advisories - Advertising Standards Council of India*. https://www.ascionline.in/advisories/

27. Marico Limited v. Adani Wilmar Ltd. (2013).

28. Hindustan Unilever Limited v. Reckitt Benckiser India Limited, 2014 ILR DEL 2 1288 (Jan 31, 2014).

29. HINDUSTAN UNILEVER LTD v. PROCTER & GAMBLE HOME PRODUCTS PRIVATE LIMITED, CS(OS)--463/2016 (Feb 17, 2017)

CONCLUSION

Voluntary eco-labelling, antiquated Ecomark standards, and dispersed enforcement make India's greenwashing laws inadequate. Despite the Trademarks Act's restrictions, descriptive marks are still misused. While CCPA takes a reactive approach, ASCI's self-regulatory guidelines do not impose penalties. Greenwashing is rarely addressed by competition law. A more robust framework is required, which includes modernizing and requiring eco-labeling standards, connecting Ecomark to procurement incentives, requiring the disclosure of environmental claims, and enforcing consumer law penalties. In contrast to India, the U.S. Energy Star and the EU Ecolabel are well-known, dynamic, and rewarded. For India to guarantee genuine green claims and stop misleading marketing tactics, a legally supported, incentive-driven system is required.

GREEN PATENTS AND ENVIRONMENTAL SUSTAINABILITY: HARMONIZING INNOVATION AND ECOLOGICAL PROTECTION

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ABSTRACT

In this era of advancements and inventions, the environment is at a crossroads because in most cases the environment is put aside in favor of prosperity. Not only is it a question of invention but also of continuing success to ensure that what is being created in the technological field does not harm ecological well-being. The term "Green is the New Black" explains the shift to the environmentally conscious, that brings about investments in green innovative practices by giving them a legal status. The paper challenges the definition of the use of green patents by considering the viewpoint that green patents are either a real change for the environment or a mere gesture in the intellectual property system. The paper tries to discern whether these patents are a relevant contribution towards sustainable development, or rather, they are concerns of the corporation and policy. The study's method is doctrinal and comparative policy analysis. It reviews the patent protection systems at the legislative level as well as international agreements, namely, the TRIPS Agreement, Paris Convention, and the green initiatives of WIPO, in addition to the jurisprudence-level reviews of fast-track and environmentally intuitive systems of patent laws. Policy reports by the WIPO, UNEP, OECD, and the EPO are used to support the analysis, `together with empirical evidence/facts of both developed and developing countries. The preliminary conclusions indicate that green patenting promotes eco-innovation and shows the increased global awareness in terms of sustainability. The paper puts forth the case that the current intellectual property system requires a redirection in the light of sustainable development laws, such as the polluter-pays principle, and access to technology on equal terms.

Keywords: Green Patents, Environmental Sustainability, Intellectual Property, Environmental Stewardship, TRIPS Agreement.

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INTRODUCTION

The recent past has witnessed a surge in green technology development, popularly known as green innovation. Its importance is now receiving a level of attention it has never received in the past due to the wave of global warming fears, loss of fauna and flora, environmental pollution and environmental depletion that has rocked the world. Repeatedly, the Intergovernmental Panel on Climate Change (IPCC) has highlighted the fact that technological mitigation is an unfavorable option, and it will be essential to meet the goals of the Paris Agreement (IPCC, Sixth Assessment Report, 2022).[3] In such a scenario, the law is not only presumed to have the obligation to preserve inventive production but also to influence innovation to be oriented towards ecological stability and sustainable growth.

Changing consumer demands towards responsible environmental products and services has increasingly drawn the industry's focus to sustainability-based research and development (R&D). This increased attention has led to an explosion of so-called green patents, a group that numbers among the traditional patent family and protects inventions aimed at counteracting environmental degradation, improving energy efficiency, cutting down waste or creating renewable energy sources (UNEP & EPO, Patents and Clean Energy, 2010).[4] Even though green patents can be placed under the umbrella of the wider scope of the architecture of the intellectual property (IP) rights as a whole, they are substantially different, from the traditional patents in terms of purpose, government policy incentives, and overall societal influence.

Unlike patents of general application, green patents are accorded accelerated examination in many jurisdictions, including the Patents (Amendment) Rules, 2016, (Rule 24C) in India,[5] the Green Technology Pilot Program in the United States Patent and Trademark Office,[6] and the Green Channel in the United Kingdom Intellectual Property Office.[7] This scaled-down review enables environmental innovators to register intellectual property rights at a faster rate and to commercialize the green technologies earlier. The patenting of green technologies is even more attractive due to monetary rewards-tax credits, research and development grants, and also licensing programs and schemes that are considered favorable.[8] Likewise, Judge Learned Hand

3. Intergovernmental Panel on Climate Change, Climate Change 2022: Mitigation of Climate Change: Summary for Policymakers 12 (2022).

4. U.N. Env't Programme & Eur. Patent Office, Patents and Clean Energy: Bridging the Gap Between Evidence and Policy 4 (2010).

5. The Patents (Amendment) Rules, 2016, Gazette of India, Rule 24C.

6. U.S. Patent & Trademark Office, Green Technology Pilot Program, 75 Fed. Reg. 69049 (Nov. 10, 2010).

7. UK Intellectual Property Office, The UKIPO Green Channel, GOV.UK (May 2, 2023)

8. [6] Org. for Econ. Co-operation & Dev., Incentives for Green Innovation in the United States and Europe 18 (2013).

has rightly observed that "The spirit of liberty is the spirit which is not too sure that it is right,"[9] a caution equally apt for patent law, which must evolve with humility to accommodate not just economic gain, but environmental necessity.

More particularly, the cross-section of green patents and United Nations Sustainable Development Goals (SDGs) is of high value. Green patents specifically advance directly against at least thirteen of the seventeen SDGs, including Goal 7 (Affordable and Clean Energy), Goal 9 (Industry, Innovation, and Infrastructure), Goal 12 (Responsible Consumption and Production), and Goal 13 (Climate Action).[10] Green patents are both legal mechanisms and economic levers because they enable migration towards a more environmentally friendly world through green patents. However, some researchers (Medeiros, 2018; Popp, 2019)[11] warn that the existence of such patents does not necessarily imply tangible environmental results and call into question accessibility, enforcement, and how the North-South innovation divide persists.

As Roscoe Pound rightly said, "Law must be stable, and yet it cannot stand still."[12] Applied to the context of green patents, this statement is an indication that the necessity of the intellectual property revision to maintain the principles that always existed over innovation and disclosure, with the intention of shifting toward the sustainability imperative that exists, as its new essential substance. Green patents, as with any other technological innovation, are at the center of technological progress and environmental protection; they are the change that is occurring in the legal as well as in the societal sphere and put a spin on which innovation is likely to flourish without necessarily having to hamper environmental protection.

LEGAL FRAMEWORKS GOVERNING GREEN PATENTS

The international legal framework of green patents is the main step of sustainable innovation, like the roots of the oldest tree, which nourishes all its branches even as it anchors them, so the tree weathers the hard gale of climate change. Not only do such legal instruments ensure the technological development itself, the elimination of the abuse of the environment, but they also make it possible to distribute it in an ethical and equal manner, building a global ecosystem, where technological innovation flourishes in harmony with environmental surveillance.

9. Learned Hand, The Spirit of Liberty: Papers and Addresses of Learned Hand 190 (Irving Dillard ed., 3d ed. 1960).

10. U.N. Dep't of Econ. & Soc. Affs., The Sustainable Development Goals Report 15 (2023).

11. Medeiros, M., Green Patents: Innovation and Diffusion of Environmental Technologies, 12 World Pat. Info. 22, 27 (2018); David Popp, Environmental Policy and Innovation: A Decade of Research, 1 Int'l Rev. Envtl. & Res. Econ. 283, 299 (2019).

12. Roscoe Pound, Interpretations of Legal History 1 (1923).

One of the pillars of this framework is the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Article 27.1 mandates that under TRIPS, patents are not discriminated based on technology, so that green patents like those involving green energy development (i.e. solar energy) to carbon capture solutions are treated similarly to other patents. This is a playing field as is the sun rays to every farmer on the tree regardless of position.[13] However, Articles 27.2[14] and 27.3[15] also present a required limitation to such an expansion of scope by providing the member states the discretion to exclude some patents on grounds of the following: to protect public order, morality, or environmental degradation. This ensures that even as a tree of innovations grows, it does not overshadow ethics and ecology, as they are entities that get to grow along with the tree of innovation. Article 30[16] is for Additional support to this balance. Article 31[17], correspondingly, introduces compulsory licensing wherein governments can use a patented invention without the consent of the patent holder in cases where it is needed in the field of national health care and environmental conservation.

At the European level, the European Patent Convention (EPC) is a well-looked-after garden where green innovation grows. Article 52 of the EPC[18] excludes the scope of patentability to be noted as novelty, inventive step, and industrial applicability. These are the criteria that would allow the granting of exclusive rights only to genuine breakthroughs, such as biodegradable materials and advanced wind energy systems. However, under Article 53[19], a gatekeeping factor has been added where inventions are not patentable as their commercial exploitation would be against the public order or morals of the country. To automate the process of enforcing these protections, a new judicial system, the Unified Patent Court (UPC), was created to handle patent disputes in Europe in a single way. Such a harmonized system will mean that green patents are not hampered by numerous jurisdictional issues, and the businessmen and innovators can concentrate on creating more climate-friendly solutions instead of consulting a lawyer.

In India, an amendment to the Patents Act in 1970 is in accordance with TRIPS, but with the integration of measures specific to the sustainability objectives of the country. Section 2(1)(j)[20] confirms that green technologies, including water purification systems and renewable energy solutions, are subject to patenting so long as they qualify on the principles of novelty,

13. Agreement on Trade-Related Aspects of Intellectual Property Rights 1994, art 27.1.

14. Agreement on Trade-Related Aspects of Intellectual Property Rights 1994, art 27.2.

15. Agreement on Trade-Related Aspects of Intellectual Property Rights 1994, art 27.3.

16. Agreement on Trade-Related Aspects of Intellectual Property Rights 1994, art 30.

17. Agreement on Trade-Related Aspects of Intellectual Property Rights 1994, art 31.

18. European Patent Convention 1973, art 52.

19. European Patent Convention 1973, art 53.

20. The Patents Act 1970, § 2(1)(j).

innovation, and industrial practicability. Section 3[21] however reveals some degree of filtering as would a protective canopy and therefore excludes the patents of those inventions that oppose the social ethic of the day, of those inventions that are harmful to the environment and the use of the traditional knowledge. Section 83[22] serves to support this structure too as it provides that patents are not to be about monopoly rewards alone but rather about technological innovation and environmental sustainability.

The National IPR Policy of India 2016, is an addition to the law structure that can become the guiding light in the darkness, which will lead the process of green technology development and commercialization. Objective 3[23] provides a more robust domestic and international patent regime that promises to focus on eco-friendly innovation and discourages harmful inventions. Simultaneously, Objective 5[24] promotes the commercial access to clean energy, patents involving pollution control and waste management technologies to ensure that such valuable technologies are not spent on the seclusion of property rights.

This symbiosis between the intellectual property law and the environmental sustainability elicits focus on the necessity to have a systematic legal framework in order to encourage green innovation. These prescriptions of the law put it so that creative activities become feasible and answerable not only to make a profit but also to preserve the environment in order as well as a sound forest. This brings a green, environmentally friendly future.

THE EVOLVING BUSINESS APPROACH TOWARDS GREEN PATENTS

Strategic advantages in the industry are the intended goal of sustainable inventions by business organizations. Green patents provide organizations with the opportunity to help in the sustainability of the environment in the innovation process and be competitive in the market and to integrate alliances into the new and green world as well. Green sustainable technologies: renewable and efficient energy solutions, electric vehicles, are patented not only to reduce carbon emissions, but also to promote industrial development. The adoption of clean technology is supported by Tesla, General Electric, Siemens and Philips in their various methods, such as open source sharing and proprietary development of intellectual property. Patent-based strategies introduce both financial gain and sustainability measures, and this proves that environmental conservation can be achieved in conjunction with economic growth in modern business processes.

21. The Patents Act 1970, § 3.
22. The Patents Act 1970, § 83.
23. National IPR Policy 2016, obj. 3.
24. National IPR Policy 2016, obj. 5.

Tesla's Open Patent Initiative

In 2014, Tesla Motors also turned into an electric vehicle (EV) company that renounced its patents and made them available to be used by anyone. This was a strategic move that enabled Tesla to spearhead the market to adopt EVs, and this made their technological improvements accessible to other firms on a broad basis. The open patent initiative established a paradigm change from standard patent competition to promote technological collaboration between companies within the automobile market.[25]

Tesla's recorded patents encompass primary EV components that extend to electric power storage solutions, charging stations, and powertrain systems. Through technological disclosure, Tesla enabled other car manufacturers to solve adoption obstacles such as high production expenses and limited charging facilities. Through its patent strategy, Tesla facilitated broader EV market expansion by removing patent-related concerns from the minds of automakers who invested in eco-friendly transportation.[26]

The open patent strategy helped create clean energy innovation both through Tesla and the competitor firms because it allowed rapid adoption of the technology. The non-exclusive policy allowed Tesla to expand into the market quickly and place EVs closer to the reach of more people across the globe. The strategic plan proves that green patents create a pathway for shared climate change solutions and fossil fuel reduction strategies.

GE's Ecomagination Initiative

General Electric (GE) established in 2005 Ecomagination as a company strategy which aimed at manufacturing and promoting green technologies. In this effort, GE was able to patent several clean energy technologies that focused on the use of wind energy, solar energy, and efficient gas turbines. The project combined innovation in renewable energy with commercial success through its design goals.[27]

The green patents at GE have produced essential benefits that enhance both operational efficiency and performance characteristics of renewable energy systems. The company has boosted wind turbine performance by developing new wind technology, which produces more energy at lower operational expenses. The company's high-efficiency gas turbine patents resulted in a major decrease in greenhouse gas emissions during power generation operations when compared to conventional methods.[28]

25. Tesla Motors, 'All Our Patent Are Belong To You' (2014).

26. WIPO, 'Tesla's Open Patent Strategy and EV Market Growth' (2022).

27. General Electric, 'Ecomagination Annual Report' (2023), (accessed 30 March 2025) https://www.ge.com/investor-relations/annual-report.

28. OECD, 'Green Patents and Industrial Sustainability' (2024).

GE has earned substantial profits through its Ecomagination venture while accomplishing its environmental goals. The sustainable technology initiatives drove billions of revenues by producing marketable sustainable technologies. The studied example proves that a well-developed green patent collection both drives financial returns and supports worldwide sustainability achievements. GE's performance demonstrates how environmental stewardship can create strong financial success when the two elements boost each other.

Siemens Wind Power Innovations

The pioneer in wind technology, Siemens, has a huge portfolio of patents that aim at enhancing the performance and reliability of wind turbines. The company has created wind power as a viable, sustainable substitute to fossil fuels across all global markets through its creative technologies.[29]

Siemens has patented technologies in three critical areas, which are rotor blade design with optimization of the turbine control and creative advanced energy storage. Innovations by Siemens have made significant advances in wind turbine efficiency that have generated more energy at lower operational costs. Among other power stability issues of renewable energy sources are the advanced storage systems put in place by Siemens to solve the reliability problems. Green technologies that Siemen patented helped it dominate the market in the renewable energy business and yield beneficial environmental outcomes in global climatic change projects. The continuous wind energy innovations by Siemens have opened the way for large-scale wind farm deployments, which have simultaneously lowered energy production carbon emissions and supported sustainable development.[30]

Philips' LED Lighting Technology

Throughout its existence, Philips has focused on creating innovative lighting technologies with an emphasis on developing energy-saving LED solutions. The company maintains an extensive group of patented technologies that include manufacturing and performance optimization, together with design aspects of LED technology. LED lighting has moved into widespread commercial use for homes and businesses, and industrial environments, because of patent protections.

The LED technologies from Philips yield major benefits through both superior energy conservation and extended product life, in contrast to the usual incandescent and fluorescent

29. Siemens, 'Sustainable Energy Solutions' (2024), (accessed 30 March 2025.) https://www.siemens-energy.com/global/en/home/energy-transition.html

30. IEA, 'Wind Energy and Technological Advancements' (2024), (accessed 30 March 2025) https://www.iea.org/reports/energy-technology-perspectives-2024

bulb illumination. Because of their patents, the company has managed to develop efficient LEDs that use minimal power while delivering top-quality lighting. The long service

life of LED lighting systems decreases operational expenses in addition to decreasing solid waste, which supports environmental sustainability.[31]

With its commitment to LED technology, Philips plays the role of market leader to promote the extensive use of energy-saving lighting systems. The presented example shows that green patents create the opportunity to develop technologies to benefit both the market members and the general population and to reduce the destruction of the environment caused by the energy factor.

The results presented in the case study support the fact that green patents enable many positive outcomes towards environmental sustainability in addition to economic growth. Electric cars, along with renewable energy sources and energy saving systems, have been facilitated by patented technologies that are necessary ingredients towards transformation of global sustainable practice.

Beyond corporates, environmental patents affect innovation across whole sectors of industry. Such patents accomplish two purposes by protecting and incentivizing investments in eco-friendly technology; therefore, they drive competitive innovations and breakthroughs. The open platform model adopted by Tesla to share its patents illustrates how the intellectual property strategies assist industries to move forward as a collectivity.[32]

One of the significant impacts of green patents is on the formulation of the public policy and regulatory frameworks. Government agencies, in collaboration with environmental agencies, employ patent technologies to develop standards of environmental sustainability. Innovation and advancement in renewable energy technology, as well as an increase in the level of energy efficiency, are examples of some of the factors that play a crucial role in directing policymakers throughout their policymaking process to reduce emissions and promote more green alternatives.

THE ROLE OF GREEN PATENTS IN SUSTAINABILITY

Increasing environmental issues force global society to welcome innovations to pursue sustainable development. The movement is reliant on green patents, which enable inventions that can be utilized by giving intellectual property rights to contribute to a sustainable environment. The patents protect numerous sustainable technologies that extend to solutions for renewable energy as well as pollution management methods, together with energy-saving systems, and

31. UNEP, 'The Role of Green Patents in Energy Efficiency' (2023), (accessed 30 March 2025.) https://www.unep.org/topics/energy/energy-efficiency/about-energy-efficiency

32. European Patent Office, 'Patent Protection and Green Technology Development' (2024).

operations for eco-friendly agriculture. Green patents act as key drivers of sustainability by safeguarding these innovative concepts, which guide humanity toward better environmental outcomes.

Green patents serve to encourage environmental research through their ability to grant their creators exclusive rights for environmental technologies. The legal protection system enables both the necessary encouragement for new solutions development and efficient technology distribution, which fights environmental degradation. Patents for renewable energy systems, including modern solar panels and wind turbines, provided crucial protection that helped decrease fossil fuel dependency and reduce climate-changing gas discharges. Damages from pollution are reduced through modern waste management techniques, which receive protection through green patents alongside improved industrial clean operations.[33]

The past decade has witnessed a remarkable surge in green patent applications worldwide. Between 2006 and 2020, the number of green technology patents grew by 120%, reflecting a global commitment to climate action.[34] In the United Kingdom, the introduction of the Green Channel program led to a threefold increase in green patent submissions, underscoring the role of policy frameworks in encouraging sustainable innovation.

The development and patenting of green technologies have taken place primarily within various specific sectors. Bioenergy underwent major progress thanks to solar power and wind power, and hydroelectric power technological developments, which improved operation efficiency and reduced expenses. The battery storage technologies stand as necessary elements because they maintain supply-and-demand balance for renewable energy systems before grid power integration.[35]. Carbon capture and utilization technologies are now becoming more popular because they convert carbon dioxide emissions into useful products rather than letting them remain in the atmosphere.[36]

Despite their promise, green patents face hurdles such as high patenting costs and restricted accessibility, limiting widespread adoption. To overcome these barriers, collaborative patenting initiatives and open-access platforms have emerged. Patent pools and open-source licensing

33. WIPO, ‘Green Patents: A Path to Sustainability’ (2021) https://www.wipo.int accessed 30 March 2025.

34. OECD, ‘Green Growth Indicators’ (2022), (accessed 30 March 2025.) https://www.oecd.org/en/publications/serials/oecd-green-growth-studies_g1g14154.html

35. UNEP, ‘Innovation for a Green Economy’ (2023), (accessed 30 March 2025.) https://www.unep.org/regions/asia-and-pacific/regional-initiatives/supporting-resource-efficiency/green-economy

36. IEA, ‘Carbon Capture Utilization and Storage’ (2024), (accessed 30 March 2025.) https://www.iea.org/energy-system/carbon-capture-utilisation-and-storage

models enable knowledge sharing among organizations, accelerating green technology development.[37]

The IP systems, with particular focus on patents, play an essential role in supporting green technology innovation through protective measures. Patents offer exclusive rights to inventors, which in turn creates financial opportunities for companies to develop their research and development activities. The necessary disclosure requirement found within patent applications allows technology information to become publicly accessible, enabling others to build upon existing knowledge deposits. The optimal relationship between protection mechanisms and knowledge sharing is essential for sustaining continuous technological progress within sustainable realms.

WIPO GREEN operates as a World Intellectual Property Organization (WIPO) platform to connect environmentally oriented technology providers with interested seekers. Since 2013, WIPO GREEN has functioned as a platform that connects sustainable technology providers with seekers so they can develop green innovation partnerships through their marketplace.[38]

Several authentic situations demonstrate the influence of green patents on sustainable development. Sustainable technological development happens through biomimicry in design, which draws natural inspiration for innovation. Japanese engineers designed the Shinkansen bullet train based on a kingfisher bird to create silent operations and better energy efficiency. Flex Power Solutions is among the companies that develop electrode boilers, which convert renewable electricity to heat for industrial processes. The technology offers dual advantages by decreasing carbon emissions and creating financial savings for clients, thus proving both economic benefits as well as environmental advantages in green innovations. The eyewear recycling startup Zac, together with similar sustainable entities, transforms the industry through their efforts to provide affordable, reused eyeglasses. The companies gain protective measures for their recycling processes through patents, which both support circular economy practices and minimize waste accumulation.[39]

The green patents development indicates that encounters that produce sustainable innovation are strong. Environmental awareness is globally on the rise, and hence the market demand for eco-friendly technologies is on an upward trend. The commercialization of innovations will

37. Salgado, E.G. & Franchi, R.A.d.S. 2023, "GREEN TECHNOLOGIES: THE ROLE OF GREEN PATENTS FOR INNOVATION, PRESERVATION AND SUSTAINABLE DEVELOPMENT", Revista de Gestão Social e Ambiental, vol. 17, no. 8, pp. 1-17.

38. WIPO, 'Patent Disclosure and Green Technology' (2023), (accessed 30 March 2025.) https://www3.wipo.int/wipogreen/en/news/2024/news_0003.html

39. Nature, 'Green Innovation and Industrial Growth' (2024), (accessed 30 March 2025.) https://www.nature.com/articles/s41598-025-13874-8

depend heavily on intellectual property systems because they protect innovative ideas and their various forms. International cooperation needs to focus on developing policies that harmonize patent laws because this will promote the worldwide distribution of green technologies.[40]

Green patents act as vital tools to advance sustainable development because they secure and market solutions that solve environmental problems. Inventors and companies receive financial motivation to create solutions for sustainable development through the proper utilization of intellectual property rights. The modern world will continue its sustainability transition through sustained green patent innovation as a basic driver to fulfill economic and environmental long-term objectives.

EFFECT OF IPR IN DEVELOPING VS. DEVELOPED COUNTRIES, DIFFUSION OF GREEN TECHNOLOGIES

Climate change, green technologies, such as renewable energy systems (wind power, solar power), carbon capture and storage systems, and energy-efficient systems, are all involved in trying to meet sustainable development objectives. IPR, especially on a patent basis, trademarks and copyrights, establishes a system regulating the development, safeguarding, and distribution of the given technologies. The impact of IPR on the diffusion of green technologies has various aspects since IPR is both a facilitator and a possible obstacle depending on the economic, legal and technological environments in a nation. In developed countries or developing countries, IPR tends to affect the rate and extent of adoption, the reward to innovation, and the availability of environmentally friendly technologies, and the dynamics that follow are different according to the infrastructure, resources, and policy priorities of different countries.[41]

IPR Staunch regimes in green technologies are part and parcel of innovation in developed nations. Such strong patent regimes offer exclusive rights to the inventor or the company over the invention covering a limited duration of time, generally 20 years, and this leads to significant investments in research and development (R&D).[42] This exclusiveness provides innovators with the ability to earn back their investments, and this is specifically vital because of the high investments and risks involved in developing the latest technologies like advanced photovoltaic cells, offshore wind turbines or carbon sequestration systems. To illustrate, the protection laws on patents in countries like the United States, Germany and Japan are very effective and they have led to incremental advances in the renewable energy technologies. Innovations in the design of wind turbines have been patented by other firms like Siemens and General Electric

40. UNFCCC, 'Green Technology and Climate Policy' (2024).

41. Su Jung Jee et al., Making intellectual property rights work for climate technology transfer and innovation in developing countries (Aug. 22 2024).

42. Mdpi study: IPR protection fosters R-&-D, attracts foreign investment, increases green innovation and international technology transfer.

using the IPR to ensure that their inventions were able to penetrate the international market and even greater R&D would be driven by the inventions. This would create a positive feedback or virtuous circle of innovation in that, the connotation of having exclusivity of the market would attract individual investments, and the ensuing generation of new technologies which are not only efficient but more importantly can be scaled to the green sector.

The exclusivity, which is provided by IPR, can also become an obstacle to diffusion of green technologies in developed countries. The patents result in the development of monopoly power over technologies, which are normally associated with high licensing costs or other restrictive conditions not always available to smaller companies and start-ups or state organizations. A case in point is a small energy company which wishes to use patented technology on solar panels will need to pay prohibitive costs, decelerate the speed of execution of renewable energy solutions. This is especially applicable in areas where green technologies must be deployed to work within a complex system like a smart grid or energy storage system, where various patents owned by distinct parties might establish a patent thicket, making the implementation more complicated and expensive. Although such barriers are posed, in most cases, the developed countries can reduce such barriers, financially and institutionally. The prevalent policy instruments used by governments of these countries to ease the diffusion of technology include subsidies, tax incentives, and public-private partnerships. As an example, Germany has a policy to use feedin tariffs and subsidies to promote renewable energy.[43] This has achieved a faster process of adopting other patented technologies on solar and wind energy, making them more available to utilities and consumers. Also, through international licensing agreements and technology transfer programs, companies in the developed nations can diffuse their innovations to other countries and retain their intellectual rights and hence encourage diffusion without losing their motivation to innovate.

The nature of IPR influence on green technology diffusion varies in different situations in the developing countries, where the imposition is determined by the economic limitations, weaker institutions, as well as different standards of technological capacity. Powerful IPR protection will lure foreign direct investment (FDI) and lead to technology transfers between developed countries because international companies are assured that their intellectual property will not be stolen. As an example, India, Brazil and China have transitioned to his advantage as the FDI in renewable energy, where foreign companies set up manufacturing units locally or collaborate in a joint venture through which they bring advanced green technologies to these markets.

Diffusion of patented technological applications in the developing world is usually hindered by the high costs of patented technologies. Green technologies may not be affordable

43. Christoph Böhringer et al., The Impact of the German Feed-in Tariff Scheme on Innovation: Evidence Based on Patent Filings in Renewable Energy Technologies, 67 Energy Econ. 545, 545–46 (2017)

on a per capita basis to small and medium enterprises, smaller governments or villages, which may be major targets of sustainable development. As an example, the deployment of energy-efficient technologies at advanced levels or even carbon capture technologies may not be easily affordable for several developing countries simply because of the costs involved in availing the patented solutions. This is enhanced by the fact that most of the developing nations do not have the local R&D capacity to generate their green technology and therefore depend on imports or licensing by the developed states. Moreover, the poor implementation of IPR in certain third-world countries may serve to stop foreign innovators from freely giving out their technologies due to the fear of being pirated or reverse-engineered or even used illegally. Communities facing this situation may experience impediments to full transfer of technology because there may be a lack of sound legal structures to support this process.

On the other hand, the diffusion of green technologies can be sped up by more flexible IPR, which may fuel green technologies through affordability and access in the developing world. Compulsory licensing has been part of the proposals as a mechanism that can enable access to green technologies since it entails governments authorizing the use of patented technologies without the consent of the patent holder under certain circumstances. As an example, compulsory licensing in pharmaceuticals used in India has been a tool to ensure low-cost access to medicines of life or death, and such mechanisms have been proposed to be applied to climate-essential technologies. Such measures can allow greater usage, especially in areas like renewable energy or waste, where green technology must be implemented quickly to mitigate environmental issues by lowering the cost of accessing patented green technologies. Also, patent waivers or the public domain strategies of some green technologies may continue encouraging diffusion, thereby enabling developing nations to use the solutions of the green revolution without incurring the costs of licensing.

Nevertheless, there are dangers of easing IPR protections. A decline in the strength of patent protection will damage innovation by reducing financial incentives in R&D. Global innovation to create new green solutions would reduce as multinational companies will not invest in or share freely their technology in countries with weak IPR. This preconditions the following fine line: poor countries need the access to the inexpensive technologies to resolve the immediate environmental issues, but the overindulgence of IPR will inhibit long-term innovations to keep pace with the rise in the number of green technologies developed. This tension resulted in international efforts to fight it through the United Nations Framework Convention on Climate Change (UNFCCC) Technology Mechanism, technology transfers to developing countries with IPR in view. The Green technology diffusion programs under schemes like the clean development Mechanism (CDM) have also been of help whereby it funds projects in the developing countries where green technologies are usually patented inventions that have been licensed by the developed countries.

The outcome of the IPR on the diffusion of green technology also relies on the nature of technology and its level of development. Older designs (or already mature technologies, e.g. older solar panel technologies) are sometimes easier to license or access even in developing nations as costs drop and patent protection declines as patents expire. However, rather than the latter, emerging technologies like the next-generation battery storage, or even energy systems based on hydrogen, are often subject to more restrictive IPR regimes and can only diffuse to more affluent markets or institutionally better endowed ones. Public policy is vital in terms of filling these gaps in both developed and developing countries.[44] Diffusion can be supported by government initiatives, e.g., investing in the R&D on open-source sources of green technology, establishing patent pools to streamline the process of granting licenses to third parties, or giving incentives to companies to share proprietary technologies in markets with less supply.

The diffusion of green technologies is influenced by IPR, which balances the provisional requirements of innovative ideas and those of spreading the technologies broadly. In highincome economies, robust IPR systems are good R&D and innovation engines that, in some cases, may introduce impediments to affordability and access. In less developed worlds, IPR is capable of drawing in technology transfers and investments, but tends to restrict diffusion related to issues of price and restrictions that surround them.[45] An increase in the use of flexible solutions, e.g. compulsory licensing systems or international agreements can provide an improvement of access to developing countries, and strong IPR protection would be another incentive to innovate the developed countries where it is needed most.[46] Rationally in the face of such complexities, policymakers could scale up the global transition to a healthier, low-carbon reality by functioning with IPR as an incentive to increase dependable access to green technologies in the communities and industries that need them the most.

CONCLUSION

Intellectual Property Rights (IPR) have a very central role towards defining the path that green innovation takes in the world as they act both as a driving force/facilitator and a controlling force/regulator of the transition towards sustainable development. IPR gives the required financial and strategic boost to undertake risky research work in the areas of renewable energy, carbon capture and energy efficiency systems by giving the inventors the exclusive right over

44. Youngmin Jee et al., Making Intellectual Property Rights Work for Climate Technology Transfer and Innovation in Developing Countries, arXiv:2408.12338 (2024).

45. Edoardo Barbieri et al., The Evolving Boundary of Green Technology, arXiv:2503.21310 (2025).

46. Compulsory Licensing for Green Technologies: A Realistic Threat? Plasseraud IP (Mar. 2025).

the technology breakthroughs. But these rights have their own puzzle pieces; the exclusivity, which is a driver of innovation, can have an unwanted effect, preventing the transmission of the necessary green technology, particularly in the context of the developing economies that might face money/institutional constraints.

This two-sidedness of IPR makes the importance of conjunctive policy frameworks emerge. The strategies of patent-policies in the developed economies provide the circumstances under which the technology-upgrading process becomes a continuing one, yet trans-national technology transfer operations, patent pooling, and compulsory licensing are also required to ensure equitable accessibility in resource-constrained settings. Aligning IPR to public policy, international cooperation, and market incentives, can thus achieve a virtuous circle- in which innovation, affordability, and environmental sustainability will reinforce each other, and not conflict.

Finally, green patent management is not a question of technicalities of legal processes but is right at the center of climate work to the world. The IPR ecosystem that balances protection, and accessibility can serve to accelerate the rapid proliferation of innovative technologies and provide strength to the developing economies of the world in a way that can further stimulate a low-carbon transition that is both low-carbon and inclusive and sustainable. Green patents can in this sense be regarded as far more than mere property; it can be considered a means towards collective improvement, as human ingenuity and climate preservation start to intersect, and the emergence of a time when innovation and sustainability can collaborate.

THE THREAT OF DEEPFAKE IMPERSONATION IN INDIA'S FINANCE SECTOR

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ABSTRACT

India's transition from a traditional way of physically accessing goods and delivering products, services, and information to a digital-first economy has restructured its financial ecosystem through various innovations and implementations such as cloud service, AI, digital payment method (UPI) platforms for banking and money transfers. However, this transformation has also given rise to novel vulnerabilities, most notably the proliferation of deepfake-enabled financial frauds. Deepfakes, powered by advanced generative AI, enable hyper-realistic impersonations that are now being weaponized to authorize fraudulent transactions, manipulate virtual communications, and deceive institutions at scale.

This research examines the intersection of deepfake technology and financial fraud in India, focusing not merely on technological risks but on legal, procedural, and institutional vulnerabilities. It traces the real-world incidents of deepfake scams that occurred through AI-enabled impersonation frauds, highlights financial institutions' loopholes, and scrutinizes the adequacy of current safeguards. Additionally, the paper explores the extent to which victims of deepfake-enabled frauds have access to compensation or remedial relief under current laws, and whether institutions like CERT-In and the RBI Ombudsman offer adequate resolution pathways for AI-induced fraud. The paper suggests futuristic reforms to tackle the misuse of deepfake technology and other AI- generated media that influence people and eventually end in financial scams. The reforms focus on the enforcement of legislative amendments to explicitly address synthetic identity and deepfake frauds, the implementation or innovation of various tools to identify the authenticity of the media, and stricter evidentiary guidelines to ensure the integrity of AI-generated deepfake videos. By bridging the gap between technological innovations and legal gaps, this research argues to safeguard the transition of the digital-first economy's future and uphold the principles of digital justice.

Keywords: Deepfakes, Financial Frauds, Redressal, Synthetic Identity, Vulnerabilities.

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INTRODUCTION

Deepfakes: AI-generated audio, video, or image forgeries; cloning voices, faces, or entire identities using sophisticated machine learning algorithms. What started as a novelty for amusement has evolved into a powerful instrument for financial fraud, obfuscating the boundaries of authentic trust. Deepfakes pose a danger to the fundamental trust mechanisms of India's quickly digitizing economy, where mobile transactions and remote onboarding are commonplace. Deepfakes are a serious concern to financial institutions, according to the Financial Services Information Sharing and Analysis centre (FS-ISAC), which has prompted an immediate examination of proxy assaults and impersonation scenarios.[3] Scholars from Carnegie Mellon University have also highlighted how financial institutions place more faith in appearance than provenance, a notion that deepfakes undermine.[4]

During election campaigns in 2020, deepfake issues initially surfaced in India when lip-synced or doctored videos of politicians and celebrities went viral on social media, raising early ethical and legal concerns.[5] Policymakers formalized their reactions by 2023. MeitY issued advisories under the IT Rules, 2021, requiring platforms to remove synthetic material within certain deadlines.[6] The use of deepfakes in financial fraud is still not thoroughly addressed despite these steps.

The enormous risks of synthetic media fraud were illustrated by the 2024 Hong Kong deepfake scam, in which an employee transferred about HK$200 million during a false video conference in which they pretended to be top executives.[7] In April 2024, the NSE and BSE in India warned the public against deepfake CEO videos that claimed to be offering investment advice.[8] A more intimate incident happened in June 2025 when Bengaluru police verified that

3. FS-ISAC, Deepfakes in the Financial Sector: Understanding the Threats & Managing the Risks (2024), (last visited Aug. 10, 2025).

4. Jon Bateman, Deepfakes and Synthetic Media in the Financial System: Assessing Threat Scenarios (Carnegie Endowment for Int'l Peace, 2020).

5. How Deepfakes Could Impact Indian Elections, India Today (Nov. 17, 2023), https://www.indiatoday.in/elections/story/how-deepfakes-could-impact-indian-elections-2464241-2023-11-17

6. Press Information Bureau, Advisory to Social Media Intermediaries to Identify Misinformation and Deepfakes (Nov. 7, 2023), https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1975445, (last visited Aug. 10, 2025).

7. Amy Hawkins, Company Worker in Hong Kong Pays Out £20m in Deepfake Video Conference Scam, The Guardian (Feb. 5, 2024), https://www.theguardian.com/world/2024/feb/05/hong-kong-company-deepfake-video-conference-call-scam, (last visited Aug. 10, 2025).

8. Munsif Vengattil, Beware of Deepfake CEO Recommending Stocks, Says India's NSE, Reuters (Apr. 10, 2024), https://www.reuters.com/technology/cybersecurity/beware-deepfake-ceo-recommending-stocks-says-indias-national-stock-exchange-2024-04-10/ , (last visited Aug. 10, 2025).

an elderly individual had lost ₹35 lakh after being tricked by a deepfake video that claimed to be Narayana Murthy and promoted a phony AI trading business.[9]

Deepfake attacks thrive in India due to the country's widespread digital adoption of UPI, mobile KYC, and remote verifications. The government released advisories in 2024–2025 in accordance with the IT Rules (2021), and CERT-In then published technical advisories.[10] Although they have helped many recoveries, quick reporting platforms such as the National Cyber Crime Portal and the 1930 hotline are still intended for conventional fraud, not synthetic manipulations.[11] Although deepfake trickery is now outside of its purview, the RBI Ombudsman offers a channel for resolving financial issues.[12]

Although research and policy discussions on deepfakes have exploded in India, the majority of the literature primarily focuses on election manipulation and political disinformation. This perspective is important, but it ignores the institutional and financial dangers that synthetic media provide.

Research on institutional responsibility is conspicuously lacking. Technical mitigations are described in regulatory advisories, but scholarly discussion of how banks, fintech's, and intermediaries fulfil their fiduciary and compliance duties when customers fall victim to scam through synthetic impersonation is scarce. The main legal gap is in the distribution of culpability across people, organizations, and platforms, not merely within legislation.

This research aims to close these gaps by changing the discussion from political disinformation to financial deceit, technological solutions to legal responsibility, and limited regulatory changes to systemic resilience.

SYNTHETIC MEDIA AND FINANCIAL FRAUD IN INDIA: CONTEXT, RISKS, AND RESPONSE

Financial crime in the digital age has taken on a new level of complexity with the introduction of deepfakes, synthetic audiovisual content that effectively replicate the appearance or voice of real people. Early deepfakes evolved from research into autoencoders and Generative

9. AI Scam Uses Narayana Murthy Deepfake; 79-Year-Old Duped of ₹35 Lakh, Times of India (June 27, 2025), https://timesofindia.indiatimes.com/city/bengaluru/cybercrooks-dupe-79-year-old-bengaluru-woman-of-rs-35-lakh-in-ai-trading-scam/articleshow/122097772.cms, (last visited Aug. 10, 2025).

10. CERT-In Advisory on Deepfake Threats (Nov. 27, 2024), cited in Khaitan & Co., Growing Concern Over Deepfakes; CERT-In Issues Advisory (Dec. 2024)

11. 1930 Mumbai Cyber Helpline Handles Up to 2,700 Calls a Day, Times of India (Aug. 15, 2025), https://timesofindia.indiatimes.com/city/mumbai/1930-mumbai-cyber-police-helpline-receives-up-to-2700-calls-a-day/articleshow/123309536.cms, (last visited Aug. 11, 2025).

12. Reserve Bank of India, The Reserve Bank—Integrated Ombudsman Scheme, 2021 (FAQs) (2021).

Adversarial Networks (GANs), which enabled face swapping and realistic speech synthesis[13]. The subsequent developments in diffusion models and multimodal transformers have further reduced the skill required to create extremely convincing media, making its exploitation accessible to non-specialists.[14]

India's susceptibility to this risk has increased in tandem with two digital revolutions: broad adoption of instant payment systems (such as UPI) and the growth of social media platforms. The convergence allows fraud to move from exposure to cash extraction in minutes. Despite the small amount involved, first events, such as forged WhatsApp calls imitating established individuals, proved to be quite disruptive. Soon after, more sophisticated frauds emerged, utilizing celebrity deepfakes to support fake trading platforms and even extortion schemes including "digital arrest" impersonations.[15] These patterns demonstrate how deepfakes may increase both reach and credibility in fraudulent operations.

Deepfakes pose a financial danger because they undermine perceptual trust, as seeing and hearing are no longer reliable indicator of authenticity, and they seamlessly integrate into existing fraud infrastructure, such as UX imitation, phishing, and mule account networks. The speed with which payments are transferred across UPI and IMPS rails exacerbates the problem; by the time irregularities are detected, money may be irretrievable.[16]

Deepfake detection is gaining momentum; however, it is being hampered by rapid changes in synthetic media production. Detection strategies are based on finding anomalies in visual or audio artifacts, inconsistencies in physiological patterns such as eye movement, or disparities in audio fingerprinting as found in foundational datasets for model training and assessment.[17]

However, deepfake detectors have minimal generalizability: models trained on earlier GAN-based media frequently fail when exposed to outputs from newer diffusion or transformer-based generators.[18] Speech deepfake detectors also struggle with high-quality neural vocoders.[19] As a result, researchers stress layered defenses, which include detectors combined with cryptographic

13. R. Tolosana, R. Vera, J. Fierrez, A. Morales, Deepfakes and Beyond: A Survey of Face Manipulation and Fake Detection, (2020).

14. P. Dhariwal & A. Nichol, Diffusion Models Beat GANs on Image Synthesis, NeurIPS, Cornell University (2021).

15. Ministry of Electronics & Information Technology (MeitY), Advisory on Deepfakes (Dec. 2023).

16. Reserve Bank of India (RBI), Trends in Digital Financial Fraud – FY 2024–25, RBI Report (2025).

17. A. Rössler, D. Cozzolino, L. Verdolvia, C. Riess, J. Thies, M. Niebner, FaceForensics++: Learning to Detect Manipulated Facial Images, (ICCV 2019).

18. B. Dolhansky, J. Bitton, B. Pflaum, J. Lu, R. Howes, M. Wang, C. Canton Ferrer, The Deepfake Detection Challenge Dataset (DFDC), (2020).

19. J. Frank, L. Schonherr, WaveFake: A Dataset to facilitate Audio Deepfake Detection, NeurIPS (2021).

content credentials (such as media metadata or watermarking), multimodal forensic analysis, and contextual cues (such as unusual fund transfer behavior or suspect advertisement sources).[20]

Deepfake-enabled fraud violates several areas of legal rights, including identity theft, privacy infringement, fraud, and extortion. Liability can extend beyond criminals to platforms that host or monetize deepfake material, payment systems that handle transfers, and advertisers who may recklessly aid scam propagation. The Indian legal system, which includes the Information Technology Act and criminal provisions against fraud, has restricted specific liability for synthetic media use. Scholars argue for specific legal standards that solve evidentiary issues and explain intermediary responsibilities.[21]

Globally, responses have varied. The European Union's AI Act establishes transparency and provenance standards for synthetic media.[22] Some U.S. states have passed anti-deepfake legislation aimed at election or extremely sensitive impersonations, while China has introduced administrative regulations requiring clear labelling of AI-generated media. These methods are based on two main principles: transparency via provenance and platform accountability.

The Ministry of Electronics and Information Technology (MeitY) has issued recommendations directing platforms to prevent AI-assisted impersonation. Concurrently, CERT-In issued technical instructions on detecting synthetic media. In response to increased digital fraud, the Reserve Bank of India has strengthened oversight and implemented the Citizen Financial Cyber-Fraud Reporting and Management System, which enables faster transaction freezes.[23] However, analysts contend that India currently lacks a specialized legal framework focused on deepfake-enabled financial crimes, and enforcement capability has not completely scaled to the threat's sophistication.

CASE STUDY: EVOLUTION OF DEEPFAKE-ENABLED FRAUDS IN INDIA

The first symptoms of deepfake-enabled fraud in India occurred in July 2023, when a retired government official in Kerala was duped via WhatsApp video chat by what looked to be his old colleague. The caller, created using deepfake technology, claimed to have a medical emergency and needed money right away. The victim was persuaded by the unusual realism of the audiovisual replication and transferred money before recognizing the fraud. The method

20. Coalition for Content Provenance and Authenticity (C2PA), Technical Specification v2.0 (2023).

21. Meera Srikant, Bharatiya Laws Against Deepfake Cybercrime Opportunities and Challenges, Vivekananda International Foundation, (2025).

22. European Parliament, Artificial Intelligence Act (2024).

23. CERT-In, Best Practices for Detection and Response to Deepfake Attacks (2024), https://www.cert-in.org.in/s2cMainServlet?pageid=PUBVLNOTES02&VLCODE=CIAD-2024-0060 , (last visited Aug. 10, 2025).

used here was direct and personal: attackers took advantage of existing social relationships and the gravity of a humanitarian appeal, demonstrating that even a modestly crafted deepfake might undermine typical suspicion checks. This case is notable because it was the first reported instance of deepfake fraud in India, indicating a potentially perilous path in which daily trust may be digitally hijacked.[24]

By 2024, fraudsters had progressed from one-on-one fabrication to widespread manipulation via synthetic celebrity endorsements. In Bengaluru, victims lost up to ₹80 lakh due to deepfake videos of N. R. Narayana Murthy and Mukesh Ambani supporting trading platforms.[25] The fraud followed an organized cycle: social media clips or adverts directed victims to skillfully cloned websites that exhibited bogus dashboards of investment "profits." Victims were urged to invest substantially after first gaining confidence via small profits, only to suffer catastrophic financial loss. The modus operandi was to create a halo of legitimacy by leveraging recognized public figures; by adopting the ethos of business heroes, they converted aspirational trust into a means of extracting funds. This point in the chronology is significant because it demonstrates how deepfakes evolved from isolated trickery to industrialized financial rackets capable of draining life savings.

A 62-year-old woman was deceived out of ₹67.1 lakh by a fake dashboard that promised small rewards, leading her to spend substantially.[26] A retired man lost approximately ₹19 lakh in a similar scam, and a Mumbai doctor was scammed of ₹7.1 lakh after watching a deepfake Instagram reel showcasing Mukesh Ambani.[27]

A more frightening shift happened with the advent of "digital arrest" frauds in late 2024 and 2025, which mostly targeted the elderly and educated professionals. In Mysuru, two older women lost approximately ₹2 crore after getting calls from someone impersonating law enforcement agents, using doctored papers and video feeds.[28] In Lucknow, a top scholar was forced into

24. Kerala man loses ₹40,000 to AI-based deepfake scam, Hindustan Times (July 2023), https://www.hindustantimes.com/india-news/deepfake-scammers-trick-indian-man-into-transferring-money-police-investigating-multi-million-rupee-scam-101689622291654.html, (last visited Aug. 10, 2025).

25. Bengaluru residents duped of ₹95 lakh by deepfake videos of Narayana Murthy and Mukesh Ambani, Times of India (Nov. 5, 2024), https://timesofindia.indiatimes.com/technology/tech-news/bengaluru-residents-duped-of-rs-95-lakh-by-deepfake-videos-of-narayana-murthy-and-mukesh-ambani/articleshow/114955868.cms. (last visited Aug. 11, 2025).

26. Shubham Raj, Two Bengaluru residents lose ₹83 lakh to deepfake videos of top industrialists, Money control (Nov. 2024), https://www.moneycontrol.com/news/india/two-bengaluru-residents-lose-rs-83-lakh-to-deepfake-videos-of-top-industrialists-12858666.html, (last visited Aug. 10, 2025).

27. Lured by deepfake Mukesh Ambani Insta reel, doctor loses ₹7 lakh in trading scam, Economic Times (Feb. 2025), https://economictimes.indiatimes.com/news/india/lured-by-deepfake-mukesh-ambani-insta-reel-doctor-loses-rs-7-lakh-in-trading-scam/articleshow/111165204.cms, (last visited Aug. 10, 2025).

28. Two Mys women, both sr citizens, lose nearly ₹2 cr in online fraud, Times of India (Aug. 6, 2025), https://timesofindia.indiatimes.com/city/mysuru/two-mys-women-both-sr-citizens-lose-nearly-rs-2-cr-in-

transferring ₹95 lakh with falsified deepfake warrants and staged video chats that resembled official operations.[29] Victims included elderly folks in Andhra Pradesh who lost crores, as well as a Delhi hospital staff member who was scammed of ₹7 lakh through forged notifications and bogus CBI/ED impersonation.[30] The modus operandi was manipulating power hierarchies by invoking the police, the National Investigation Agency, or banking regulators while utilizing deepfakes to make the coercion appear credible. Unlike celebrity investment schemes, which preyed on optimism, digital arrests preyed on fear, demonstrating how synthetic media can affect opposing extremes of the psychological spectrum with disastrous financial implications.

While deepfake-enabled frauds have made headlines, they are part of a larger ecosystem of sophisticated digital schemes. A doctor in Kolkata lost ₹25 crore over 13 years due to fake RBI paperwork and impersonation of bank personnel.[31] Similarly, an associate professor in Tamil Nadu lost ₹76.5 lakh in a staged investment program marketed through online ads.[32] Although these incidents did not necessarily utilize deepfakes, they demonstrate how synthetic media fits into a continuum of impersonation-based scams, making deception more convincing and diminishing victims' ability to detect fraud.

Tracing this trend reveals a clear developmental arc: intimate, personal impersonations (2023), aspirational celebrity-driven trading scams (2024), and coercive authority-based extortion (2025). This path demonstrates fraud networks' adaptive intelligence, as they adjust techniques from hope to fear, one-to-one to one-to-many, and persuasion to coercion. This case study focuses on deepfakes as operational weapons in systemic financial crime, rather than experimental novelty. They take advantage of trust's cognitive shortcuts, capitalize on India's fast digitization, and overwhelm inadequate legal structures. Addressing them is not a choice; it is a pressing matter that necessitates both doctrinal revision and cross-disciplinary attentiveness.

online-fraud/articleshow/123263846.cms, (last visited Aug. 11, 2025).

29. UP STF busts gang behind digital arrest of academic who lost ₹95L; 2 held from Thane, Times of India (July 28, 2025), https://timesofindia.indiatimes.com/city/lucknow/up-stf-busts-gang-behind-digital-arrest-ofacademic-who-lost-rs95l-2-held-from-thane/articleshow/122940136.cms, (last visited Aug. 11, 2025).

30. Elderly make up 10% of cybercrime victims in AP: Police, Times of India (Aug. 6, 2025), https://timesofindia.indiatimes.com/city/vijayawada/elderly-make-up-10-of-cybercrime-victims-in-ap-police/articleshow/123287246.cms, (last visited Aug. 10, 2025).

31. Kolkata doctor loses ₹25 crore to fraud, blackmail over 13 years, Times of India (Aug. 5, 2025), https://timesofindia.indiatimes.com/city/kolkata/doc-loses-25-cr-to-fraud-blackmail-over-13-years/articleshow/123242507.cms. (last visited Aug. 10, 2025).

32. India's "scamdemic": Associate professor loses ₹76.5 lakh in fake trading scam, New Indian Express (Nov. 23, 2024), https://www.newindianexpress.com/magazine/2024/Nov/23/indias-scamdemic, (last visited Aug. 10, 2025).

Theme / Category →	**Personal Impersonation (Kerala WhatsApp, 2023)**	**Celebrity Investment Frauds (Bengaluru TOI/Money control, 2024)**	**Digital Arrest Extortions (Mysuru, Lucknow, Delhi, 2024–25)**	**Professional Victim Scams (Doctor ₹25cr, Associate Prof ₹76.5L, 2023–25)**	**Political/ Tech Leader Campaigns (Go Invest, 2025)**
Nature of scam	One-to-one contact impersonation	Fake trading schemes using celebrity deepfakes	Authority impersonation & extortion ("digital arrest")	Long-running high-value scams targeting professionals	Investment campaign impersonating PM/CEOs
Primary tech used	Voice cloning, WhatsApp video face-swap	Deepfake videos of Ambani, Murthy, other industrialists	Deepfake video calls, forged warrants, fake IDs	Deepfake ads, forged documents, cloned platforms	Deepfake clips + fabricated press-style sites
Method of deception	Fake urgent plea ("medical emergency") → small transfer	Ads → fake portals → staged profits → repeated deposits	Fake officials show warrants → isolate victim → demand transfers	Targeted grooming, blackmail, fake dashboards	Circulating fake "announcements" → onboarding via WhatsApp/portals
Target victims	Individuals, often elderly	Retail investors, aspirational middle-class	Educated professionals, elderly, academics	Professors, doctors, CAs (asset-holders)	Mass public, politically/brand-attentive
Perpetrator strategy	Exploit trust and urgency	One-to-many amplification, aspirational bait	Psychological coercion, duress	Long-term persuasion, repeated deposits	Campaign-scale reach, domain churn
Main objective	Quick monetary gain	Extract high deposits at scale	Extract large sums immediately as "bail/security"	Drain high-value targets over time	Maximise conversions across victims
Level of sophistication	Moderate (basic deepfake tools)	High (ads, fake UX, laundering)	High/very high (synthetic media + forged docs)	Very high (multi-year fraud + blackmail)	Very high (multi-platform coordination)
Impact on victims	Emotional distress; small loss	Financial ruin, loss of savings; trust erosion	Severe trauma, reputational fear, large losses	Stress, reputational damage; long-term ruin	Financial loss + erosion of trust in leaders/brands

Scale of losses	~₹40,000 (single case)	₹95L + ₹83L (Bengaluru cluster); individual ₹7–67L	₹1.92 cr (Mysuru), ₹95L (Lucknow), ~₹7L (Delhi)	₹25 cr (doctor over 13 yrs), ₹76.5L (professor), ₹7L (doctor)	Not disclosed (multiple victims; large aggregated)
Counter-measures	Awareness campaigns, call-backs	Platform ad vetting, domain takedowns, RBI advisories	Cyber taskforces (UP-STF), quick banking holds	Professional advisories, stricter bank alerts	Ad liability, provenance standards, literacy drives

Table: Prepared by the Authors

LEGAL REMEDIES AND CURRENT APPLICABLE LAWS

The current legislation in India doesn't have a standalone statute for addressing deepfake frauds or focusing on the impersonation fraudulent activities, there are sections from various statutes which address the impersonation fraud at present:

a. **Information Technology Act, 2000**

- Section 66C - Identity theft: This section states that any person fraudulently uses the identity information of someone such as their electronic signature, PIN or password they shall be punished with imprisonment for a term, which may extend to three years or with a fine to an extend of one lakh rupees.[33]

- Section 66D - Cheating by Personation by Using Computer Resources: This section states that any person cheats by using any communication device or any computer resources to represent as someone to commit a fraudulent activity they shall be punished with imprisonment for a term, which may extend to three years or with a fine to an extend of one lakh rupees.[34]

b. **Digital personal Data Protection Act, 2023**

- Section 8(5): Safeguards by Data Fiduciary: this section states that it is the duty of the data fiduciary to make security safeguards as the data fiduciary will be held liable for failure to protect the security information when required measures are not taken by them, and which lead to deepfake scams.[35]

- Section 15 - Duties of Data Principal: This section lays down some duties for the data principals as to ensure that they not provide any information by impersonating

33. Information Technology Act, No. 21 of 2000, § 66C, Act of parliament , 2000 (India).

34. Information Technology Act, No. 21 of 2000, § 66D, Act of Parliament, 2000 (India).

35. Digital Personal Data Protection Act, No. 22 of 2023, § 8, Act of Parliament, 2023 (India).

other, as it leads to deepfake scams in finance sectors and when such information is given through impersonation even before any scams or fraudulent activities occurs, it is considered as illegal.[36]

c. Bharatiya Nyaya Sanhita, 2023

- Section 318 - Cheating: This section has a core idea of cheating as deceiving a person with an intention to acquire any valuable information by pretending to be someone authorised to collect.[37]
- Section 319 - Cheating by Personation: This section states that someone pretending as a person who was in a position to give consent for the use of someone's identity information with help of AI, impersonating as the person and representing as the same person.[38]
- Section 336 – Forgery: This section is directly relevant to the deepfake frauds focusing on finance sector as it defines that as anyone who makes false document or an electronic record in order to involve in any fraudulent activity. In the financial sector using AI software to pretend to be someone with false electronic information shall be punishable by imprisonment, which may extend to two years or with fine or both.[39]

d. Aadhaar Act, 2016

- Section 36 - Penalty for Impersonation: This section clearly states that any person whoever pretends to be an authorised person to collect any identity information by words or any other conduct will be punishable with imprisonment for a term, extending to three years or with a fine. It applies to person who doesn't fall under the authorised persons under the Act.[40]

EXISTING GRIEVANCE REDRESSAL MECHANISM:

The evolution of technological advancements is rapid compared to the last decade which poses more challenges to the regulatory bodies to resolve the disputes with the applicable laws that are relevant to resolve the deepfake fraud disputes. With the technological advancements and the misuse of such advancements leads to rise in deepfake driven frauds creates a legislative gap to address the disputes. While existing laws provide a substantive basis to categorize these

36. Digital Personal Data Protection Act, No. 22 of 2023, § 15, Act of Parliament, 2023 (India).
37. Bharatiya Nyaya Sanhita, No. 45 of 2023, § 318, Act of Parliament, 2023 (India).
38. Bharatiya Nyaya Sanhita, No. 45 of 2023, § 319, Act of Parliament, 2023 (India).
39. Bharatiya Nyaya Sanhita, No. 45 of 2023, § 336, Act of Parliament, 2023 (India).
40. Aadhaar Act, No. 18 of 2016, § 36, Act of Parliament, 2016 (India).

frauds as an offense, there are no procedural laws which states that a separate body is formed to address the disputes related to these offences and there are no clear definitions to such terms related to deepfake technology and a dispute related to it.

At present, victims of deepfake frauds need to approach different bodies based on the type of harm that they have suffered. For example, CERT-In focuses on overall cybersecurity issues and technical part of it, consumer forum covers disputes of any misled or manipulated on any investments or transactions. Then the cyber police or the cyber cell of each state involves in the criminal part of the complaint, filing FIR, and initiation of investigation.[41] There are certain portals as well which are specifically focused to cover the cybercrimes. As these bodies focus on different areas its confusing for the victims to approach any regulatory body for justice. To understand the effectiveness of these different forums we need to get deeper knowledge of these different regulatory bodies:

a. **CERT-In**: This is a national organization which handles the cybersecurity incidents. To keep individuals and organizations from becoming victims of deepfake scams, Computer Emergency Response Team primarily supports by releasing alerts, advisories, and guidelines. Though it doesn't compensate the victims directly, they are crucial in spotting cyberthreats, and advising businesses and internet service providers to strengthen the security. From the victim's perspective, that even if CERT-In doesn't resolve their specific case, it works in the background to reduce the likelihood of occurrence of such scams.[42]

b. **I4C:** The Indian Cyber Crime Coordination Centre (I4C) was established by the Ministry of Home Affairs, it's the main body for reporting and monitoring cybercrime, including instances of deepfake technology.[43] It's National Cyber Crime Reporting Portal allows victims to submit their complaint applications, then they were forwarded to state police for further investigation. To further mitigate and control the contemporary risks like AI-generated deepfakes, I4C also conducts awareness programs. Although the effectiveness of the local police was not paced up to the complaint, it gives victim a clear understanding of where to start first regarding the offence.

41. Karan Choudhary & Mahak Rajpal, Criminalizing Deepfake Technology in India: A Legal Analysis of Privacy and Regulatory Gaps, 5 INT'L J. ADV. LEGAL RES. (2023), https://ijalr.in/volume-5-issue-3/criminalizing-deepfake-technology-in-india-a-legal-analysis-of-privacy-and-regulatory-gaps-karan-choudhary-mahak-rajpal/ ,(last visited Aug. 11, 2025).

42. Press Information Bureau, Ministry of Electronics & Info. Tech., Govt. of India, Union Minister Ashwini Vaishnaw Launches Several Digital Initiatives to Strengthen India's Cybersecurity Ecosystem (Aug 8, 2024), https://www.pib.gov.in/PressReleasePage.aspx?PRID=2154268,(last visited Aug. 11, 2025).

43. Indian Cyber Crime Coordination Centre (I4C), Ministry of Home Affairs, Govt. of India, National Cybercrime Reporting Portal, https://cybercrime.gov.in, (last visited Aug. 10, 2025).

c. **Consumer Protection Redressal:** The Consumer protection forum is also a body for victims of deepfake frauds, which include of manipulating advertisements, online money transaction fraud, or AI- generated content to deceive consumers.[44] In cases when the fraud amounts to any unfair practice, or misrepresentation, these forums offer a legal remedy to compensation claims. It can be difficult for victims of deepfake schemes to verify the legitimacy of any content which might be AI- generated, even though consumer courts are intended to be less formal than traditional courts. However, in instances where the harm is not solely criminal but rather financial or consumer-related, these forums offer an alternative legal remedy.

d. **Cyber Police:** Cyber police stations and cyber cell of each state were the places where the victims of deepfake scams can directly report and file a complaint or FIR, and they have the right to investigate upon any complaint or an FIR under offences like cheating, forgery, and impersonation caused by deepfakes.[45] With the current grievance redressal mechanisms in India, this is considered a better way to initiate a legal action for a victim against any deepfake scam. however, considering the limited technical resources, sometimes they fail to trace the source of such deepfake frauds.

CHALLENGES

Deepfake frauds in the finance sector have evolved more than the usual cyber scams, which creates new challenges in resolving such frauds. Compared to the ordinary frauds that happen in the money transaction, these deepfake scams have occurred with AI-generated conversations and misuse of identity information such as realistic audio and video conversations, which makes it hard to detect the legitimacy of that content and the current legal and regulatory structure also struggle to address these scams. The following are some of the major challenges that have arisen due to such scams:

- There are some people still not able to find a content is whether AI-generated video, audio or message which allows scammers to mislead or cheat the individuals easily using any fake celebrity endorsements or pretending to be bank officials to collect personal information.
- The victims of the scams or an offense take time to realise that they've been cheated by someone through a manipulated endorsements or content, by the time they realize

44. The Consumer Protection Act, 2019, No. 35 of 2019, § 21, Act of parliament, 2019 (India).

45. Press Information Bureau, Ministry of Electronics & Info. Tech., Govt. of India, Union Minister Ashwini Vaishnaw Launches Several Digital Initiatives to Strengthen India's Cybersecurity Ecosystem (Aug 8, 2024), https://www.pib.gov.in/PressReleasePage.aspx?PRID=2154268, (last visited Aug. 10, 2025).

the money was gone. In some cases, the individuals figure the scam prior and report it to the authorities.

- In the financial scams, when the victim reports it to authorities such as RBI Ombudsman, CERT-In, or to the cyber police, they take time to respond and process the case, by which time the fraudster has already transferred to multiple accounts.[46]
- Many deepfake scammers have servers that are set up outside the jurisdiction of India, and it becomes complicated for the authorities in India to investigate those cases considering the jurisdictional limits and laws.
- Banks, UPI apps, and even social media websites deny liability when such scams occur even though fake ads are circulated on their websites or applications. They blame the victim by claiming that the victim was careless.
- Victims are not sure whether to file a complaint to cyber police or to reach RBI Ombudsman, or to approach CERT-In. There is no regulatory body to approach on such events makes the victim frustrated and each body has its jurisdictional limits.[47]
- In India, at present there is no legislature that explicitly focusing on deepfake impersonation in financial frauds. the scope of the AI driven frauds is beyond the scope of current applicable laws.

RECOMMENDATIONS

The doctrinal examination and case studies in this article uncovered that deepfakes have emerged as a key facilitator of financial fraud in India, highlighting structural lacunae in regulation and enforcement. Although there is some protection available through existing cyber and financial law, the acceleration of synthetic media growth necessitates a specific legal and institutional response. Some practical recommendations that integrate criminal law reform, financial regulation, intermediary liability, and public sensitization to stem the threat of deepfake-enabled frauds are set forth below.

- Deepfake creation and dissemination for malicious purposes must be clearly criminalized under Indian law. Existing provisions of law under cyber as well as banking fraud laws are not adequate to address the specific wrong of synthetic impersonation. A separate

46. Press Information Bureau, Ministry of Home Affairs, Govt. of India, Telecom-Related Cyber Frauds and Safety Measures (Aug 7, 2025), https://www.pib.gov.in/PressReleseDetailm.aspx?PRID=2153524 , (last visited Aug. 10, 2025).

47. Press Information Bureau, Ministry of Electronics & Info. Tech., Govt. of India, Union Minister Ashwini Vaishnaw Launches Several Digital Initiatives to Strengthen India's Cybersecurity Ecosystem (Aug 8, 2024), https://www.pib.gov.in/PressReleasePage.aspx?PRID=2154268, (last visited Aug. 10, 2025).

offense, with enhanced punishment when associated with financial fraud, would fill this doctrinal gap and act as a deterrent.

- Compulsory provenance and watermarking rules for AI-created content would increase authenticity checks and make doctored material more challenging to spread undetected. Through the inclusion of tamper-evident identifiers at the point of creation, courts, regulators, and platforms would be better equipped to authenticate content and react swiftly to fraud.
- Intermediary liability has to be expanded from a notice-and-takedown regime to active detection of deepfake-enabled financial fraud. Ad-hosting sites and user-generated media-sharing sites have to be put under a statutory mandate to detect, block, and remove fraudulent deepfake content, especially when linked to financial incentives.
- Banks and fintech intermediaries must utilize anomaly detection tools that are capable of identifying suspicious transactions triggered by deepfake scams. Alongside technical measures, liability-sharing for unrecovered fraud losses has to be enforced to make financial institutions liable where there is a failure in due diligence. Providing special cyber benches with the mandate of issuing instant freezing orders against mule accounts would minimize the speed leverage currently enjoyed by fraudsters. This would benefit fraud victims and allow for rapid recovery of the embezzled funds before they can be paid out.
- To include a statutory tort of unauthorized use of likeness would provide victims of deepfake impersonation with a civil remedy, in addition to what criminal law is currently in place. Enabling damage claims where personal identity is used without authorization would make the regime more of a deterrent and offer strong redress.
- Compulsory advertiser KYC measures need to be adopted, particularly for financial products and celebrity endorsement adverts. Eliminating anonymity in online adverts would prevent scammers from utilizing ad platforms to initiate deepfake campaigns at scale.
- India needs an institutionalized system to handle deepfake financial scams, as current enforcement is decentralized among agencies. A constant inter-agency task force with financial regulators, technology ministries, and law enforcers would facilitate harmonized regulation and quicker intervention.
- Evidence rules need to be adjusted to clearly acknowledge the admissibility of electronic authentication techniques like watermarking, metadata, and forensic detection reports. This would eliminate uncertainty for courts, improve prosecutions, and give a clearer guideline for the treatment of deepfake evidence.

- Public education is perhaps the strongest defense against fraud. Regulators, banks, and fintech platforms must be mandated by law to undertake targeted awareness campaigns to inform vulnerable groups about the dangers of deepfake-facilitated scams, building community resilience.

CONCLUSION

Deepfake technology has moved beyond entertainment and is now being misused in India's banking sector to trick people and steal money. The examples show how quickly criminals are adapting, from small WhatsApp scams to large fraud schemes involving fake celebrity endorsements and even fabricated "digital arrests." These scams are dangerous because they exploit human psychology. People tend to believe what they see or hear, and digital transfers allow money to disappear in minutes.

India currently lacks a specific law targeting deepfakes. Instead, the legal system relies on existing laws addressing fraud, impersonation, and cheating. This creates a significant gap. Victims often struggle to decide whether to report the crime to banks, CERT-In, cyber police, or consumer forums. Cases face delays because these organizations work independently, allowing scammers to go free. Platforms and banks frequently blame victims, which adds to their frustration. Many scams also originate outside India, complicating investigation and enforcement.

This situation highlights the urgent need for stronger and clearer procedures. India should introduce a law that specifically addresses deepfake fraud. People who create or share such content should face strict penalties. Regulations requiring digital content to include watermarks or authenticity markers can help consumers and authorities verify what is real. When scams occur, banks, payment apps, and online platforms should share some responsibility instead of placing the entire burden on the victims. Courts should also accept modern forms of evidence, like technical reports or metadata, to avoid delaying justice.

Awareness is crucial for the success of new laws and procedures. Regular campaigns about deepfakes are essential, similar to past efforts that taught people to identify phishing scams or fake messages. Social media companies, banks, and regulators should work together to provide clear advice, especially for everyday users and senior citizens, to prevent them from falling victim to these traps.

In summary, deepfake frauds are about trust, not just technology. Improved public awareness, better cooperation among institutions, and stricter laws are all necessary to maintain that trust. If India acts quickly and decisively, it can protect its digital economy while ensuring that safety and justice remain a priority alongside innovation.

PURPOSE BOUND MONEY, BLOCKCHAIN AND TRANSPARENT GOVERNANCE

Geethika Katakam[1]

ABSTRACT

The world is rapidly moving towards technology; it is being used and adapted in almost all spheres of professional and personal life. This research article examines a new concept of Purpose Bound Money (PBM) in the area of Digital Finance, which uses blockchain technology to work. It offers an advanced method to guarantee that money is only utilized for what it was intended. With regard to the digital finance it is proud to say for every Indian that India is one of the leading countries in the digital finance with the start of Unified Payments Interface (UPI) and with future plans of introducing Digital Rupee, this leads us to the question of why India being one of the leading countries in the aspect of digital finance did not adopt the concept of PBM yet? With that question, the research article starts with an introduction to what purpose-bound money is and continues with how it functions and also discusses the potential benefits of PBM.

With an emphasis on maintaining a balance between innovation, security, and accessibility for all parties involved in the financial ecosystem, the research findings are intended to contribute to discussions on the adoption of PBM in India's future financial architecture and for a better understanding of its function.

Keywords: Purpose Bound Money (PBM), Digital Finance, UPI, India.

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INTRODUCTION

India has great digital tools like the UPI, which was introduced in 2016, and India has always been ready to start and try new things, but there is a question as to why India didn't get in the concept of PBM which has a good amount of benefits especially for a developing country like India and thus the question in itself is the literature gap.

With developments like the UPI and the continuous creation of the Digital Rupee, India is leading the way in digital finance. In the Indian context, the idea of PBM, which entails limiting the use of funds to particular purposes, has not yet been thoroughly investigated. By contrasting it with traditional intermediaries, this study investigates the viability and possible effects of PBM in India. The study will evaluate how PBM could help India's financial landscape.

The main objectives of this paper are questions facing this paper are (1) to have a basic idea of what PBM is (2) To understand how PBM works differently from the traditional banking intermediaries in India. (3) To know what the potential benefits and limitations are of implementing PBM. Based on the aforementioned objectives, the work intends to know (1) How does PBM function differently from traditional banking intermediaries in India? (2) What are the potential benefits and limitations of implementing PBM in the Indian Banking System? This research also examines PBM, emphasizing its functions and distinctions from India's conventional banking institutions. It discusses PBM's drawbacks, such as its reliance on technology and the difficulties of complying with regulations, while highlighting its benefits, such as improved efficiency, transparency, and accountability. However, the article's assertions regarding PBM's efficacy are mostly supported by theoretical analysis rather than case studies from the actual world. Furthermore, the results could not apply outside of India or in areas with poor internet infrastructure, and some of the insights might soon become obsolete due to the speedy advancement of technology. The methodology used in this research paper is the Doctrinal Research Method. This research was based on secondary data analysis. The data was collected from various websites, news articles, research papers, and research articles.

HOW DOES PBM FUNCTION DIFFERENTLY FROM TRADITIONAL BANKING INTERMEDIARIES IN INDIA?

What are the Traditional Intermediaries in the Indian Banking System?

a. **Commercial Banks:** The most well-known intermediaries are commercial banks, which provide a variety of services like loan provision, deposit acceptance, and payment facilitation. They fall into three categories: foreign banks (with branches in India), private sector banks (owned by private entities), and public sector banks (owned by the government in the majority).[2]

2. INSIGHTS ON INDIA, https://www.insightsonindia.com/indian-economy-3/indian-financial-system-ii-money-and-capital-market-in-india/types-of-capital-market/financial-intermediaries/ (last visited Oct. 23,

b. **Cooperative Banks:** These banks specialize in small-scale and agricultural lending and primarily serve particular communities or groups. Cooperative societies own and run them, and they operate in both urban and rural regions.[3]

c. **RRBs, or Regional Rural Banks:** RRBs were created to support financial inclusion in rural areas and offer banking services, mostly to the agricultural industry. Non-Banking Financial Companies (NBFCs): Although they do not hold bank licenses, NBFCs offer comparable financial services, such as asset finance and loans. They are important because they provide financing for industries that regular banks may not adequately serve.[4]

d. **Insurance companies:** By offering insurance products, they offer financial stability and have grown to be crucial intermediaries in the mobilization of savings. So, there are different intermediaries for different purposes and the question of why PBM will come and the answer to it is one of the purposes of Purpose Bound is to reduce the role of the intermediaries.[5]

e. How Purpose Bounds Money function differently from the Traditional Intermediaries in the Indian Banking System?

f. **Transaction Automation:** PBM employs smart contracts and blockchain technology to automate transactions. This implies that when certain requirements are satisfied, such as spending money only at approved establishments, transactions may be carried out automatically. Conventional banking, on the other hand, necessitates human verification by bank employees and requires manual permission for every transaction, which can be time-consuming and include several processes.

g. **Spending Rules Embedded:** PBM enables the issuer to incorporate particular spending guidelines directly into the digital currency. For instance, money intended for education can only be spent on books or tuition. This functionality is not available with traditional banking; once funds are in your account, you are free to spend them anyway you see fit.

h. **Decreased Intermediary Reliance:** PBM reduces the need for conventional intermediaries like banks. There is no need for a bank to validate every transaction because they are processed and validated on the blockchain. These intermediaries are

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2024).

3. Investor to Night, https://investortonight.com/banking-structure-in-india/ (last visited Oct. 23, 2024).

4. StudyIQ, https://www.studyiq.com/articles/banking-system-in-india/ (last visited Oct. 23, 2024).

5. *Id*.

crucial to the facilitation and supervision of transactions in traditional banking, which can result in additional expenses and delays.

i. **Increased Transparency:** PBM transactions are documented on a public blockchain, which offers an unchangeable, transparent record. Because people can see how money is distributed and used, this transparency increases user trust. Transactions in traditional banking are usually confidential, and customers have less insight into how their money is handled.

j. **Cost-Effectiveness:** PBM can cut transaction costs by automating operations and eliminating the need for several intermediaries. For services like transaction processing and account maintenance, traditional banks frequently charge a variety of fees. PBM aims to simplify these procedures, which could result in lower transaction costs.

Another aspect in this regard is UPI.

In UPI also money is stored in wallets and bank accounts, but once the money is deposited in the bank there is no restriction on its usage, and the transaction is overlooked by the bank which is an intermediary, whereas in PBM, the role of the intermediaries is minimized and money will be transferred only after certain pre-conditions are met.

Minimisation of Intermediaries role and PBM's effectiveness.

a. **Decentralised Verification:** Smart contracts on a blockchain enforce the transaction rules when you utilise PBM. Because a smart contract is self-executing code that operates on a decentralised blockchain network, the blockchain automatically checks and authorises the transaction in accordance with the pre-established rules, eliminating the need for a bank or other third party to verify that the spending rules are being followed. This reduces the need for a bank or other middleman to manually approve every transaction.[6]

b. **Function of Digital Wallet:** Although PBM funds are kept in a digital wallet, the wallet does not serve as a typical middleman. It only connects to the blockchain to perform transactions and stores the PBM tokens. Access to the funds is made possible by the wallet, but the blockchain's smart contracts manage and keep an eye on how the money is used. As a result, the wallet serves more as a tool for storage than as a middleman to monitor transactions.[7]

6. Anndy Lian, https://anndy.com/op-ed/why-smart-money-is-pushing-the-big-idea-of-purpose-bound-money-opinion/ (last visited Oct. 25, 2024).

7. Onyx by J.P. Morgan, https://www.jpmorgan.com/onyx/programmable-payments-purpose-bound-money (last visited Oct. 30, 2024).

c. **Security and Transparency:** By logging each transaction, blockchain provides an extra degree of security and transparency. This implies that since the blockchain enforces all requirements, the digital wallet itself does not need to monitor the reason for spending or approve transactions. This arrangement lessens reliance on conventional middlemen while guaranteeing the money is used as intended.[8]

How is CBDC Different from PBM?

A digital currency issued directly by the central bank of a nation, such as the Indian rupee, is called a CBDC. It functions as the digital equivalent of currency and is primarily meant to increase payment system efficiency and offer a digital alternative for routine transactions that is supported by the government. Like actual currency, CBDCs have no usage limits and can be used as you like.[9]

PBM is a type of digital currency that can be programmed and is "purpose-bound." This indicates that the funds are subject to some restrictions, like being limited to particular kinds of purchases or being available for a set amount of time. In a PBM framework, for instance, a government would give its citizens money that they could only use for certain services or groceries. To ensure that the funds are used as planned, PBM uses smart contracts and blockchain technology to enforce these terms. Since this method permits restricted expenditure, which general-purpose CBDCs do not, it is perfect for targeted government subsidies or vouchers.[10]

In conclusion, PBM offers an extra layer of programmable control, enabling particular conditions to be linked to digital monies that are enforced by smart contracts, whereas CBDC is more akin to a digital form of cash.

WHAT ARE THE POTENTIAL BENEFITS AND LIMITATIONS OF IMPLEMENTING PBM IN INDIA WHEN COMPARED TO THE TRADITIONAL PRACTICES IN THE INDIAN BANKING SYSTEM?

Comparing the adoption of PBM in India to the country's conventional banking methods reveals a number of possible advantages and drawbacks.

Benefits

a. **More Transparent:** PBM uses blockchain technology making it transparent and accountable. So if PBM is used for any fund transfer, it cannot be diverted further, if

8. OrionW LLC, https://www.orionw.com/news-insights/mas-publishes-a-white-paper-on-purpose-bound-money (last visited Oct. 25, 2024).

9. Forkast, https://forkast.news/purpose-bound-money-pbm-potential/ (last visited Oct. 25, 2024).

10. Ledger Insights - blockchain for enterprise, https://www.ledgerinsights.com/singapore-digital-currency-purpose-bound-money-cbdc/ (last visited Oct. 25, 2024).

the money is kept for that specific purpose the fund goes that specific purpose only so when the government has to release any funds to specific section of people there are chances of money being used by the middle men, using this technology the funds goes to specific purpose, so that the tracing the fund allocation is also easy.

b. **Enhanced Efficiency and Lower Costs:** By eliminating the need for middlemen and using smart contracts to automate transactions, PBM can reduce processing times and operational expenses, which are often higher in traditional banking due to the multiple layers of intermediaries. This could increase transaction efficiency and save costs for the government and end customers.[11]

c. **Online Commerce:** In online shopping there are times where the consumer has to pay the money through online payment but there is always a chance of non-delivery of the product, so if this PBM is used the merchants and consumers both will be at a better edge without any fears as there will be transfer of funds only after the services are fulfilled.[12]

d. **Cross-border Payments:** Policy and regulatory requirements, including macro prudential policy measures, capital flow management, Anti-Money Laundering (AML), and fighting the financing of terrorism (CFT) regulations, apply to cross-border transfers. Observance of these guidelines and requirements results in significant expenses and delays in processing. Compliance checks can be automated by including current policy requirements as conditions into PBMs, significantly lowering costs and boosting cross-border payment efficiency.[13]

Limitations

a. **Technological barriers:** India is still trying and testing technology, this PBM is completely based on technology and needs deep research and understanding, for the PBM to be implemented in India there will technological barriers, we need to build a strong digital infrastructure to accommodate PBM.

b. **Financial Flexibility Issues:** People or organisations may find it more difficult to reallocate funds for unforeseen expenses due to PBM's strict, goal-oriented framework. For instance, funds that are strictly limited to specific purposes (like healthcare) could

11. Finreg.sg, https://finreg.sg/answers/project-orchid-446/what-is-purpose-bound-money-817 (last visited Oct. 25, 2024).

12. Monetary Authority of Singapore, https://www.mas.gov.sg/-/media/mas-media-library/development/fintech/pbm/pbm-technical-whitepaper.pdf, (last visited Aug. 27, 2025).

13. *Id.*

not be accessible in other emergency situations, which could affect those in lower-income areas who have various financial needs.

c. **Regulatory and Legal Compliance:** PBM systems must manage complex regulatory contexts, including Know Your Customer (KYC) and AML rules, particularly for cross-border transactions. In India's highly regulated banking sector, maintaining compliance with current financial regulations is necessary to prevent legal challenges, which can be difficult and time-consuming. There needs to be some changes brought to the existing laws and teach people about the same.

Legalities

To lower legal concerns, any PBM framework must adhere to the Reserve Bank of India's (RBI) proactive standards for digital payment systems. Data protection rules like the Information Technology Act of 2000 and potential future legislation on personal data privacy will be crucial to ensuring that user data is handled safely and ethically inside PBM platforms. Furthermore, compliance with bilateral agreements and international banking standards would be necessary because PBM might involve cross-border transactions. The intricate legal landscape surrounding PBM requires rigorous analysis and collaboration among financial institutions, regulatory bodies, and technology suppliers to establish a robust framework that promotes innovation while protecting the rights and interests of all parties.

CONCLUSION AND SUGGESTIONS

Research on the subject in Indian banks indicates that PBM has the potential to improve financial efficiency and transparency. By using smart contracts and blockchain technology to enable automated transactions, PBM reduces dependency on traditional middlemen making it accountable and transparent. This innovation has the potential to significantly increase accountability in the allocation of money, especially in government welfare and subsidy programs. However, there are also disadvantages to PBM adoption, such as a lack of budget, technological infrastructure, rules and regulations and etc. When regulatory compliance is required, integrating PBM with existing banking practices becomes much more challenging.

The successful adoption of PBM in India, particularly in rural areas, depends on enhancing digital infrastructure and ensuring consistent internet connectivity. Promoting digital literacy through instructional programs will help users understand PBM's features, uses, and will be able to easily adapt to the new trend. A flexible implementation structure that allows for exceptions in fund usage should be developed in order to reduce any potential financial rigidity. The implementation of certain laws in collaboration with financial institutions would also facilitate the adoption of PBM. The practical effects of PBM can be evaluated through pilot programs, and implementation challenges can be addressed with the help of partnerships between financial institutions, governmental agencies, and ICT firms.

A STUDY ON THE REGULATORY LAWS IN DATA BREACHES DUE TO MASSIVE ARTIFICIAL INTELLEGENCE/MACHINE LEARNING/DIGITAL LEARNING: IMPLICATIONS WITH RESPECT TO USER SATISFACTION IN BENGALURU CITY

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ABSTRACT

The laws framed and implemented in India are governing the data breaches due to emerging technologies, but there is equivocal cause for concern as legislative provisions seem to lack the scope to try cases under the passed acts. For instance, Reasonable Security Practices and Procedures and Sensitive Personal Data or Information, 2011 (hereinafter referred to as the SPDI Rules), include personal information about any individual relating to passwords, financial information, physical, etc. A cursory glance at Sec.43A of the IT Act, 2000, applies to SDPI in a computer resource where the data are stored in electronic form. Another startling revelation is that the terms 'information', 'personal information', and 'SPDI' have been defined differently in sub-clauses. This sounds fallacy as the end users on data breach have no understanding towards either Sec. 43A or the SPDI, as they are interested only in getting relief and not the overriding scopes between enacted laws and provisions. Any direction of due diligence obligations on the intermediaries and platforms by the Ministry of Electronics and Information Technology, MeitY, should have legislative backing for stricter enforcement on the data breaches and or the deepfakes. The proposed 'Complex Adaptive System' framework to regulate AI and thereby avoid the domino effect leading to system failure, etc., has to be implemented tooth and nail for arresting data breaches and to safeguard against information misuse. It is in this context that the idea of the paper is to study the gamut of user dissatisfactions with respect to Bengaluru City to ascertain proper law enforcement of regulatory practices and the need to revamp, if any.

Keywords: AI, Sensitive Personal Data or Information, Fallacy in regulatory mechanism, User satisfaction, Suggestive measures

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INTRODUCTION

Loss of personal data, financial fraud, identity theft, etc., has a telling effect on trust of end-users, as it is all the more important that governments enact stringent laws to counter breaches of data and to regulate emerging technologies. By the same token, the Government of India supports monetization of AI/ML technologies in India, but the delay in regulatory measures in specific compliances for high-risk use cases, wherein human intervention, oversight, and ethical use of AI/ML tools is endangering customer digital data protection. Loss of sensitive information belonging to any individual, any entity that has the propensity to affect individuals and organizations down the wire by nefarious and or unauthorized parties is said to be a data breach. Examples are theft of personal data like bank account, Aadhar card details, etc. Thanks to ransomware, data that gets stolen and encrypted proves to be a full cybersecurity incident for stricter enforcement of laws. Whether the data got encrypted and thus ransom has to be paid, or data theft is altogether a corporate occurrence, but the form in which the data was lost calls for regulatory provisions with due notifications to the aggrieved parties. However, it is seen that the 'Digital Personal Data Protection Act, 2023,' is not enforced fully, keeping the substantive powers unnotified, expecting the sunrise period to transition, allowing the Information Technology Act, 2000 (IT Act), to have a say. The phrase "data fiduciary will be responsible" has no legs to stand on its own, as it defeats any concrete measures. Right to grievance redressal of the DPDP Act is found to act as an intermediary and not with full-scale powers. After the DPDP Act comes into full operation, the current laws of the IT Act and SPDI rules will be repealed. Though Bhartiya Nyan Sanhita, 2023 has laid provisions imposing criminal liability for acts, it acts specifically with respect to data breaches and is considered general legislation. Going by this, it is felt that regular laws need revamping at all levels.

Of late, the privacy of individuals has seen compromise-making of data breaches for the year 2024 as the worst data breach year. Customer Personal Identifiable Information (PII), Intellectual Property (IP) have peaked at almost 50% of the breach. Emerging technologies like AI, Zero-Trust Architecture, blockchain, and quantum-resistant encryption are addressing the database and its security concerns. Revolutions in database management, unlike the traditional pre-defined rules, the absence of pattern recognition, and anomalies have gained momentum with AI-enabled real-time threat detection and proactive defensive mechanisms. As the traditional methods fail to handle a large amount of data and hence find it difficult to neutralize the downtime within organizations due to data breaches, focus has shifted to predictive analytics, where machine learning (ML) models are applied to minimize vulnerabilities. Most of the emerging architectures involve multi-factor authorization, micro-segmentation of the network, isolation of IoT networks from critical business databases, blockchain with its immutable nature, etc., thus paving the way for fewer data breaches even from insider threats and unauthorized access.

EMERGING TECHNOLOGY

For the regulation of emerging technologies, Indian Cyber Law has met with challenges in the integration of AI and blockchain. A nuanced approach is necessary, which can outweigh data breach instances due to emerging technologies with protection of individual rights and societal interests, chances of publicly accessible personal data that can go beyond the data localization, minimizing anonymized data in AI applications, etc. The emerging technology of AI has an inbuilt algorithmic bias due to flawed algorithms, human oversight, etc. may lead to nepotism, favoritism and hence regulatory provisions should be robust. It is pointed out here that developers and or users accountable for biased outcomes make a clear escape unless proper regulatory guidelines are in place. Hence, AI liability and its subjection to regulatory provisions have to be well thought of and not leave any room for uncertainty, like in the case of the legal status of cryptocurrencies in India. The other point in this connection is felt in clearly defining jurisdictional laws, which currently lack international consensus, at least in blockchain technology. In the absence of a foolproof regulatory mechanism, potential investors are not coming forward due to a lack of regulatory clarity. As with the emergence of technologies, explicit laws governing such technologies are not running co-terminus, often leading to a state of uncertainty – one can find in the case of smart contracts, lacking legal status under the Indian Contract Act, 1872[3]. Fairness and accountability are thrown to the wind when AI is allowed to make decisions that contribute to the outcome of discrimination and bias, should the AI algorithm target a certain group. Licensing requirements based on the specific needs and risks is one suggestion offered for developing our own legal framework.

SENSITIVE PERSONAL DATA RULES, 2011

The Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011 (hereinafter called "SPDI Rules") provide for the regulation of the usage of sensitive personal data or information. As the DPDP Act, 2023[4] remains unnotified, the above rules under the legislative framework for data protection in India remain. It is seen that the SPDI framework is carried to a larger extent by the OECD guidelines cast pre-AI period and hence found no relevance in the midst of large amounts of data breaches and theft. The regulation calls for a body corporate, written consent, letter, authorization, etc., which can cater to regulatory compliance per se, but not to the extent of challenging data privacy losses due to AI and other emerging technologies manifestations. Though the rules pave the way for withdrawal of consent, much damage takes place when AI-enabled algorithms go wrong and are not tried by any plausible provisions of law. The digital realm goes unchecked, and its effectiveness compared to a comprehensive data protection regime has already been questioned

3. Indian Contract Act, No. 9 of 1872, Acts of Parliament, 1872 (India).

4. Digital Personal Data Protection Act, , Acts of Parliament, 2023 (India).

during the prevailing rules and to the present position. Appreciating the SPDI Rules, as novel attempts disregarding the zettabyte era cannot withstand the locus standi of users' satisfaction in cases of data losses, especially *dominius litus*.

Sec.43A of the IT Act, 2000

"Punishes a body corporate that is negligent in implementing/maintaining reasonable security practices while possessing, dealing or handling sensitive personal data or information in a computer resource which it owns, controls or operates and whereby such negligence causes wrongful loss or wrongful gain to any person"[5]. A paradoxical specification of additional compliance requirements beyond the purview of Sec. 43A had been questioned, and hence, the application of rules with these additional compliance requirements became a farce. As the word personal information has a wider scope than with SPDI above, the distinction in application of various sub-rules of Rule 5 to different sets of information has become apparent as the compliance is becoming considerably onerous, not offering justice to the users' satisfaction. Adding to this is Rule 8, bringing ambiguity in the security program and contractual arrangement. As such, progressive amendments are recommended to make the Act comply, leaving a trail of data breaches in emerging technologies due to AI, ML, etc., that are out of proportion to the small regulatory measures.

MONETIZATION OF AI/ML

As businesses look for AI that reshapes the industry landscape by improving efficiency, personalizing customer experiences, and driving automation, giving a level playing field, data transfer takes place between the developer and the user. "Monetizing AI" means revenue generation through employing artificial intelligence tools, such as AI-powered tools, AI chatbots, or AI-enhanced analytics. User satisfaction has to be measured with business metrics, and hence to effectively monetize AI usage for transforming data sources, businesses typically offer AI capabilities such as NLP, computer vision, or large language models that are either with paid features or standalone solutions. These metrics are aimed at delivering actual value to customers after processing their data. But the fact remains to be seen is to determine how much value AI functionalities bring to users; their safety of data and how good data breaches are addressed for building long-term customer satisfaction under the impugned powers of the regulatory laws in proportion to the AI functionalities.

a. Customer digital data protection

All the more, the current Indian legal framework for data protection has to be taken to mean only a foundation, scope for improvement in the areas of enforcement, consumer expectations in digital data protection and its misuse, addressing cross-border data flow concerns, stricter

5. Information Technology (Amendment) Act, 2008, § 43A, No. 21 of 2000 (India).

enforcement of punishments, etc., is felt. Prioritizing data breaches, respecting consumer privacy while collecting UPI credentials, CVV codes, and ensuring sensitivity must be ensured while drawing up a balanced regulatory framework. A customer is viewed as a customer, and especially in digital data protection, data breaches are set to affect customer relations, thereby plummeting user satisfaction. Data breach, should it occur, will include any profile, pages, interface information through any social media, email address, phone number, etc., and will not be confined to a particular incident. The classification of E-Commerce entities, gaming intermediaries, and social media intermediaries should be on any suitable basis that everyone aggrieved by the data breaches gets relief and not necessarily classified with >2 Crores users, >50 lakhs, > 2 Crores users, etc. This classification rule should also include all organizations that have established an online presence either through websites or through any 'app' for linkages with data analytics for offering solutions to these data breaches under the extant rules. When any data breach occurs, the UIDAI[6], DigiLocker[7] the Central Government agencies should cooperate in detail, and the cases of data breaches should not be disposed off at the level of the organizations. Industry-wide sectors are to be subjected to cases of data breaches and not to hold only the payment system providers governed by any law enforced. Any impugned rule should be inclusive of cloud-based organizations that are operating away from Indian soil. Timelines have to be clearly laid out for any grievance redressal on the data breaches for actions, thereby the application of the DPDP Act, 2025[8] can be effective and may lead to user' satisfaction.

b. Ministry of Electronics and Information Technology MeitY

On the global data leak imbroglio, MeitY has identified the Indian Computer Emergency Response Team (Cert-In) for securing details from the parties connected with the handling of data. It is discerned that the Cert-In need not function for any isolated deputed work but as an agency to liaise with the aggrieved persons in data breach, on being referred for an efficient way of handling data breach cases, regardless of the quantum of cases when reported, and submitting a report. In this way, the MeitY can keep track of not only the data breaches and trying of cases being tried apart from cybersecurity but also to enhance user satisfaction in parting with sensitive information.

c. Complex Adaptive System

Interactions within the system should happen in response to the changes in the extent of data breach often occur which requires a design of a complex adaptive system. This system can identify emergent behaviors of data breaches that cannot be predicted from any individual component. The CAS may distinguish major and minor breaches, compelling organizations to

6. Unique Identification Authority of India, https://uidai.gov.in/ (last visited Aug. 30, 2025).

7. DigiLocker, https://digilocker.gov.in/ (last visited Aug. 30, 2025).

8. Digital Personal Data Protection Act, No. 22 of 2023, Acts of Parliament, 2023 (India).

report even minute incidents for designing a foolproof system. Uncontrolled AI propagation has the potential to cause dangers in systems misaligned with human welfare. This also broadly covers the data breach. Hence, the ex-ante impact analysis by the present regulatory measures must be revamped to meet the abrupt ways of system components colluding, creating butterfly effects. Model parallelism techniques have the potential of partitioning the memory accelerator devices so as to have a buffer that can slow the data reaching out for other genuine purposes.

METHODOLOGY

This study uses systematic research methodology to optimize rules, applications, interpretations, introduction of new software in consonance with the data breaches, especially at Bengaluru City customers. It involves formulating research questions, reviewing relevant literature, and selecting appropriate research designs. Data is collected through surveys with stakeholders, operational observations, and analysis of historical data breaches from magazines of trade and commerce. The findings are analyzed to identify misinterpretations, more alignment with the user expectation and satisfaction and to recommend strategies to improve tightening of rules and procedures, more stringent provisions for trying out data breaches without consent, and laws in tandem with the gravity of data breaches.

a. Research Design

Descriptive Research

Descriptive research is found suitable for the current provisions under various acts, their inter-twining and interpretations, identifying scope for stringent laws, and advanced techniques like zero-test architecture prevailing in the minds of the respondents in Bengaluru City. The study will highlight factors contributing to a weak system prevailing that is disproportionate to the data breaches to the provisions of inter-twining of laws under Sec.43A of the IT Act, 2000[9] with SPDI.

b. Sampling Technique

Random Sampling

Random sampling has been employed for the survey portion of the research to ensure a representative cross-section of respondents spread across Bengaluru City. This method reduces bias and enhances the reliability of the findings. The goal is to collect insights from a wide range of stakeholders involved in data breaches and aggrieved.

b. Sample Size

A total of 30 respondents are randomly selected from a diverse group of stakeholders having expectations to revamp the rules and regulations when technology is emerging, but found the

9. Information Technology Act, No. 21 of 2000, § 43A (India).

provisions of law having no teeth and are not commensurate with the technology explosion, like customers of banks, both national and private, insurance, and frequent mall visitors, to participate in the survey phase.

c. Data Collection Method

Primary data collection

Primary data is gathered directly from sources, providing valuable insights into the expectations of users aggrieved by data breaches in parts of Bengaluru City. Surveys are conducted to collect quantitative data from the above diverse group of stakeholders involved in data breach instances. This approach helps identify scope for revamping the said laws and to foresee technology-based software that handles big data, keeping the data breaches to a minimum.

Secondary Data Collection

Information from websites, banks, emails, insurance authorities, and reviews in online shopping of customers losing personal information and suffering data breaches was collected.

Analysis and Interpretation

Questionnaire Statement	N	Mean	Standard Deviation	Minimum	Maximum
Regulatory laws are effectively dealing with data breaches	25	3.6	1.04	Strongly Disagree	Strongly Agree
Various intervening provisions are resolving the data breach, and each has its own overriding powers	25	3.48	1.26	Strongly Disagree	5
Well-coordinated rules are in place	25	3.24	1.3	Strongly Disagree	5
Much needed to effectively prune down the data breaches	25	3.36	1.35	Strongly Disagree	5
Customer data protection is satisfactory in India	25	3.16	1.31	Strongly Disagree	5
Monetisation of AI/ML to generate revenue needs further laws for enforcement	25	3.12	1.42	5	Strongly Disagree
Educating CAS to design a complete incident response plan	25	3.08	1.29	5	Strongly Disagree
Classification of data breaches cannot be done	25	3.4	1.35	5	Strongly Disagree
Mismatch between the rules in force and the gravity of the data breach	25	3.1	1.09	5	Strongly Disagree

Computing techniques like zero-test architecture are to be introduced to minimize data breaches	25	3.02	1.06	5	Strongly Disagree

The descriptive statistics show moderate to positive perceptions in revamping the rules that have been interpreted differently between the IT Act, 2000, Sec.43A[10] and SPDI rules. The highest mean score was for regulatory laws (M = 3.60, SD = 1.04), suggesting that effective rules are to be in force without in any way altering the locus standi of the aggrieved party while a data breach has happened. Intervening provisions with respect to laws (M = 3.48) and classification of data breaches (M = 3.40) also received ratings for due revamping and tightening of rules. Users demand the introduction of zero-test architecture to the fullest potential to ward off data breaches (M = 3.02) and for the mismatch between rules in force and the gravity of data breaches (M = 3.1). However, customer data protection is satisfactory (M = 3.16) and educating CAS (M = 3.08) showed more neutral to slightly positive perceptions, indicating areas for improvement and due enactments in law. The standard deviations (1.04 to 1.42) suggest variability in user experiences.

Chi-Square Test

Gravity of data breach	Observed (O)	Expected (E)	Residual (O-E)
Intervening provisions of SPDE Rules, Sec.43A, AI/ML monetizing	4	8.33	-4.33
CAS education	17	8.33	8.67
Enforcement of laws commensurate with the data explosion and cloud data	4	8.33	-4.33

Null Hypothesis (H_0)

There is no significant difference in the distribution of respondents across aggrievedness of the data breach. Any observed variations are due to chance.

Alternative Hypothesis (H_1)

There is a significant difference in the distribution of respondents across aggrievedness of the data breach. The observed variation is not due to chance.

Variable	Chi-square	d.f	Asym. Sig (P-value)
User experience in a data breach	13.52	2	0.001

A Chi-square test was conducted to determine if respondents were evenly distributed across the aggrievedness of the data breach. The results ($\chi^2 = 13.52$, df = 2, p = 0.001) led to rejecting the null hypothesis, indicating a significant difference in the distribution exists and that the opinion gets diversified, but the perception of change in rules drastically prevails among all.

10. Information Technology Act, No. 21 of 2000, § 43A (India).

This highlights user experience as a key factor in perceptions of equipping laws with stringent provisions sans intervening rules, warranting further analysis.

CORRELATIONAL ANALYSIS

Null Hypothesis (H_0) There is no significant relationship between the veracity of data breaches and that the laws in force are adequate to deal with

Alternative Hypothesis (H_1): There is no significant relationship between the veracity of data breaches and that the laws in force are adequate to deal with

		Various provisions under SPDI Rules, Sec.43A of the IT Act, 2000[11]	DPDP Act, 2025[12] said to include monetization of AI/ML and be commensurate with emerging trends in data breaches
Various provisions under SPDI Rules, Sec.43A of the IT Act, 2000	Pearson Correlation Sig. 2 Tailed N	1.000 30	0.629 0.001 30
DPDP Act, 2025 said to include monetization of AI/ML and commensurate with emerging trends in data breaches	Pearson Correlation Sig. 2 Tailed N	0.629 0.001 30	1.000 30

INTERPRETATION

Based on the Pearson correlation test, the p-value of 0.001 is below the significance level of 0.05, indicating that the result is statistically significant. Therefore, it is discerned to reject the null hypothesis. This suggests that there is a significant positive relationship between the Various provisions under SPDI Rules, Section 43A of the IT Act, 2000 and DPDP Act, 2025, said to include monetization of AI/ML and commensurate with emerging trends in data breaches. In other words, better provisioning of rules commensurate with the emerging technology under CAS education, not covered in detail in the DPDP Act, 2025, and efforts are needed to revamp the entire laws governing data breaches with other inter-twining provisions.

11. Information Technology Act, No. 21 of 2000, § 43A (India).

12. Digital Personal Data Protection Act, No. 22 of 2023, Acts of Parliament, 2023 (India).

SUGGESTIONS AND RECOMMENDATIONS

The following suggestions are offered:

- Incident detections in terms of network monitoring for anomaly identification may be made more scalable
- Strengthening unauthorized access,
- Educating CAS to design a complete incident response plan
- Impact assessments on data breach and to draw normal and liquidity damages
- Assessing the infrastructural facilities of third parties for proper alignment with the objectives of stakeholders
- Deployment of federated learning through distributed machine learning that can clone raw data
- Exploring quantum-resistant cryptography that can hoodwink CRYSTALS_Kyber algorithms and lattice-based encryption

CONCLUSION

It is seen that various provisions under regulatory laws are found wanting in terms of the rising and emerging technologies. Unless the laws are designed to counter the veracity of data breaches vis-à-vis, the customer aggrievedness is said to reach a low ebb. The discovery of the scope of data breaches through emerging technologies only supports the above statement, and the user experience is dimming. Complex advanced system design has to be strengthened, users' information has to be protected by employing rudimentary monetization of AI/ML tools to make the unsupervised learning in the user experience a pleasurable experience and not in any way to put into bewilderment between the provisions that exist in SPDI Rules, Sec. 43A of the IT Act, 2000 and the DPDP Act, 2025, in those areas requiring revamping.

CHAPTER - 6

CONSTITUTIONAL LAW, HUMAN RIGHTS AND GENDER JUSTICE

OH MY GOD 2 AND A CASE FOR A FUNDAMENTAL RIGHT TO SEX EDUCATION IN INDIA

Ratul Das[1]

ABSTRACT

The author examines the feature film *Oh My God 2* as a defamiliarized landscape to imagine and conceptualize a right to sex education. Reading the film as a cultural space for juristic argumentation, the author analyzes the narrative to appreciate the negotiated development of a theory of sex education as a public good, situating it in the discourses on the fundamental right to education, health and dignity within the broader paradigms of the fundamental right to life under Article 21 of the Constitution of India and of the fundamental right to elementary education under Article 21A of the Constitution of India.

Keywords: Cinema, constitution, fundamental right, sex education, health, dignity.

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INTRODUCTION

The feature motion picture Oh My God 2 (popularly known as OMG2)[2] offers its viewer an opportunity to imagine a juristic landscape featuring argumentative engagement of the cases for and against a fundamental right to sex education. The main act of the narrative play employs the theatrical courtroom devices, and the employment of populist constitutionalism[3] in the exchanges between Kanti Sharan Mudgal and Kamini Maheshwari, the chief combatants in the litigative battle in the film, frees up the space for the imagination of a constitutional good in sex education by defamiliarizing the debate from the constraints of the formalism of precedent and procedure.

There is a telling moment in the film, centrally suggestive to its narrative project and the discourse of a fundamental right to sex education, when it no longer seems enough for Kanti to ask his son Vivek—who is facing a series of misfortunes of late: from being hospitalized from the effects of masturbation under the influence of unprescribed medication, to facing expulsion from his school upon discovery of having masturbated in the school washroom—whether they teach him at school. Instead, he asks what they teach him. This can be taken as an inquiry about the substantive content of the fundamental right to education as may be conceived of in the paradigms of Article 21 and 21A of the Constitution of India. The film urges the viewer further to ask whether the subject of sexuality should form part of the normative concept of elementary education, and as such should inform the associated obligations of the State and educational institutions, both public and private.

However, neither any policy document nor any known curriculum has emphasized sex education as a core subject, and therefore there is no formal recognition yet of sex education as a component of education in the right to education. To then argue that there exists a fundamental right to sex education needs to traverse the argumentative route towards establishing it as a penumbral right, similar to the derivation of the fundamental right to education from the fundamental right to life in Article 21.

In the following sections of the essay, the author traces the themes emerging from the cinematic hearings undertaken before the judge presiding over the action brought by Kanti (in representative capacity for his son) to seek remedy against a host of persons, including Kanti himself, but chiefly against the school where Vivek was enrolled in, and subsequently expelled from. But before that, it is pertinent to trace a juristic history of the fundamental right to education in India, to contextualize the reel jurisprudence in terms of the formal.

2. Amit Rai dir., Cape of Good Films/Viacom Studios/Wakoo Films 2023.

3. This author borrows the expression from MARK TUSHNET, TAKING THE CONSTITUTION AWAY FROM THE COURTS (1999).

WHAT IS 'EDUCATION' IN THE FUNDAMENTAL RIGHT TO EDUCATION?

The juridical history of evolution to the fundamental right to education in formal constitutional jurisprudence in India is well known. The idea of a fundamental right to education in India predates the 86th Constitutional Amendment.[4] Credit is given to the pronouncements of the Supreme Court in ***Mohini Jain v. State of Karnataka***[5] and ***J.P. Unnikrishnan v. State of Andhra Pradesh***[6] towards developing a judicial discourse on the right to education as a penumbral fundamental right derived from the right to life in Article 21 as read with the erstwhile Articles 39, 41 and 45 of the Constitution. However, neither the judgments nor Article 21 reveal anything substantive regarding the content of the right to education or what defines the concept of education in the context of Part III of the Constitution.

The prerogative of determining what qualifies as education within the scope of Article 21A has been cast upon academic authorities specified by the appropriate Government,[7] that is, boards and councils recognized by the Central and State Governments with the authority to develop curricula for elementary education across different age groups and ability levels from pre-school to the higher secondary stages and to provide affiliation to educational institutions willing to offer their respective curricula to enrolled students. The Right to Education Act lays down a few directional themes for the academic authorities to consider in the course of developing the respective curricula, such as, constitutional values, all-round development of students, building their knowledge and potentiality, development of physical and mental abilities to the fullest extent, and making them free of fear, trauma and anxiety.

So, while we may not have an exhaustive set of curricular components laid out by the text of the Constitution, the Right to Education Act or of any other primary legislative instrument that could ostensibly be claimed as a fundamental right by the intended beneficiaries of Article 21A, there are two ways in which we may construe the substantive content of the fundamental right to education. First, one may simply regard the elements incorporated in the curricula developed by the academic authorities as what can be claimed by the beneficiaries of the right to education. Adopting this approach would mean that the concept of education and thereby the substance of the right depends to a great extent on what the academic authorities deem fit as the legitimate domain of elementary education. This reduces the constitutional aspect of the concept of education as a nearly empty vessel to be filled up as per the discretion exercisable by the academic authorities, having regard, of course, to the guidelines provided in Section 29(2)

4. The Constitution of India, 1950, Art. 21A, inserted vide The Constitution (Eighty-sixth Amendment) Act, 2002.

5. Mohini Jain v. State of Karnataka, AIR 1992 SC 1858.

6. J.P. Unnikrishnan v. State of Andhra Pradesh, AIR 1993 SC 2178.

7. The Right of Children to Free and Compulsory Education Act, 2009, § 29(1), Acts of Parliament, 2009 (India).

of the Right to Education Act (The content of Section 29(2) in itself is subject to legislative change).

The other approach is to derive a normative concept of education from its purposive relationship with the right to life in Article 21, as illustrated in ***Mohini Jain*** and ***Unnikrishnan*****.** This shifts the determinative locus from the academic authorities to the needs and aspirations, as may be understood as legitimately accommodated within the discourse of the right to life, of the beneficiaries of the right to education, which must in turn inform the interpretation of the guidelines provided in Section 29(2) of the Right to Education Act and the curricula designed by the academic authorities.

In ***Mohini Jain***, the Supreme Court, while not recognizing a fundamental right to education, associated education as an essential component of the right to live with human dignity. Channeling the spirit of one of the spiritual origins in judicial history reading dignity into the discourse of the fundamental right to life, the Court quoted from ***Francis Coralie Mullin v. The Administrator, Union Territory of Delhi***,[8] highlighting the significance of "facilities for reading, writing and expressing oneself in diverse forms, freely moving about and mining and commingling with fellow human beings."[9] Although ***Francis Coralie Mullin*** does not place the value of free movement and association with fellow human beings in a purposive relationship with education—let alone sex education, one might ask whether in the absence of educational components addressing sexual development, it is possible to freely navigate and associate with fellow human beings. Further, the Court drew inspiration from ***Bandhua Mukti Morcha v. Union of India***,[10] wherein "educational facilities" were understood to be part of "minimum requirements which must exist in order to enable a person to live with human dignity.[11]

While ***Mohini Jain*** reads education as an aspiration essential to the existential dimensions of human life. understanding the human organism as a social animal and an expressive being, and to pursue life with dignity, in ***Unnikrishnan***, the Supreme Court developed the discourse on the fundamental right to elementary education for children up to the age of 14 years – a vision which was subsequently formalized in Article 21. The Court cast the obligation of ensuring this right to be performed not only through the agency of State-maintained educational institutions, but also that of non-governmental institutions permitted, recognized and aided by the State.

Reading the judicial inspirations in the right to education discourse into the scope of Article 21A then leads us to understanding the content of the right both in its substantive and adjectival

8. Francis Coralie Mullin v. The Administrator, Union Territory of Delhi (1981) 2 SCR 516.

9. Mohini Jain, *supra* note 5.

10. Bandhua Mukti Morcha v. Union of India, AIR 1984 SC 802.

11. Mohini Jain, *supra* note 5.

aspects which are derived from other fundamental rights. Substantively, any curricular content to be developed in pursuance of the obligation to ensure the right to elementary education must not only be guided by the statutory directions in Section 29(2) of the Right to Education Act, but also be designed sufficiently to address the dimensions of interpersonal development and dignity as part of the right to life under Article 21. On the other hand, the manner in which the right is ensured through public and private institutions must be seen to inform the adequacy and efficacy of the programs purposed for the execution of the curricula so developed.

OMG2 AND THE RHETORIC OF SEX EDUCATION AS A FUNDAMENTAL RIGHT

It is pertinent to note at the very outset that neither the expression ‘fundamental right’ nor ‘constitution’ appears anywhere throughout the narrative content of the film. Attributing too much seriousness to the formal nature of the action brought forth by Kanti before the cinematic court can boggle the viewer’s mind with jurisdictional nightmares and it can be at least characterized as a civil defamation suit against Savoday International School, a suit of deceit and negligence against a few other defendants, such as the pharmacist and the street peddler who had sold substances of dubious medicinal qualities, the quack doctor who had falsely diagnosed Vivek of sensual inadequacy and against Kanti himself for parental negligence. Even so, the central project of the action was to compel the school to reinstate Vivek upon admission that the ground on which Vivek had been expelled – on the basis of the video evidence of Vivek masturbating in a bathroom within the school premises – was a result of the failure of the school to incorporate the subject of sex education in its curricular offerings. This in turn rests on the implicit objective of establishing sex education as a just good and a corresponding obligation of educational institutions and authorities to offer the same as part of the respective curricula.

Positioning thus the problematic of the content of the fundamental right to education makes it conducive to appreciate the case against the school, which is, ‘shiksha mein laparwahi’ — roughly translated as negligence in imparting education. On one hand, the failure of the school to include a sex education component may be seen as a failure to apply reason in designing or offering the curriculum, not having regard to interests embedded in the right to education, such as those of human dignity, sociability and health. The other aspect that the right to education should be ensured not only through public institutions but through private institutions as well, fits right in with the fact that the defendant school falls in the latter category.

Sex education as a conduit to life, dignity and health

Kanti’s chief argument invokes the right to dignity for Vivek, which the former argues has been severely and adversely affected by the bullying he was subjected to — first from his schoolmates, followed by the school administration and members of his immediate social community. According to him, had the school been steadfast in equipping its students with the means of understanding and safely exploring their sexuality, Vivek would have been more confident and open about his curiosities, reducing his vulnerability to bullying at school and to the subsequent ridicule in the community his family was situated in.

Kanti's model of dignity is not unchallenged, though, and the viewer may read the courtroom exchanges as a debate between competing moral constructs of dignity. Kamini, representing the school and subsequently the other defendants too (with the exception of Kanti, of course!), asks if the court and the society are prepared to have an open discussion on the subject of sexuality. This is followed by a spontaneous referendum of sorts among the people gathered to witness the proceedings of the courtroom – constituting an impromptu representative sample of the society, there seems to be a unanimous consensus regarding the propriety of open discussion on the matter. The charge of obscenity made by Kamini on the prospect of openness on the issue of sexuality is hardly disguised, and the referendum can be seen as a heuristic invocation of the community standards test[12] to settle the question in favor of Kanti that a public discussion on sexuality by itself does not qualify as obscene. It must be noted that had the question been resolved otherwise, not only would Kanti's action have met a dead end, but if any public discourse on sexuality is deemed in itself as obscenity, the argument for incorporating sex education in a formal elementary curriculum to pursue the interests of leading a life with dignity, would also fail. The cornerstone of Kamini's arguments thus rested on a moral model of dignity contrary to Kanti's – one which emerged from a less individualistic and more collectivist concern.

However, it might be a mistake to read the narrative as an endorsement of the interests of the individual over the collective in the discursive hierarchy on dignity, or, in terms of the Preamble to the Constitution, of the dignity of the individual over fraternity. Even if it is accepted that sexuality is an essential aspect in the quest for a dignified human existence, the question as to whether it should constitute a subject for elementary education remains open. Kamini addresses the lay jury, prompting them into another referendum with the question as to how many of them would want their children to be taught about sex in their schools. This is met with near unanimous silence, save for two raised hands. She proceeds to project sex education as a potential cause for worsening incidences of predatory behavior jeopardizing the dignity and safety of women such as sexual harassment, rape and other forms of assault in an already skewed gendered plane. Therefore, she submits that "society will completely go vulgar and it will be destroyed".

Kamini also examines the anonymous mother of another student enrolled in the school, who is a professional sex worker, to establish that the subject of sexuality outside the space of matrimony is illegitimate for reasons inherent in an objective moral standard agreed upon by

12. Aveek Sarkar v. State of West Bengal, AIR 2014 SC 1495.

the society—even one in which a person who engages in extramarital sexual activity for her livelihood, participates. Kanti, however, turns the tables during cross-examination, eliciting from the witness that most of her clients were neither skilled in sex nor did they know how to treat “a woman’s body” with respect. Kanti argues that sex education would be instrumental in engendering mutual respect among individuals engaging in intimate relations, and in turn, further dignity for women. This reads in an intersectional dimension to the construct of dignity by appealing to an inclusive politics of sexual agency and positioning it as an aspirational good for women towards the actualization of a life with dignity in a world where citizens would be better placed to develop a shared ethic of consent and respect.

This is also where the religious-cultural side of the debate assumes great importance, given the backdrop of the film’s narrative. Kanti is a devotee of Lord Shiva, and both his moral conscience and litigation strategy are inspired by his submission to divine guidance. To Kamini’s charge of vulgarity against the subject of sexuality, both generally and as a curricular component in formal elementary education, Kanti counters with a citation from The Panchatantra, authored by Vishnusarma, wherein a minister informs a king about the domains of education that a young prince should be instructed in – among which, ‘kaamshastra’ or the discipline of sexual desire is included. Kanti goes on to draw inferences from other mythological sources in Hindu traditions to establish the virtuosity – even divinity – of sexuality in support of his case that the same should meet a legitimate inclusion in modern academic discourse.

Further, he highlights some widely celebrated erotic art and sculptures preserved as national heritage, situated in tourist attractions of architectural repute, such as the Ajanta and Ellora Caves and Khajuraho. Emphasizing on the place of ‘kama’ or sexual desire as one of the four pillars of ‘sanatana dharma’, he seeks to drive home the sanctity and decency of the subject of sexuality, firmly grounded in tradition. Therefore, Kanti resolves the ever-present tension between the individualist aspirations of uninhibited discourse on subjects perceived in conservative circles as taboo and the cultural imaginations of tradition, reconciling those into linear and consistent normative constructs of dignity and decency.

Even though the courtroom proceedings in the film serves to reclaim the discourse on the fundamental right to education into the paradigm of Article 21, one must consider the fact that the right may be denied “according to procedure established by law.” This means that even if the substantive content of the right to education were to hypothetically contain a sex education component, it could be excluded of the actual curriculum by making express provision in law for its exclusion. However, if the juristic construct of education admits of sex education within its unrestricted ambit, any such exclusion would have to satisfy the scrutiny of the reasonableness standard.

Kanti also argues that sex education would help adolescents to make informed decisions in pursuit of their physical and psychological health. He examines the other defendants: the seller of a bogus oil claimed to lengthen and strengthen the penis, a predatory medical practitioner preying on masculine insecurities of sexual prowess by making false diagnoses, and a pharmacist who sold a pack of tablets meant for intensifying erections, misrepresenting its effects on the male genitalia. Through their testimonies, Kanti contends that such irresponsible practices pose a threat to adolescent health, which can be countered and guarded against by having a safe and scientific environment in an academic setting to inquire about psycho-physiological changes experienced by adolescents.

Might the absence of practicable means and methods to implement a fundamental right be considered a reasonable ground for restricted application and exclusionary classification of certain elements from the content of the right? The constitutional developments in India on reading policy directives in Part IV into Article 21 as penumbral rights associated with the fundamental right to life have been tempered with pragmatic considerations of State capacity to take appropriate measures towards ensuring such rights to citizens. However, it must be observed that in ***Unnikrishnan***, State capacity as a legitimate ground for limiting the scope of obligation of the State was understood as available only in the context of education for persons above the age of 14 years.[13]

No more birds and bees

It is in this context that Kamini's challenge regarding the (im)possibility of a reasonable methodology for integrating sex education in the elementary school curriculum flips the formal juristic script. There is no direct governmental representation in the courtroom proceedings through the film and as such, no scope or jurisdiction for the court to pass interim directions to an appropriate public authority to prepare a draft syllabus or action plan (although the court issues directions to education boards/councils to devise curricular frameworks for sex education in schools, as part of final order on Kanti's suit). So instead, the court casts the burden on Kanti. Following a hypothetical concession of the legitimacy of sex education in elementary curriculum, Kamini defends the school's choice not to adopt sex education, arguing that it is impossible to design an age appropriate[14] syllabus or instructional methodology. In the next hearing, Kanti brings the scanner back onto the interests of health and dignity, and more particularly, protection of children from sexual abuse. He submits that sex education is a necessity in a country like India, where the statistics on sexual violence are patently unflattering.

13. Unnikrishnan, *supra* note 6.

14. In the very least, to avoid the pitfalls of the several offences defined in the Protection of Children from Sexual Offences Act, 2012.

Therefore, sex education is again reasoned as a constitutional good inherent in the aspirations of a safe and dignified environment to live in, especially for women and children.

Kanti's response to the core methodological question is far from technical. He suggests that knowledge should be imparted through clear and unambiguous language in describing bodily organs and processes. One may read the reasonableness of such an approach to be founded on two assumptions. First, it is self-evident that when members of a human society share certain psycho-physiological characteristics associated with their sexuality, the language of sex education course content must directly address the same. Second, an empirically aware non-paternalistic submission Kanti makes in the course of this argument: that a vast multitude of people in the country are sexually curious, evidenced by the measure of internet data used in accessing pornographic material. Implicit in this argument is again the necessity that such curiosities should be met with a scientific course content in a guided academic environment.

CONCLUSION

The stakeholders of the right to sex education

The film reaches a deafening crescendo, as the judge and the litigating opponents before him have to use loudspeakers to get through the din of the crowd assembled in the open space where the court is held for the finale. Vivek makes a miraculous entry (one of many performed by the anonymous messenger of Lord Shiva) and finally addresses Kamini's challenge to Kanti's locus standi in representing his son's interests. Vivek maintains that he no longer considers masturbation to be a wrongful act in itself. This sets off a chain reaction among the gathered audience – more particularly, among his peers at school (a jury of peers, if you would, for the coup de grace!), who back up Vivek's stand and then, in a populist exposition of justice on the core question of the essentiality of sex education in an elementary academic curriculum, they declare that they believe sex education to be necessary and fundamental to their existing needs.

The cinematic court transcends, at several junctures, the constraints of the formal courtroom – an elite space where justice is conceived of and delivered through the argumentation among technocratic professionals in the discipline of law. Instead, it democratizes the space in several ways. First, the placement of Kanti, who is not a professionally trained lawyer, as the advocate-protagonist. Second, the argumentative theatre seeks not merely to persuade the judge, but it also panders to the public opinion, including that of the advocate-antagonist, Kamini. The viewer perhaps realizes that Kanti has clinched it when Kamini is seemingly moved by Vivek's final submission, asking her if there is a viable alternative source from where he can learn the myriad aspects of sexuality if not his school; Kamini declines to add anything further to her closing statement after this. Third, questions relating to the moral propriety of sex as an academic subject, the reasonableness of any pedagogical design for sex education, the morality of masturbation, and ultimately, the necessity of sex education in a school curriculum, are placed in before impromptu referenda of informally assembled people gathered to witness litigation proceedings. They are, however, provided with greater agency in determining the course of justice, becoming active participants instead of remaining mere passive onlookers. It is quite fitting then that it is the unanimous applause for the stand taken by Vivek and his schoolmates that seals the case.

... and those who are not

Attention must be drawn, though to the sites of exclusion in the development and presentation of Kanti's populist constitutionalism in the film. First and foremost, Kanti's imagination of the aspirational cosmopolitanism of the Indian Constitution is deeply embedded in the construction of the constitutional state as a Hindu civilizational state. This plays out in the aesthetic for reimagining secular spaces in constitutional institutions as well as in the arguments of liberal constitutionalism.

The former can be evidenced in an informal exchange between the judge and Kanti. When the judge notices that the courtroom has been dusted and cleaned that morning and that Kanti and his associate have left their shoes outside the threshold of the courtroom, he remarks with an air of surprise and appreciation that the courtroom is not a temple that necessitates such reverential behavior. To this, Kanti replies with a direct metaphor that the courtroom represents a temple of justice and the judge is a god of justice. Combined with how Kanti had previously performed a recreation of ritual behavior that he would habitually perform at the temple premises he was associated with until recently, this integrates the secular constitutional space into a ritualized Hindu aesthetic, evoking, in the echoes of Oishik Sircar's jurisprudential-aesthetic readings of Bollywood cinema, "a sense of seamless cohabitation of the secular and the religious when it comes to Hinduism."[15]

A similar parallel is found in the course of Kanti's argumentation where the competing moralities of decency and dignity are reconciled by drawing from into 'apni sabhyata' or 'our own civilization', which incorporates exclusively texts from the *shastric* tradition. This reconciliation of traditional and constitutional moralities reproduces the latter as having devolved from inspirations located in the *shastric* knowledge systems, conveniently excluding all other pre-modern normative discourses native to this part of the world. The only mention merited in the narrative of the film for other religious or cultural groups ranks below tokenism, qualifying for media coverage on spokespersons of conservative religious groups (including those from the Hindu community) citing their disapproval towards the prospect of inclusion of sex education in school.

15. OISHIK SIRCAR, VIOLENT MODERNITIES: CULTURAL LIVES OF LAW IN THE NEW INDIA 131 (2021).

Even if one were to argue that such exclusion is only a reflection of the absence of supportive material in other cultural systems, to imagine a cosmopolitan moral standard on decency and dignity without acknowledging or addressing such differences could indicate that it is attainable "only through the revival of Hindu India", where the existence of *others* would "be a hindrance to the achievement of constitutional welfare."[16]

From a narrower perspective of the substantive content of education, it might also be taken as justifying the privileged incorporation of texts held in reverence in the Hindu religio-cultural traditions[17] as secular texts in the school curricula to the exclusion of literary traditions celebrated in other cultural knowledge systems (and therefore restricting the scope of the 'ancient' in the formulation of ancient knowledge system as is now being pushed by regulatory authorities into educational curricula to implement the vision in the National Education Policy 2020).[18]

The discourse on sexuality also is increasingly constrained in the sphere of heteronormativity. To be fair, the subject of sexuality is freed of the context of marriage, and the elements of consent and pleasure are deemed as its central tenets. This is brought out during the examination of Damayanti by Kamini and the cross-examination of the anonymous sex worker by Kanti. However, as Kanti later proceeds to ground his proposal for a straightforward and clear instructional language for a prospective sex education course in school, he relies heavily on literary sources discussing male and female reproductive faculties as a metaphor for divine creation of nature. Nor does he acknowledge or address variations in sexual orientation and gender identity, firmly excluding people with queer experiences outside the ambit of the stakeholders of the right to sex education.

All said, *OMG2* stands as a unique foray into a subject that remains contentious, offering an opportunity for the viewers to engage in conversations on these matters in the form of an easily comprehensible comedy. By also adapting the genre of a courtroom drama, it transforms a moral debate into a space for juristic contestation and negotiation on a prospective right to sex education in schools and provides a ground for imagining the same as a penumbral right in the light of Articles 21 and 21A of the Constitution of India by offering purposive arguments for its inclusion in elementary curricula through invoking the goods of dignity and health, which are already recognized as positive fundamental rights within the umbrella of the fundamental right to life.

16. *Id.* at 137.

17. *Id.* at 132.

18. NATIONAL EDUCATION POLICY 2020 (India) 14, 16 and 55.

EMPOWERING WOMEN: ARTIFICIAL INTELLIGENCE AND THE FUTURE OF HUMAN RIGHTS PROTECTION IN CASES OF DOMESTIC VIOLENCE AGAINST WOMEN

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ABSTRACT

This study explores how artificial intelligence (AI) is developing to combat domestic abuse and improve women's human rights safeguards. Legal systems have made progress in identifying and addressing domestic abuse, but there are still issues and delays with implementation, which frequently restrict the effectiveness of interventions. This study's goal is to examine how AI-based legal aid platforms, chatbots, machine learning algorithms, and predictive policing tools can change institutional responses and give survivors more power. Using a socio-legal approach, the study integrates empirical data from interviews with survivors, legal experts, and technologists with doctrinal legal analysis. To evaluate AI's potential and constraints in actual domestic violence situations, comparative case studies from the US, UK, and India are used. The broad argument advanced is that AI has the potential to improve early detection of abuse, streamline evidence collection, expand access to legal resources, and assist law enforcement in risk assessment. Tentative findings suggest that AI-enabled tools are already contributing to faster reporting, better protection orders, and improved victim support systems. However, the study also identifies critical risks such as algorithmic bias, lack of transparency, and the exclusion of marginalized groups from tech-based solutions. The paper concludes that while AI cannot replace human judgment and sensitivity, it can significantly enhance existing mechanisms if deployed within an ethically guided, rights-based, and gender-sensitive framework.

Keywords: Artificial Intelligence, Domestic Violence, Human Rights, Women's Empowerment, Gender Justice.

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INTRODUCTION

Globally, domestic violence (DV) is a serious violation of both public health and human rights. One in three women worldwide is a victim of domestic violence, which is defined as physical, emotional, sexual, or financial abuse committed by intimate partners or family members, according to the World Health Organization (WHO).[3] According to the National Family Health Survey (NFHS-5) conducted in India, more than 29.3% of women between the ages of 18 and 49 who have ever been married have been victims of domestic abuse. Many survivors still struggle to obtain justice, safety, and long-term rehabilitation in spite of legislative changes and advocacy initiatives. Domestic violence violates fundamental rights guaranteed by international treaties like the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW),[4] Universal Declaration of Human Rights (UDHR),[5] International Covenant on Civil and Political Rights (ICCPR).[6] Through the Protection of Women from Domestic Violence Act, 2005 (PWDVA),[7] India, a signatory to these treaties, has codified a number of protective measures. However, ground-level implementation remains fraught with institutional delays, social stigma, and underreporting. Most support systems, such as police, helplines, legal aid, and shelters are often overstretched, inadequately trained, or unresponsive to the emotional and economic needs of survivors. As traditional systems falter, Artificial Intelligence (AI) emerges as a novel and potentially transformative force in governance and access to justice. AI's ability to detect patterns, automate interventions, and offer data-driven insights can aid in identifying, preventing, and responding to domestic violence cases more swiftly and sensitively. Both special and general laws in India address domestic violence. The main piece of legislation is the PWDVA. Domestic violence is defined in Section 3 as verbal, emotional, financial, sexual, and physical abuse. Sections 17–23 guarantee rights like residence, financial relief, custody, protection orders, and compensation, while Section 12 permits a woman who feels wronged to speak with the magistrate directly. The Indian Penal Code (IPC)[8] contains parallel provisions, most notably Section 498A (cruelty by husband or relatives). This was continued under Section 85 following the Bharatiya Nyaya Sanhita, 2023 (BNS),[9] which preserved protection against cruelty in matrimonial relationships. Legal protection and artificial intelligence (AI) are related. In order to protect women's digital privacy, Section 4 of the Digital Personal Data Protection

3. World Health Organization, Violence Against Women: Key Facts (Mar. 9, 2021), https://www.who.int/news-room/fact-sheets/detail/violence-against-women (last visited July 6, 2025).
4. Convention on the Elimination of All Forms of Discrimination against Women, Dec. 18, 1979, 1249 U.N.T.S. 13.
5. Universal Declaration of Human Rights, G.A. Res. 217A (III), U.N. Doc. A/810, at 71 (Dec. 10, 1948).
6. International Covenant on Civil and Political Rights, Dec. 16, 1966, 999 U.N.T.S. 171.
7. The Protection of Women from Domestic Violence Act, No. 43 of 2005, Acts of Parliament, 2005 (India).
8. Indian Penal Code, No. 45 of 1860, Acts of Parliament, 1860 (India).
9. Bharatiya Nyaya Sanhita, No. 45 of 2023, Acts of Parliament, 2023 (India).

Act, 2023 (DPDP Act)[10] places a strong emphasis on processing personal data with consent. Sensitive personal information is better protected under Section 9, which guards against abuse when technology is used for harassment or surveillance. AI-based safety monitoring tools for women also function within these legal parameters, supporting NITI Aayog's Responsible AI for Social Empowerment (RAISE) framework,[11] which emphasizes accountability, transparency, and ethical protections. Applications of AI in this context include chatbots offering legal aid, predictive analytics for high-risk households, AI-enhanced helplines, and wearable technologies for real-time safety responses.[12] While promising, such interventions must navigate complex ethical, legal, and infrastructural barriers to avoid replicating societal biases or infringing on privacy. This paper thus explores the central research question: How can AI be effectively and ethically deployed to strengthen human rights protections for survivors of domestic violence in India? Sub-questions include:

i. What are the key gaps in the current domestic violence support systems that AI can address?

ii. What AI technologies are already being used globally and in India for DV prevention and response?

iii. What legal and ethical frameworks are needed to ensure accountability, safety, and survivor-centered design in AI tools?

The methodology followed in this research is qualitative, doctrinal, and exploratory, involving a review of secondary literature, including peer-reviewed articles, government policy documents, case law, international treaties, and recent AI-based innovations. Where relevant, comparative insights from the U.S., U.K., and India have been used to evaluate policy trends and best practices. This paper is organized into eight sections. Following this introduction, Section 2 explores the relationship between domestic violence and human rights frameworks. Section 3 introduces the basics of AI and its application in the field of law and governance. Section 4 dives into AI-powered tools and interventions addressing domestic violence. Section 5 presents case studies from India and globally. Section 6 analyzes legal and ethical challenges, while Section 7 provides policy recommendations for India. The paper concludes in Section 8 by reflecting on the future prospects of AI in gender justice.

10. Digital Personal Data Protection Act, No. 22 of 2023, Acts of Parliament, 2023 (India).

11. NITI Aayog, Responsible AI for Social Empowerment (RAISE 2020), https://www.niti.gov.in/files/responsible-ai-social-empowerment.pdf (last visited July 6, 2025).

12. NITI Aayog, Responsible AI for Social Empowerment (RAISE 2020), https://www.niti.gov.in/files/responsible-ai-social-empowerment.pdf (last visited July 6, 2025).

DOMESTIC VIOLENCE AGAINST WOMEN: A HUMAN RIGHTS VIOLATION

a. Defining Domestic Violence: Legal and Social Dimensions

One of the most common types of gender-based violence and a clear violation of women's fundamental human rights is domestic violence (DV). It includes any action that causes or is likely to cause women to suffer from physical, sexual, or psychological harm, including threats, pressure, or capricious deprivation of freedom, whether in a private or public setting. According to the United Nations Declaration on the Elimination of Violence Against Women (1993)[13], systemic discrimination and historically unequal power relations are the root causes of violence against women. Recognizing violence against women as a form of discrimination, the CEDAW[14] requires state parties to implement institutional and legislative measures to prevent and address it hinders or eliminates women's ability to exercise their fundamental freedoms and human rights. The PWDVA[15] was a historic law in India that broadened the definition of domestic violence to encompass verbal, emotional, sexual, and financial abuse in addition to physical abuse. The Act acknowledges domestic violence as a human rights issue and provides civil remedies such as protection orders, residence orders, monetary relief, and custody orders, thus bridging the gap between civil and criminal law. The various forms of abuse recognized under Indian and international frameworks include:

i. Physical abuse: Hitting, slapping, choking, or any form of bodily harm

ii. Sexual abuse: Marital rape, coercive sex, and unwanted sexual advances

iii. Economic abuse: Controlling access to money, denial of financial resources

iv. Digital abuse: Surveillance through phones, social media threats, cyberstalking

These abuses are not isolated incidents but often form part of a structural system of control embedded in patriarchal norms. Power imbalances, economic dependency, lack of education, and social conditioning that idealize female submission contribute to the normalization and tolerance of abuse.

b. Global and Indian Trends

It concerns how widespread domestic violence is. One in three women worldwide has at some point in their lives been the victim of physical or sexual abuse by an intimate partner or sexual abuse by a non-partner. In its 2021 report, the WHO found that approximately 27% of women between the ages of 15 and 49 who have ever been in a relationship have

13. Declaration on the Elimination of Violence Against Women, G.A. Res. 48/104, U.N. Doc. A/RES/48/104 (Dec. 20, 1993).

14. CEDAW, *supra* note 4.

15. PWDVA, *supra* note 7.

been victims of intimate partner violence.[16] According to the National Family Health Survey (NFHS-5) conducted in India, 29.3% of women between the ages of 18 and 49 who have ever been married have experienced domestic abuse. But this information is only the beginning. Most cases go unreported because of ingrained social stigma, fear of reprisals, and financial dependence. Additionally, according to the NFHS-5, only 14% of women who are abused seek assistance, and among them, very few approach the police or legal system. Cultural norms that prioritize family reputation and discourage legal action exacerbate silence and underreporting. In rural areas, the barriers to justice are even higher due to lack of access to support services, absence of female police officers, and entrenched gender roles. Conversely, in urban contexts, although awareness may be higher, institutional apathy and secondary victimization discourage survivors from seeking help.[17] Thus, domestic violence remains a deeply under-recognized and under-addressed epidemic across both rural and urban India.

c. Human Rights Framework

Numerous fundamental human rights protected by international law are flagrantly violated by domestic violence. According to Article 3 of the Universal Declaration of Human Rights (UDHR), everyone has the right to life, liberty, and personal security, as well as protection from torture and cruel, inhuman, or dehumanizing treatment (Article 5). State parties are required by Article 26 of the International Covenant on Civil and Political Rights (ICCPR)[18] to guarantee equal protection under the law, free from discrimination. Gender-based violence is explicitly declared to be a form of discrimination under Article 1 of CEDAW's General Recommendation No. 19, which also requires states to take reasonable steps to prevent, investigate, and punish acts of violence against women.

In India, the Constitution provides a strong framework to protect women's rights

i. Equal rights under the law are guaranteed by Article 14; the state is permitted to make special provisions for women and children under Article 15(3).

ii. The right to life and personal liberty is protected by Article 21, which has been construed to include the right to a dignified life free from fear and violence.

Recognizing domestic violence as a human rights issue was made possible in large part by the Indian judiciary. The Supreme Court highlighted the Act's goal of empowering women and defending their human rights in ***Indra Sarma v. V.K.V. Sarma,***[19] ruling that a woman in a

16. WHO, *supra* note 3.

17. United Nations Population Fund (UNFPA), Understanding Domestic Violence in India: A Fact Sheet, https://www.unfpa.org (last visited July 6, 2025).

18. ICCPR, *supra*

19. Indra Sarma v. V.K.V. Sarma, 2013 AIR SCW 6783

live-in relationship is entitled to protection under the PWDVA. Similarly, the Court invalidated the narrow definition of "respondent" under Section 2(q) of the PWDVA in ***Hiral P. Harsora v. Kusum Narottamdas Harsora,***[20] thereby expanding protection to women from violence committed by any adult male relative, not just husbands or in-laws. These developments mark a shift from a private law view of domestic violence to its treatment as a public wrong and human rights violation that demands state intervention.

ARTIFICIAL INTELLIGENCE AND SOCIAL JUSTICE: THEORETICAL FOUNDATION

What is Artificial Intelligence?

The term Artificial Intelligence (AI) describes how machines, especially computer systems, can simulate human intelligence processes. These procedures include reasoning (applying rules to arrive at approximate or definitive conclusions), learning (acquiring knowledge and rules for applying it), and self-correction. Machine Learning (ML), Natural Language Processing (NLP), and Computer Vision are some of the subfields that fall under AI (Russell & Norvig, 2020). Without explicit programming, ML allows systems to learn from data and get better over time. ML can identify risk factors and forecast high-risk cases in the context of domestic violence by analyzing patterns in sizable datasets. Computers can now comprehend and interpret human language thanks to NLP, making it valuable for analyzing victim testimonies, social media narratives, or emergency call transcripts to detect abuse patterns (Chouldechova & Roth, 2020). Computer vision, another crucial AI domain, enables machines to interpret and analyze visual data. It is used in surveillance systems or forensic analysis to detect signs of physical violence or control within households.[21] These technologies collectively enhance data-driven decision-making, enabling predictive tools to flag potential threats, assist in resource allocation, and improve institutional responsiveness in domestic violence cases. However, their deployment must be tempered with ethical considerations and contextual sensitivity.

AI and Human Rights

AI has the potential to either advance or hinder human rights depending on how it is designed and deployed. A rights-based approach to AI advocates for technological systems that are transparent, fair, and accountable. In the context of domestic violence, AI tools should not only be effective but also uphold the dignity, privacy, and autonomy of survivors.

Transparency refers to the extent to which AI decisions can be understood and explained. Without it, survivors may be subject to opaque and possibly biased decisions that affect their

20. Hiral P. Harsora v. Kusum Narottamdas Harsora, (2016) 10 SCC 165 (India).

21. Alexandra Chouldechova & Aaron Roth, A Snapshot of the Frontiers of Fairness in Machine Learning, 21 Comm. ACM 82 (2020).

access to justice. Accountability ensures that there are mechanisms to challenge and correct wrongful outcomes. This is especially relevant when AI tools are integrated into policing, judicial, or welfare systems dealing with domestic violence survivors, where unjust decisions can have life-altering consequences. The "AI for Good" movement emphasizes the development and use of AI to solve social problems and advance global development goals, including gender equality and violence prevention (ITU, 2020). However, gender-blind designs often exclude the realities of marginalized women. AI tools must therefore be intentionally inclusive, ensuring that data sets reflect the intersectional realities of survivors—considering not just gender, but also caste, class, disability, and sexuality.[22]

Feminist Legal and Technological Perspectives

Feminist theorists have long argued that law and technology are not neutral but are embedded with the values and power structures of their creators. Techno-feminism critiques how digital technologies often reproduce existing gender biases. For example, AI models trained on biased data may underrepresent or misinterpret domestic violence cases involving women from marginalized communities (D'Ignazio & Klein, 2020). Women's ability to take advantage of AI advancements in the administration of justice is further restricted by the digital gender gap, which is the difference in access to digital tools and literacy. This disparity is especially noticeable in India's rural and lower-income areas, where many women might not have access to smartphones. Digital literacy, or reliable internet (GSMA, 2022). These exclusions run the risk of escalating inequality as AI is incorporated into public services. From a feminist legal perspective, technology must be developed through inclusive and participatory frameworks, with women—especially survivors—having a voice in shaping tools meant for their protection. This aligns with the principle of substantive equality, which recognizes that equal treatment alone does not ensure justice unless the unique needs and disadvantages of individuals are accounted for. The concept of intersectionality, introduced by Kimberlé Crenshaw (1989), is particularly vital in analyzing the use of AI in domestic violence cases. It helps uncover how overlapping systems of discrimination—based on gender, caste, class, religion, and sexuality—shape both vulnerability to violence and access to protection. For instance, an AI system trained primarily on urban, upper-caste, English-speaking users may fail to detect threats faced by Dalit or Muslim women in rural areas, thereby reinforcing systemic exclusions.To achieve social justice through AI, it is essential to embed ethical guardrails, participatory design, and intersectional analysis into the development and deployment of technologies. Only then can AI serve as a transformative tool that supports—not supplants—human rights frameworks in responding to domestic violence.

22. Int'I Telecomm. Union, AI for Good Global Summit, https://aiforgood.itu.int (last visited Aug. 29, 2025).

AI in Domestic Violence Cases: Solving Critical Challenges

Artificial Intelligence (AI) is revolutionizing how societies respond to domestic violence—especially violence against women—by addressing systemic inefficiencies across detection, prevention, protection, prosecution, and survivor support. While traditional systems rely on fragmented data, delayed responses, and under-resourced personnel, AI-based solutions offer a real-time, data-driven, and scalable alternative.[23] However, the integration of AI must be grounded in ethics, intersectionality, and human rights to ensure that it truly serves the vulnerable rather than reinforces discrimination.

Bridging the Detection Gap

A significant challenge in domestic violence (DV) cases is that abuse often goes undetected or is reported too late. AI steps in to detect early warning signs by analyzing behavioral, emotional, and environmental data through machine learning (ML), natural language processing (NLP), and computer vision. For example, AI-based risk assessment tools are being used in countries like the UK and Australia to identify high-risk cases. These tools analyze previous police reports, court data, victim statements, and even social media activity to predict the likelihood of repeat or escalating violence. In Spain, the VioGén system monitors over 70,000 cases by assigning real-time risk scores to help police prioritize intervention (UN Women, 2023). In India, where underreporting is rampant due to societal stigma and fear of retaliation, such predictive tools could be integrated into platforms like 112 Emergency Response Systems (ERS) and Police IT systems (CCTNS) to flag repeat abusers or coercive control patterns before they escalate into physical violence.

Real-Time Protection and Support

AI-powered tools can also provide immediate support to women in danger. Chatbots such as HERA, My Ambar, and Safecity's chatbot offer information on legal rights, shelter homes, and police contacts. These tools are multilingual, gender-sensitive, and accessible through low-end phones or platforms like WhatsApp and Telegram, which women are more likely to use in private.[24] In South Africa, Rainbow, a Facebook Messenger chatbot powered by NLP, offers psycho-social support and risk screening to survivors who may be unable to speak to a human counselor due to fear or isolation. Similarly, India's Raksha App and UP's 112 Helpline now integrate location tracking and AI-supported response prioritization, allowing police to reach survivors faster during emergencies.

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23. NITI Aayog, Responsible AI for Social Empowerment (RAISE 2020), https://www.niti.gov.in/files/responsible-ai-social-empowerment.pdf (last visited Aug. 29, 2025).

24. Breakthrough India, Meet Hera: A Chatbot for Women's Rights, https://inbreakthrough.org/meet-hera-a-chatbot-for-womens-rights (last visited July 6, 2025).

Wearables integrated with AI algorithms—such as Epowar in the UK or India's Shakti Smart Rings—analyze biometric data (like sudden heart rate spikes or physical struggle movements) to detect violence and automatically trigger alerts or recording functions. This hands-free, covert support can be life-saving in situations where the survivor cannot access a phone or speak.

Enhancing Evidence Collection and Documentation

Convictions in domestic violence cases often fail due to lack of evidence or survivor reluctance to re-live trauma during multiple retellings. AI can digitize and automate evidence collection, offering a trauma-sensitive approach. For instance, Bright Sky (UK) and MyPlan (USA) allow survivors to maintain private, encrypted logs of abuse—including images, audio notes, and descriptions—which are time-stamped and securely stored without being visible in the phone's gallery. These can later be submitted as evidence in court, reducing the burden of repeated storytelling. Further, AI-enabled NLP tools can analyze distress signals in voice calls to emergency services or hotlines, flagging high-risk cases for immediate human review. In India, the proposed integration of Inter-Operable Criminal Justice System (ICJS) with AI-based docket systems could help link FIRs, medical reports, and protection orders into one accessible case file for faster judicial processing.

Streamlining Legal and Judicial Access

The Indian legal system is often overburdened, under-resourced, and hostile for women survivors. AI offers potential solutions to streamline legal processes through automation and data synthesis. AI-powered legal tech platforms can help survivors with the PWDVA[25] forms, draft complaints, and even forecast case timelines based on past data. Judicial systems could also adopt AI-based risk dashboards, which summarize survivor history, protection needs, and abuser threat levels using visual and statistical data to assist magistrates in making informed and time-sensitive decisions, such as issuing interim protection orders.[26]

Empowering Communities and Prevention through Data

AI doesn't only serve institutions—it can empower communities by revealing patterns of abuse and unsafe spaces. Platforms like Safecity use crowdsourced data on harassment incidents, visualized through AI-generated heat maps to inform urban planners and civic bodies. Safetipin, another Indian initiative, uses computer vision to rate streets on safety parameters such as lighting, gender presence, and crowd density. By integrating this information into city planning, local governments can address environmental risk factors for violence. For example, in Mumbai,

25. The Protection of Women from Domestic Violence Act, No. 43 of 2005, Acts of Parliament, 2005 (India).

26. U.N. Women, Leveraging Artificial Intelligence to Improve Protection Orders and Risk Assessment in Domestic Violence Cases (2021), https://www.unwomen.org/en/digital-library/publications/2021/10/ai-and-domestic-violence-risk-assessment (last visited July 6, 2025).

harassment reports submitted via Safecity led to the installation of better street lighting and increased police patrolling in certain neighborhoods.[27] Moreover, AI-driven sentiment analysis of local social media and news feeds can help detect rising domestic tensions (especially during crises like the COVID-19 lockdown) and inform NGO or government outreach before abuse surges. Predictive modeling can also assist in policy evaluation—for instance, tracking how funding cuts or shelter closures impact violence levels over time.

Addressing Ethical, Gender, and Intersectional Concerns

While AI holds transformative potential, it must be applied with caution. Algorithms can reproduce structural biases if trained on incomplete or skewed data. If a DV risk assessment model is built only on English-language urban data, it may miss the signs of abuse in rural, Dalit, Muslim, or queer contexts—perpetuating digital exclusion.

Therefore, ethical design and feminist AI frameworks are crucial. Developers should:

i. Use diverse and representative training datasets

ii. Include survivors and gender experts in the development process

iii. Build explainable and transparent algorithms

iv. Provide opt-in and consent-driven data sharing

v. Create accountability mechanisms for AI decision-making in justice processes

Additionally, data privacy and cybersecurity are paramount. Any breach in AI-based apps storing abuse evidence could put women at risk. All tools must follow the highest standards of encryption, data minimization, and user control.

AI is not a magic solution to domestic violence—but it can be a powerful complement to human-led support systems when developed with ethics, inclusivity, and social justice at the core. From early risk detection to real-time help, from digital evidence collection to legal access and community mapping, AI tools are already reshaping how domestic violence cases are identified, managed, and prosecuted.

For India, the way forward lies in building gender-inclusive, locally contextualized, and survivor-centric AI systems—while ensuring that human rights remain at the heart of technological progress. Policymakers, NGOs, and technologists must collaborate to ensure that

27. Safecity, How Safecity Data Was Used in Mumbai to Make Public Spaces Safer for Women, https://safecity.in/impact-mumbai/ (last visited July 6, 2025).

AI becomes a tool not just of innovation, but of empowerment, dignity, and justice for all women.[28]

Case Studies: Comparative and Indian Experiences

***We The Women of India v. Union of India* (2025),**[29] the Supreme Court addressed the weak implementation of the Protection of Women from Domestic Violence Act, 2005. Many states had failed to appoint Protection Officers, establish Shelter Homes, or create awareness about the Act, leaving survivors without meaningful support. The Court directed governments to institutionalize mechanisms such as full-time Protection Officers, registered Service Providers, safe shelters, and public campaigns. From a feminist legal theory perspective, the judgment is significant because it rejects the patriarchal assumption that domestic violence is a private matter. By mandating state-backed structures, it transforms the law into a tool of empowerment, enabling survivors to access remedies without dependence on family power dynamics. The ruling acknowledges the heightened vulnerabilities faced by rural, Dalit, Adivasi, and migrant women when viewed through the lens of intersectionality. The Court guaranteed access for marginalized women, who are frequently shut out of urban-centered legal resources, by mandating services across districts and sub-districts. The decision changes the focus of domestic violence from private silence to public accountability from a socio-legal perspective. It strengthens women's access to justice by bridging the gap between the theory and application of the law and making sure that statutory promises are fulfilled through real relief.

India: Emerging Models of AI-Based Domestic Violence Response

India has begun leveraging artificial intelligence to modernize its approach to domestic violence (DV) response, especially through state-backed initiatives and centrally-funded platforms. Several innovative programs illustrate how AI can be tailored to address the country's unique legal, social, and infrastructural challenges.

112 Emergency Response System with AI (Uttar Pradesh)

Uttar Pradesh, one of India's most populous states, has implemented a robust AI-integrated 112 Emergency Response System (ERS). This system uses real-time geolocation, behavioral pattern recognition, and call data analytics to prioritize high-risk calls, especially from women reporting domestic violence. The AI module analyzes repeat call frequency, voice stress levels, and time-of-day patterns to assess urgency and allocate resources accordingly. In many cases, this has helped reduce police response times to under 10 minutes. The system also integrates

28. NITI Aayog, Towards Responsible AI for Social Empowerment in India (RAISE), https://www.niti.gov.in/files/responsible-ai-social-empowerment.pdf (last visited July 6, 2025).

29. WE THE WOMEN OF INDIA v. UNION OF INDIA, W.P.(C) No. 001156/2021 (Supreme Court of India Aug. 5, 2025) (pending), available at Supreme Court Database.

with mobile applications like Raksha and Shakti Button, allowing women to trigger silent SOS alerts through simple gestures like shaking their phone or pressing a power button three times.[30]

***Dara Lakshmi Narayana v. State of Telangana* (2024),**[31] the Supreme Court quashed criminal proceedings under Section 498A IPC and the Dowry Prohibition Act, holding that the allegations were vague, omnibus, and lacked specific factual foundation. The Court emphasized that while 498A was enacted to protect women from cruelty and dowry harassment, it cannot be misused to harass entire families through generalized accusations. From a feminist legal theory lens, the ruling underscores that genuine protection of women requires careful balance; misuse undermines both justice and credibility of gender-specific laws. It rejects the stereotype that protective laws can be used as instruments of vendetta, preserving the legitimacy of women's rights frameworks. The ruling reaffirms the necessity of judicial review to preserve the integrity of the legal system from a socio-legal standpoint. It guarantees continued legitimacy, efficacy, and attention to real survivors of domestic abuse their legal remedies.

Legal, Ethical, and Policy Challenges

The integration of AI into systems addressing domestic violence against women DVAW promises efficiency, early intervention, and survivor support. However, it also brings a complex web of legal, ethical, and policy concerns that must be addressed to ensure that technological innovation does not reinforce patriarchal control, violate rights, or deepen existing inequities. These challenges lie across four critical dimensions: algorithmic bias, data privacy, evidentiary concerns, and lack of regulation.

Algorithmic Bias and Gender Discrimination

AI systems are only as fair as the data they are trained on. Unfortunately, most datasets reflect entrenched gender, caste, class, and racial biases. In the context of domestic violence, algorithmic bias can have life-threatening consequences. For example, predictive models trained on historical police data may misclassify women from marginalized communities—such as Dalit, tribal, or Muslim women—as low-risk, simply because their cases were underreported or poorly recorded in the past.[32] A significant danger lies in replicating patriarchal assumptions through machine learning. Risk-assessment tools used in policing and social services, such as those piloted in the UK and Australia, have shown disparities in risk prediction accuracy when applied to minority women or immigrants. If adopted uncritically in India, these tools may reinforce exclusionary patterns and lead to false negatives—where high-risk women are denied

30. Ministry of Women & Child Dev., Gov't of India, Mobile Apps for Women's Safety: Raksha and Shakti Button, https://wcd.nic.in/acts/mobile-apps-womens-safety (last visited July 6, 2025).

31. Dara Lakshmi Narayana v. State of Telangana, 2024 INSC 953

32. Usha Ramanathan, Aadhaar: A Tool for Surveillance?, 5 Indian J.L. & Pol'y 1, 15–17 (2017); see also Virginia Eubanks, Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor (2018).

timely protection—or false positives, which could subject survivors to unnecessary surveillance or institutional intervention. Feminist scholars argue for intersectional audits of AI systems to ensure they account for overlapping vulnerabilities—such as gender, caste, class, religion, and geography. A tool that cannot identify coercive control in rural, non-English speaking, or disabled women's contexts risks amplifying the very invisibility it aims to counter.

***S. Vijikumari v. Mowneshwarachari C (2024)*,**[33] the Madras High Court provided clarification on the application of the PWDVA.[34] According to the Court, the Act is a gender-specific, secular law that applies to all women, irrespective of their caste, religion, or community. The respondent had claimed that the Act's applicability was limited by personal laws, but the Court categorically denied this claim, highlighting the PWDVA's unique status as legislation designed to protect women's rights from all forms of domestic abuse. According to feminist legal theory, the ruling upholds that women's protection from violence is a universal human right that is unaffected by one's religious or personal identity. According to a socio-legal perspective, the decision strengthens equality and inclusivity by removing interpretive obstacles and guaranteeing that no woman is denied access to statutory remedies.

Privacy, Surveillance, and Consent

Domestic violence survivors are particularly vulnerable to digital surveillance—not only by state actors but also by abusers who often control phones, passwords, and financial resources. AI-based safety technologies, such as GPS tracking apps, biometric wearables, or voice-activated panic tools, raise urgent questions of consent and autonomy. India's DPDP Act[35] provides a legal framework for personal data processing, consent, and redressal. However, it exempts law enforcement agencies from many of its safeguards, allowing police or public authorities to collect and process sensitive data without strict judicial oversight. This poses serious concerns when applied to DV contexts, where a woman's location, audio recordings, or health data might be shared across agencies without her explicit permission.[36] Further, under the constitutional right to privacy affirmed in ***Justice K.S. Puttaswamy v. Union of India (2017)***,[37] any state intrusion must pass the "triple test" of legality, necessity, and proportionality. Continuous surveillance through AI-enabled emergency response systems—such as the 112 AI platform in Uttar Pradesh—must therefore be balanced against the survivor's right to withdraw consent, delete data, or access anonymized support services. Ethical design must include "stealth modes"

33. S. Vijikumari v. Mowneshwarachari C, 2024 INSC 732

34. PWDVA, *supra* note 7.

35. DPDP, *supra* note 10.

36. Apar Gupta, DPDP Act 2023 and the Erosion of Consent in State Surveillance, Internet Freedom Found. (Aug. 2023), https://internetfreedom.in/dpdp-consent-surveillance (last visited July 6, 2025).

37. Justice K.S. Puttaswamy v. Union of India, (2017) 10 SCC 1

in safety apps, such as disguised icons, data encryption, remote logouts, and auto-deletion options. Otherwise, such tools risk enabling tech-facilitated abuse rather than preventing it.

Evidentiary and Admissibility Concerns

AI tools offer immense promise in evidence collection—for example, apps that timestamp abuse incidents, chatbots that record survivor testimonies, or smart devices that detect and log assault-related biometrics. However, the Indian legal system still grapples with the admissibility and authentication of such digital material. Under Section 65B of the Indian Evidence Act, 1872, electronic records are admissible only if accompanied by a certificate validating the process by which the record was generated and stored. In ***Arjun Panditrao Khotkar v. Kailash Kushanrao Gorantyal (2020)***,[38] the Supreme Court reaffirmed that such a certificate is mandatory. Therefore, an AI-generated transcript or risk score will not be admissible unless its integrity, algorithmic transparency, and source chain can be certified. Moreover, Indian courts have yet to develop a judicial standard for AI-generated assessments in criminal matters. Questions remain:

i. Can risk scores be submitted as expert evidence?

ii. How can survivors challenge erroneous AI findings?

iii. What safeguards exist to prevent tampering or misinterpretation?

Without clarity, defense lawyers may argue that AI outputs are unreliable, and survivors could face the double burden of producing proof and defending the method of its creation.

Lack of Regulation and Accountability

While countries like the European Union (EU) are progressing toward comprehensive AI governance laws (e.g., the EU AI Act), India currently lacks a binding regulatory framework for ethical AI deployment in sensitive domains like domestic violence. The Responsible AI for Social Empowerment (RAISE) initiative and the National Strategy for Artificial Intelligence (2018) have provided policy-level principles like Equity, Responsibility, Openness, and Inclusivity, but they remain non-binding.[39] There is no legal obligation for AI tools used by police, courts, or social services to:

i. Conduct algorithmic audits,

ii. Report performance disparities,

38. Arjun Panditrao Khotkar v. Kailash Kushanrao Gorantyal, AIR 2020 SUPREME COURT 4908

39. NITI Aayog, National Strategy for Artificial Intelligence (2018), https://niti.gov.in/sites/default/files/2021-02/NationalStrategy-for-AI-Discussion-Paper.pdf (last visited July 6, 2025); see also NITI Aayog, Responsible AI for Social Empowerment (RAISE) 2020, https://www.niti.gov.in/files/responsible-ai-social-empowerment.pdf (last visited July 6, 2025).

iii. Allow survivors to opt out, or

iv. Ensure grievance redressal.

Additionally, inter-agency protocols, for example, between police, courts, One-Stop Centres, and helplines—are fragmented. This creates data silos, inconsistencies in evidence handling, and gaps in survivor protection. A unified legal-technical protocol is needed to guide the use of AI across the criminal justice and welfare ecosystem, grounded in gender-sensitive and human rights-compliant standards. As India experiments with AI in its fight against domestic violence, legal and ethical guardrails must evolve in tandem. Technologies must empower survivors, not automate injustice. This requires:

i. Gender-inclusive datasets and intersectional bias testing,

ii. Consent-based design and robust data privacy laws,

iii. Judicial clarity on AI evidence admissibility, and

iv. Strong institutional accountability mechanisms.

Without these reforms, the promise of AI risks being overshadowed by new forms of inequality, surveillance, and denial of justice for the very women it aims to protect.

Recommendations for an Ethical and Inclusive AI Framework

To ensure that artificial intelligence (AI) meaningfully supports women facing domestic violence rather than replicating structural injustices, it is imperative to build a framework grounded in human rights, gender justice, data ethics, and social accountability. Based on identified legal, ethical, and implementation challenges, the following multi-level recommendations can help shape an ethical and inclusive AI ecosystem for domestic violence interventions in India and beyond.[40]

Adopt a Rights-Based and Survivor-Centric Approach

Women's autonomy, privacy, dignity, and safety—fundamental tenets of human rights law and the PWDVA[41]—must be upheld in the design and implementation of AI systems.

This includes:

i. Ensuring informed and revocable consent in all AI-based applications, especially those tracking geolocation, biometric data, or storing sensitive records.

40. NITI Aayog, Responsible AI for Social Empowerment (RAISE) 2020, https://www.niti.gov.in/files/responsible-ai-social-empowerment.pdf (last visited July 6, 2025).

41. PWDVA, *supra* note 7.

ii. Allowing survivors to control how their data is used, stored, and deleted.

iii. Creating opt-in models with clear disclaimers, language accessibility, and non-coercive participation.

AI should never override a woman's agency or become a substitute for trauma-informed, community-based support.

Ensure Gender-Inclusive and Intersectional Data Practices

AI models used in domestic violence interventions must be built on representative datasets that account for the realities of marginalized groups—including Dalit, Adivasi, Muslim, queer, disabled, rural, and migrant women. Developers and agencies must:

i. Conduct intersectional audits to detect and correct algorithmic bias based on caste, class, language, and other social hierarchies.

ii. Involve gender experts, survivors, and civil society groups in data collection, labeling, and testing stages.

iii. Disaggregate all AI outputs by socio-demographic indicators to reveal disparities in service delivery.

This ensures that AI systems do not invisibilize or endanger already underserved communities.

Build Transparent, Explainable, and Accountable AI

Given the high stakes in domestic violence cases—where misclassification can endanger lives—AI systems must be explainable and open to challenge. Therefore:

i. Algorithms used in policing, courts, or welfare services should have clear documentation, accuracy benchmarks, and mechanisms for review or appeal.

ii. Survivors and their legal representatives must have the right to challenge AI-based risk scores or evidence assessments.

iii. Governments must enforce mandatory impact assessments before deploying AI tools in sensitive domains.

Accountability mechanisms should be legally binding, not voluntary or aspirational.

Strengthen Data Protection and Privacy Laws

While the DPDP Act, 2023 provides a basic legal framework, it needs to be strengthened and gender-sensitive to protect survivors of violence.[42] Key actions include:

42. The Digital Personal Data Protection Act, No. 22 of 2023, India Code (2023), https://prsindia.org/billtrack/the-digital-personal-data-protection-bill-2023 (last visited July 6, 2025).

i. Amending the law to ensure survivor-specific protections in cases involving law enforcement and AI-enabled surveillance.

ii. Mandating encryption, limited retention, and local storage for all DV-related apps and databases.

iii. Creating protocols for invisible, safe exit options (e.g., dummy icons or panic deletes) in safety apps.

Public and private actors alike should be held liable for any breaches or misuse of survivor data.

Establish Ethical and Regulatory Governance Structures

India urgently needs a comprehensive, enforceable AI regulatory framework aligned with national gender justice goals and global human rights norms. Key recommendations include:

i. Creating a specialized inter-ministerial task force involving the Ministry of Women and Child Development, Ministry of Electronics and Information Technology, judiciary, and civil society to monitor AI in gender-based violence systems.

ii. Requiring algorithmic transparency and fairness reporting from all public and private developers working on DV-related tech.

iii. Issuing sectoral guidelines on AI use in policing, shelter systems, One-Stop Centres, courts, and emergency response platforms.

These regulations must be embedded in law and periodically revised based on lived experiences and technological shifts.Ethical, inclusive, and feminist AI is not an abstract ideal—it is a necessity when the lives and rights of domestic violence survivors are at stake. By embedding consent, transparency, fairness, and accountability into every layer of AI design and governance, India and other nations can make sure that technology is used to empower people rather than to oppress them. The future of justice must be digitally enabled, but human rights-led.[43]

CONCLUSION

Regardless of geography, class, caste, or culture, domestic violence against women continues to be one of the most widespread human rights abuses in the world. Despite the existence of legal frameworks such as the Protection of Women from Domestic Violence Act, 2005 in India, systemic challenges—delayed reporting, evidentiary gaps, stigma, and institutional apathy—

43. U.N. High Comm'r for Human Rights, The Right to Privacy in the Digital Age, U.N. Doc. A/HRC/27/37 (2014); see also NITI Aayog, Responsible AI for Social Empowerment (RAISE) 2020, https://www.niti.gov.in/files/responsible-ai-social-empowerment.pdf (last visited July 6, 2025).

continue to obstruct justice and recovery for survivors. In this context, the advent of Artificial Intelligence (AI) presents a transformative opportunity to reimagine support systems for survivors of domestic violence, especially in terms of prevention, protection, documentation, and empowerment. As this paper has demonstrated, AI technologies—ranging from predictive analytics and NLP chatbots to smart wearables and digital evidence lockers—are already being deployed across jurisdictions to intervene in cases of abuse. In India, tools such as the 112 Emergency Response System, Raksha App, and One-Stop Centres supported by the Nirbhaya Fund illustrate growing experimentation with AI in public safety and survivor support. Globally, platforms like myPlan, Bright Sky, and rAInbow have enhanced women's access to real-time assistance and risk assessment, often bypassing institutional hurdles. However, the promise of AI is not without peril. Algorithmic bias, rooted in historical and structural discrimination, can lead to misidentification of risk or invisibilization of vulnerable groups—particularly Dalit, tribal, queer, disabled, or rural women. Data-driven tools that lack consent mechanisms or privacy safeguards risk becoming instruments of surveillance rather than empowerment. Further, the legal landscape in India remains underprepared to handle AI-generated evidence or ensure accountability in the use of these technologies. The absence of binding AI regulation limited judicial precedents, and gaps in data protection law all raise red flags that must be addressed urgently.The path forward lies not in rejecting AI, but in radically reimagining it through a feminist, ethical, and rights-based lens. AI must be inclusive, transparent, accountable, and survivor-centric. It must complement—not replace—community-led, trauma-informed, and culturally sensitive interventions. Technology should serve as an amplifier of human support systems, not a substitute for empathy, legal due process, or survivor autonomy.[44] Policymakers, technologists, legal professionals, and civil society actors must co-create robust regulatory frameworks that align innovation with justice. Only by embedding ethical design, intersectional data practices, and strong legal oversight can AI truly become a force for gender justice. In the digital age, empowering women against domestic violence means ensuring that the very tools meant to protect them do not become another face of structural harm—but rather a new frontier in the struggle for dignity, freedom, and equality.

44. U.N. Women, Recommendations on Ethical Use of AI for Gender-Based Violence Prevention and Response (2022), https://www.unwomen.org/en/digital-library/publications/2022/11/ethical-ai-gbv (last visited July 6, 2025).

CONSTITUTIONALISM AND DEVELOPMENTAL JUSTICE TOWARDS NATURAL DISASTER VICTIMS: THE INDIAN SCENARIO

Smitha Kurian [1]

ABSTRACT

The primary obligation of a welfare state is to protect vulnerable persons. The practical dimensions of the relationship of a state with its people will be crystal clear only in the wake of natural disasters. Due to the absence of specific provisions for the protection of rights of disaster victims in the Constitution of India, Article 21 can be considered as the nucleus around which all rights of disaster victims, including the right to life and personal liberty. Through judicial activism, the apex court, on many occasions, widened the scope of the right to life and personal liberty in Article 21 and many rights were included in it. Besides Article 21 and 38 also directs the state to promote the welfare of the people. During natural disasters, the state has a positive obligation to provide help, assistance, and support to disaster victims. The doctrine of "*parens patriae*" simply reassures the same. The concepts of constitutionalism and developmental justice give a structural framework for protecting the basic human rights of natural disaster victims and it will be practically feasible only through judicial activism. Without ensuring proper protection for natural disaster victims, the concept of the welfare state will be meaningless

Keywords: Welfare state, Natural disasters, Judicial activism, Rights, *Parens patriae*

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INTRODUCTION

The concept of disaster management is not new, it is as old as the history of disasters. Natural disasters are one of the major threats to human life and property. Natural disasters are events in nature that are sudden and at the same time terrible, resulting in serious damage and many deaths. Natural disasters can be defined as "abnormal natural phenomena" which may cause damage to human life, property, environment, living conditions and socio-economic activities.[2] Many great civilizations, including the Mayans, the Minoans and the Egyptians, were destroyed due to natural calamities. The number of natural disasters has increased globally due to the growth of human population, industrialization and unscientific exploitation of nature. Various instances of disaster management are evident from historical records. The story of Noah's ark from the Old Testament, for example, is a lesson about the importance of warning, preparedness and mitigation. Likewise, a similar narration in Hindu Mythology, the story of Lord Vishnu's Matsya avatar in Satya Yuga to save living beings from a great flood. There was evidence of risk management practices in 3200BC among "the Asipu", a social group that lived in modern Iraq[3].

The Renaissance movement of 14th century and the recognition and development of democratic rights due to the political struggles such as "The French revolution of 1789" and "The American war of independence 1775" and other similar revolutions in different parts of the world and political uprisals of 18th and 19th century, etc., led to the recognition of democratic rights and drafting of constitutions of many countries, all these stimulated the development of human rights and as a part of this the rights of disaster victims were gradually recognized and started getting protected. Further, the concept of the state was also changed from a police state to a modern welfare state. By its very nature, the modern welfare State had to undertake many welfare activities, including the protection of victims of natural disasters. The drafting of international documents on human rights, such as the UDHR, 1948,[4] ICCPR, 1966,[5] ICESCR, 1996,[6] etc, also recognized many rights which are essential for an individual.

Though we are unable to point out a particular period from which the beginning of overall move to safeguard and protect citizens during natural disasters and mitigating its effects yet the modern disaster management in terms of emergence of global standards and organized efforts to address preparedness, mitigation and response activities for a wide range of disasters did

2. Merriam-Webster, https://www.merriam-webster.com/dictionary/natural%20disaster (last visited Jun. 7, 2025).

3. *Management of disasters*, Elsevier, (Jun. 7, 2025, 9:00 PM), https://booksite.elsevier.com/samplechapters/9780750679824/02~Chapter_1.pdf

4. G.A. Res. 217A (III), U.N. Doc. A/810 (Dec. 10, 1948).

5. G.A. Res. 2200A (XXI), U.N. Doc. A/6316 (Dec. 16, 1966).

6. *Id.*

not begin to emerge till the mid of 20th century. In most countries, this change occurred as a response to specific disaster events.

The beginning of international environmental strategies, such as the Stockholm conference of 1972[7] and other environmental strategies followed and considered natural hazards as a crucial obstacle to the process of sustainable development. The global framework for natural disaster management began with the declaration of the UN General Assembly dated 11th December 1987, and in 1990, as the International Decade for Natural Disaster Reduction (IDNDR). It aimed at reducing the material loss and socio-economic disruptions caused by natural disasters. To evaluate the progress attained by IDNDR, UN members met at Yokohama in May 1994, and this world conference developed the Yokohama Strategy for disaster management. Another world conference on disaster reduction held in Kobe, Japan, in 2005 addressed the gaps identified in the Yokohama Strategy and formulated an action plan for disaster reduction from 2005-2015. Again, UN Members adopted the Sendai Framework on 18th March 2015 at the third UN World Conference on Disaster Risk Reduction in Sendai City, Japan. It was a global blueprint to prevent new disasters and reduce the existing disaster risk.

NATURAL DISASTER MANAGEMENT IN INDIA OVER DIFFERENT PERIODS

The evolution and development of disaster management in India can be classified into three different periods. They are the ancient period, the Colonial period and the post-independence period.

Disaster Management during the Ancient Period

We got knowledge about the disaster management mechanisms of this period through the earlier texts such as "Vedas, Puranas, the Mahabharata and the Arthasastra of Kautilya.[8] The concept of Raja Dharma clearly points out the duties and responsibilities of the kings. Welfare of the people was the chief concern of the king, "In the happiness of his subjects lies the king's happiness; in their welfare his welfare, whatever pleases himself the king shall not consider as good, but whatever pleases his subjects, the king shall consider as good"[9]. The calamities affect the king and the people within a certain time frame. In times of distress, the king allowed tax reduction from one-sixth of the produce to one-third. The Puranas insist in the performance of certain Palliatives, "Shantis", and they are to be prescribed based on astrological time and position of heavenly bodies. For example, when there is no rain or unnatural or excessive

7. UN Conference on Human Environment in Stockholm, June 5-16th b 1972, it marked the inaugural global gathering on planetary environmental issues.

8. An ancient Indian Sanskrit treatise on state craft, political science, economic policy and military strategy, Vishnu Gupta popularly known as Kautilya is considered as the author of this text.

9. Justice M Rama Jois, Legal and Constitutional History of India 607 (Universal Law Publishing Company 1984).

rainfall, Varuna must be propitiated. Likewise, stars indicate calamities or when comets are seen, other ceremonies are suggested. The Matsya Purana even suggest that calamities are foreseen by watching animal behavior.[10]

Kautilya called natural disasters as "Daivam Vyasanam". He lists eight types of natural disasters. They are Agni (Fire), Udaka (Flood), Vyadi (Epidemics), Durbhiksha (Famine), Musaka (Rats), Vyala (Wild animals), Sarpa (Snakes), Raksami(Demons, Evil spirits). The process of disaster management, such as preparedness, mitigation and rehabilitation etc, is also mentioned in the Arthasastra.[11]

Disaster Management During the Colonial Period

During the British colonial period, the disaster management activity in India had changed from an activity based reactive set-up in the initial stage to a proactive institutionalized structure. India may have the world's oldest disaster relief code (The Famine Code of 1883). The main reason behind its drafting was the Famine of 1876-1878. Famines were recurrent incidents in British India, so to study famines and to formulate policy to control them, the British appointed three commissions.

The first Famine commissions was appointed by Lord Lytton in the year 1878 under the chairmanship of Sir Richard Strachey. The commission recommended periodic adjustment of wages, and providing sufficient food for labor support, suspension and remission of land taxes, provide gratuitous payment to poor and for the interference of the state in food trade at times of famine on the basis of this report, a famine code was drafted in 1883.[12]

The second famine commission was set up in 1897 during the Viceroyship of Lord Elgin II with Sir James Layall as chairman, to study about the famine of 1896-1897, which affected most of the provinces of British India. The commission recommended developing irrigation facilities.

The third famine commission was appointed in the year 1900 with Lord M C Donnel as chairman during Lord Curzon's reign to study the Famine of 1899-1900. The commission, in its report, gave importance to the improvement of transport facilities, irrigation facilities, etc. Most of these recommendations were accepted under British administration. The government was not concerned about the welfare plans for the people, and as a result, famines continued,

10. Manjula Tekal, *Reflections of Raja dharma -Political Thought in the Puranas*, Medium (Jun. 8, 2025, at 5:00 AM), https://manjula-tekal.medium.com/reflections-on-rajadharma-political-thought-in-the-puranas-1022567df462.

11. Pallavi Sharma, *Relevance of Kautilyan Thought on Disaster Management*, 2, International Journal of Social Science & Economic Research, 11 (2017).

12. It classified situations of food scarcity according to the scale of intensity and laid out a series of steps that the governments are obliged to take in the event of famine.

and among them the most tragic was the Bengal Famine of 1943, which killed more than 3 million people.

Compared to famine, though Floods have been recorded in government documents of the country since the Eighteenth century, in flood situations rather than setting up of committees and commissions such as the Orissa flood committee, the Patna conference on flood, etc.[13] The British government did not do much to control floods. Under British administration, during disasters rather than setting up of relief departments for handling emergencies, the government was not concerned with concentrating more on the welfare of the people. Another important step taken by the British was the enactment of the "Epidemics Disease Act, 1897."[14] It was an act to provide better prevention of the spread of dangerous epidemic diseases. The act consists of only four sections. Though this colonial legislation was enacted to control the outbreak of plague in the presidency of Bombay. This act was applied even after India's independence and most recently in Covid time to reduce the spread of Covid-19 pandemic in India.

Disaster Management During the Post-Independence Period

During the post-independence period, India continued with the relief commissioner system. At the federal level, the central relief commissioner was appointed, and his main duty was to arrange relief after drought or famine and help the state government. At the state level, the relief commissioner is duty-bound to recommend to the state government for the declaration of drought and the relief to be granted on the basis of the report from the lower local land administration. Though in our constitution and in the initial five-year plan, disaster management was not mentioned, yet in the last two five-year plans, it was considered an important theme.

Five-Year Plans and Disaster Management

After gaining independence, the Indian government set up the Planning Commission of India in 1951, and it was responsible for implementing five-year plans.[15] The first five-year plan was launched in 1951, and the last was the 12th plan of 2017. Each five-year plan has a special objective. Unfortunately, the earlier plans did not mention anything about disaster management. It was the 10th plan (2002-2007), which for the first time had a detailed chapter on disaster management. The plan considered disaster mitigation and prevention as a vital component of the development strategy. The 11th plan (2007-2012) considered disaster management as a high-

13. Vol 1, Anjuli Mishra & Awadesh Kumar Singh, New Dimensions of Disaster Management in India 356 (Serial publications, New Delhi 2013)

14. Epidemic Disease Act, 1897

15. Centralised and integrated national economic programmes It was first implemented in late 1920's in Soviet Union by Joseph Stalin, After independence India launched first five year plan in 1951 The last plan was the 12th plan of 2012.

priority theme and focused on the development process by consolidating the disaster prevention and mitigation.

Beginning of the Institutional Framework

It was by 1990, an institutionalized mechanism towards disaster management began in India. The driving force behind this change was the "UN General assembly declaration of 1990 as the International Decade for Natural Disaster reduction (IDNDR)", and the occurrence of series of disasters in India such as, The Bhopal gas tragedy of 1984, The Lathur earthquake of 1993, The Assam flood 1998, The Odisha super Cyclone 1999 etc, All this resulted in the appointment of a high-power committee under the chairmanship of Mr J C Pant, the former secretary of government of India to study about the problem of disaster management. The committee submitted its report in 2001. An important recommendation in the report was that 10% of plan funds at the national, state, and district levels be earmarked for schemes for prevention, reduction, preparedness and mitigation of disasters. The committee proposed the Disaster management bill, but the bill was in dormant stage till the Indian Ocean Tsunami of 2004, which affected all the coastal states of India. Finally, the legal framework on disaster management in India came into force by the passing of the Disaster Management Act in 23rd in December 2005. It mandated the creation of the National Disaster Management Authority with the Prime Minister as chairman and the State Disaster Management Authority, headed by chief ministers, to implement disaster management programs in the respective states.[16]

DISASTER MANAGEMENT ACT, 2005; AN OVERVIEW

Disaster Management Act, 2005[17] was passed by the Indian parliament in 2005 for effective management of disasters and other matters connected to it. The act consists of 11 chapters and 79 sections, got presidential assent on 23rd December 2005 and came into force in January 2006. The main objective of the act is to establish an efficient disaster management system for the country in the event of natural and man-made calamities.

Main Features of the Act

1. Appointment of a Nodal agency: The act considers the Ministry of Home Affairs as the nodal ministry for steering the overall national disaster management
2. Creation of an Institutional structure: The act creates a systematic structure of institutions at the national, state and district levels.
3. Constitution of National-level entities: The act provides for the constitution of national-level entities such as NDMA, NEC, NIDM, NDRF, etc.

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16. Vol 1, ANJULI MISHRA & AWADESH KUMAR SINGH, *supra note* 13 at 5.
17. Disaster Management Act, 2005.

4. Declaration of disaster-prone zones: The act empowers the central government to declare all or portions of the country as impacted by disaster and also to develop steps for mitigating the disasters, risks and consequences.

Drawbacks of the Act

Though the aims at manage disasters effectively yet it have some drawbacks, such as narrow definition of the term disaster, procedural delays in implementing plans and policies, overlapping functions of different authorities etc.

1. Role of the Indian Judiciary in Protecting the Rights of Natural Disaster Victims

Being a welfare state, India is obliged to ensure social justice and welfare of all sections of society, especially disaster victims. To achieve this object, our judiciary plays an important role by enlarging the scope of the Right to life and personal liberty guaranteed under Article 21[18] especially after Maneka Gandhi's case.[19] Article 21[20] imposes a positive obligation on the state to preserve and protect human life. So the right to rescue, relief and rehabilitation are also part of the Right to life under Article 21.[21] Further, in many cases, the Supreme Court applied the doctrine of "*Parens patriae*", and thus the state is obliged to provide rescue, relief, and rehabilitation of the victims of disasters.

Though the Disaster Management Act was passed in 2005.[22] Even after 20 years of its enactment, there is no concrete policy to provide relief and rehabilitation to victims and also for effective management of disasters. So a bundle of petitions were filed in the Supreme Court for directing the government to implement the provisions of the Disaster Management Act so our judiciary performs a paramount role in protecting the human rights of disaster victims. Protection of human rights is an important aspect of disaster management. Denial of human rights makes people more vulnerable to the adverse impact of disasters. The dominant role performed by the Indian judiciary in protecting the rights of Natural disaster victims can be studied from two different periods. They are, Pre-Legislation period (period before the enactment of the Disaster Management Act) and the Post-Legislation period (period after the enactment of the Disaster Management Act).

2. Development of Disaster Victims Rights in India Over Different Periods

The recognition, development and protection of natural disaster victims in India can be studied through the following classification of its development over different periods they are:-

18. Constitution of India, 1950.

19. Maneka Gandhi V. Union of India, AIR 1978 SC 597.

20. Disaster Management Act, *supra note* 17 at 6.

21. *Id.*

22. Vol 1, ANJULI MISHRA & AWADESH KUMAR SINGH, *supra note* 13 at 5.

The Pre-Legislation Period: During this period, disaster victims' rights were protected by giving a wider interpretation to Article 21[23] of the Indian Constitution by applying doctrines such as parens patriae and human rights principles. The judicial activism for the protection of disaster victims is clear from the following case laws.

Charan Lal Sahu V. Union of India[24]

This case was filed to question the constitutional validity of the Bhopal Gas Leak Disaster (Processing Claims) Act of 1985. The act conferred an exclusive right on the central government to represent all victims of disaster and thereby barred individual litigation for compensation against Union Carbide Corporation. Here court by majority decision upheld the constitutional validity of the act and recognized the need for consolidated approach to compensation, as individual litigation may lead to inconsistencies and delays in dispensing justice. Here court applied "parens patriae" doctrine and held that in such vast tragedies, the central government can represent the public interest. The court placed trust in central government to protect the best interests of all victims.

Bipin Chandra Divan&Ors V. State of Gujarat and Another[25]

Through this public interest litigation, the petitioner urged judicial intervention to ensure speedy and effective relief to the Gujarat earthquake victims, as the government failed to meet the situation arising from the calamity and had no adequate infrastructure to satisfactorily perform the herculean task of providing relief and rehabilitation to the victims. In this case court gave a wider interpretation to Article 21[26] of the Constitution of India and held "Article 21[27] guarantees every citizen's right to life and personal liberty, is a repository of all important rights which are essential for a person, so when there is a natural calamity like earthquake, flood or cyclone, the state as a guardian of people obliged to provide help, assistance and support to the victims to help them to save their lives.

N D Jayal V Union of India[28]

This case was concerned about the safety and environmental aspects of their dam. This writ prayed for the issuance of a necessary direction to conduct further safety tests so as to ensure the safety of the dam. The main allegation raised by the petitioner was that the concerned authorities have not complied with the conditions attached to environmental clearance dated

23. Disaster Management Act, *supra note* 17, at 6.

24. Charan Lal Sahu Vs. Union of India, (1990) 1 SCC 613.

25. Bipin Chandra J. Divan And Ors. vs State Of Gujarat And Ors, AIR 2002 GUJARAT 99.

26. Constitution of India, *supra note* 18, at 7.

27. *Id.*

28. N D Jayal v. Union of India, (2004) 9 SCC 362.

July 19, 1990 and so the petitioner seek direction from the court to halt the project till the environmental clearance is complied with. Here, the Supreme Court issued a direction to the central government to constitute an expert committee for Environmental Impact Assessment

The Post-Legislation Period: During this period court decisions were mainly focused on the Disaster Management Act, 2005. The courts issued many directions for the effective implementation of the provisions of this act for protecting disaster victims rights. The courts applied certain principles such as public trust, doctrine of parens patriae, etc., along with the declaration of new rules such as granting the status of legal person to rivers, glaciers and also to Mother Earth, etc.

Kranti V Union Of India[29]

The active role played by the Supreme Court in the matter of rehabilitation and protecting the right to livelihood of Tsunami-affected victims of Andaman & Nicobar Islands can be seen in this case. The Tsunami completely devasted the island. In this case Supreme Court issued a direction to the local authority to undertake relief and rehabilitation measures, including providing medical facilities, ensuring the availability of drinking water, employment opportunities to those families who lost their livelihood due to inundation of land and providing boats to coastal fisherman communities who depend on fishing and unable to earn their livelihood due to loss and destruction of boats.

Shruti Singh V National Disaster Management Authority And Another[30]

This petition was filed to seek the attention of the court about the recurring floods in Bihar. Here, the Patna High Court held that although the victims of floods have the right to get rehabilitation, the court abstained from intervening in the matter due to the absence of evidence showing failure on the part of the government.

G Sundarrajan V Union Of India[31]

This case was with respect to the establishment of Kudankulam Nuclear power plant in the state of Tamil Nadu. Here, the court issued detailed description of the provisions of the disaster management act in case of disaster occurring due to nuclear radiation. Court observed that NDMA has assumed the responsibility of strengthening the existing nuclear/radiological emergency management framework by involving all stakeholders in a holistic approach through a series of mutually interactive, reciprocal and supplementary actions to be taken on the basis of a common threat.

29. Kranti V Union Of India, Civil Appeal No. 2681/2007.

30. Shruti Singh V National Disaster Management Authority And Another, MANU|BH |0882|2008.

31. G Sundarrajan V Union Of India, (2011) 6 SCC 620.

MCD V Uphar Tragedy Victims Association[32]

This appeal was filed before the Supreme Court by in an appeal filled by the Delhi municipal Corporation, and M/S Ansal Theatre and Club Hotels (p)Ltd, (the owners of UPAHAR cinema) against the decision given by Delhi high court making them jointly and severally liable for the incident and made them liable to compensate the victims. The original case was filed by the victims of Uphar cinema tragic fire incident for compensation.

Here court upheld the decision of Delhi High court and directed the disaster management authority should laydown standards to manage disasters relating to Cinema theatres and further directed to conduct mock drill in each Cinema theatre's at least once in a year

Valliammai V The Government of Tamil Nadu[33]

The petitioner filed this writ petition for issuance of writ of Mandamus to directing, the respondents (State of Tamil Nadu) to pay compensation of two lakhs rupees to the petitioner for the death of her father in the Flood relief camp. Initially the government announced a compensation of one lakh rupees to the families of victims who died during natural calamities from the calamity relief fund, but subsequently, it was increased to two lakhs. The petitioner made several representations for getting the amount, but no action was taken, so she approached the court, and the court allowed the writ petition and directed the respondents to pay compensation to the petitioner.

Vasundhara Pathak Masoodi V Union Of India[34]

Here, the Hon'ble Supreme Court directed the central government to explain the measures undertaken to reduce the sufferings of Kashmir flood victims of 2014 Court directed the governments to ensure adequate supply of food, drinking water, blankets, etc. to the victims and ensure the availability of medicines, doctors and para-medical staff. Proper supply of all this is necessary for the survival of a large number of people, and lack of it will definitely infringe their fundamental right under Article 21 of the Constitution.

Swaraj Abhiyan V Union of India[35]

In this case, the Hon'ble Supreme Court condemned the delay on the part of three states (Gujarat, Haryana and Bihar) towards the non-implementation of the Disaster Management Act, and not drawing the national plan under Section 11 of the act. The court also issued certain directions to the States, such as:

32. MCD v. Uphar Tragedy Victims Association, (2011) 14 SCC 481.

33. Valliammai V The Government of Tamil Nadu, WP(C) No 1075 of 2012.

34. Vasundhara Pathak Masoodi V Union Of India, 2014 SCC ONLINE SC 736.

35. Swaraj Abhiyan V Union of India, 2016 SCC 7 498.

1. To constitute a national disaster response force within a period of six months as per sec 43 of the act
2. To establish National disaster mitigation fund within a period of three months as provided in sec 47 of the Disaster management act
3. Formulate national plan in terms of sec 11 of the Disaster management act at the earliest
4. Revise and update the drought management manual prepared in 2009

Gaurav Kumar Bansal V Union Of India[36]

This case was filed for the issuance of necessary directions for the proper implementation of the disaster management act in the light of unprecedented flood and land slide occurred in Uttarakhand in 2013 Here the supreme court issued direction to the central government to formulate the National plan for disaster management within in one month, as it will have many positive social and economic impacts and it will help to tackle the post disaster situations, especially those of people who belong to socially vulnerable sections

S Senthil Kumar V Director Of Fisheries[37]

The petitioners were fisher men from two villages of Thanjavur district they filed a writ for issuance of writ of Mandamus against the government for payment of compensation considering their earlier representations The petitioner have huge loss due to cyclone Gaya and their boat suffer total damage They contend that the relief assessment process was not proper Here the court held the relief assessment process cannot be arbitrary as the policy of the government is to enable the affected individual to stand on their feet Court applied "parens patriae" doctrine and issued detailed directions as to how an inspection process is to be conducted such as it should describe the nature and extent of the damage, the team should contain at least one experienced person, the team should contain spot inspection, etc.

Abdul Latheef V State Of Kerala[38]

This case was filed for questioning the legality of the order passed by the district collector, Malappuram, directing the demolition of a check dam constructed by the petitioner Here the petitioner constructed a water theme park and a check dam in his property and the check dam prevented the free flow of water of a natural river and there by caused threat of land slide There was a colony of scheduled tribe beneath this hillock and if land slide occur in this region that will cause serious damage to them Here court applied"public trust doctrine "and held that"resources

36. Gaurav Kumar Bansal V Union Of India, AIR ONLINE 2017 SC 202.

37. S Senthil Kumar V Director Of Fisheries, WP (MD) No.11033 of 2019.

38. Abdul Latheef V State Of Kerala, WP(C) No 41156/2017.

like air, sea, water, and forest which have great importance to all people as a whole and it is unjustified to make them a subject of private ownership as such resources are gift of nature and they should be freely available to all "Court upheld the order of the district collector and hold it as valid under Disaster management act

Lalit Miglani V State Of Uttarakhand And Others[39]

The original case (WPC 140/2015) was for issuing continuous mandamus against the pollution of river Ganga (Gangs) The petitioner through CLMA prayed to declare Himalayas, Glaciers,streams, water bodies etc as juristic persons at par with pious rivers Ganga and Yamuna Here court applied parens patriae principle and declared the glaciers including Gangothri,and Yamamori,rivers,streams, lakes,air,meadows,dales, jungle, forests,wet lands,grass lands,springs,water falls etc as legal entities and accorded the status of living person to them with all corresponding rights,duties, and liabilities of a living person

Vijayan M H And Others V State Of Kerala And Others[40]

In this case petitioner challenge the legality of mechanized loading and transportation of mineral sand from Thottappally pozhi mouth on the ground that it will cause serious threat to environment and ecology The petitioner argued that the sand dunes created by the sea act as a strong barrier against natural calamities and if it is removed tidal waves will reach the land and cause damage, here along with other legal provisions court considered the scope of sec 72 of the Disaster management act 2005 and held that ordinary laws are framed and are meant to regulate and govern in times of peace, they became insufficient to tackle extraordinary situations like war, calamities, pandemics and disasters so a departure from ordinary laws is required in such emergency situations In India such legal mandates were described as "Apaddharma" Sec 72 of the Disaster management act recognize the general law of Apaddharma so The Disaster management act -2005 can override the provisions of other laws

A Periyakaruppan V The Principal Secretary To Government And Another[41]

In this case the Madras high court by invoking "parens patriae"jurisdiction declared that mother nature as a living being having a legal entity and declared that it is a legal, juristic, and moral person having all corresponding rights, duties and liabilities of a living person Here the Madurai bench of justice S Srimathy also observed that nature shall have fundamental legal and constitutional rights for survival, safety, sustenance and resurgence in order to maintain

39. Lalit Miglani V State Of Uttarakhand And Others, 2017 SCC ONLINE UTT 392.

40. Vijayan M H And Others V State Of Kerala And Others, 2022 (4), KLT 245.

41. Akansha Jain, *Amidst Widespread Criticism, Modi Orders "Fake News" Release To Be Withdrawn,* Live Law. in (Aug. 30, 2025), Amidst Widespread Criticism, Modi Orders "Fake News" Release To Be Withdrawn.

its status and also to promote its health and well being The court also directed the state and the central government to take appropriate steps to protect the mother earth in all possible ways.

CONCLUSION

Being the watch dog of justice and guardian of fundamental rights of citizens, the judiciary always aims at maintaining a balance between constitutionalism and developmental Judiciary plays a pivotal role in protecting not only the enumerated rights but also the unenumerated rights as well Enumerated rights are protected by interpreting the fundamental rights and widening its scope, while the unenumerated rights are recognised and protected by widening the scope of article 21[42] of the constitution, and through recognizing and applying principles such as" parents patriae, public trust" etc. The court in many occasions through judicial activism recognises and protects many human rights issues and this judicial trend is crystal clear in natural disaster situations During natural disaster situations the courts, either Suo motto or through Public Interest Litigations (PIL) acknowledges many human rights issues of people and as a result numerous rights such as right to medical aid, right to shelter, right to rehabilitation, right to livelihood, right to food, etc., have been accord the status of fundamental rights and were made available to natural disaster victims Thus judicial activism act as a tool for upholding constitutionalism and thereby assuring justice to marginalized sections of the society especially to natural disaster victims.

42. Constitution of India, *supra note* 18, at 7.

INTER-CASTE AND INTER-RELIGIOUS MARRIAGES IN INDIA: AN ANALYSIS OF LEGAL FRAMEWORKS AND GENERATIONAL ATTITUDES

Shaik Ishrath Sadiqua[1]

Kandukuri Lakshmi Priya[2]

ABSTRACT

India is known for its diverse cultural population comprising various languages, castes, religions, and ethnicities. The marriage system is deeply influenced by these characteristics, particularly caste and religion. Even though the nation is symbolic of unity in diversity, it continues to lag behind in adopting and accepting marriages outside one's caste and religion. Marriages between members of different castes and religions are difficult and socially taboo to consider. In India, discrimination based on religion and caste is a major barrier to both social advancement and motivation. As a sacred institution, marriage unites the partners in a pious bond. In Indian society, caste endogamy-based marriage is the norm. From time immemorial, endogamous marriages have been part of the Indian society. However, with globalization, westernization, and modernization, and the changing society, the institution of marriage has evolved. Now, inter-caste and inter-religious marriages are seen in society, connecting individualism and liberalism for the individual choices in marriage. Nevertheless, their acceptance is still an obstacle to overcoming the traditional practices. The aim and objective of this paper is to look into the legal provisions giving rights and protection to individual undergoing inter caste and inter religious marriages in India. This paper will also undertake the task of understanding the change in perspective regarding inter caste and inter religious marriages between the generations. In the paper, empirical research is conducted in the form of a survey to understand and interpret the opinion and understanding of individuals on inter caste and inter religious marriage.

Keywords: Inter-Caste, Inter-Religion, Marriage, Legal Protection, Generational perspective.

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INTRODUCTION

Marriage is a universal social institution that connects and binds individuals in a society. A marriage binds two individuals along with their families. Marriage forms a family, which is the fundamental unit of a society. It is the fundamental unit aimed at procreation, companionship, and redemption. A society is largely affected by the family system and the institution of marriage in aspects such as the socio-cultural norms, values, and economic development of a nation.

Marriage, through the lens of functionalist theory, is a key to stabilizing society. A family created through marriage plays a formative role in society and performs systemic functions, including those related to sexual, reproductive, educational, and economic functions. Functionalism emphasizes that the institution of marriage and family brings prosperity and development of society, while its members perform systemic functions. In contrast, the conflict theory examines the power dynamics in the institution of marriage. This theory highlights that marriages involve power dynamics which can 'breed systems of inequality at a macro sociological level'. Thus, exogamous marriages can create tensions and reinstate the social structures, norms, and power dynamics within families as well as communities.

According to Hinduism, marriage (Grihastha) is one of the four stages of life, including Brahmacharya, Grihastha, Vanaprastha, and Sannyasa, and without marriage, an individual cannot achieve salvation. In India, the institution of marriage is primarily affected by caste and religion. Endogamy, marriages within their individual group or community, is one of the prime characteristics of the caste system in India.[3] Hindus traditionally considered marriage to be a sacrament and essential for the survival of the race and body. The majority of people always marry within their own religious group, and families also generally adhere to that faith.

The caste system is deeply rooted in Indian society, and efforts have been made to overcome but it continues to be a social menace. However, the changing society is impacted by various phenomena such as modernization, westernization, and urbanization, bringing in changes to marriage patterns in Indian society. Now, mixed marriages are seen in society, for instance, the inter caste and inter-religious marriages. Inter-caste marriage refers to marriage involving people of two different castes.[4] Interfaith marriage or inter-religious marriage, is marriage between spouses professing different religions.[5] Furthermore, most people consider it a taboo to discuss inter-caste and inter-religious marriages in India. Nevertheless, inter-caste and inter-religious marriages are crucial to the abolition of the caste system and racial discrimination.

3. G.S. Ghurye, Caste and Race in India (Popular Prakashan 1969).

4. Inter-caste, Cambridge Dictionary, https://dictionary.cambridge.org/dictionary/english/inter-caste (last visited Nov.5, 2023).

5. Interfaith Marriage, Encyclopedia, https://encyclopedia.pub/entry/31205 (last visited Nov. 5, 2023).

The law of a nation works as a product and process of social change. Law in a nation, alongside having adaptability, also has the power to change society. So, the legal framework of India has great importance in understanding the changing society and law. In the paper, the legal framework of India enabling individuals to undertake inter-caste and inter-religious marriages and to overcome traditional approaches is explored.

Furthermore, inter-caste and inter-religious marriages are considered taboo in the present society, and the individuals involved in such marriages often face discrimination. The attitude towards these marriages is different among different generations. The present generation is likely to support these marriages. However, the generational attitudes are also affected by various aspects such as education levels, their place of residence, family support, etc. Thus, the paper will also try to look into the differences in the generational attitudes and their causes affecting the acceptance of inter-caste and inter-religious marriages in the present society.

ANALYSIS OF THE LEGAL FRAMEWORK

The inter-caste and inter-faith marriages in India have been gaining acceptance as a result of increase in education, middle-class economic background, urbanization, and other factors. The Supreme Court of India has shown concern towards these marriages, suggesting that they act as a unifying factor for the nation, and there has never been a bar on inter-caste or inter-religious marriages in India. Also, the Government of India has taken several measures to eradicate casteism and achieve social equality through schemes. There are several constitutional provisions, legislations which are associated with marriages that are not dealt under personal laws to protect the rights of individuals under inter-caste and inter-religious marriages.

a. Constitutional Provisions & Inter-Caste and Inter-Religious Marriages:

Here are the major provisions under Part IV of the Indian Constitution, as given below, along with the landmark cases that are associated with inter-caste and inter-religious marriages:

Article 21- Right to Marry

The right to life and personal liberty is given to individuals under article 21[6] of the Indian constitution. Various aspects and elements of human life are recognised as fundamental under this article. Similarly, the right to marry has been recognised as an integral part of the right to life and personal liberty. This right has been recognized under the right to life of the Indian constitution, since marriage plays a major role in one's life, and it is an element of the right to life. It is incorporated with a scope of right to start a family. This right gives freedom to a person to marry one of their choice or choose a life partner without any external interference.

6. Constitution of India, 1949, Article 21.

While discussing in **Shafin Jahan v. Asokan K.M.**[7] and others, the majority held that "The right to marry a person of one's choice is integral to Article 21 of the Constitution." As decided by the Supreme Court in **K.S. Puttaswamy v. Union of India**,[8] "Privacy includes at its core the preservation of personal intimacies, the sanctity of family life, marriage, procreation, the home, and sexual orientation. Privacy also connotes a right to be left alone." In **Lata Singh v. State of U.P. (2006)**,[9] the Supreme Court ruled that no one, not even family members, can impede an adult's ability to marry the person of their choosing. The court emphasized the value of each person's autonomy and their right to select a life partner.

Article 25-28: Right to Freedom of Religion

A person's religious freedom is protected under article 25- 28 of the Indian Constitution. Article 25[10] provides a fundamental right that guarantees the freedom of conscience, practicing, professing, and propagating a religion. It is subject to public order, health, and morality. This indirectly impacts inter-caste and inter-religious marriages by protecting and safeguarding the rights and interests of individuals to choose their religion and marry as per their belief, which can be outside their community. These rights protect personal beliefs, choices, and individual autonomy, including marriages.

Article 44: Uniform Civil Code

Under the Directive Principles of State Policy, Article 44,[11] the Uniform civil code deals where all sections of society, irrespective of their religion, are treated equally as per the national civil code, and they shall be uniformly applicable. They cover areas like marriage, divorce, maintenance, inheritance, succession of property, and adoption. This is not mandatory to be followed by the government; it is only a directive. Recently, Uttarakhand became the first state to pass a UCC bill after Independence. However, it is not fully implemented yet.

These constitutional provisions play major roles concerning the marriages where the right of the individuals to marry, personal choices, and religion are addressed. The landmark cases mentioned above show the impact of these constitutional provisions on inter-caste and inter-religious marriages. Thus, the provisions under the constitution enable an individual to marry outside their caste and religion. These provisions give necessary rights to persons involved in such marriages. So, the law and legal framework in India have delved into the aspects of mixed marriages and provides the required rights and protection to the individuals.

7. Shafin Jahan v. Asokan K.M., (2018) 16 SCC 368 (India).
8. K.S. Puttaswamy v. Union of India, (2017) 10 SCC 1 (India).
9. Lata Singh v. State of Uttar Pradesh, (2006) 5 SCC 475 (India).
10. Constitution of India, 1949, Article 25.
11. Constitution of India, 1949, Article 44.

Legislations Associated with Inter-Caste & Inter-Religious Marriages in India

Apart from the above-mentioned provisions, there are legislations that gives a comprehensive framework for marriages for different religions in the form of personal laws and the special marriage act.

Personal Laws

India is a religiously diverse nation with a very diverse population. Furthermore, every religious group has its own regulations. In addition, different regulations apply depending on a person's gender, religious beliefs, place of residence, and kind of marriage. In addition to this, many other customary laws still hold true for different communities known as personal laws.

These personal laws in association with marriage include Hindu Marriage Act, 1955.[12] Under Hindu personal law, the marriage between two people belonging to different castes is considered valid. Section 5[13] of this act lays down the conditions for marriage, where there are no restrictions to the individuals regarding caste.

Whereas under the Muslim personal law, the marriage of a Sunni male along with a non-Muslim or non-kitabia female is considered an irregular marriage[14].

Special Marriage Act, 1954

The Special Marriage Act, 1954[15] is a secular law and is considered to be a step towards the UCC. It regulates marriages among individuals irrespective of their caste or religion, allowing them to marry regardless of their religious beliefs or practices under a secular legal framework. The interfaith and inter-caste marriages in India are made possible through this legislation, as it bypasses the personal laws which restrict marriage between members from different religion. Any two people, irrespective of religion, caste can get legally married and registered under the Special Marriage Act.

The act enables inter-marriages, without any obligation of conducting a specific ceremony, instead it requires formalities to be performed by the Marriage Officer to register the marriage under this act. It also incorporates the rights guaranteed under the Indian Constitution of India

12. Hindu Marriage Act, 1955, No. 25, Acts of Parliament, 1955 (India).

13. Hindu Marriage Act, 1955, § 5, No. 25, Acts of Parliament, 1955 (India).

14. Samarth Trigunayat, Inter-Caste & Inter-Religious Marriages: Social and Legal Issues, *Academike* (2019), https://www.lawctopus.com/academike/inter-caste-inter-religious-marriages-social-legal-issues/ (last visited Nov. 15, 2023).

15. Special Marriage Act, 1954, No.43, Acts of Parliament, 1954 (India).

which include freedom of religion, right to marry a person of personal choice, and it does not require couples who choose to marry under its provisions to renounce their respective religions.[16]

Drawbacks of the SMA, 1954

Under Section 5 of the SMA,[17] 1954 the parties to the marriage are mandated to give notice in writing to the Marriage officer of the district (that is 30-day notice period before the marriage) which the officer shall publish, and under Section 7(1)[18] of the act any person can make objection to the marriage before the expiration of 30-days from the date of such notice. This 30-day mandatory notice period is a major drawback to the act as it can potentially expose the couples to societal and family pressures which can lead to harassment. It can also be seen as violation of privacy of the personal information or plans to get married.[19] This mandate compromises the whole purpose of the act, also the extensive paperwork and repeated visits to the registrar's office and non-uniform application in different states (as this falls under concurrent jurisdiction of both central and state Government, the notice period and procedure timings differ from state to state) it can make inter-caste and inter-faith marriages even difficult.

Government Incentives and Schemes on Inter-Caste Marriages

Both the Government of India and the state governments have provided incentives and come up with schemes for individuals involved in inter-caste marriage, and they are as follows:

Mukhya Mantri Samajik Samrasta Antarjatiya Vivah Shagun Yojana (50:50)

This scheme is initiated by the Government of India to promote communal harmony by encouraging inter-caste marriages. Under this scheme, an amount of Rs. 1,01,000 is provided as an incentive to the married couple, and the eligibility to this scheme includes that one of the spouses should be a scheduled caste[20].

Inter-Caste Marriage Promotion Scheme

This scheme offers general caste youths an incentive of Rs. 200000/-for intercaste marriages with young men and women from scheduled castes. Under the Hindu Marriage Act of 1955, applicants must get their marriage registered with the Collectorate. Additionally, you must

16. Harshita Didel, Special Marriage Act: A Step Towards UCC, J. Legal Rsch. & Jurid. Sci. (2022), https://jlrjs.com/wp-content/uploads/2022/12/35.-Harshita-Didel.pdf (last visited Nov. 3, 2023)

17. Special Marriage Act, 1954, § 5, No.43, Acts of Parliament, 1954 (India).

18. Special Marriage Act, 1954, § 7, No.43, Acts of Parliament, 1954 (India).

19. Rennie Joyy, What Is Special Marriage Act and Who Should Consider It, *Times of India*, June 19, 2024, https://timesofindia.indiatimes.com/life-style/relationships/love-sex/what-is-special-marriage-act-and-who-should-consider-it/articleshow/111105036.cms (last visited Aug. 28, 2025).

20. Mukhya Mantri Samajik Samrasta Antarjatiya Vivah Shagun Yojana (50:50), Dep't of Soc. Just., Empowerment, Welfare of SC & BC & Antyodaya, Haryana, https://sewa.haryana.gov.in/mukhya-mantri-samajik-samrasta-antarjatiya-vivah-shagun-yojana-5050/ (last visited Nov. 5, 2023).

submit your completed application and all required letters no later than one year from the date of marriage.[21]

Dr Ambedkar Scheme for Social Integration

The Inter Caste Marriages scheme, initiated in 2013 by Prime Minister Narendra Modi, is overseen by the Ministry of Social Justice & Empowerment. The scheme aims to promote inter-caste marriages involving Dalits by providing an incentive of Rs. 2.5 lakhs to couples where one spouse is a Dalit. The scheme was initially targeted at couples with an annual income below Rs. 5 lakhs.

However, the Ministry of Social Justice and Empowerment has extended the scheme to all couples without income requirements, aiming to encourage inter-caste marriages involving Dalits.[22]

Incentive Award to Inter-Caste Married Couple

This scheme is initiated by the Adi Dravidar Welfare Department, Puducherry. This scheme provides an incentive of Rs. 50,000 is given to intercaste married couples in an effort to promote intercaste marriage and end untouchability and casteism in society[23].

The Inter-Caste Marriage Scheme

The government of Himachal Pradesh launched the Inter-caste Marriage Scheme in an effort to foster social integration and intercaste marriages. Couples from different castes who marry can receive financial assistance under this scheme up to Rs. 75,000. Social harmony and the dismantling of caste barriers are the goals of the scheme[24].

Financial Assistance to Inter-Caste Married Couples (Except SC/ST Category)

The scheme "Financial Assistance to Inter-Caste Married Couples (Except SC/ST Category)" was launched by the Department of Social Justice, Government of Kerala. Under the scheme,

21. Inter-Caste Marriage Promotion Scheme, Dist. Khargone, Gov't of Madhya Pradesh, India, https://khargone.nic.in/en/scheme/inter-caste-marriage-promotion-scheme/ (last visited Nov. 11, 2023).
22. A. Shukla, Dr. Ambedkar Foundation Scheme for Inter-Caste Marriage – SC/ST, Sarkari Yojana – Gov't Schemes, Central & States of India (2023), https://sarkariyojnaa.org/dr-ambedkar-foundation-marriage-scheme/#:~:text=B.R%20Ambedkar%20Scheme%20for%20Social,belongs%20to%20the%20Dalit%20community (last visited Nov. 11, 2023).
23. Incentive Award to Inter-Caste Married Couples, Gov't of Puducherry, https://www.py.gov.in/sites/default/files/adwincentive-award-inter-caste-married-couples.pdf (last visited Nov. 11, 2023).
24. Inter-Caste Marriage Scheme, myScheme, https://www.myscheme.gov.in/schemes/icms (last visited Nov. 11,2023).

the Government of Kerala provides financial assistance to inter-caste married couples (except SC/ST category) who suffer from financial problems[25].

These are some of the schemes and incentives that state governments and the central government provide for marrying outside one's caste. The main objectives of these schemes and incentives are to reduce discrimination and the effect of caste in society, and also to financially assist the weaker sections. However, some of the incentives can only be applicable when the marriage involves one party from the SC/ST community or if the party is a Dalit. So, the incentive may not apply to couples having inter-caste marriage, but one of them doesn't belong to the above-mentioned communities. This shows that the government is enabling social mobility. The monetary incentives are a way towards social integration by removing untouchability and other barriers of the caste system.

The government has not initiated any recognizable incentives or scheme regarding inter-faith marriages. Even though the country claims to be secular, the government has not made any remarkable efforts to promote harmony by encouraging inter-religious marriages. The only legal framework provided for the encouragement of inter- religious marriages is the Special Marriage Act, which enables individuals to marry outside their religion. There is debate as to extending the Dr. Ambedkar scheme to inter-faith marriage. However, inter-religious marriages are mainly criticized in the present day due to the conversions.

GENERATIONAL ATTITUDE & FACTORS AFFECTING: INTER-CASTE & INTER-FAITH MARRIAGES

Impact of Socio-Cultural Elements

Even though there are several legislations and schemes for protecting and promoting inter-caste & inter-faith marriages, these kinds of marriages are highly discouraged and carry a social stigma with them. There are elements that impact society to accept and reject these marriages, which include caste hierarchy, religious beliefs, cultural norms, family reputation, media influence, stereotypes, education, and the economic status of people.

The traditional Indian marriages are considered to be arranged marriages where the elders choose the person their children or relatives will get married to, and they are endogamous in nature. This makes the choice of suppose limited to the caste endogamy, which leads to the alliance between two families. Often the marriages within the same lineage are performed. This happens with the religious aspects, as well as the mutual understanding in terms of their

25. Financial Assistance to Inter-Caste Married Couples (Except SC/ST Category), myScheme, https://www.myscheme.gov.in/schemes/faimcescstc (last visited Nov. 11, 2023).

practices and customs is made[26]. Inter-caste marriages are more seen when compared to inter-faith as people can take it as an opportunity for social mobility, hierarchy, and less objection.

Also, Indians live religiously segregated in their lives, especially when it comes to marriage. Geographical factors also influence the attitude towards these marriages. As per the survey conducted by Pew Research Centre, the South Indians are more religiously integrated and less opposed to inter-religious marriages[27]. Also, the people belonging to urban areas are more likely to have a mixed circle of friends. The level of education one has received effects one's attitude towards inter-caste and inter-religious marriages, as they are open to the opportunities and less opposed to these marriages compared to people with less education[28].

Whereas the media influences and stereotypes the concept of 'love jihad' (it is a conspiracy theory where it is believed that Muslim men target Hindu women for conversion to Islam by means of seduction, marriage, kidnapping, love [29]), which can be taken as a perfect example of how media portrayal can form a stereotype towards interfaith marriages. This often becomes challenging and causes misinterpretation of the concept of inter faith marriages in society. Societal and family pressure to follow the norms and practice endogamous marriages as a sign of protecting the reputation of the family is also a factor.

On March 12, 2025 a 23-year-old woman who was from Teli Community was killed by her father and brother for marrying a person from Jat Community[30], also in a recent case from Maharashtra's Pune District, a Dalit boy who married a woman from Maratha community was brutally murdered by his Spouse's family members. These cases show how honour killings related to inter-caste marriages are in India.[31] Further, there is a notable case of Manoj-Babli (Haryana, 2007), where Manoj and Babli were murdered by Babli's relatives on the diktas of Khap

26. R. Saroja, R. Kamath & Krishnaswamy, Measurement of Attitude Toward Inter-Caste Marriage, 23 Indian J. Soc. Work 45 (1982), https://www.jstor.org/stable/23029669 (last visited Nov. 15, 2023).

27. Nehal Sahgal et al., Religious Segregation, Pew Research Ctr.: Religion & Pub. Life Project (June 29, 2021), https://www.pewresearch.org/religion/2021/06/29/religious-segregation/ (last visited Nov. 15, 2023).

28. Id.

29. Love Jihad Is an Islamophobic Campaign: Whose Honour Is It Anyway? Engage, Econ. & Pol. Wkly. (Oct. 28, 2020),https://www.epw.in/engage/article/love-jihad-islamophobic-campaign-whose-honour-is-it-anyway (last visited Aug. 26, 2025).

30. Samridhi Tewari, Noida 'Honour Killing': A Blue Dupatta for a Wedding and a Strangulation, The Hindu, Mar. 23, 2025,https://www.thehindu.com/news/national/uttar-pradesh/a-blue-dupatta-for-a-wedding-and-a strangulation/article69358138.ece (last visited Aug. 28, 2025).

31. Vaibhav B.A., Inter-Caste Marriage and Honour Killings in India, ROUND TABLE INDIA (May 8, 2025), https://www.roundtableindia.co.in/inter-caste-marriage-and-honour-killings-in-india/ (last visited Aug. 28, 2025).

Panchayat for marrying in the same gotra[32]. These are just few examples on Khap Panchayat's role and the societal response towards inter-caste marriage, according to the National Crime Records Bureau (NCRB) around 145 honor killing cases were officially recorded between 2017 and 2019 despite of underreporting and misclassification[33].

In case of Inter-faith marriage there are several cases where similar responses were reported, on May 18, 2025 a 28-year-old man N. Noufal was assaulted, and attempted to kill, for allegedly marrying a woman from another community[34].

As per a BBC report, inter-faith couples in India often face intimidation from families as well as local state authorities who enforce anti-conversion laws, this brings more hurdles indirectly to interfaith marriages, especially Hindu-Muslim unions.[35] The 'Love Jihad' campaign fueled the communal violence and discrimination, this concept was framed in public discourse after a 2022 murder case of Shradda Walker by her Muslim Companion Aaftab Poonawala, this exacerbated communal polarization against interfaith couples[36].

Because of the above-mentioned factors, the conception of marriage is highly possible within the same caste and community. If an inter-caste and inter-faith marriage takes place, then it is considered a violation of social norms and could lead to violence like honour killing, social boycott, and family boycott[37].

Generational Perspective

The present youth is mainly affected by the ideas of individualism and liberalism. There is an impact of modernization, westernization, and urbanization. With the development of modern education, new employment opportunities, and urban residence, there is a gradual change in the perspective of youth towards inter caste and inter religious marriages.

32. Death sentence commuted in Manoj-Babli case, THE HINDU (Mar. 11, 2011), https://www.thehindu.com/news/national/Death-sentence-commuted-in-Manoj-Babli-case/article14943294.ece (last visited Aug. 28, 2025).

33. Government of India, Ministry of Home Affairs, Lok Sabha, Unstarred Question No. 1954 (to be answered on Mar. 11, 2025), Murder Cases, PDF, MHA, Mar. 11, 2025, available at https://www.mha.gov.in/MHA1/Par2017/pdfs/par2025-pdfs/LS11032025/1954.pdf (last visited Aug. 26, 2025).

34. Youth attacked in suspected 'honour assault' over interfaith marriage, THE HINDU (May 18, 2025), https://www.thehindu.com/news/national/kerala/youth-attacked-in-suspected-honour-assault-over-interfaith-marriage/article69589786.ece (last visited Aug. 28, 2025).

35. Chinki Sinha, India's interfaith couples on edge after new law, BBC (Mar. 15, 2021), https://www.bbc.com/news/world-asia-india-56330206 (last visited Aug. 28, 2025).

36. Victoria Lavelle, India: The 'Love Jihad,' an Islamophobic Crusade Against Mixed Marriages, ORIENT XXI, https://orientxxi.info/magazine/india-the-love-jihad-an-islamophobic-crusade-against-mixed-marriages,6510 (last visited Aug. 28, 2025).

37. Kumudin Das et al., Dynamics of Inter-Religious and Inter-Caste Marriages in India, Paper Presented at the Population Ass'n of Am. Annual Meeting (2011), https://paa2011.populationassociation.org/papers/111281 (last visited Nov. 15, 2023).

Sandhya S.(2019) in her paper discussed the perception of college students on inter-caste marriages in Bagalkot district, Karnataka, which included a sample of 2624 college students. It was found that the perception of youth towards inter caste marriages has been affected by higher and professional education. Even though there is a change in the marriage pattern due to the impact of modernization and globalization of the Indian economy. It was found that even though the youth have favored inter caste marriages but their acceptance is still lagging.

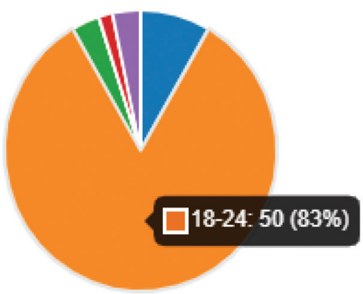
Avinash G. (2013) in his paper discussed about the inter caste marriage and how youth perceived them. The paper is based on academic research conducted in Kolhapur District. The study's conclusions indicate that inter caste marriages have grown recently, especially in cities. Inter-caste marriages are influenced by variables like the women's age at marriage, their ability to select a mate, and their level of education. Inter caste marriages are more common among the scheduled castes, as are urban living, education, modern occupations, and middle-class economic backgrounds. However, there are obstacles for young people to consider inter-caste marriages because of cultural attitudes, family choices, and fear of social rejection and isolation.

The present youth have a positive attitude towards such marriages because of an increase in awareness or knowledge about them, and opportunities like mixed friend circles and others. This mindset is developing with every successive generation when compared to that of the older generation, who are still concerned with the social norms and other aspects.

SURVEY FINDINGS

To explore further, an online survey has been conducted in Alliance university, Karnataka. The survey included 15 questions. The findings of the survey as follows:

The major responses are from the age group of 18-24 (as shown in *Figure 4.1)*, whereas the percentage of responses received from under 18 is 8%, 25-34 is 3%, 35-44 is 2% and 44 above is 3%. With respect to the distribution of responses by gender, around 65% of the responses are from female and 35% from male (*Figure 4.2)*.



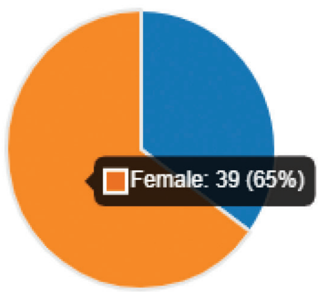


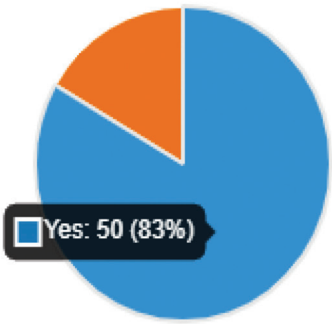
Figure 1: Distribution of responses by age groups, Figure 2: Distribution of responses by Gender

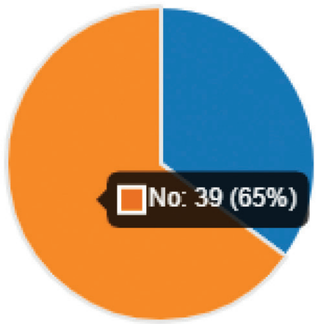
Distribution of responses on basis of education include, 77% of the responders from UG , 3% from PG and 20% who fall under others. The responders identified themselves coming different regions of the country. 75% from south, 17% from north, 5% from east and 3% from the western part of the country.

When it was whether they understood inter caste and inter religious marriage, 88% responded Yes, 10% responded No and 2% responded as Maybe.

Observations

The **main difference** can be seen in the response for the questions regarding their support to inter caste and inter religious marriage and their family's support. When it was asked whether they support these marriages, 83% responded Yes and 17 % responded No (Figure 3- depicts the respondents support to inter caste and inter religious marriages). Whereas, when it was asked whether their family supported inter caste or inter religious marriages, 65% responded No and 35% responded Yes (Figure 4 - depicts their family's support to inter caste and inter religious marriages).





Figures 3 and 4

For the question, "Have you or anyone in your family been involved in an inter-caste or inter-religious marriage?", 50% said Yes and 50% said NO, which is depicted in the below Figure-5.

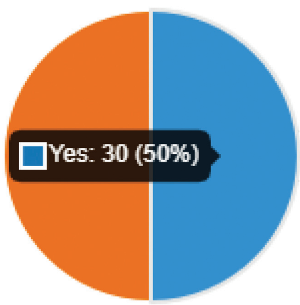


Figure 6

As to the initial response to such marriages by the family, the response was 44% initially rejected eventually accepted, 42% responded as Rejected and only 14% said the family accepted.

Further, responses are as follows:

Do you believe that inter-religious marriages promote religious harmony in the community?

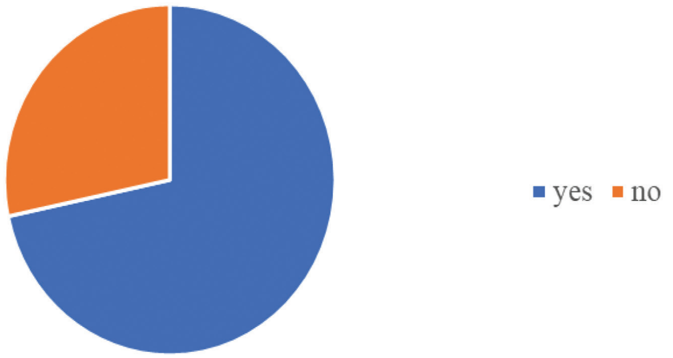


Figure 6

Do you think inter-caste marriages help in reducing caste-based discrimination in society?

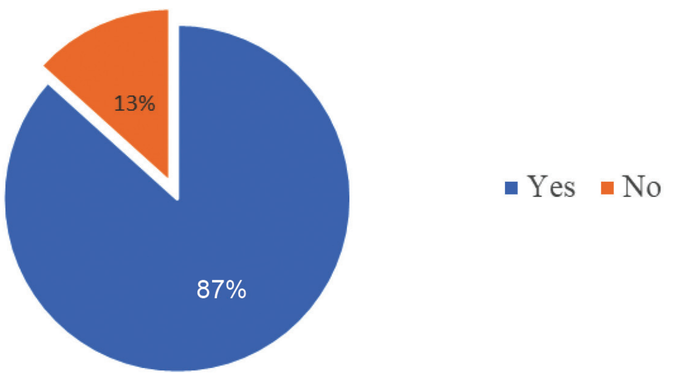


Figure 7

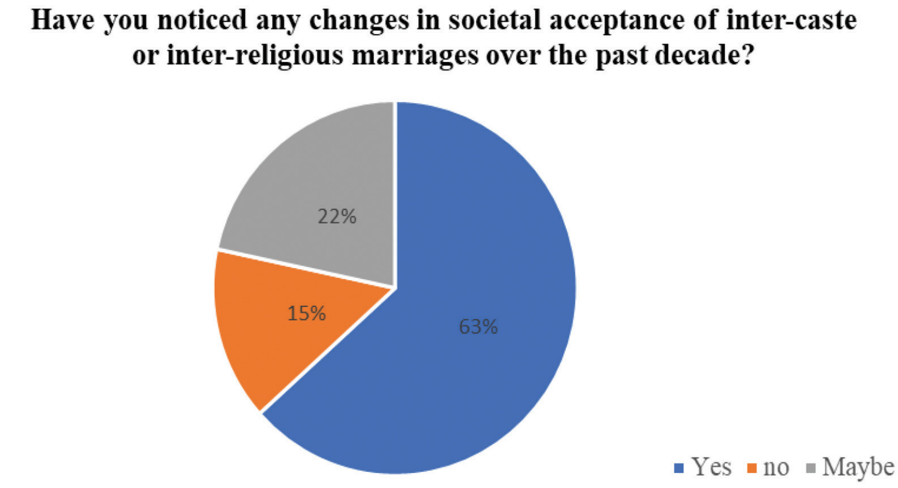


Figure 8

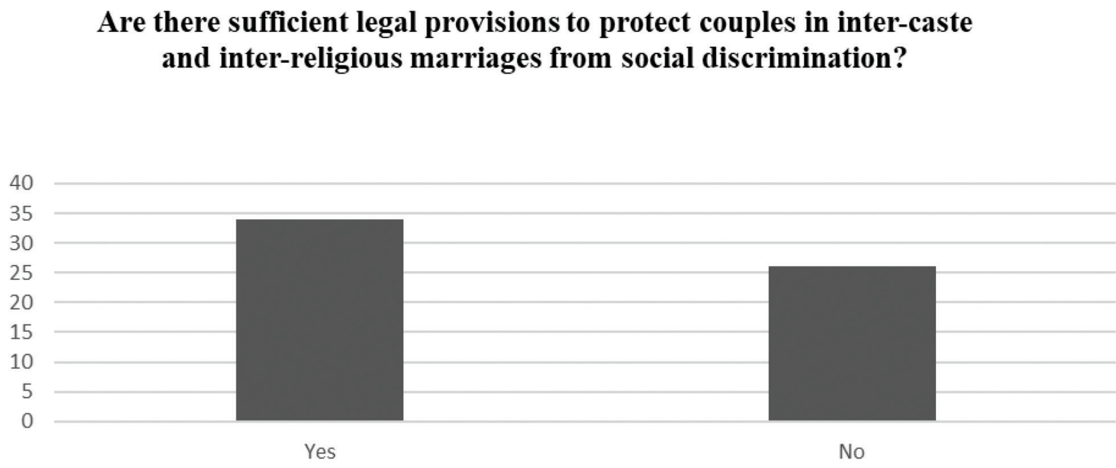


Figure 9

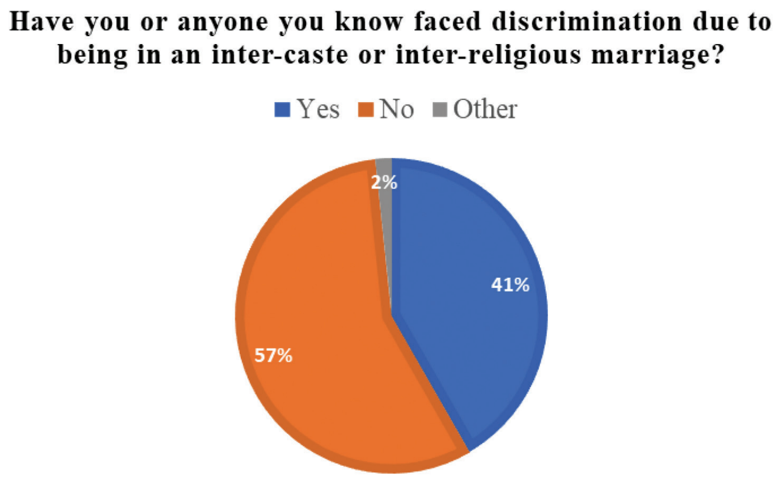


Figure 10

For an opinion question, asking the major factors that discourage for opting inter caste and inter religious marriage, 46 % answered family, other factors as casteism, social pressure, cultural and religious differences.

From the survey, it is found that the youth perception towards inter caste and inter religious marriage is favorable. The majority of the individuals consider that these kinds of marriages can help in reducing caste-based discrimination and promote religious harmony in the country. When it comes to the legal protection most of the individuals think that there is sufficient legal protection, however, some are unaware of the legal framework. Even though the youth perception is favorable, they are affected by the decisions of family and parents which is not favorable towards inter-caste and inter-religious marriages.

FINDINGS AND DISCUSSION

The traditional marriage practices in India are endogamous in nature and past generation see the inter-caste and inter-religious marriages to be problematic. The societal acceptance towards these marriages has been changing with time and the factors like education, urbanization, modernization, individualism played major role in this. The observation that is drawn from the research is that the present youth are in favour and have a positive attitude towards such marriages but the family and societal pressure or impression is impacting the decisions. This shows the relation between the social institutions like family and marriage.

When it comes to the legal framework associated with the inter-caste and inter faith marriages the constitutional rights under Article 21, 25 to 28 protects the rights of individuals involving in such marriages. The Uniform Civil code under DPSP can be voluntarily taken by the states. The personal laws focus mainly on the particular religions and marriages that are not dealt under any personal law are covered under Special marriage Act, 1954. But there are several loopholes under this act like privacy concerns when the publishing of notice violates the privacy of the couple, mandatory 30-day notice of their intention to marry, wife under this marriage will not be able inherit the property. This act also lacks enforcement mechanism, inadequate protection against coercion, non-uniform application and limited outreach and awareness. The Government of India provides schemes for the inter-caste marriages encouraging people through providing incentives whereas there are no schemes for inter-faith marriages. Despite the presence of such legal provisions, schemes still it is hard for the people to go under such marriages as the societal approach has not been changed and concerning in the name of family reputation, religious beliefs, lack of awareness and stigma. Further, there is a probability of successive generation being open towards the inter-caste and inter-religious marriages.

CONCLUSION AND SUGGESTIONS

Indian society has been greatly influenced by the caste system and the religious identities. In the same manner the institution of marriage has largely within the own caste and religion. Historically greater importance is given to endogamous marriages. With the passage of time and the changing society there is a change in the marriage patterns. Traditionally arranged marriages are given more importance however, now with the impact of modern education, social development and the globalization of economy and the influence of phenomena such as modernization, westernization, and urbanization the perception towards mixed marriages has changed. There is a movement towards inter- caste and inter- religious marriages in the Indian society. The government with the changing society has provided necessary legal rights and protection to individuals by providing incentives and making legislations. However, the effectiveness of these legal-framework is still doubtful. The incentives and the schemes are only provided for inter-caste marriage to overcome the caste barriers whereas there are no incentives or schemes initiated for the encouragement of inter- religious marriages. The acceptance of inter religious marriages is still a problem when compared to little relaxation given to the inter-caste marriages.

The socio-cultural aspects affect the perception of individuals regarding the inter caste and inter religious marriages. Various aspects such as education, urban residence, religious beliefs, media influence, cultural norms, family reputation, etc. has influenced the acceptance and promotion of inter caste and inter religious marriages. With the following influences, the youth are favoring the concepts of inter caste and inter religious marriages. However, the acceptance of these marriages by the youth is still dependent on the support of family and social acceptance. Even though the acceptance of mixed marriages not clear, it is clear that these marriages can reduce the barriers of caste system and help in social integration and promotion of harmony among the individuals.

Based on the tentative conclusion, the following are the suggestions:

- The Special Marriage Act, 1954 should be amended addressing the loopholes and rectifying the inconsistencies and promote social integration.
- Bringing awareness among the people through media and education to avoid stereotypes and misconceptions like ‘love jihad’.
- Bring legislations protecting the couples from honour killings, punishments like death sentence given by Khap Panchayats.
- Implementation of Uniform Civil Code all over the nation bringing unity, simplified legal process and reduced communal tensions.

CHILD BEGGING IN INDIA: A LEGAL INQUIRY INTO THE VIOLATION OF THE RIGHT TO LIFE AND DIGNITY

Bandari Divya[1]

ABSTRACT

Child exploitation through begging is a major issue in India which we see despite our economic growth and development, and we have the legal structure which is supposed to support the education system. This is a breach of human rights as per Indian constitution and put forth in our own country's laws as well as international laws. Although we are a developing nation and our economic progress is praised by the developed world for its sustainability in the Right to Education domain, we fail to do enough about child begging. This is a result of a very complex set of social and economic issues which include poverty, unemployment, disability, which is both mental and physical, large wealth gaps, child abuse, and the breakdown of the traditional family unit. To assist such children, government bodies along with NGOs have made attempts for the rehabilitation and development of children living in vulnerable conditions. But the legal provisions offering free education for children, in the face of ignorance and poor implementation, a number of targeted laws for many children living in poverty. There is also a difference across social classes in terms of access to education, especially for child beggars. This research focuses on the socio-economic reasons and the legal issues associated with child begging, assessing the impact on children's lives, and looking into the legal frameworks aimed at mitigating the problem. It emphasizes the need for skill-based rehabilitation programs, family support systems, and stronger policy enforcement to prevent child exploitation. Additionally, the paper discusses the disparities in educational opportunities among different socio-economic groups and highlights the various laws and rights related to the education of child beggars in India.

Keywords: Child begging, poverty, unemployment, alms, wounds.

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INTRODUCTION

"Childhood should be carefree, playing in the sun, not a nightmare in the darkness of the soul"[2]

– David James Pelzer

"This quote is particularly relevant here because the issue under discussion is highly sensitive. When addressing matters related to children and their rights, it is crucial to recognize that the future of any nation largely depends on the well-being of its children. Today's children will become the leaders and workforce of tomorrow".

Child begging in India poses significant challenges to both education and health, contributing to ongoing cycles of poverty and disadvantage. A large number of child beggars are excluded from formal education, with studies revealing that over 70% are not enrolled in schools. Health-wise, these children often suffer from severe malnutrition and mental health issues, with reports indicating that 73% experience chronic malnutrition. To effectively address these issues, comprehensive interventions focused on improving access to education and healthcare are essential.

In our country, the common issue to see in young, disordered children begging alone, in groups, or accompanied by an adult at traffic signals, outside shopping malls, residential areas, and schools. These children often appear with runny noses and worn-out clothing, approaching vehicles or pedestrians with pleading expressions in hopes of receiving alms. This situation is prevalent in various crowded locations, including railway stations, metro stations, bus stops, tourist sites, temples, and restaurants. Unfortunately, many people tend to overlook these children, often tossing a few coins out of pity before moving on with their day.[3]

Currently, India lacks comprehensive legislation specifically targeting child begging. While some anti-begging laws exist, they are inadequate to effectively combat this widespread problem. "*The Bombay Prevention of Begging Act, 1959,*[4] under Section 2(1) defines Begging states that stronger legal measures and social initiatives to safeguard vulnerable children from this dire situation".

Child begging represents a significant social issue and a form of social deviance, where individuals seek financial assistance without providing any service in return. The situation becomes even more distressing when it involves children, revealing a harsh reality where the

2. David James Pelzer, A Child Called IT, 1ST ed. 1995

3. Amaan UI haq,Dr. Chandrakala Diyali, Impact of child begging on education, volume 6, Issue 04 Apr,2024,PP:490-495,ISSN:2395-5252

4. The Bombay Prevention of Begging Act, 1959

future generation is required to live on the roadside, struggling for basic necessities. Childhood, a crucial and transformative phase full of innocence and hope, is tragically disrupted for millions around the world. In India alone, over three hundred thousand children are compelled to beg, deprived of their basic human rights and facing severe hardships. These vulnerable children roam the streets, often finding refuge in underpasses, railway stations, and parks, while battling hunger and despair. Many fall prey to exploitation, controlled by criminal networks and traffickers who profit from their suffering. Living in extreme poverty, they are denied the care, love, and education every child deserves. Instead, they face neglect and cruelty, constant threats of violence, and their limited earnings are frequently used to fuel substance abuse rather than meet their essential needs. This profound and heartbreaking reality calls for urgent societal awareness and action to protect the rights and futures of these innocent children, ensuring they can grow up in innocent and development surroundings.

Child begging is a heartbreaking reality that reflects the profound social issues plaguing many communities, particularly in urban India. This practice involves minors seeking money, food, or other essentials from the public in bustling areas such as streets, traffic signals, and markets, often driven by extreme poverty, coercion, or organized exploitation. For countless orphaned, abandoned, or neglected children, begging has become a desperate means of survival. While some may view this as a simple act of seeking assistance, it is a manifestation of deeper societal problems, including poverty, neglect, and abuse, which rob these children of their innocence and fundamental rights to healthcare, education, and safety.

In urban areas, these children are frequently alone, confronting a forbidding reality that turns them into lenient aims for criminal gangs. Some are raised in broken homes, whereas others are mercilessly trafficked like commodities and forced through physical and emotional torture to satisfy their addicts demands. Society has demonstrated its inability to protect its most defenseless victims. Children embody the future of any society. They must be protected and given the opportunity to thrive in nurturing, exploit-free, and hope-filled environments. We have a shared moral duty to ensure every child grows up with dignity, hope, and the possibility of a brighter future. This study states that the conversation on child begging as a violation of constitutional rights, rather than just a social or welfare matter, highlighting its conflict with Articles 21, 21A, 23, and 24 of the Constitution. It brings a unique perspective by combining key judicial decisions with recent policy efforts like the SMILE scheme, revealing the disconnect between legal protections and their enforcement on the ground. The research further extends beyond traditional legal analysis by incorporating data from the Census of India 2011, NCRB reports, and the UNICEF 2023 South Asia Report, alongside international frameworks such as the UNCRC, adopting an interdisciplinary approach. Ultimately, the paper recommends policy reforms rooted in constitutional principles, including decriminalization, enhanced rehabilitation, and stronger anti-trafficking measures, making a valuable contribution to both academic scholarship and practical child rights advocacy.

1. Child

A child, is defined by various legal frameworks, is generally to be a person who is unable to maintain themselves, with the" UNCRC (United Nations Convention on the Rights of the Child), (1989) stipulating that a child is any human being below the age of 18 years, although individual nations may set their own age limits."[5] The status of children is crucial for the welfare and future of any nation, as they are considered valuable assets that require protection and nurturing. "In India, the Constitution mandates specific provisions for children under the Act, as Article 15(3) emphasizes their right to a healthy development free from abuse, as drew in Article 39(c) of constitution of India. Various laws, such as the Factory Act of 1948 and the Child Labour (Prohibition and Regulation) Act of 1986, define a child as child below the age of 14 years, while the Juvenile Justice (Care and Protection of Children) Act, 2015. These legislative procedures reflect an obligation to safeguarding children's rights and ensuring their well-being in society and in our country."[6]

2. Child Begging

Child begging is a distressing reality for many orphaned and neglected children in urban areas, where they solicit money, food, or assistance, often operating alone or in small groups. Typically hailing from impoverished backgrounds with little parental support, these children may adopt the begging lifestyle of their families or fall prey to organized gangs that exploit them for profit. These gangs train the children to maximize their earnings through specific tactics, and those who fail to meet daily targets often face abuse. In some cases, children are kidnapped or mutilated to evoke sympathy and increase the financial gains for their exploiters. "In India, the Juvenile Justice (Care and Protection of Children) Act, 2000,[7] recognizes child beggars as individuals in need of care and protection, while various state laws, such as the Bombay Prevention of Begging Act, 1959, seek to address this critical issue. Overall, child begging is a manifestation of systemic social problems, including poverty, neglect, and lack of access to education, and is recognized as a violation of children's rights that necessitates legal intervention and societal awareness".

5. UNCRC (United Nations Convention on the Rights of the Child), (1989)
6. Dr. S.K. Chatterjee,Offences Against children and juvenile offence,2 Central law Publication, 2nd edition,2016
7. Sec.2(d)(ia), The Juvenile Justice (Care and Protection of Children) Act,2000

3. Street Children

"The Juvenile Justice (Care and Protection of Children) Act of 2015[8] addresses two main categories of children those in need of care and protection and those in conflict with the law, with street children often fitting into both. The term "street children" is widely used in regions like Latin America, Asia, Africa, and Eastern Europe, while "homeless children" is more common in North America and Western Europe. In India, many street children work from a young age to support their families". They can be classified into three groups: (a) Children on the street, who maintain some family connections; (b) Children of the street; and (c) Abandoned children, who are entirely on their own and require specialized support. It is important to note that while boys are often more visible, girls also represent a significant and growing number of street children, facing their own unique challenges.[9]

"Section 24(1) of the Juvenile Justice (Care and Protection of Children) Act, 2000, stipulates that anyone who employs or uses a juvenile or child for begging, or causes a juvenile to beg, can face imprisonment for up to three years and may also incur a fine. Those who abet begging are subject to the same penalties. Additionally, Section 363A[10] of the Indian Penal Code (IPC) while Section 363A(4)" provides a definition of begging "such as:

1. "1. Soliciting or receiving alms in a public place, whether under a pretense of singing, dancing, fortune-telling, performing tricks or selling articles or otherwise;
2. Entering on any private premises for the purpose of soliciting or receiving alms;
3. Exposing or exhibiting, with the object of obtaining or extorting alms, any sore, wound, injury, deformity or disease, whether of himself or of any person or of an animal;
4. Using a minor as an exhibit for the purpose of soliciting or receiving alms."

As per Article 23 of the Constitution of India,1950 prohibits human trafficking and any form of forced labor, which includes begging. Furthermore, unauthorized vending or begging on public spaces is a provision undersection144 of Railways Act, 1989. Despite these provisions, it is alarming that India lacks comprehensive legislation specifically addressing beggary and child begging. This gap in the legal framework allows exploitative individuals to profit from the lives of vulnerable children without fear of significant repercussions. While some laws exist, they

8. Juvenile Justice (Care and Protection of Children) Act, No. 2 of 2016, India Code (2016)

9. Vaibhav Agarwal and Hadiya Khan, Education of Street Child and Child Beggar in India, 2019 JETIR March 2019, Volume 6, Issue 3www.jetir.org (ISSN-2349-5162).

10. Section 363A of Indian Penal Code,1860

are often too weak to effectively combat the pervasive issue of child begging that is prevalent throughout the country.[11]

CAUSES AND ISSUES RELATED TO CHILD BEGGING

1. Poverty

Poverty is a major factor in the causes of child begging, which effects the issue on a large scale due to over 30% of people live below their poverty line. It even compels many families to send their children outside to beg for an opportunity since they do not have the resources necessary to satisfy even essentials.

2. Educational Failures:

More and more, child begging is the result of how inefficient the educational system has proven. Not many have the privilege of a high-quality government education due to inadequate infrastructure and unqualified teaching staff. Children that grow up without an education have few chances for a brighter future, so this perpetuates the cycle of poverty and begging.

3. Peer Influence and Family Encouragement:

Children are mostly learning to request from their friends and siblings over a period of time as the gang of children are going together in public places and adopting the culture of it. Many times, it is families that push their children into begging so as to have one more mouthpiece for household earnings, nudging the children as victims of a dire fate.

4. Cultural and Religious Factors:

Hostile cultural norms Charity-related attitudes that lead to child begging Most people pity and offer money or food to street children, but in a very short vision. India is one of the religious practices is giving money, food to the poor or economically weaker section people. Mainly on the festivals or occasions as on worship days, you will notice child beggars outside temples and mosques mainly.

5. Governmental Responsibility:

The government has not been able to realize more efficient policies in the field of welfare, leading to a child under age of 18 years old. The government should make efforts to pass laws that economically weaker families through generating jobs, and embrace social welfare programs creating awareness. The government as a part of its policy to arrest child beggars needs to address the underlying factors that propel families into poverty and cannot afford, at least on an experimental basis if not permanently, high-quality education so their children never

11. Anti-Begging Laws In India - “Idleness Is The Key Of Beggary” - C.H. Spurgeon

have to become child beggars. Good intentions would not translate into impact without detailed plans and execution in building a future for those who are poor.

6. Abuse and Cruelty:

Children who beg on the streets often suffer severe abuse and cruelty from parents, guardians, traffickers, and others. They may face physical violence, like beatings, and can be subjected to sexual exploitation, which leaves them with lasting emotional and psychological scars. Coerced into begging, these vulnerable children have their small earnings taken away, leading to neglect and a lack of basic needs like food, shelter, and education. The combined effects of this abuse can cause significant psychological issues, including anxiety, hopelessness or PTS disorder.

LAWS GOVERNING BEGGING IN INDIA:

The criminalization of begging in India has roots in colonial laws, like the Vagrancy Act of 1856. These laws sought to control marginalized communities, especially the poor and lower castes, by criminalizing their means of survival instead of tackling the financial issues that affects child begging in our country. Many states kept these colonial laws after the independence of our country. They failed to acknowledge the complex reasons behind this issue, such as scarcity, non-availability of proper resources, and systemic discrimination. Instead of providing solutions to it, these laws stigmatize, further marginalize vulnerable groups, continuing cycles of social exclusion.

They are some important legislations have been passed in our country till now regarding this issue, central laws such as Indian Penal Code, 1860 (repealed as Bharatiya Nyaya Sanhita, 2023) and various state- laws specifically focus on such as the Hyderabad Prevention of Beggary Act (1941), the Bengal Vagrancy Act (1945), the Mysore Prevention of Beggary Act (1945), the Bombay Prevention of Beggary Act (1945), etc. Additionally, the Children Act of 1960 also addresses related issues. These laws reflect the various approaches taken by different states to combat begging.[12]

Individuals who employ or involve children in begging face penalties of up to one year in prison, a fine, or both, as per the Children Act, 1960 under Section 42 deals with" Kidnapping or harming a minor for the purpose of begging is a serious offense" under Section 363A of the Indian penal code,1860 and they are punishable for life imprisonment and as well as fine. The Criminal Law (Amendment) Act, 2013, allows for imprisonment of up to 10 years for those convicted of beggary. The laws, pertains to child beginning may be directed to shelter homes or arrested without a warrant and imprisoned. Who are entirely dependent on beggars the legislation will mandates the detention of individuals and imposes penalties for employing or

12. "Pratik Maitra, Anti beggary laws in India: A critical analysis, 2 (1) Jus Corpus Law Journal 551-557 (2021)".

exploiting individuals for begging, whereas earlier provisions were aimed to protect vulnerable family members from being forced.

In India, begging is not considered a criminal offense/ crime. However, laws such as the Bombay Prevention of Begging Act of 1959, along with similar laws/regulations in various states, allow local authorities to detain and rehabilitate individuals who are found begging in public areas. The intention behind these laws is to provide support to those who are unable to care for themselves, rather than to impose penalties. The rehabilitation process generally includes access to food, shelter, medical services, and vocational training to help individuals regain their independence/ self-sufficient. They are total 22 states and union territories in India. However, these laws have faced criticism for allegedly targeting vulnerable and marginalized populations, and for not adequately addressing the underlying social and economic factors that contribute to the issue of begging.

"In the Act itself clearly specify that objectives of anti-begging laws in India are to found in systematic and active procedures for prevention from child begging activities, to provide for incarceration, rehabilitation, and employment and their dependents in designated institutions or work places. These laws prohibit and penalize soliciting or receiving alms in public places, entering private premises for the same purpose and exhibiting any injury, deformity, or disease to obtain alms."[13] Additionally, remaining in public spaces without visible means of subsistence is considered an offense. Begging can be classified as a nuisance under "Section 268 of the now-repealed Indian Penal Code (IPC) 1860", which has been replaced by "Section 270 of the Bharatiya Nyaya Sanhita 2023".

Children who are forced or compelled to beg are considered as needing special support and protection under the "Juvenile Justice (Care and Protection of Children) Act, 2015". States that their vulnerability and aims to safeguard their interests through legal and welfare measures.

"The Right to Education Act, 2009 was established to ensure free and compulsory education for all children between the ages 6 to 14 years. However, children who are engaged in begging are frequently left out of this educational guarantee, facing significant barriers to access".

"Additionally, the SMILE (Support for Marginalized Individuals for Livelihood and Enterprise) this Scheme was launched in 2021 by the Ministry of Social Justice & Empowerment, is a government initiative focused on the rescue, rehabilitation, and welfare and those involved in begging, including children. The scheme aims to provide them with opportunities for education, livelihood, and social integration".

13. The Bharatiya Nyaya Sanhita 2023, (Act No. 45 of 2023) s. 139

ANTI-BEGGING LAWS IN INDIA:

Sl.No.	States/UT	ACT/Legislations
1.	Jammu &Kashmir	The J&K Prevention of Begging Act,1960
2.	Andhra Pradesh	The A.P Prevention of Beggary Act,1977
3.	Assam	The Assam Prevention of Begging Act,1964
4.	Bihar	The Bihar prevention of begging Act,1951
5.	Chhatigarh	Adopted the Madhya Pradesh Bikshavitry Nivara Nadhiniyam, 1973
6.	GOA	The Goa, Daman &Diu Prevention of Begging Act, 1972
7.	Gujarat	Adopted the Bombay Act,1959
8.	Haryana	The Haryana Prevention of begging Act,1971
9.	Himachal Pradesh	The Himachal Pradesh Prevention of Prevention of Begging in India
10.	Jharkhand	Adopted Bihar Act,1951
11.	Karnataka	The Karnataka Prevention of Begging Act,1975
12.	Kerala	The Travancore prevention of Begging Act,1120
13.	Madhya Pradesh	The Madhya Pradesh Bolshevist Navarin Adhamiya, 1973
14.	Maharashtra	The Bombay Prevention of Begging Act,1959
15.	Tamil Nadu	The Madras Prevention of Begging Act,1945
16.	Uttar Pradesh	The U.P. Prohibition of Begging Act,1972
19.	Uttarakhand	Adopted UP Act,1972
20.	West Bengal	The West Bengal Vagrancy Act,1943
21.	Daman &Diu	The Goa, Daman, Dinu Prevention of Begging Act,1972
22.	Delhi	Adopted the Bombay Act,1959

RECENT DEVELOPMENTS IN ANTI-BEGGING LAWS:

Starting January 1,2025, Indore will penalize individuals giving alms to beggars, expanding previous restrictions. This initiative aims to disrupt the begging cycle and will be supported by an awareness campaign about the negative impacts of almsgiving.

In 2018, the Delhi High Court declared certain provisions of the Bombay Prevention of Begging Act unconstitutional, emphasizing that begging is often a necessity rather than a choice. The court highlighted the government's responsibility to provide social security and basic amenities.

In addition to state's anti-begging law, arguing that beggars the state of Jammu and Kashmir High Court also struck down they should not be treated as threats to public order but rather as individuals suffering from poverty.

The Rajasthan Rehabilitation of Beggars or Indigents Act, 2012, focuses on rehabilitation rather than punishment, providing vocational training and support to help beggars reintegrate into society.

As per their official report in 2011 Census, India has over 400,000 beggars and vagrants.

The legal and policy framework to address this issue includes:

1. Constitutional provisions: The provision of (Article 41 and 23) Directs states to implement welfare measures and prohibits human trafficking and forced labor.[14]

2. State Responsibility: 9th entry of the State List in the Seventh Schedule designates "Relief of the disabled and unemployable" as a state subject.[15]

3. Section 363-A of the Indian Penal Code criminalizes kidnapping or maiming for begging.

4. The Juvenile Justice (Care and Protection of Children) Act, 2000: The anti-child begging laws, aims to prevent child begging and promote the well-being of vulnerable children. It focuses on protecting and rehabilitating children in difficult circumstances, ensuring their rights are upheld. The legislation addresses the root causes of exploitation by rescuing children and providing them with education and care. Ultimately, it seeks to create a safe and nurturing environment for all children to thrive.

5. The Constitution (Eighty-sixth) Amendment Act, which came into effect on April 1, 2010, established free and compulsory education as a fundamental right for children between the ages of six and fourteen in India through the Right to Education Act. This Act requires that all children within this age range receive free primary education and mandates that private schools reserve 25% of their seats for students from low-income families. Nevertheless, the implementation of this Act has encountered considerable obstacles, such as insufficient government funding, a lack of reliable data concerning out-of-school children, and the exclusion of private unaided schools from regulatory oversight. Furthermore, the Act fails to sufficiently address the quality of education, is limited to children aged 6 to 14, and does not conform to constitutional provisions and

14. Indian Constitution of India,1950

15. "Jehosh Paul", May 10, 2024, "Moving Beyond Criminalization: Embrace Rajasthan's Progressive Model of Rehabilitation for Beggars in India".

international standards related to child labor and education for all children as stipulated under Article 14 of the Constitution of India. Amendments are essential to guarantee comprehensive educational rights and protections for all children.

PRESENT SCENARIO

Child begging varies significantly across nations and regions due to cultural and socioeconomic differences. Estimates from organizations like UNICEF suggest that approximately one million children are involved in begging activities worldwide, with high prevalence in countries such as Pakistan, Bangladesh, India, Nepal, Thailand, Indonesia, Kenya, Ghana, Nigeria, Mexico, and Brazil.[16]

In India, over 70% of begging children are under the age of 10.[17] The issue of child begging is often linked to broader challenges, including poverty, migration, displacement, and inadequate social security systems. Children from disadvantaged backgrounds are particularly vulnerable to being forced into begging due to structural inequalities and limited access to healthcare and education.

According to statistics provided by the Ministry of Women and Child Development in 2016, the number of child beggars in India has seen a significant decline, dropping from 112,794 in 2001 to 45,296 in 2011, as reported in census data. In response to this issue, the Ministry of Social Justice and Empowerment has launched the "SMILE" scheme, which aims to comprehensively rehabilitate marginalized individuals, including those engaged in begging. "The main objective of this scheme is to create a Bhiksha Vritti Mukt Bharat (Begging-Free India) through comprehensive rehabilitation, ensuring that beggars lead a life of dignity, self-respect, & self-confidence."[18] This initiative focuses on various aspects such as rehabilitation, medical care, counseling, education, skill development, and economic linkages. Furthermore, the Ministry of Women and Child Development administers the Child Protection Services (CPS) Scheme, which provides financial support to states for assessing the conditions of children in difficult situations and for maintaining Child Care Institutions (CCIs) that deliver age-appropriate education and non-institutional care options. Under the Juvenile Justice (Care and Protection of Children) Act, 2015, children found begging or living on the streets are

16. United Nations Children's Fund,1950, Established in 1946 by the United Nations General Assembly.

17. In 2006, an Indian news channel went undercover and filmed doctors agreeing to amputate limbs for the begging mafia.

18. Ministry of Social Justice and Empowerment, Government of India, SMILE Scheme: Support for Marginalized Individuals for Livelihood and Enterprise (2021) and Ministry of Women and Child Development, Government of India, Annual Report 2016-17 (2017)

categorized as "Children in Need of Care and Protection."[19] A state-wise analysis of children aged 0-14 years engaged in begging indicates significant numbers in Uttar Pradesh (10,167), Rajasthan (7,167), and West Bengal (3,216), contributing to the overall total of 45,296 children across India.

Key Implications of Begging in India:

1. Social issues: - Discrimination and social exclusion of beggars - Limited access to healthcare and basic necessities - Vulnerability to abuse and exploitation

2. Criminal concerns:- Exploitation of children and vulnerable individuals - Human trafficking and forced begging by criminal networks

3. Identification challenges: - Difficulty in distinguishing between genuine and fake beggars - Exploitation of infants and children for begging - Use of harmful tactics to elicit sympathy, such as drugging babies Addressing these issues requires a comprehensive approach that balances legal measures with social welfare initiatives and protection of vulnerable individuals.

IMPACT OF CHILD BEGGING IN INDIA ON CHILD'S EDUCATION

1. School Attendance and Dropout Rates:

A significant number of children don't go to school. For instance, a study in Bangladesh found that over 70% of child beggars were not enrolled in any educational institution. The dropout rate among children engaged in begging is alarmingly high. Research indicates that children who beg are 50% more likely to won't prefer to school compared to their peers' groups.

2. Educational Attainment:

Lack of formal education leads to low literacy rates among child beggars. In India, approximately, only 20% of child beggars could read and write compared to 80%. The long-term effects of this educational deprivation are evident in employment opportunities. Studies view that individuals would not complete basic education are Paying low amount or unemployment.

3. Cognitive Development:

Exposure to the harsh realities of street life can hinder cognitive development. Research has shown that children living in poverty, including those who beg, score lower on cognitive tests compared to their peers. The stress and trauma associated with begging can impair learning abilities, leading to difficulties in academic performance.

19. Mohammad Saleem, Law mantra, I.S.S.N-2321-6417, volume 6, CHILD BEGGING: A MENACE TO INDIA'S FUTURE,

4. Social Skills and Integration:

Children who beg often miss out on social interactions that occur in school settings, which are crucial for developing social skills. The stigma associated with begging can lead to social isolation, further hindering their capability for social adjustment. The rights of children education, particularly street children and child beggars, are emphasized through various policies, constitutional provisions, and judicial pronouncements in India.

NATIONAL POLICIES ON EDUCATION

The National Policy on Education was first introduced in 1968, focusing on free and compulsory education, equal educational opportunities, and the development of various educational sectors. Subsequent policies in 1986 and 1992 further emphasized early childhood education, the importance of secularism, and the need for special programs for marginalized groups, including women, Scheduled Castes, and Scheduled Tribes.

National Charter for Children (2003) deals with Article 7 of these states as mandates free and compulsory primary education for all children, with special initiatives for disadvantaged groups. It emphasizes the importance of education in the mother tongue and the need for child-oriented, meaningful education that respects the diverse cultural backgrounds of children.[20]

Right of Children to Free and Compulsory Education Act (2009) deals with the act mandates free and compulsory education for children aged 6 to 14 years across India, ensuring that children who have not been admitted to school or have not completed their education are placed in appropriate classes.

Scheme for Working Children:

This scheme aims to provide essential educational services, such as non-formal education and vocational training, to working children, particularly those in urban areas who are often excluded from other educational schemes. Children's engaged in begging are recognized as "children in need of care and protection" under the Juvenile Justice (Care and Protection of Children) Act, 2015. The Right to Education Act, 2009 provides for free and compulsory education to children aged 6–14 years, yet those involved in begging often remain sidelined and excluded from these provisions. The SMILE Scheme, introduced in 2021 by the Ministry of Social Justice & Empowerment, is aimed at the rehabilitation of persons involved in begging, including child beggars.

20. (PUBLISHED IN THE EXTRAORDINARY GAZETTE OF INDIA, PART-I, SECTION-I) NO. F. 6-15/98-CW GOVERNMENT OF INDIA MINISTRY OF HUMAN RESOURCE DEVELOPMENT DEPARTMENT OF WOMEN AND CHILD DEVELOPMENT

CONSTITUTIONAL PROVISIONS:

As per the Article 21-A of the Indian Constitution states that the right to free and compulsory education for children aged 6 to 14 years. It is supported by Articles 41 and 45 of the constitution of India, which emphasize the state's responsibility to provide education and early childhood care. Articles 39(e), 39(f), and 45 of the Constitution, direct the State to ensure children are not abused, and that they are given opportunities to develop in a healthy environment. Child begging directly undermines these constitutional commitments.

Recent judgments in India:

1.In "**Francis Coralie Mullin v. Administrator, Union Territory of Delhi**, Hon'ble Supreme Court held that the right to life under Article 21 of the Constitution of India includes the right to live with dignity. For children forced into begging, this right is routinely violated, as they are subjected to physical hardship, social stigma, and exploitation".[21]

2. In "**Society for Unaided Private Schools of Rajasthan v. Union of India**[22] the Hon'ble Supreme Court held that the constitutional validity of the Right of Children to Free and Compulsory Education Act, 2009, emphasizing the obligation of private schools to admit students from economically weaker sections".

3. In "**Environmental & Consumer Protection Foundation v. Delhi Administration** the Court held that the State has an obligation to provide free and compulsory education under Article 21A of Indian Constitution. Children engaged in begging are systematically excluded from education, perpetuating cycles of poverty and exploitation."[23]

4. In **Pramati Educational and Cultural Trust v. Union of India**[24] the Hon'ble Supreme Court held that the Right to Education Act applies to all schools, including minority institutions, and that they must adhere to the provisions of the Act regarding admissions.

5. In **State of Uttar Pradesh v. Ranjana Prakash:**[25] The Supreme Court addressed the issue of the right to education for children in madras and emphasized the need for educational standards and recognition of madras education.

6. In "**Anand Vardhan Chandel v. University of Delhi**:[26] The Delhi High Court held that education is a fundamental right under Article 21 of the Constitution, necessary for the full development of personality of the child".

21. (1981) 1 SCC 608.
22. (2012) 6 SCC 1.
23. (2012) 10 SCC 197.
24. (2014) 6 SCC 1.
25. (2020) 10 SCC 1.
26. (2018) 247 DLT 1.

7. In **M.C. Mehta v. State of Tamil Nadu**[27] before the Supreme Court directed the state to ensure educational facilities for child laborers, reinforcing the obligation to provide education.

8. In **Harsh Mander v. Union of India**,[28] the Delhi High Court held that "Criminalising begging is a wrong approach to deal with the underlying causes of the problem. It ignores the reality that people who beg are the poorest of the poor and marginalised in society."

9. In ***People's Union for Democratic Rights v. Union of India***, the supreme Court clarified that "forced labour" under Article 23 prohibits trafficking and forced labour, while Article 24 bans child labour in hazardous occupations and which the court includes in the word of forced labour as to extracted work due to economic compulsion. Organized begging rackets exploiting children fall squarely within this definition[29].

10. In **Harsh Mander & Anr. v. Union of India & Ors., W.P. (C) 10498/2009 (Delhi HC, 2018),** the Delhi High Court held that division bench of the high court states that Struck down provisions criminalizing begging under the 1959 Act, holding that penalizing poverty violates Articles 14 and 21 of the constitution of India.

11.In "**Kush Kalra v. Union of India**, W.P. (C) 569/2021, the Hon'ble division bench of Supreme Court held that during the COVID-19 pandemic, the petition highlighted how criminalization disproportionately affected vulnerable populations, including children".

12.In **Bachpan Bachao Andolan v. Union of India**[30], the hon'ble court Addressed the trafficking of children for labour and begging, directing states to establish rehabilitation mechanisms.

13.In **Laxmi Kant Pandey v. Union of India**[31], the court held that with inter-country adoption, it emphasized that children are a "supremely vulnerable class" requiring State protection.

Child beggary in India necessitates a comprehensive approach that combines legal reform, social support, and community engagement. The recent decriminalization of begging by the Delhi High Court underscores the need to view begging, especially among children, as a societal issue rather than a criminal one. Solutions should include strengthening child protection laws, expanding Child Care Institutions (CCIs) for rehabilitation, and implementing vocational training programs to empower older children. Public awareness campaigns can

27. [1996] 6 SCC 756.

28. (2020) 3 SCC 758.

29. (1982) 3 SCC 235.

30. (2011) 5 SCC 1.

31. (1984) 2 SCC 244.

educate communities about the negative impacts of child begging and encourage reporting to child protection helplines. Additionally, collaboration with NGOs, economic support for impoverished families, and the establishment of Child Welfare Committees are crucial for timely intervention. By fostering a collective responsibility among government bodies, civil society, and local communities, India can create a supportive environment that protects children and provides them with opportunities for a brighter future.

ROLE OF GOVERNMENT INITIATIVES AND OTHER AUTHORITIES:

The Indian government has introduced various legislative and policy measures to protect children, yet challenges such as child begging, homelessness, and social exploitation continue to persist. To address these issues, the Ministry of Social Justice and Empowerment is formulating a scheme for the protection, care, and rehabilitation of beggars, while the Ministry of Women and Child Development is implementing the Child Protection Services (formerly ICPS) under the Juvenile Justice (Care and Protection of Children) Act, 2015. This Act identifies children engaged in begging, working in violation of labour laws, or living on the streets as children in need of care and protection. The responsibility for enforcement lies primarily with State Governments and UTs, which receive central financial support to establish Child Care Institutions (CCIs) that offer shelter, education, healthcare, and counselling. These institutions also promote non-institutional alternatives like adoption, foster care, and sponsorship. Additionally, the government is working on schemes that provide basic services, including food, healthcare, skill training, and shelter, particularly for destitute children and women. To ensure transparency and accountability, beneficiary data will be maintained digitally and linked with UIDAI (Aadhar) numbers.[32]

They are few of the other schemes for the welfare and education of the child are Integrated Child Protection Scheme (ICPS), Sarva Shiksha Abhiyan (SSA), Mid-Day Meal Scheme and Bal Swaraj Portal (NCPCR) which means a digital tool to track and assist children in need, including those in begging situations. The Awareness, Advocacy and Prevention of child begging in the country with the help of Government and allied organizations' run awareness drives to sensitize the public about not giving alms and instead reporting such cases to helplines NHRC and NCPCR often conduct public hearings and workshops with stakeholders to strengthen child protection frameworks.

Child begging in India represents a deep socio-legal challenge at the intersection of poverty, child rights, and social policy. Despite constitutional guarantees under Articles 21, 21A, 23, and 24 and progressive laws such as the Juvenile Justice Act, 2015 and the Right to Education Act, 2009, thousands of children continue to be exploited into begging due to poverty, trafficking, and

32. V. Swathi, "Beggar rehabilitation to the force again" , The Hindu, Jan 7,2021

systemic neglect, often under organized crime networks that subject them to abuse. The Census 2011 recorded over 4.1 lakh beggars, including children, while NCRB (2022) and UNICEF (2023) highlight forced begging and multidimensional poverty as major concerns. Yet, outdated anti-beggary laws persist, criminalizing victims rather than ensuring rehabilitation, education, and reintegration. Comparative models from Bangladesh and Nepal stress rehabilitation over punishment, and as a signatory to the UNCRC, India is obligated to protect children from exploitation, making child begging not a marginal but a core rights-based issue requiring urgent reform.

Role of Non-Governmental Organizations

Non-governmental organizations (NGOs) play a vital role in complementing governmental efforts to eliminate child begging in India. These organizations actively engage in the rescue, rehabilitation, and reintegration of children forced into begging by identifying vulnerable children on the streets and providing them with shelter, education, nutrition, healthcare, and psychological counselling. NGOs often operate transit homes, skill development centres, and community outreach programs that aim to interruption of poverty and exploitation. They also conduct awareness campaigns to discourage the public from giving alms and instead report such cases through helplines like Childline 1098. Additionally, NGOs advocate for stronger policy implementation and collaborate with government bodies, the police, and judiciary to ensure the enforcement of child protection laws. Their ordinary presence, flexibility, and people-centric approach make them crucial stakeholders in addressing the root causes of child begging, including poverty, trafficking, and lack of access to basic needs. Eg: **Save the Children, Smile foundation, MAD**, **Asha foundation**, **CRY** and **Bachpan Bachao Andolan.**[33]

Role of Society

"History will judge us by the difference we make in the everyday lives of our Children."[34]

In India, society needs to adopt an active role and express awareness in order to tackle child begging. By encouraging access to education, nutritious food, shelter, and safety, we can create a nurturing environment for these vulnerable children. When we encounter a child begging, it is crucial not to look away instead, we should notify the appropriate authorities or local law enforcement, as even small actions can lead to significant change. While children often hear stories of heroes, they rarely experience the presence of one in their lives; you have the opportunity to be that hero who brings hope and transforms a child's future. Every child deserves a life filled with dignity and peace, and we can make a difference by connecting them to child welfare services, providing financial support, or helping reunite them with their families.

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33. For details, refer https://www.makeadiff.in/

34. Nelson Mandela Rules.

Each day, we see these young children reaching out for help, often ignored or reprimanded, yet many of us walk past with indifference, asking, "What can we do?" The truth is that we can take action and we must. These children are not just seeking money; they need compassion, understanding, and support to escape the cycle of poverty and suffering. It is our moral duty and collective responsibility to ensure they receive the assistance they deserve, paving the way for a brighter future.[35]

CONCLUSION AND SUGGESTIONS

The study concludes that despite constitutional, legal, and administrative efforts, begging persists in India due to a combination of poverty, illiteracy, unemployment, traditional practices, and weak implementation of laws. Vulnerable groups are often forced into these activities mostly such as women, children, and hijras. Many beggars are born into the profession and lack motivation or opportunity to change, leading to an underutilization of human resources and increased burden on the State.[36]

Begging also poses public health risks and contributes to the spread of diseases. While the State has a primary responsibility in eradicating begging, beggars themselves must also be willing to participate in rehabilitation schemes. The study recommends:

1. Formulate a National Rehabilitation Policy:

Develop and implement a unified policy to provide financial aid, skill development, vocational training, housing, and sustainable employment to individuals involved in beggary, with clear monitoring and accountability mechanisms.

2. Enact a Law Against Forced Begging and Trafficking:

Introduce robust anti-human trafficking legislation specifically addressing forced begging. Criminalize perpetrators and treat victims as vulnerable persons requiring state protection and rehabilitation.

3. Create a Centralized National Database:

The Ministry of Social Justice and Empowerment, along with municipal bodies and NGOs, is conducting standardized surveys to create a digital database on individuals engaged in begging. This data supports targeted rehabilitation and coordination of services to improve their health, education, and social well-being.

35. Sumita Sarkar, Beggary in Urban India: Reflections on Destitution and exploitation, 68(4),The Indian Journal of Social Work 531-544(2007)

36. Shristi Gupta,"Hyderabad:83 child beggars rescued after collective drive conducted in city" , the logical Indian,Aug1,2021

4. Ensure Identification and Shelter Support:

Relocate identified beggars to certified shelter homes under the SMILE Scheme. Provide essential identification documents (Aadhar, Ration Cards, etc.) to enable access to government services and benefits.

5. Deliver Comprehensive Welfare Services:

Offer residents of shelter homes basic amenities such as nutritious food, clothing, healthcare, mental health counseling, and linkage with key welfare schemes including Ayushman Bharat, Jan Dhan Yojana, and housing assistance.

6. Focus on Vulnerable Populations:

Prioritize the needs of children, women, elderly, persons with disabilities (PwDs), and substance-dependent individuals through specialized programs, legal protections, and rehabilitative care.

7. Guarantee Education and Healthcare Access:

Ensure that all children aged 6–14 are enrolled in school under the Right to Education Act. Connect all individuals with public healthcare and insurance schemes like UHIS, NUHM, and NRHM.

8. Promote Skill Development and Employment:

Partner with vocational training centers and corporates to equip shelter home residents with market-relevant skills. Facilitate job placements and entrepreneurship opportunities to build self-reliance.

9. Encourage SHGs and Financial Inclusion:

Assist residents in forming Self-Help Groups (SHGs), support access to microfinance, and incentivize banks to provide loans and services to support self-employment and financial independence.

10. Strengthen Public Awareness and Law Enforcement:

Launch comprehensive national campaigns to discourage giving money to beggars and instead promote rehabilitation programs. Set up anti-begging units at the local level working together with non-governmental organizations. Take strong action against organized begging networks and speed up the approval of the "Abolition of Begging and Rehabilitation of Beggars Bill, 2018".

SUGGESTIONS

1. Create and develop more rehabilitation facilities to offer rescued children and vulnerable populations the proper care and support.

2. Enhance the ability and operations of Child Welfare Committees to guarantee prompt and efficient child protection and rehabilitation.

3. To provide a child-friendly approach, state begging laws should be repealed and generally amended to eliminate criminalizing clauses that penalize children.

4. To make it easier for rescued children to enter and remain in schools, combine social welfare programs like SMILE with educational legislation like the Right to Education (RTE) Act.

5. To expedite the procedures of rescue, rehabilitation, and monitoring, encourage improved coordination and communication between state agencies, such as police, Juvenile Justice Boards, CWCs, and NGOs.

HARBOURING THE RICH BEHIND THE PLOUGH

Harshita Goyal[1]

ABSTRACT

The principal means by which the Indian Government generates revenue is through the levying and collection of taxes. Given that India ranks first globally in terms of population, the Government is positioned to accrue substantial tax revenue. It is well-known that in India, farmers constitute a majority of the population. Thereby, levying tax on a significant portion will provide the Government with greater revenue. Provided that in India, tax exemptions are granted to this substantial segment of the society earning agricultural income, leading to a significant revenue loss for the Indian Government. This proviso in the Income Tax Act has led to a prominent issue of both avoidance of tax and tax evasion. Henceforth, in the 21st century, it is crucial that this exemption can be granted to the farmers with some conditions, so that no one can take the shield of agricultural income and evade from the tax. Owing to the growing concerns related to tax evasion, there is a need to reconsider the current law therefore, it is essential to examine the laws of other nations. Therefore, this paper focuses on the laws pertaining to agricultural income in Brazil, the United Kingdom, Ireland, the United States of America and how it can be applied in the Indian context, leading to an effective taxation system in India.

Keywords: Government, Farmers, Tax evasion, Levying, Revenue loss.

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INTRODUCTION

In Mercedes, they travel, with wealth in their pocket, claiming the exemption, in which they lock it. Farmers they are, by claim and by name, but their fortune lifestyle is far from the same.

The tax exemption designed for the humble and true, are now exploited by those in a different view. In luxury they move, while the law stands aloof, twisting the system, they seek to misuse the proof.

It is prominent to note that, under the framework of Indian Taxation Law, agricultural income is exempted from the tax liability and not included under total income as enshrined under Sec 10 of the Income Tax Act, 1961.[2] Notably, the Indian Taxation Enquiry Committee 1925, while acknowledging the exemption, observed that, "there is no historical or theoretical justification for the continued exemption from the income tax. There are, however, administrative and political objections to the removal of the exemption at the present time."[3] Nonetheless, few are of the view that, "the prevailing exemption serves as a social and economic policy tool, assisting the livelihood of millions of farmers in a predominantly agrarian financial system."[4] "The taxation of agricultural income in India has emerged as a subject of consideration among academicians, policy-makers, and social activists. Thereby, the government-appointed commissions and academicians advocate for the inclusion of agricultural income within the tax net due to equity and efficiency issues. Conversely, a significant section continues to resist this proposition."[5] "This divergence stems largely due to the peculiar socio-economic structure of the Indian population."6 Henceforth, it becomes imperative, at the very outset, to comprehend the meaning of 'agriculture', to determine the scope of 'agricultural income' under the Indian Income Tax regime. The term 'agriculture' has traditionally been understood in a narrow sense, but "agriculture is the basic idea underlying the expressions 'agricultural purposes' and 'agricultural operations' and it is pertinent therefore to enquire what is the connotation of the term agriculture. The primary sense in which the term agriculture is understood is, agar-field and cultra-cultivation, i.e., the cultivation of the field, and if the term is understood only in that sense, then agriculture would be restricted only to cultivation of the land in the strict sense of the term, meaning, thereby, tilling of the land, sowing of the seeds, planting and similar operations on the land. They would be the basic operations and would require the expenditure of human skill and labour upon the land itself. However, other operations have to be resorted to

2. Income Tax Act, 1961, § 10, Acts of Parliament, 1961 (India).

3. Mannava Sumaja & M. Kishore Babu, *Taxation on Agricultural Income*, 04 IJIRAS 89, 89 (2017).

4. Ajay Khatri, *Agricultural Income and Taxation: Legal Framework and Implications in India*, 05 IJALR (2024).

5. Lakshmi Praba K, *An Analysis on Development of Agricultural Income Tax in India*, 10 IJRAR 552, 552 (2023).

6. Dr. Rabinarayan Samantara, *Taxation of Agricultural Income in India*, 09 IJMSS 01, 01 (2021).

by the agriculturist and which are necessary for effectively raising the produce from the land. They are operations to be performed after the produce sprouts from the land, e.g., weeding, digging the soil around the growth, removal of undesirable under growths and all operations which foster the growth and preserve the same not only from insects and pests but also from depredation from outside, tending, pruning, cutting, harvesting, and rendering the produce fit for the market."7 "Mere performance of the subsequent operations would not be enough to characterise them as agricultural operations."8 As observed, the term 'agriculture' encompasses primary and secondary activities centred around land cultivation and crop production. But it is prominent to note that agricultural activities are not just about production, but are the major contributor to national income.9 Now, it is pertinent to examine the definition of 'agricultural income' given under the Income Tax Act, 1961 under Sec 2 [(1A)],10 which is as follows-

"[(1A)] "agricultural income" means—

[(a) any rent or revenue derived from land which is situated in India and is used for agricultural purposes;]

(b) any income derived from such land by—

(i) agriculture; or

(ii) the performance by a cultivator or receiver of rent-in-kind of any process ordinarily employed by a cultivator or receiver of rent-in-kind to render the produce raised or received by him fit to be taken to market; or

(iii) the sale by a cultivator or receiver of rent-in-kind of the produce raised or received by him, in respect of which no process has been performed other than a process of the nature described in paragraph (ii) of this sub-clause ;

(c) any income derived from any building owned and occupied by the receiver of the rent or revenue of any such land, or occupied by the cultivator or the receiver of rent-in-kind, of any land with respect to which, or the produce of which, any process mentioned in paragraphs (ii) and (iii) of sub-clause (b) is carried on:

[Provided that—

7. Commissioner of Income-tax, West Bengal, Calcutta vs. Raja Benoy Kumar Sahas Roy, AIR 1957 SC 768.

8. C.I.T. vs. Jyotikana Chaudhurani, (1957) 32 ITR 705 (SC).

9. Rameen Devi, *The Role of Agriculture in Economic Development: An Indian Perspective*, 02 SAS PUBLISHERS 643, 643 (2015).

10. Income Tax Act, 1961, § 2[(1A)], Acts of Parliament, 1961 (India).

i. the building is on or in the immediate vicinity of the land, and is a building which the receiver of the rent or revenue or the cultivator, or the receiver of rent-in-kind, by reason of his connection with the land, requires as a dwelling house, or as a store-house, or other out building, and

ii. the land is either assessed to land revenue in India or is subject to a local rate assessed and collected by officers of the Government as such or where the land is not so assessed to land revenue or subject to a local rate, it is not situated—

(A) in any area which is comprised within the jurisdiction of a municipality (whether known as a municipality, municipal corporation, notified area committee, town area committee, town committee or by any other name) or a cantonment board and which has a population of not less than ten thousand 1***; or

[(B) in any area within the distance, measured aerially,—

(I) not being more than two kilometres, from the local limits of any municipality or cantonment board referred to in item (A) and which has a population of more than ten thousand but not exceeding one lakh; or

(II) not being more than six kilometres, from the local limits of any municipality or cantonment board referred to in item (A) and which has a population of more than one lakh but not exceeding ten lakh; or

(III) not being more than eight kilometres, from the local limits of any municipality or cantonment board referred to in item (A) and which has a population of more than ten lakh.] [Explanation [1.]—For the removal of doubts, it is hereby declared that revenue derived from land shall not include and shall be deemed never to have included any income arising from the transfer of any land referred to in item (a) or item (b) of sub-clause (iii) of clause (14) of this section.]

[Explanation 2.—For the removal of doubts, it is hereby declared that income derived from any building or land referred to in sub-clause (c) arising from the use of such building or land for any purpose (including letting for residential purpose or for the purpose of any business or profession) other than agriculture falling under sub-clause (a) or sub-clause (b) shall not be agricultural income.]

[Explanation 3.—For the purposes of this clause, any income derived from saplings or seedlings grown in a nursery shall be deemed to be agricultural income.]

[Explanation 4.—For the purposes of clause (ii) of the proviso to sub-clause (c), "population" means the population according to the last preceding census of which the relevant figures have been published before the first day of the previous year;]"[11]

Under Section 10 (1) of the Income Tax Act, 1961, agricultural income is exempted from taxation. However, this blanket exemption, which was aimed at protecting the agricultural community, now warrants critical re-evaluation. As in contemporary times, "the agricultural sector has attained a remarkable growth;"[12] therefore, the continued application of this exemption will undermine the intent of the legislators. It is rightly highlighted that "a farmer who earns Rs. 5 crores from agriculture pays zero tax, while one who earns Rs 30 lakh has to pay Rs 8 lakh as tax."[13] In furtherance, it is considerate to note that, "if a particular type of income is made completely tax free without any limit, it indicates that the intended beneficiaries, farmers, are not the primary recipients of this tax exemption and there is a larger conspiracy for providing this exemption of unlimited amount, by making a provision for the same in the Income Tax Act as such provision raises serious concerns regarding its potential misuse."[14] It has been observed that "most of the politicians and the persons patronised by these politicians are misusing the 'agricultural income' route for "conversion of their black money into white money."[15] Henceforth, it is crucial to recognise the legislative intent behind the aforesaid exemption, as it was rooted in an objective of providing support to the agrarian society. However, this provision is now being used as a tool for tax evasion. In lieu of the above stated, it is important that the law should be reconsidered to strike a balance between social welfare and legal accountability. It is pertinent to understand that when this provision was made, the intent of the legislators was the social welfare of the farmers, which now is being used by the political parties and other prominent people for the purpose of tax evasion.

INTERNATIONAL APPROACH TOWARDS AGRICULTURAL INCOME

In lieu of the current debate over the taxation regime, it is crucial to consider the approach of other jurisdictions. This comparative analysis will underline the distinctive approaches that other nations follow in order to strike a balance between the agrarian welfare and the Indian

11. *Id.*

12. Amit Mandal, *Trend and Pattern of Costs and Varying Profitability and Determinants of Paddy Crop in Eastern India: A Fixed Effect Approach Using Cost of Cultivation Data*, 79 IJAE 725, 725 (2024).

13. TAX CONCEPT, https://taxconcept.net/income-tax/if-you-earn-rs-5-crores-from-agriculture-you-pay-nil-tax/ (last visited Mar.1, 2025).

14. TIMES OF INDIA, https://timesofindia.indiatimes.com/readersblog/freeview/why-agricultural-income-is-tax-free-in-india-without-any-limit-4810/ (last visited Mar.1, 2025).

15. *Id.*

legal system. "8.2% of the total population in Brazil is engaged in agricultural activities,"[16] which contributes to "10% of the GDP."[17] "Tax policies play a crucial role in shaping the economic growth of the country."[18] Thereby, India, with a greater segment of its population dependent upon agriculture, continues to exclude taxation of agricultural income, leading to a substantial impact on the national economy. Henceforth, it becomes crucial to understand the Brazilian approach concerning the taxation of agricultural income, which can offer a model of reform in the Indian context.

a. Brazil

"Agriculture is an integral part of the world's economy, mainly for developing countries such as Brazil."[19] It is prominent to note that agricultural income is a subject of taxation in Brazil, wherein the liability is determined by two distinct methods, as stated below-

- "They can be taxed on just **10% of their gross agricultural income** (the total money earned from farming), or
- They can **subtract the cost of modern farming inputs** (like seeds, fertilizers, and machinery) from their total income before taxes. This reduces the amount of income that gets taxed."[20]

Further, it is considerate to note that, when corporations are involved in the agricultural activity, then "the tax rate is very low, around 6% on agricultural profits. When combined with the ability to deduct investments, the tax could go as low as 1.2%."[21] Moreover, the Brazilian Government has explained a tax policy wherein they are allowed to reduce their taxable income by applying accelerated depreciation to their fixed investments. Those fixed investments can be in the form of animals, buildings, vehicles, machinery, etc. "The procedure of applying accelerated depreciation is as follows-

1. When there is an agricultural business, it can depreciate their assets much faster than the typical depreciation schedule. Usually, the depreciation is spread out over many years but to avoid this, they can apply a much higher depreciation rate in the first year using a 'multiplication factor' which ranges from two to six.
2. When the depreciation is made to these assets, farmers can then reduce their taxable income by a significant amount, that is, upto 80% of their profits cannot be taxed.

16. STATISTA, https://www.statista.com/statistics/1076769/brazil-share-employment-agriculture/ (last visited Mar. 21, 2025).
17. FAO, https://www.fao.org/4/y4632e/y4632e09.htm (last visited Mar. 21, 2025).
18. Shakunthala. H., *The Impact of Tax Policies on Economic Growth and Development: An Analysis*, 10 JETIR 741, 742 (2023).
19. Matthew N.O. Sadiku et al., *Agriculture in Brazil*, 8 IJETMS 261, 261 (2024).
20. WORLD BANK, https://documents1.worldbank.org/curated/ar/589111493257485326/pdf/multi-page.pdf (last visited Mar. 22, 2025).
21. *Id.*

3. If there are instances in which the depreciation exceeds the farmer's current income, then the excess of the amount can be carried forward and applied in the subsequent years (upto four years).
4. Henceforth, it is possible that the agricultural income can avoid taxation, due to the large tax deductions from accelerated depreciation."[22]

b. United kingdom

With respect to the laws in the United Kingdom, "Agricultural income is taxable in the UK. The tax imposed is in the form of Income Tax and Corporation Tax." These taxes are levied in two ways, i.e.,

- Trading Income
- Rental Income[23]

If an individual has to name their income as agricultural income, then they have to fulfil the conditions enshrined under Sec. 996 (1) of the Income Tax Act, 2007 or under Section. 832 (1) of the Income and Corporation Taxes Act, 1988. "Farming means 'the occupation of land wholly or mainly for the purpose of husbandry'. From the corporate tax angle, the definition is, to a certain extent, more oblique, as stated in Sec. 832(1) of the Income and Corporation Taxes Act 1988 (ICTA 1988), where 'farmland' is defined as "land in the United Kingdom wholly or mainly occupied for the purposes of husbandry…and 'farming' shall be construed accordingly."[24]

Thereby, as aforesaid, under the taxation system of the United Kingdom, the taxpayer can be deemed to be the farmer, only if two conditions are satisfied, namely,

- He or she must be in possession of land and
- The purpose of the occupation must be, at least mainly, for husbandry – i.e. cultivating crops or breeding and rearing livestock.

Provided that the Income tax charged is only dependent on the profit made.

The prominent question that is often raised is whether the net profit made by the farm will be subject to Income Tax or Corporation Tax. This depends upon the business structure that is being selected by the farm in question.

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22. *Id.*
23. ROY ACCOUNTS, https://royaccountants.co.uk/2023/10/25/foreign-agriculture-income/#:~:text=Agriculture%20income%20is%20exempt%20in,trading%20income%20or%20rental%20income (last visited Mar. 23, 2025).
24. BUTLER, https://www.butler-co.co.uk/articles/farm-taxation-in-the-uk-ireland-issue-2-irish-tax-reviewpdf (last visited Mar. 23, 2025).

To understand the UK taxation system, the following tax slab is to be considered-

Peronal Allowance	£9,440*	
Band	**Income**	**Tax rate**
Basic rate	£0-32,010	20%**
Higher rate	£32,011–£150,000	40%**
	£150,001+	45%**
* This is the amount of income that is tax-free for 2013/14, available up to £100,000 income.		
** Tax bands can be extended for gift aid and pension contributions.		

Table 1: UK Agricultural Income tax rates for 2013/201425

Thereby, it is primarily important to examine that the legal framework of United Kingdom is framed in lieu of several factors, and the liability of the agrarian society arises accordingly.

In furtherance, "Indian States have highlighted fluctuations in agricultural production due to uncertain weather conditions, thereby, posing significant challenge to assessment of agricultural income."[26] Thereby, reference can be made to the "concept of Farmers' Averaging in United Kingdom, to mitigate the effects of these fluctuations."[27]

c. Ireland

The law relating to agricultural income in Ireland is similar to the law of United Kingdom. The primary distinction between the two lies in the tax slabs.

Personal tax credit (Single Persion)	£1,650*	
Band	**Income**	**Tax rate**
Standard rate	€0–€32,800	20%**
Higher rate	€32,801+	41%**
*this is the amount that is deducted from the income tax liability after the tax rates have been applied. It is subject to more variation than its UK counterpart, e.g. it is €3,300 for married couples and there are additional credits depending on personal circumstances.		
** This band increases to €36,800 for single or widowed persons qualifying for the one-parent family tax credit and to €41,800 for married couples where only one spouse has income, with an increase of up to an additional €23,800 if both spouses have income.		

Table 2: Irish Agricultural Income Tax Rates for 201328

25. *Id*.

26. Sandeep Jain, *Taxation of Agriculture Income in India: An Overview*, 2 JPI 95, 95 (2015).

27. Julie Butler, *Farm Taxation in the UK and Ireland: Differences, Similarities and Current Challenges*, Irish Tax Review, 2013 Number 2, https://www.butler-co.co.uk/articles/Farm%20Taxation%20in%20the%20UK%20%20Ireland%20(Issue%202%20-%20Irish%20Tax%20Review).pdf.

28. *Id*.

Furthermore, “similar to the United Kingdom’s concept of Farmers’ Averaging, Ireland has likewise incorporated the concept of Income Averaging.”[29] Thereby, not fully exempting the farmers from paying the tax when suffered by the weather conditions.

d. United States of America

In the United States of America, “Farmers, like other taxpayers, are subject to a variety of taxes at all levels of government. At the Federal level, these include income taxes, social security and self-employment taxes, and estate taxes. At the state and local level, the most significant taxes are on property and income. Other taxes such as excise taxes, corporate income taxes, and retail sales taxes are significant for only a small number of farmers. The Federal income tax is a progressive tax imposed on net income. Numerous provisions of Federal Income Tax law allow taxpayers to reduce their tax liability if they undertake certain tax-favoured activities.”[30] “Farm income is income derived from the sale of material that you have grown or raised and sold. It does not include products that you have processed from the material you grow or raise on the farm. For example, an orchard that grows apples and processes those apples into preserves and then sells the preserves cannot classify those sales as farm income. Similarly, a farm that offers a hayride or a petting zoo for a fee could not classify that revenue as farm income.”[31] “Meeting the qualifications of farming and being a farmer under the Internal Revenue Code (IRC) allows for special benefits, which is why it is vitally important for operators of farms and their tax professionals to understand the Internal Revenue Service (IRS) tax definitions of farm, farming, and farmer. It is pertinent to note that you are in the business of farming if you cultivate, operate, or manage a farm for profit, either as an owner or tenant.”[32] Further, “one of the policy instruments that remains today is the use of preferential tax treatment of agricultural and forested lands. The process of adopting farmland’s preferential tax treatment took place at state and local levels and over several decades. As a result, many are unaware that such policies exist, or unaware of the differential property tax treatment that occurs for agricultural land. All 50 U.S. states provide some form of preferential treatment for agricultural land. Most states do so through a form of use-value assessment. Under use-value assessment agricultural lands

29. SANDEEP JAIN, *Supra note 26.*

30. US LEGAL, https://farmers.uslegal.com/tax-treatment-of-farmers/#:~:text=Farmers%2C%20like%20other%20taxpayers%2C%20are,are%20on%20property%20and%20income (last visited Mar. 28, 2025).

31. UNIVERSITY OF NEW HAMPSHIRE, https://extension.unh.edu/blog/2023/12/farm-income-taxation-beginning-farm-businesses#:~:text=As%20the%20owner%2C%20you%20are,tax%20and%202.9%25%20for%20Medicare (last visited Apr. 5, 2025).

32. Guido van der Hoeven, *Farm, Farming and Who’s a Farmer for Tax Purposes*, RURAL TAX EDUCATION, RTE/2022-01 (Feb. 2022), https://www.farmers.gov/sites/default/files/2022-03/whos-a-farmer.pdf.

are taxed according to the potential earnings from agricultural production, rather than the full market value of the property."[33]

In essence, it can be observed that the aforesaid countries have not exempted the farmers from paying the tax, as every tax no matter how small or big, but acts as a building block for the nation's GDP, depending upon how effectively the collected tax is used by the Government.

INDIAN STANCE ON AGRICULTURAL INCOME

In the Indian context, the statutory provision has excluded the farmers to pay tax. It is pertinent to note that, as the power is divided between the Centre and the State enshrined under Art. 246 of the Indian Constitution,[34] the state has the power to make the laws on agriculture and not the union as per the 7th Schedule.[35] Thereby, there are regional laws imposing different tax slabs in different states, thereby advocating non- uniformity among the states in this particular subject. Thereby, to understand the concern, let's take the example of "two prominent states in agriculture namely, Punjab and Uttar Pradesh."[36]

A. Punjab

"Punjab holds place of pride among the Indian States for its outstanding achievements in agricultural development."[37] "It is crucial to consider that 75% of its population heavily relies on agriculture for their livelihoods. Agriculture constitutes 19% of Punjab's GDP and is thereby referred to as 'Granary' or 'Bread Basket of India'.[38] The following are the tax slabs for the farmers enforced by the ruling local government, provided that the tax slabs change with respect to the nature of subject, i.e., individuals or company.

New Income Tax Rates for Farmers (2025)		
Sl. No	**Income Bracket**	**Rate of Tax**
1	Not exceeding Rs. 600,000	Nil
2	Rs. 600,001 – Rs. 1,200,000	15% of the amount exceeding Rs. 600,000
3	Rs. 1,200,001 – Rs. 1,600,000	Rs. 90,000 + 20% of the amount exceeding Rs. 1,200,000

33. UNIVERSITY OF ILLINOIS, https://policymatters.illinois.edu/the-taxation-of-agricultural-land-in-the-united-states/ (last visited Apr. 5, 2025).
34. INDIAN CONST. art. 246.
35. INDIAN CONST. sched. VII.
36. KRISHI JAGRAN, https://krishijagran.com/blog/top-10-leading-agriculture-states-of-india-with-most-crops/ (last visited Apr. 10, 2025).
37. AERCPAU, https://www.aercpau.com/assets/docs/AERC%2044.pdf (last visited Apr. 10, 2025).
38. EZGARDENTIPS, https://ezgardentips.com/what-is-punjab-s-agricultural-contribution.html (last visited Apr. 10, 2025).

4	Rs. 1,600,001 – Rs. 3,200,000	Rs. 170,000 + 30% of the amount exceeding Rs. 1,600,000
5	Rs. 3,200,001 – Rs. 5,600,000	Rs. 650,000 + 40% of the amount exceeding Rs. 3,200,000
6	Above Rs. 5,600,000	Rs. 1,610,000 + 45% of the amount exceeding Rs. 5,600,000

Table 3: Punjab Agricultural Income Tax Rates for 202539

In furtherance, the tax slabs on agricultural income for the company, is as follows-

Agricultural Income Tax for Corporate Farming (2025)	
Type of Company	**Rate of Tax**
Small Company	20%
Any Other Company	29%

Table 4: Punjab Agricultural Income Tax Rates for 202540

It is prominent to note that, "the agricultural income is taxed in lieu of the political agendas."[41] This is so done as to gain the majority in a particular state. Whereby, due to this, it is the GDP of the nation that is being affected.

B. Uttar Pradesh

As per the recent update, "Farmers will be free from the wholesale market and will no longer have to pay any mandi tax that comes to around Rs 125 crore in a year."[42] This Mandi Tax was earlier paid to the Government but now the Government removed the same for the political success, thereby, losing the amount of Rs. 125 Crores.

From the above-mentioned circumstances, it can be inferred that, the political parties impose the agricultural tax in accordance with their political interest and not in lieu of the country's GDP. This is so because the "political parties target this community as they are in majority and make false promises to them in order to get the majority in their support."[43] Henceforth,

39. LEGALVERSITY, https://legalversity.com/agricultural-income-tax-rates-in-punjab-2025 (last visited Apr. 12, 2025).

40. *Id*.

41. K.V. Sridhar Golagani, *The Taxation of Agricultural Income in India*, 6 IJFMR 1, 2 (2024).

42. KRISHI JAGRAN, https://krishijagran.com/agriculture-world/uttar-pradesh-latest-changes-in-agri-reforms-farmers-free-from-mandi-tax-will-directly-sell-their-produce/#google_vignette (last visited Apr. 15, 2025).

43. NEWS CLICK, https://www.newsclick.in/why-parties-promise-moon-farmers-poll-bound-heartland (last visited Apr. 16, 2025).

rather than making this as a subject of State List, it should be added in the Central List, so as to minimise the political bias.

In furtherance, when the Income Tax Act 1961, was framed, there were two major intentions of the legislators that were highlighted to be the primary reasons for granting an exemption. Firstly, the farmers didn't have much of the revenue in their hands, which "aims to protect small and marginal farmers from financial burdens,"[44] and secondly, there are situations when they can be "affected by the weather conditions."[45] To address this, it is crucial to understand that, earlier, when the farmer was involved in farming, the efforts were comparatively more than the output, and hence it was thought that they held less revenue. But as society develops, and there is more use of technology, the input is relatively less than the output that the farmers are generating. Henceforth, they can contribute to the country's GDP. In furtherance, when the question pertains to the fact that they are affected by the weather conditions, then the law should be framed in line with the laws of Ireland and the United Kingdom.

In contemporary times, the controversy pertaining to the exemption on agricultural income is on the rise. This is due to the recent news that was reported relating to the actress Suhana Khan. "Suhana Khan claimed herself to be an agriculturalist."[46] Herein, she purchased the property of 12.91 crores and got an exemption from paying the tax, as she claimed herself to be an agriculturalist. But this is not the first reported case rather many famous people have done the same act, which includes "Actor Amitabh Bachchan as well."[47] Additionally, the internet is silent about the information as to whether or not tax has been paid by Mukesh Ambani in the name of Reliance Company, for owning a mango orchard.

Our "general public is influenced by the acts of such influential people," [48] whereby getting an idea to evade the tax. The issue of evasion of taxation of agricultural income extends to P. Chidambaram, the Former Finance Minister. "He showed his income to be an agricultural income on the ground that he cultivated cabbage in the balcony of his own house." For a long time, people have been taking the benefit of the tax exemption so as to "convert black money into white money." but now, even the influential class is taking the shield of this exemption and

44. TAX CONCEPT, *Supra note 13.*

45. SANDEEP JAIN, *Supra note 26.*

46. HINDUSTAN TIMES, https://www.hindustantimes.com/cities/mumbai-news/shah-rukh-khan-daughter-suhana-khan-buys-farmland-in-aibaug-rs-12-91-crore-101687441869671.html (last visited Apr. 16, 2025).

47. HINDUSTAN TIMES, https://www.hindustantimes.com/india-news/lashkaretaiba-terrorist-abu-qatal-mastermind-of-rajouri-attack-shot-dead-in-pakistan-report-101742090607318.html (last visited Apr. 18, 2025).

48. PRESSMAVERICK, https://pressmaverick.com/the-power-of-influence-how-celebrities/ (last visited Apr. 22, 2025).

is evading the tax. The primary motive of the Act was the welfare of the farmer, as they were not able to generate much revenue, but this is not the concern. Rather, the economic conditions of the farmer are relatively improved, but it is the other part of society that is misusing the laws.

In order to curb this situation, the author is of the view that the central level tax exemption should be imposed, by making it a Central subject with respect to the reference from the laws of other jurisdictions and the doctrine of ability as proposed by Adam Smith.

CONCLUSION

In India, tax exemption on agricultural income has become a highly debatable topic. The intent of the legislators while framing this provision in the statute was the mere welfare of the framers, but as society progressed, people started to misuse this exemption either by evading the tax or by converting the money. The primary intent of the legislators is lost in contemporary times. Further, it is to be noticed that farmers form a considerable number in our nation. Henceforth, exempting them from paying tax will lead to a substantial loss in revenue for the government. Thereby, a uniform taxation law should be implemented, rather than administering different laws for different states. Further, the author is of the view that this particular provision in the current law should be taken into consideration as it stands in violation of the equity principle and should not be condoned.