

...ure to all its citizens: JUSTICE, social, economic and political; LIBERTY of thought, expression, belief, faith and worship; EQUALITY of status and
...portunity; and to promote among them all FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation; IN O
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Law in Transition

Rights, Sovereignty and Regulation in a Changing World

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EDITED BY

Siddharth Saxena · Bhagyashree Agarwal



LAW IN TRANSITION

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Preface

Law changes shape when the people it governs change their circumstances. A person asks the State to recognise who they are. A worker crosses a State border and finds that the protections of home do not travel with them. A family flees a flood that no treaty foresaw. A face is borrowed by software and made to say what its owner never said. In each case the question is the same: does the law as it stands reach the situation, and if not, what should be done?

The thirteen chapters of this book ask that question across four fields. Part I deals with identity, equality and dignity: transgender rights, same-sex and non-binary unions, and interstate migrant workers. Part II turns to displacement, sovereignty and international law: refugees and statelessness, non-refoulement for the climate-displaced, and secondary sanctions. Part III considers technology, liberty and security: deepfakes, predictive policing, and artificial intelligence in India's financial infrastructure. Part IV deals with the environment, enterprise and innovation: environmental rights before the National Green Tribunal, corporate greenwashing, debt restructuring for small enterprises, and the patenting of human genetic material.

Every chapter has been read line by line. Where an error of fact, citation or expression could be checked against its source, it has been corrected, and every argument has been left as its author made it. The views expressed are the authors' own.

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PART I

Identity, Equality and Dignity

CHAPTER 1

Transgender Rights in India: A Comparative Analysis of the 2019 Act and the 2026 Amendment Act

PEARL MONTEIRO*

The right to self-determination of gender identity is a fundamental right, as laid down by the Hon'ble Supreme Court in National Legal Services Authority (NALSA) v. Union of India (2014). The Court relied on Articles 14, 15, 16, 19, and 21 while writing its judgement. Transgender persons have been present in Indian history, myth, and legend for centuries; their rights, however, have as yet been only partially recognised. The Transgender Persons (Protection of Rights) Act, 2019 was enacted with the objective of providing a statutory framework for the protection of transgender rights; the Act, however, has not led to the expected results in improving the position of transgender persons. The Transgender Persons (Protection of Rights) Amendment Act, 2026 seeks to address some of these concerns by introducing procedural modifications and expanding the scope of welfare and protective measures. However, the Act has met with severe criticism from the persons whom it seeks to protect, the main ground of concern being the denial of the right to self-identify one's gender relying more on the assessment of physicians and psychologists, via an institutionalised medical board-led verification mechanism. This paper undertakes a comparative analysis of the 2019 Act and the 2026 Amendment Act, with specific focus on the issues of self-identification, anti-discrimination safeguards, access to healthcare and employment, and institutional mechanisms for implementation. The paper evaluates whether the proposed amendments bring the legislative framework in closer alignment with constitutional guarantees under Articles 14, 19 and 21, as well as with evolving principles of constitutional morality and international human rights standards.

Keywords: Transgender, Fundamental Rights, Constitutional Morality, Gender Identity

“I Am What I Am, So Take Me as I Am”¹

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¹ Johann Wolfgang von Goethe quoted by SC in *Navej Singh Johar v. Union of India*, AIR 2018 SC 4321.

1 INTRODUCTION

The recognition of transgender rights in India has undergone a significant transformation over the past decade, particularly following judicial intervention.² Historically, transgender persons have occupied a visible yet marginalised position within Indian society, reflected in cultural, religious, and literary traditions.³ Despite this longstanding presence, legal recognition and protection of their rights remained limited until relatively recently.⁴

The landmark decision of the Supreme Court in *National Legal Services Authority v. Union of India* marked a decisive shift in the legal landscape by affirming the right to self-identification of gender as a fundamental right under the Constitution.⁵ The judgment located gender identity within the broader framework of dignity, autonomy, and personal liberty, thereby expanding the scope of constitutional protections available to transgender persons.

In response to the judicial mandate, the legislature enacted the Transgender Persons (Protection of Rights) Act, 2019 (“2019 Act”) with the stated objective of prohibiting discrimination and promoting welfare measures.⁶ However, the Act has been subject to sustained criticism for failing to fully implement the principles laid down in *NALSA*, particularly in relation to self-identification and procedural autonomy.⁷

The Transgender Persons (Protection of Rights) Amendment Act, 2026 (“2026 Act”) seeks to address some of these concerns by introducing procedural changes and expanding welfare mechanisms. Nevertheless, the Act has generated further debate, especially regarding the denial of self-identity, and the continued involvement of medical and administrative authorities in determining gender identity.

This paper undertakes a comparative analysis of the 2019 Act and the 2026 (Amendment) Act, examining whether the evolving legislative framework aligns with constitutional guarantees and principles of constitutional morality. It argues that while the 2026 Act merely claims incremental reform, it reflects a rollback of the *NALSA* mandate and further it does not fully resolve the structural limitations of the existing legal framework.

² Suzanne M. Marks, *Global Recognition of Human Rights for Lesbian, Gay, Bisexual, and Transgender People*, 9 HEALTH & HUM. RTS. 33 (2006), <https://doi.org/10.2307/4065388>.

³ Govindasamy Agoramoorthy & Minna J. Hsu, *Living on the Societal Edge: India's Transgender Realities*, 54 J. RELIGION & HEALTH 1451 (2015), <http://www.jstor.org/stable/24485502>.

⁴ Neela Ghoshal et al., *Rights in Transition: Making Legal Recognition for Transgender People a Global Priority*, in WORLD REPORT 2016: EVENTS OF 2015 21 (2016), <https://doi.org/10.2307/j.ctvndv9bj.5>.

⁵ *Nat'l Legal Servs. Auth. v. Union of India*, (2014) 5 SCC 438.

⁶ Transgender Persons (Protection of Rights) Act, 2019.

⁷ Arvind Narrain, *The Transgender Persons (Protection of Rights) Act, 2019: A Critique*, 55 ECON. & POL. WKLY. 12 (2020).

2 CONSTITUTIONAL FRAMEWORK AND JUDICIAL RECOGNITION

The constitutional foundation for transgender rights in India is primarily derived from Articles 14, 15, 19, and 21 of the Constitution. Article 14 guarantees equality before the law and equal protection of the laws.⁸ The Supreme Court in *NALSA* interpreted this provision to include transgender persons within the ambit of “persons,” thereby extending constitutional protections irrespective of binary gender classifications.⁹ Article 15 prohibits discrimination on grounds of sex.¹⁰ The Court adopted an expansive interpretation of “sex” to include gender identity, thereby recognising that discrimination against transgender persons constitutes a violation of constitutional guarantees.¹¹ Article 19(1)(a) protects the freedom of expression, which the Court held includes the right to express one’s gender identity through dress, behaviour, and presentation.¹² Article 21, guaranteeing the right to life and personal liberty, was interpreted to include dignity, autonomy, and the right to self-determination.¹³ The Madras High Court in *Arunkumar v. Inspector General of Registration* further expanded this understanding by recognising that a marriage involving a transgender person falls within the scope of a valid heterosexual marriage under personal law, thereby affirming the legal recognition of gender identity beyond mere classification.¹⁴ Similarly, in *Nangai v. Superintendent of Police*, the Madras High Court emphasised the obligation of State authorities to ensure protection and dignity of transgender persons, reinforcing that constitutional guarantees must translate into administrative action.¹⁵

The doctrine of constitutional morality, invoked in *NALSA* and later reinforced in *Navtej Singh Johar v. Union of India*, emphasises that constitutional values must prevail over societal prejudices.¹⁶ This doctrine plays a critical role in evaluating legislative measures affecting marginalised communities. The *NALSA* judgment explicitly directed the State to recognise transgender persons as a “third gender” and to grant them the right to self-identify their gender without medical intervention.¹⁷ This principle forms the yardstick against which subsequent legislative developments must be assessed.

⁸ INDIA CONST. art. 14.

⁹ *NALSA*, (2014) 5 SCC at 454.

¹⁰ INDIA CONST. art. 15.

¹¹ *NALSA*, (2014) 5 SCC at 463.

¹² INDIA CONST. art. 19(1)(a).

¹³ *Id.* art. 21.

¹⁴ *Arunkumar v. Inspector Gen. of Registration*, 2019 SCC OnLine Mad 877.

¹⁵ *Nangai v. Superintendent of Police*, (2014) 4 M.L.J. 12 (Mad.).

¹⁶ *Navtej Singh Johar v. Union of India*, (2018) 10 SCC 1.

¹⁷ *NALSA*, (2014) 5 SCC at 477.

3 THE TRANSGENDER PERSONS (PROTECTION OF RIGHTS) ACT, 2019

The 2019 Act represents the first comprehensive legislative attempt to address the rights of transgender persons in India. It defines a “transgender person” broadly to include individuals whose gender does not align with the sex assigned at birth.¹⁸ The Act prohibits discrimination in areas such as education, employment, healthcare, access to public goods, and residence.¹⁹ It also mandates the establishment of welfare schemes and the creation of a National Council for Transgender Persons.²⁰ A key feature of the Act is the certification mechanism under which a transgender person must apply to a District Magistrate for a certificate of identity.²¹ While the Act ostensibly recognises self-perceived gender identity, the requirement of certification introduces an element of administrative control. The Act also provides for certain offences against transgender persons, including denial of access to public places and abuse.²² However, the penalties prescribed have been criticised as being inadequate when compared to similar offences under other laws.²³

4 LIMITATIONS OF THE 2019 ACT

Despite its stated objectives, the 2019 Act has been widely criticised for several reasons.²⁴ The certification process has been viewed as inconsistent with the principle of self-identification recognised in NALSA. The requirement of obtaining a certificate from a District Magistrate effectively subjects gender identity to bureaucratic scrutiny.²⁵ The Act lacks robust enforcement mechanisms. While it prohibits discrimination, it does not provide for a clear grievance redressal system or independent enforcement bodies, thereby limiting its practical effectiveness.²⁶ Further, the penalties prescribed for offences against transgender persons are comparatively lower than those for similar offences under the Indian Penal Code, raising concerns about unequal protection.²⁷ The Act adopts a welfare-oriented

¹⁸ Transgender Persons (Protection of Rights) Act, 2019, § 2(k).

¹⁹ *Id.* § 3.

²⁰ *Id.* §§ 8, 16.

²¹ *Id.* § 6.

²² *Id.* § 18.

²³ Ronak Panchal, *Key Issues with Transgender Persons (Protection of Rights) Act, 2019*, LIVE LAW (July 24, 2025, 9:05 AM), <https://www.livelaw.in/articles/key-issues-with-transgender-persons-protection-of-rights-act-298597>.

²⁴ Dipika Jain & Kimberly Rhoten, *A Comparison of the Legal Rights of Gender Non-Conforming Persons in South Asia*, 48 ECON. & POL. WKLY. 10 (2013), <http://www.jstor.org/stable/24477885>.

²⁵ See PARLIAMENTARY STANDING COMMITTEE REPORTS ON THE TRANSGENDER PERSONS BILL (2019).

²⁶ The National Council for Transgender Persons (NCTP), established under Section 16 of the Transgender Persons (Protection of Rights) Act, 2019, acts as the central advisory body to the Government of India. Its core functions include advising on policy formulation, monitoring the implementation of the Act, and redressing grievances to protect the rights and welfare of transgender persons.

²⁷ *Id.*

approach rather than a rights-based framework. While welfare measures are important, they cannot substitute for enforceable legal rights grounded in constitutional guarantees. Taken together, these shortcomings indicate that the Act fails to fully implement the mandate of NALSA.

5 THE TRANSGENDER PERSONS (PROTECTION OF RIGHTS) AMENDMENT ACT, 2026

The 2026 Act seeks to address some of the shortcomings of the 2019 Act by introducing procedural modifications and expanding welfare measures. However, the 2026 Amendment introduces significant structural changes that alter the foundational approach of the 2019 Act. The amendment narrows the definition of “transgender person” by introducing medicalised and socio-cultural criteria, while explicitly excluding persons based on sexual orientation and self-perceived identity.²⁸ This marks a clear departure from the inclusive understanding in NALSA, which recognised gender identity as a matter of personal autonomy rather than medical classification.

One of the key changes relates to the certification process. The amendment strengthens State oversight by requiring the District Magistrate to rely on recommendations from a medical authority for issuing identity certificates.²⁹ This is not a minor procedural tweak: by quietly dropping the earlier statutory recognition of self-perceived identity, the amendment redefines “transgender person” along medicalised lines.³⁰ Gender recognition, once a matter of self-declaration, becomes something a medical board must confirm – a shift that sits uneasily with the right to privacy and bodily autonomy recognised in *Puttaswamy v. Union of India*.³¹ The new institutional reporting requirements for gender-affirming procedures compound the problem, extending surveillance into matters that are, by their nature, intensely personal. To be fair, the 2026 Act does expand certain welfare provisions – healthcare access, insurance coverage for gender-affirming procedures, and a somewhat strengthened institutional apparatus – but these gains do little to offset the tightened verification regime at the centre of the amendment.

The omission of Section 4(2) marks a legislative retreat from self-identification. The conflation of identity with biology and the exclusion of self-perceived identity contradict the NALSA judgment. However, the continued reliance on medical assessment with an institutionalised medical board-led verification mechanism has been a point of contention.

²⁸ Transgender Persons (Protection of Rights) Amendment Act, 2026, No. 3 of 2026, § 2.

²⁹ *Id.* § 4.

³⁰ *See id.* § 2(k).

³¹ Justice K.S. Puttaswamy (Retd.) v. Union of India, (2017) 10 SCC 1.

Critics argue that such requirements undermine the principle of self-identification and reintroduce forms of gatekeeping that the NALSA judgment sought to eliminate.³² Thus the Act introduces a surveillance-oriented framework requiring institutional reporting of gender-affirming procedures.

6 COMPARATIVE ANALYSIS OF THE 2019 ACT AND THE 2026 AMENDMENT ACT

A comparative analysis reveals both continuity and change in the legislative approach.

- *Self-Identification.* The 2019 Act recognises self-perceived gender identity but subjects it to certification. The 2026 Act modifies the process and subjects it fully to external verification. This nullifies the NALSA judgment.
- *Anti-Discrimination Safeguards.* While both frameworks prohibit discrimination, neither provides a strong independent enforcement mechanism. The absence of independent oversight bodies remains a significant gap.
- *Healthcare and Employment.* The 2026 Act expands welfare measures, particularly in healthcare. However, implementation remains contingent on state capacity and policy execution.
- *Institutional Mechanisms.* The National Council established under the 2019 Act continues under the 2026 Act, with some enhancements. However, questions remain regarding its effectiveness and autonomy.

Overall, the 2026 Act represents a significant setback to transgender rights, and an incremental reform rather than a fundamental restructuring of the legal framework.

7 DISCUSSION AND ANALYSIS

From a constitutional perspective, the central issue is whether the legislative framework respects autonomy and dignity. The principle of self-identification is integral to Articles 19 and 21. Any requirement of external validation risks infringing upon personal liberty. The continued involvement of medical authorities raises concerns about paternalism and state control.

International human rights standards, particularly the Yogyakarta Principles, emphasise that no person should be required to undergo medical procedures or obtain approval from authorities to recognise their gender identity.³³ The divergence between these principles and the legislative framework is troubling, given that the law conflicts with prevailing

³² Ayaan Saroori & Arushi Mengi, *Identity on Trial: Constitutional Debate on Transgender Rights in India*, LIVE LAW (Apr. 12, 2026, 10:00 AM), <https://www.livelaw.in/lawschool/articles/constitutional-debate-transgender-rights-india-529903>.

³³ INT'L COMM'N OF JURISTS, YOGYAKARTA PRINCIPLES (2007).

international norms. The Yogyakarta Principles, adopted in 2007 by a group of international human rights experts, articulate the application of existing international human rights law to issues of sexual orientation and gender identity. While not legally binding, they have acquired significant persuasive value and are frequently referred to by the United Nations, and in judicial and academic discourse. The central philosophy underlying the Yogyakarta Principles is that all human beings are entitled to the full enjoyment of human rights without discrimination based on sexual orientation or gender identity. The Principles emphasise that identity is an inherent aspect of personhood and that recognition of such identity is essential to the realisation of dignity and equality. A key aspect of the Principles is the recognition of the right to self-defined gender identity. They explicitly reject any requirement for medical procedures, psychological evaluation, or state approval as a precondition for legal recognition. This reflects a broader shift away from pathological approaches towards an understanding of gender identity as self-determined. The Principles also underscore the obligation of States to prevent discrimination and ensure equal access to healthcare, education, employment, and public services. Importantly, they adopt a rights-based approach rather than a welfare-oriented model, thereby placing emphasis on enforceable entitlements rather than discretionary benefits. The philosophical foundation of the Yogyakarta Principles is rooted in the idea of universality of human rights. It rejects cultural or societal justifications for discrimination and asserts that human dignity is inherent and inalienable. This approach aligns closely with the concept of constitutional morality, particularly in its emphasis on protecting minority rights against prevailing social norms.

In the Indian context, the Supreme Court in *NALSA* implicitly drew upon similar principles by recognising self-identification and dignity as fundamental rights. The influence of international human rights norms is also evident in subsequent judgements, including *Navtej Johar*. However, the extent to which these principles have been incorporated into legislation remains limited. The continued reliance on certification mechanisms and medical assessment in transgender laws marks a divergence from the standards articulated in the Yogyakarta Principles. In this regard, the Principles serve as an important benchmark for evaluating legislative frameworks. They provide a coherent normative framework that emphasises autonomy, dignity, and non-discrimination, and offer guidance for developing a more rights-oriented approach to transgender legislation. Several concerns persist despite the amendment. The conflict between autonomy and state control not only remains unresolved but has, if anything, worsened. The requirement of certification, even in modified form, limits self-determination. Implementation challenges continue to hinder the effectiveness of legal provisions. Without adequate infrastructure and awareness, statutory rights may remain largely symbolic. Social stigma and discrimination cannot be addressed solely

through legislation. However, the law must provide a robust framework to combat such discrimination.

The judgment in *National Legal Services Authority v. Union of India* represents a foundational moment in the constitutional recognition of gender identity. The Supreme Court, in its reasoning, treated gender identity not merely as a social or medical issue but as an intrinsic aspect of personal autonomy. The Court emphasised that the determination of gender lies at the core of individual dignity and cannot be subjected to external validation. In doing so, it rejected approaches that conditioned recognition upon medical procedures or psychological certification. The Court further observed that the Constitution does not contemplate a binary understanding of gender. By interpreting the term “person” under Article 14 in an inclusive manner, the Court affirmed that transgender persons are equally entitled to legal protection. This interpretive approach reflects a purposive reading of the Constitution, where equality is understood in substantive rather than formal terms. In its analysis of Article 19(1)(a), the Court recognised that gender expression constitutes a form of speech and expression. The freedom to express one’s gender identity through dress, behaviour, and self-presentation was held to be constitutionally protected. Any restriction on such expression, whether through law or administrative practice, would therefore require strong justification. The Court’s interpretation of Article 21 is particularly significant. It located the right to self-identification within the broader framework of dignity, privacy, and personal liberty. The judgment makes it clear that dignity is not an abstract concept but one that must be realised through recognition of individual identity. Denial of such recognition, the Court noted, results in a violation of fundamental rights. Importantly, the Court also addressed the role of the State. It held that the State has a positive obligation to recognise and protect the rights of transgender persons, including through affirmative measures. However, this obligation does not extend to controlling or determining gender identity. The distinction between recognition and regulation is central to understanding the limits of legislative intervention.³⁴

Subsequent developments in *Navtej Singh Johar v. Union of India* further reinforce these principles. While the case primarily concerned the decriminalisation of consensual same-sex relations, the Court’s observations on autonomy, identity, and constitutional morality have direct relevance to transgender rights. In *Navtej Johar*, the Supreme Court emphasised that constitutional morality must guide the interpretation of fundamental rights, even where societal morality may be opposed. The judgment underscores that the Constitution is designed to protect minority rights against majoritarian tyranny. This principle is particularly relevant in the context of transgender rights, where social prejudice continues

³⁴ *Nat’l Legal Servs. Auth. v. Union of India*, (2014) 5 SCC 438.

to influence legal and administrative practices. The Court also expanded the scope of dignity under Article 21 by linking it with the right to privacy, as recognised in *K.S. Puttaswamy v. Union of India*.³⁵ Privacy was understood not merely as spatial or informational privacy, but as decisional autonomy, including the freedom to make intimate personal choices. Gender identity falls squarely within this domain. Further, the judgment recognised that identity is a complex and deeply personal construct that cannot be reduced to biological determinism. The Court rejected the notion that legal recognition should be contingent upon conformity with socially accepted norms. Instead, it affirmed that the Constitution protects the right of individuals to define their own identity.³⁶

Taken together, *NALSA* and *Navtej Johar* establish a clear constitutional framework grounded in autonomy, dignity, and substantive equality. They emphasise that the role of the State is to facilitate, rather than restrict, the exercise of these rights. Any legislative framework that imposes conditions on self-identification must therefore be carefully scrutinised. When viewed in this context, the continued reliance on certification mechanisms under the 2019 Act and the 2026 Amendment Act raises important constitutional concerns. While administrative processes may be justified for the purpose of accessing benefits or welfare schemes, they cannot be used to determine or validate identity. Such an approach risks reintroducing forms of control that are inconsistent with the principles laid down by the Supreme Court. Moreover, the emphasis on medical or psychological assessment reflects an outdated understanding of gender identity. Both *NALSA* and *Navtej Johar* move away from pathologizing approaches and instead recognise identity as self-determined. Legislative provisions that rely on medical validation therefore run counter to these judgments. It is also relevant to note that the Supreme Court, in these decisions, adopts an approach that is aligned with international human rights standards. The emphasis on self-identification, dignity, and non-discrimination reflects principles articulated in global human rights frameworks. While the Constitution does not mandate that domestic law replicate international standards in entirety, a clear divergence is difficult to justify. In this light, the 2026 Amendment Act cannot be seen as an attempt to balance administrative concerns with constitutional principles. The balance continues to remain tilted in favour of regulation rather than autonomy. The persistence of pseudo-paternal mechanisms reflects that the legislative framework is not in tune with the transformative potential of the Constitution. The Supreme Court provides not only a benchmark but also a direction for future reform. It indicates that any meaningful advancement in transgender rights must move beyond procedural

³⁵ *K.S. Puttaswamy v. Union of India*, (2017) 10 SCC 1.

³⁶ *Navtej Singh Johar v. Union of India*, (2018) 10 SCC 1.

adjustments and address the underlying question of autonomy. Without such a shift, legislative reform remains incremental and arbitrary.

8 RECOMMENDATIONS

8.1 Restoring the Right to Self-Identification

A more effective approach to transgender rights would require a shift towards a rights-based framework.³⁷ The starting point has to be self-identification. Section 4(2) of the 2019 Act, and the definition it was meant to protect, should be restored in clear and unambiguous terms, so that a person's gender is once again a matter of their own declaration rather than a medical board's opinion. Administrative procedures may still be retained for accessing welfare schemes, but they should have no bearing on the validity of an individual's identity.

8.2 Strengthening Anti-Discrimination Enforcement

Anti-discrimination protections need teeth. The 2019 Act prohibits discrimination but gives transgender persons almost nowhere to go when it actually happens. Parliament should establish independent grievance redressal authorities at the state level, backed by defined timelines, the power to award compensation, and a clear route of appeal. Without mechanisms of this kind, the existing prohibitions remain largely aspirational.

8.3 Ensuring Effective Implementation and Accountability

Implementation deserves as much attention as drafting. Jane Kaushik shows what happens when rights exist on paper but not in practice: a transgender woman lost her livelihood despite a statute that was supposed to prevent exactly that outcome. Regular monitoring, mandatory compliance audits, and annual public reporting on transgender employment and welfare outcomes would go some way towards closing that gap between recognition and lived reality.

8.4 Institutional Sensitisation and Social Inclusion

None of this, finally, works without a change in attitudes on the ground. Sensitisation of police personnel, healthcare workers, teachers, and employers should be a standing institutional obligation rather than an occasional training exercise, and public awareness campaigns are likely to succeed only if they are built together with transgender communities rather than designed on their behalf. Law can open a door; it cannot make anyone walk through it. A

³⁷ Alexander Lussenhop, *Beyond the Male/Female Binary: Gender Equity and Inclusion in Evaluation Surveys*, 43 J. MUSEUM EDUC. 194 (2018), <https://www.jstor.org/stable/48540051>.

framework that gets self-identification, enforcement, and implementation right at least gives that door somewhere real to lead.

9 CONCLUSION

A significant recent development is the decision of the Supreme Court in *Jane Kaushik v. Union of India*, wherein the Court moved beyond the question of recognition to address the issue of implementation. The case arose from the denial of employment to a transgender woman despite statutory protections. The Court held that the failure of State authorities to effectively implement the provisions of the Transgender Persons (Protection of Rights) Act, 2019 amounts to a violation of fundamental rights. It characterised such failure as a form of “omissive discrimination”, thereby recognising that inaction by the State can be as detrimental as direct discrimination. The judgment also emphasised that constitutional guarantees under Articles 14, 15, 16 and 21 must translate into actual access to employment and dignity. In doing so, the Court highlighted the gap between legal recognition and lived reality, reinforcing the need for a more effective and rights-based legislative framework.³⁸

The evolution of transgender rights in India reflects a conflict between constitutional ideals and legislative practice.³⁹ While the 2019 Act marked an important step towards recognition, its limitations have necessitated further reform. The 2026 Amendment Act claims to represent an attempt to address these shortcomings; however, it does not resolve the fundamental issues relating to autonomy and self-identification. The continued reliance on administrative and medical processes indicates a cautious, arbitrary approach that falls short of the transformative vision articulated in NALSA. A more robust conformity with constitutional principles requires a shift towards recognising transgender rights as inherent and inalienable, rather than conditional upon state approval.⁴⁰ Only then can the promise of equality, dignity, and liberty be meaningfully realised.

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³⁸ *Jane Kaushik v. Union of India*, 2025 INSC 1248.

³⁹ *The Third Sex: Transgender Persons in India Want to Be Treated as Citizens. Is This Too Much to Ask For?*, 48 ECON. & POL. WKLY. 9 (2013), <http://www.jstor.org/stable/23528827>.

⁴⁰ M. V. Lee Badgett et al., *Statistical Relationship Between LGBT Rights and Development*, in *THE RELATIONSHIP BETWEEN LGBT INCLUSION AND ECONOMIC DEVELOPMENT: AN ANALYSIS OF EMERGING ECONOMIES* 36 (2014), <http://www.jstor.org/stable/resrep35047.9>.

CHAPTER 2

The Binary Barrier: Assessing the Exclusion of Same-Sex and Non-Binary Unions from India's Matrimonial and Parental Legislations

BHAWANI CHOUDHARY* AND PRIYANSHU KUMAR**

This research project investigates an entrenched family law regime in India that continues the long-standing bias toward heterosexual couples and explores what is termed the “Binary Barrier”. The Binary Barrier is a phrase used for the “systemic legal architecture” that only accounts for couples in the male/female dyad and excludes from legal recognition same-sex couples and non-binary individuals. Although the Supreme Court of India has expanded constitutional understanding of dignity, privacy, and personal autonomy in cases such as Navtej Singh Johar¹ and Justice K.S. Puttaswamy², a substantial rights gap persists for queer and non-binary persons in the context of marriage and family formation. The statutory exclusion of same-sex couples and other types of couples from the Special Marriage Act, 1954 is the main focus of the research. Using both comparative and doctrinal methodologies argue that the legislative insistence on gender-specific nomenclature for a marriage acts as a gatekeeping mechanism to deny LGBTQ+ couples’ access to the “bundle of rights” that accompany a marriage, which includes not only symbolic rights, but also rights to alimony, succession, tax benefits, and medical proxy. The research assesses how the CARA regulations and the HAMA set forth unmanageable barriers for non-binary and same-sex couples. “Joint adoption” is an exclusion from that, and the complexities of guardianship laws create a very precarious legal status for the children that will be raised in these unions. The paper propensity to defer to Parliament that produces a stalemate between recognizing discrimination legally and the inability to provide a remedy. The study concludes that the Binary Barrier is not a neutral social policy choice but a constitutional problem implicating equality, non-discrimination, and dignity. It calls for a shift from gender-stereotyped statutory interpretation toward constitutional morality and recommends reform of family law to recognise the diversity of modern Indian families.

Keywords: Same-Sex Union, Non-Binary Rights, Personal Laws, Constitutional Morality, Matrimonial Legislation, Parental Rights, *Supriyo v. Union of India*.

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¹ Navtej Singh Johar v. Union of India, (2018) 10 SCC 1.

² Justice K.S. Puttaswamy (Retd.) v. Union of India, (2017) 10 SCC 1.

1 INTRODUCTION

The LGBT community's struggle for recognition and equality in India has been at the forefront of recent constitutional changes. Historically, same-sex relationships have been, and unfortunately still continue to be, socially discriminated against and have been subject to criminalization through Section 377 of the Indian Penal Code 1860 – an offense that deals with “carnal intercourse against the order of nature.”³ This law was a remnant of colonial rule and has long been a tool of violation against the dignity, privacy, and autonomy of sexual minorities, even after India gained independence. However, after the Supreme Court partially struck down Section 377 on 6 September 2018 in its *Navtej Singh Johar v. Union of India* judgment,⁴ same-sex sexual conduct was decriminalized for consenting adults. This historic ruling by the Supreme Court recognized sexual orientation as a fundamental characteristic of personhood that requires constitutional protection. It was based on Articles 14 (Right to Equality), 15 (Prohibition of Discrimination on Grounds of Religion, Race, Caste, Sex or Place of Birth), 19 (Right to Freedom of Speech, Expression, Assembly, Association, Movement) and 21 (Right to Protection of Life and Personal Liberty) of the Constitution. The Supreme Court declared that criminalizing consensual same-sex relationships was contrary to the principles of the Constitution and perpetuated discrimination and exclusion from society. Although it was a progressive ruling, it was insufficient in scope. The Supreme Court could only decide if Section 377 was unconstitutional pursuant to the advice of the Union Government.⁵ Therefore, while homosexual conduct ceased to be classified as a criminal offence, the LGBT community was left without resolution of other civil rights such as marriage, families, inheritance, adoption, and social security. This unfulfilled legal gap raised the important question of whether decriminalisation alone provides sexual minorities with true equality. While same-sex relationships were no longer treated as criminal in nature, LGBT persons could not claim equal social or legal status. The Supreme Court, therefore, was asked to address the matter in *Supriyo v. Union of India* where an application was made to recognise same-sex marriage in India. The applicants contended that the current marriage statutes – the Special Marriage Act, the Hindu Marriage Act, and the Foreign Marriage Act – fail to provide an opportunity for same-sex couples to marry legally.

Petitioners claim same-sex marriages violate Articles 14 and 15(1)⁶ because they are denied equal treatment and discriminated against based on gender and sexual orientation. Furthermore, the petitioners assert that an individual's right to choose their partner and

³ Indian Penal Code, 1860, § 377.

⁴ *Navtej Singh Johar v. Union of India*, (2018) 10 SCC 1.

⁵ Indian Pen. Code, 1860, § 377.

⁶ INDIA CONST. arts. 14, 15(1).

establish a family should be guaranteed by Article 21 which protects an individual's right towards physical freedom, personal dignity, and personal autonomy;⁷ as well as Article 19(1)(a) which protects an individual's right to express themselves freely. The petitioners received major public and media interest, prompting the Supreme Court of India to appoint the Five Judge Constitution Bench of the Supreme Court, composed of Chief Justice D.Y. Chandrachud, Justices S.K. Kaul, Ravindra Bhat, Hima Kohli, and P.S. Narasimha, to hear their case.⁸ The Supreme Court ultimately ruled that same-sex marriage is not a fundamental right protected by the Constitution; rather, same-sex marriages are recognized or not recognized through legislative enactments. The Court acknowledged that people in the LGBTI community have rights and dignity, but the Supreme Court did not change existing marriage laws through court order. While the Court acknowledged the dignity and autonomy of queer persons, it held that any extension of marital status or civil-union rights must come from the legislature rather than judicial interpretation. The Court further observed that transgender persons who identify within the male-female binary may marry under existing law. Even though the ruling admitted that same-sex relationships are legitimate, it didn't give them legal recognition. Given all of this, this paper argues that just decriminalizing same-sex acts isn't enough to give the LGBT community complete justice under the Constitution. Legally recognizing same-sex relationships is something that needs to happen to make sure they have equality, dignity, and are included in society.

2 THE ANTIQUITY OF FLUIDITY – SCRIPTURAL AND LITERARY EVIDENCE

One of the biggest problems in getting marriage equality recognized in India is the idea that non-traditional gender identities are just Western imports or something only rich city people care about. The belief that Indian culture has always adhered to very rigidly defined gender roles, with very traditional family structures based on those gender roles, is an incorrect assumption when you consider old Indian literature, medical texts, and other ancient writings. What many Westerners perceive as an absolute, divided male/female role was not an original concept for Indians, but rather a later result of colonizers' laws and morals being imposed upon us. Instead, ancient Indian philosophical thought regarding gender and sexuality was much less rigid than it has become under Western influence; gender and sexuality were instead viewed as completely normal and natural. One of the dominant concepts in Indian culture regarding gender is the concept of *Tritiya-Prakriti* (also known simply as 3rd Gender). Rather than ostracize or segregate those individuals who do not follow the male/female dichotomy, the Vedic texts of ancient India viewed all identities as perfectly

⁷ Nat'l Legal Servs. Auth. v. Union of India, (2014) 5 SCC 438.

⁸ Supriyo @ Supriya Chakraborty v. Union of India, 2023 SCC OnLine SC 1348.

consistent with a natural existence (i.e., the entire creation). “Several historical and literary sources indicate that gender diversity was not alien to precolonial Indian thought, but was understood through concepts such as *tritiya-prakriti* and gender fluidity.” Additionally, the Ayurvedic texts, such as the *Charaka Samhita* and *Sushruta Samhita*,⁹ indicated that true gender identity was based on the biological composition of the individual and not based on socially learned behaviour; therefore, Ayurvedic medical practitioners did not consider these identities to be unnatural or inappropriate, but rather as normal variations in the human experience. This shows that they understood gender diversity in a scientific way, not just as a matter of right and wrong. Indian myths also back up the idea of flexible gender roles. The Puranas show gender as something that can change, not something set in stone.¹⁰ A good example from the scriptures is the story of Lord Ayyappa, who was born from Shiva and Mohini (Vishnu in female form). This shows a child coming from a divine same-sex match. The Mahabharata also has stories that go against the usual male/female ideas. Shikhandi,¹¹ who changes from female to male, is important in defeating Bhishma. This links changing gender with doing what’s right. Arjuna’s time as Brihannala while exiled shows how non-binary identities were acted out and seen in society without shame. These stories make gender fluidity a key part of the cosmic and moral order, not something weird.

Besides religious writings, regular books like Vatsyayana’s *Kamasutra*¹² openly admit same-sex attraction. It talks about *Auparishtaka* and people seen as having a female nature, who had lasting feelings and relationships with each other. This hints that same-sex relationships, like civil partnerships, were understood in ancient cities. Local stories and customs, like the Aravan cult in South India, also show that communities knew and accepted different gender identities. You can see how the way we used to understand things fell apart when colonial powers wrote down the laws in the 1800s. Victorian ideas of what was right and wrong, which you can see in things like Section 377 of the Indian Penal Code, swapped out the old, more flexible ways of thinking for strict ideas about sex and marriage between men and women. Because of this, the ways people used to show different genders were seen as wrong or even sick.

3 THE LEGISLATIVE FORTRESS – ANALYSIS OF EXISTING MATRIMONIAL LAWS

The Binary Barrier in India is not only a result of conservative values but also a consequence of how marriage laws have been created. The Constitution guarantees rights and equal

⁹ CHARAKA SAMHITA, *Śārīrasthāna*, ch. 4, 30–31 (P.V. Sharma trans., 1981).

¹⁰ THE BHAGAVATA PURANA, *Skandha VIII*, ch. 12 (Ganesh Vasudev Tagare trans., 1976).

¹¹ THE MAHABHARATA OF KRISHNA-DWAIPAYANA VYASA, *Virata Parva*, ch. 2 (Pratap Chandra Roy trans., 1956).

¹² SUSHRUTA SAMHITA, relevant passages on *tritiya-prakriti* / third sex.

treatment to all individuals, but the HMA of 1955 and SMA of 1954 are examples of how legislatively created barriers exist that prohibit individuals who do not identify as either male or female in a relationship with other people from getting married. These laws were intentionally created this way; they do not allow for the possibility of men marrying men or women marrying women. The HMA was intended to be a modernisation of Hindu marriage law to make it equitable; however, it maintains a narrow definition of marriage as being limited to two individuals (a man and a woman). Section 5 states that for a marriage to be recognised as valid, there must be one party to the marriage, referred to in the terms “bride” and “bridegroom”. While these terms are not defined in statutory law, courts have interpreted “bride” and “bridegroom” to refer only to females and males, respectively. Consequently, there is no alternative statutory construction available for courts to interpret these two terms.¹³

Section 7 of the Hindu Marriage Act requires that a marriage is only valid if traditional ceremonies such as Saptapadi occur; this means that the traditional notions of who can marry a person are related to the civilization’s understanding of the traditional roles of spouses (e.g., Kanya Daan) based on religious beliefs that provide a structure through which men and women can have a meaningful relationship. In reality, same-sex couples and/or non-binary individuals cannot occupy those roles under the law. While same-sex couples and individuals do not have a legal prohibition against marrying, they do not have a legal basis on which to establish their marriage as the law is not structured to support marriage in that form. The Special Marriage Act (SMA)¹⁴ was intended to provide a secular alternative to marriage and was imagined as providing an opportunity to allow different castes and religions to intermarry based on what individuals want. However, although the SMA was created to be inclusive, it too requires that persons document their male or female gender on the forms used to obtain the marriage. In the case of *Supriyo v. Union of India*¹⁵, the people filing the case argued that the SMA could be changed to use words like spouse or person instead of husband and wife. Still, the government argued, and the Court mostly agreed, that the SMA is a connected system. The rules about things like financial support after marriage (Section 36)¹⁶, getting back together after separating, inheritance, and divorce all assume marriage is between a man and a woman. The Court said that changing this would mean rewriting the law, which they can’t do. One of the reasons given for not allowing same-sex marriage is that marriage is mainly for having kids. This idea favors heterosexual couples and ignores relationships built on friendship, love, and taking care of each other.

¹³ The Hindu Marriage Act, 1955, §§ 5, 7.

¹⁴ The Special Marriage Act, 1954, § 36.

¹⁵ *Supriyo @ Supriya Chakraborty v. Union of India*, 2023 SCC OnLine SC 1348.

¹⁶ The Special Marriage Act, 1954, § 36.

This goes against the idea that people should be able to make their own choices, including who they want to be with, as part of their basic rights. In the end, the courts are hesitant to change things. They say that the right to marry is created by law, not a basic right, so it's up to the government to make changes. Until the wording and ideas behind these laws are changed, the Binary Barrier in India's marriage laws will stay in place.

4 BEYOND MARRIAGE – THE CRISIS OF PARENTAL AND SUCCESSIONAL RIGHTS

The Binary Barrier under Indian law serves to limit the rights of same-sex couples in many ways beyond preventing them from marrying. As a general rule, marriage is the legal instrument by which a couple can create a variety of legal rights with respect to family, children, and property. Without marriage, same-sex couples and non-binary individuals exist in a legally ambiguous state wherein there is no legal recognition of their family unit. The denial of their family unit raises important questions under the Indian Constitution, including Articles 14 and 21, both of which guarantee all persons equal rights and the right to a dignified existence. The Central Adoption Resource Authority (CARA) has stated that a single person can adopt a child without regard to his or her sexual orientation;¹⁷ however, CARA does not permit same-sex couples to jointly adopt a child. This policy is inconsistent with the provisions of Article 14 of the Indian Constitution. If a person can adopt a child as a single individual regardless of his or her sexual orientation, then he or she should also be able to adopt a child with a partner if the adoption is in the best interest of the child. This discriminatory action goes against the best interest of the child by removing a parent's non-legal role in the life of the child. After the legal parent's death, the other non-legal parent has no legal rights to that child even though they have cared for and raised that child. The child will effectively become an orphan because law provides more weight to marriage than to the actual people within the family. This is unjust and likely violates the equal protection clause of Article 14 of the Constitution. The Surrogacy (Regulation) Act of 2022 and Assisted Reproductive Technology (ART) Regulation Act of 2022 are also examples of the Binary Barrier as they provide fertility treatment to married heterosexual couples and some women only.¹⁸ That is an act of the government making decisions for a citizen as to who may parent, based on their out-dated views of marriage.

The Supreme Court has stated repeatedly that privacy, including individual freedom to determine what happens to one's body, is a right protected under Article 21 of the Constitution. The decision to produce children is a private decision. By denying same-sex couples' access to fertility treatments based solely on their love for one another, the government is

¹⁷ Juvenile Justice (Care and Protection of Children) Act, 2015, Adoption Regulations, 2022, ¶ 5.

¹⁸ Surrogacy (Regulation) Act, 2021.

violating the same-sex couple's rights to have a dignified life and make personal choices protected under Article 21 of the Constitution. The issue of what follows death further demonstrates the lack of acknowledgment of same-sex couples resulting in discrimination. The laws governing inheritance (like the Hindu Succession Act) determine the recipient of an inheritance based on one's legal marriage or biological blood line, which means that if a same-sex couple is not legally married then the surviving partner would receive no inheritance. Where there is no will, the deceased spouse's property would go to the original family, despite the surviving partner having an equitable interest in it based on how much they contributed financially throughout the relationship. The lack of legal recognition for inheritance, pension rights, health insurance, and employment benefits for same-sex couples is a violation of Article 14 because it discriminates against same-sex couples. Furthermore, the lack of legal recognition also infringes upon Article 21 because having financial stability allows for living with dignity.¹⁹ Essentially, this Binary Barrier turns private relationships into public issues by not recognizing same-sex couples as parents or heirs, and denying them the same legal protections as heterosexual couples, creating an unfair disadvantage.

5 THE JUDICIAL LANDSCAPE – FROM NAVTEJ TO SUPRIYO

In India, the legal evolution of queer rights shows gradual constitutional changes, where court rulings have slowly increased recognition instead of causing sudden change. The courts in India have gone from not addressing sexual minority rights at all to recognizing their dignity, self-rule, and identity. But they have been unwilling to extend these recognitions into actual legal rights. While the outcomes of Navtej Singh Johar and Supriyo v. Union of India²⁰ demonstrate the court's ability to bring about change,²¹ they also illustrate the capacity of a judicial system to impose limitations upon one's rights through the application of law. In the case of Navtej Singh Johar, the Supreme Court effectively decriminalised sexual conduct between adults of the same gender when it found that section 377 IPC, which prohibited same-sex conduct in India, was unconstitutional. In addition, the Court affirmed its dedication to constitutional principles over societal norms and found that sexual orientation is an inherent component of identity that is protected by Articles 14, 19 and 21 of the Constitution. By linking dignity, privacy, and self-rule to sexual orientation, the ruling recognized a "right to love" as part of the right to a dignified life. It is important that Navtej rejected the idea that the State could remain neutral while queer relationships are ignored by society. Though the ruling did not formally approve unions, it set the stage for later

¹⁹ Assisted Reproductive Technology (Regulation) Act, 2021.

²⁰ Supriyo @ Supriya Chakraborty v. Union of India, 2023 SCC OnLine SC 1348.

²¹ Navtej Singh Johar v. Union of India, (2018) 10 SCC 1.

claims seeking legal approval of same-sex partnerships. Navtej's constitutional optimism hit a roadblock in *Supriyo v. Union of India* when the Supreme Court had to deal with questions regarding marriage equality. The petitioners claimed that the right to marry (or at least enter into an officially recognised relationship) is an essential element of their individual freedom and dignity under Article 21 of the Constitution. The Supreme Court ended up dividing their decision into 2 separate opinions, which demonstrates the significant lack of agreement amongst the Judges on this issue.

The majority claimed that there is no absolute basic right to marry under the Constitution. They reasoned that marriage is a legal and social institution controlled by law, and for the court to include same-sex unions into the Special Marriage Act would be an inappropriate overreach. To the court, this kind of change is up to Parliament alone. Chief Justice D.Y. Chandrachud and Justice Sanjay Kishan Kaul, in their dissenting opinions, had a more open view of what the Constitution requires. While admitting legal limits, the dissent recognized a "right to civil union" based on Articles 14 and 21. They stressed the State's duty to guarantee a set of rights, like inheritance, medical choices, and insurance, that come from stable partnerships, no matter the marital status. The result of *Supriyo* shows a key constitutional contradiction. The Court openly admitted that queer couples face discrimination, yet it refused to change the basic structure of marriage law. By telling the government to look into solutions through a Cabinet Committee, the Court moved the issue from one of enforceable basic rights to one of optional policy. This position shows a readiness to affirm dignity in private but a hesitation to enforce equality in public. The separation survives not because it is constitutional, but because the court has chosen to be careful instead of making radical change. The outcome is a legal approach that recognizes identity but does not provide complete solutions, leaving queer people with incomplete citizenship.

6 CONCLUSION AND RECOMMENDATIONS

In India's marriage and family law, the Binary Barrier is not an isolated incident; it demonstrates a larger issue as the Constitution does not completely protect or support sexual and gender minorities. Numerous studies demonstrate that the lack of a legal framework to recognize same-sex and gender non-binary unions conflicts with India's historical relationship with gender-fluid identities. The Binary Barrier is also a violation of the promise of actual equality, dignity, and autonomy found in Articles 14 and 21 of the Constitution. While being in a same-sex relationship is no longer a criminal act, it is as if individuals can only partially fulfill their citizenship. These individuals are not evil, yet they are also unable to engage in basic family life. Dating from colonial periods, the Hindu Marriage Act, 1955, and the Special Marriage Act, 1954, continue to use outmoded constructs regarding gender and sexuality

rather than the ideals found within the Constitution. The manner in which both of these statutes are drafted creates barriers where same-sex or gender non-binary relationships are not recognized legally. Although there have been some cases in which courts recognised both the dignity of queer couples and their human experiences (i.e., *Supriyo v. Union of India*), these courts still failed to provide substantive answers. To get rid of the Binary Barrier, we need a plan with many parts:

Amend the Special Marriage Act: To create legal equality between people married under the SMA, and people married under other laws (including Hindu Marriage Act, Parsi Marriage & Divorce Act, etc.), there needs to be an amendment of the Special Marriage Act, to provide gender-neutral nomenclature, and remove all references to ‘husband’ and ‘wife’; instead, generally convert reference to ‘spouse’ or ‘partner.’ The SMA is a non-religious law; therefore, an amendment of this nature would be much easier than trying to amend other religious laws.

Create Civil Union Statute: The Government also needs to establish a Civil Union statute, which grants the same rights to civil union couples that are granted to married couples, i.e., the right to inherit from each other, own property jointly, make medical decisions, receive each other’s insurance benefits, and be entitled to each other’s social security benefits. This will alleviate the hardships that many individuals experience as a result of not being legally married.

Amend Adoption and ART Laws: Guidelines promulgated by the CARA, Surrogacy (Regulation) Act 2021 and ART Regulation Act 2021, should be reviewed and amended in order to recognize the diversity of family structures and types of families. When determining who should be a parent (biological or otherwise), the decision should focus on what is best for the child, in terms of their ability to care for the child, instead of parental gender identity or sexual orientation.

Educate Government Employees on Non-Binary Identification Systems: In addition to legal reforms occurring at an institutional level, legal reforms should also result in creating a framework for how institutions operate. Government employees must be taught how to work with people who have a non-binary identity, and to ensure that documents and assistance can be provided without requiring individuals to conform to traditional gender-based classifications.

Marriage is more than just a form of legal documentation; it represents a way of publicly expressing care, responsibility and belonging to one another. The Binary Barrier leads the government to accord different values to certain expressions of love than others (as if some expressions of love are of greater value). The laws must change from simply tolerating us as individuals and start including us as citizens in order to truly create change. The future of

equality is for everyone to have the right to love, have a family, be secure and be treated with dignity and respect.

* * *

CHAPTER 3

The Human Rights of Interstate Migrant Workers in India: A Study of the Current Legal Regime

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The systemic vulnerability of interstate migrant workers in India represents one of the most pressing human rights challenges within the nation's informal economy. Despite the foundational constitutional guarantees of equality (Article 14) and the right to life with dignity (Article 21), a significant portion of this demographic remains relegated to the margins of legal protection, routinely subjected to wage theft, occupational hazards, and systemic exclusion from social security networks. This doctrinal study critically examines the existing legal regime governing interstate migrant labour in India, evaluating its efficacy in safeguarding fundamental human rights. By tracing the legislative trajectory from the structural limitations of the Interstate Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, to the consolidation under the Occupational Safety, Health and Working Conditions (OSH) Code, 2020, the research assesses whether the modern statutory framework resolves historical enforcement failures or merely perpetuates existing vulnerabilities. The analysis specifically scrutinizes the operational realities of welfare boards, the legal friction surrounding registration requirements, and the profound access-to-justice barriers that migrant labourers face when seeking constitutional remedies. Furthermore, the study highlights the gap between legislative intent and grassroots execution, demonstrating how jurisdictional ambiguities and the transient nature of migrant work effectively dilute statutory protections. Ultimately, this paper concludes that an equitable legal framework demands more than statutory consolidation; it requires robust, accessible grievance redressal mechanisms and a fundamental shift towards rights-based enforcement to ensure that India's economic growth does not occur at the expense of its most marginalized workforce.

Keywords: Interstate Migrant Workers, Constitutional Remedies, OSH Code 2020, Labor Rights, Access to Justice

1 INTRODUCTION

Interstate migrant workers constitute one of the most vulnerable segments of India's informal economy. Driven by persistent agrarian distress, regional economic disparities, and localized unemployment, laborers from states such as Bihar, Jharkhand, Odisha, Uttar

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Pradesh, and West Bengal migrate to urban industrial centers in search of livelihood. Predominantly employed in construction, manufacturing, domestic work, and sanitation, these workers operate within unregulated, informal frameworks. Despite driving urban infrastructure and economic growth, interstate migrant workers face systemic wage exploitation, lack of social security, and widespread exclusion from state welfare mechanisms.

The human rights situation in India has become increasingly serious because of the unsafe work and living situations which migrant workers experience when they travel between states. The migrant labor force faces multiple challenges which include wage theft and dangerous work conditions and substandard housing and their inability to receive medical treatment and social security benefits. The July 2025 Malappuram Kerala incident demonstrated that migrant workers continue to face dangerous situations when three interstate migrant laborers died after they cleaned a poultry waste treatment tank without proper safety gear because of toxic gas exposure.¹ The incidents show that the employers break not only statutory labor requirements but also the workers' constitutional rights to life and dignity which Article 21 of the Constitution of India protects.² The enduring situation of exploitation shows how the actual labor governance system in India operates differently from what lawmakers intended to achieve through their labor laws.

The Indian Constitution establishes fundamental legal protections which safeguard workers' rights and their basic human dignity. Article 14 grants all people equal legal rights whereas Article 19(1)(d) allows individuals to move freely throughout India.³ The Supreme Court has interpreted Article 21 to establish three rights, which include the right to work and decent employment conditions and a respectable standard of life.⁴ The State must create fair and decent work environments according to the Directive Principles of State Policy, which require implementation through Articles 39 and 41 and 42 and 43 of the Constitution.⁵ Parliament passed the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act 1979 to execute constitutional obligations which required the establishment of minimum employee welfare standards and the control of hiring procedures used to recruit migrant workers.⁶ The legislation faced major implementation challenges because of two factors which included weak enforcement and administrative inefficiencies

¹ *India: Three Migrant Workers Die from Exposure to Toxic Gas at Malappuram Poultry Waste Treatment Plant amid Alleged Safety Violations*, BUSINESS & HUMAN RIGHTS RESOURCE CENTRE (July 2025), <https://www.business-humanrights.org/fr/derni%C3%A8res-actualit%C3%A9s/india-three-migrant-workers-die-from-exposure-to-toxic-gas-at-malappuram-poultry-waste-treatment-plant-amid-alleged-safety-violation/>.

² INDIA CONST. art. 21.

³ *Id.* arts. 14, 19(1)(d).

⁴ *Olga Tellis v. Bombay Mun. Corp.*, (1985) 3 SCC 545.

⁵ INDIA CONST. arts. 39, 41, 42, 43.

⁶ Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979.

while informal work systems, thus remaining unregulated, restricted the legislation's effectiveness.

The Occupational Safety, Health and Working Conditions Code, 2020 established a major transformation of India's labour law system through its unification of multiple existing labour laws which included the Inter-State Migrant Workmen Act of 1979.⁷ The new labour codes which the government established to improve compliance processes and update labour regulations face ongoing doubts about their effectiveness in solving historical problems which have impacted interstate migrant workers. This research paper studies human rights aspects that affect interstate migrant workers through an analysis of India's constitutional system and the statutory safeguards which the 1979 Act provides and the new labour code reforms which have been implemented. The study demonstrates how migrant workers continue to encounter obstacles which prevent them from obtaining justice and welfare benefits while showing that effective protection needs a rights-based system to enforce laws instead of depending on basic legal framework development.

2 CONSTITUTIONAL AND HUMAN RIGHTS FRAMEWORK FOR INTERSTATE MIGRANT WORKERS

The Indian Constitution establishes a complete legal system which secures the rights of interstate migrant workers through the constitutional equality and liberty and dignity rights protected in Part III and Part IV of the Constitution. Article 14 establishes legal equality and equal protection rights for all people which stops employers from treating migrant workers differently based on their regional background and economic standing.⁸ Interstate migrant workers who hold citizenship rights to equal constitutional protection face widespread discrimination which prevents them from accessing work opportunities and housing and healthcare services and welfare benefits in their new states of residence. Citizens of India have the right to move anywhere within the country according to Article 19(1)(d) while Article 19(1)(e) protects their right to choose their permanent residence in any part of India.⁹ These legal provisions treat internal migration as a constitutional right which mandates the State to protect migrant workers from facing discrimination when they search for work across state lines.

The Constitution protects interstate migrant workers through Article 21 which grants them the fundamental right to life and personal freedom. The judicial system expanded Article 21 which guaranteed physical existence to include rights that protect human dignity

⁷ Occupational Safety, Health and Working Conditions Code, 2020.

⁸ INDIA CONST. art. 14.

⁹ *Id.* art. 19(1)(d), (e).

as well as rights to sustainable employment and safe housing and medical treatment and acceptable work environments.¹⁰ The Supreme Court established that human dignity rights arise from Directive Principles of State Policy which protect people from exploitation and unsafe work conditions.¹¹ The Court determined that employers who fail to pay their construction workers minimum wage rates commit forced labor because the Constitution's Article 23 includes this prohibition.¹² The judicial rulings show that exploitative work conditions which affect migrant workers constitute both statutory violations and constitutional violations which damage their fundamental human rights.

The State Policy Directive Principles create an additional constitutional obligation which requires the government to protect workers' rights and maintain social equality. The State must provide citizens with sufficient resources to support their basic needs while protecting them from all forms of worker exploitation according to Article 39.¹³ The State must provide workers with just working conditions and maternity benefits according to Article 42 whereas Article 43 requires the State to provide workers with a living wage that guarantees them a decent life.¹⁴ The Directive Principles remain non-justiciable yet they have served as a continuous basis for courts to interpret labor rights and welfare laws. The Supreme Court has established that socio-economic justice constitutes a fundamental aspect of constitutional law which specifically protects interstate migrant workers who belong to vulnerable and marginalized labor communities.¹⁵

International human rights standards establish mandatory obligations which India must fulfill according to its constitutional framework for labor protection and migrant welfare. India is a founding member of the International Labour Organization (ILO) and has ratified several conventions concerning forced labour, equal remuneration, and discrimination in employment.¹⁶ International human rights instruments such as the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights recognize the rights to just conditions of work, social security, and an adequate standard of living.¹⁷ The State must fulfill its constitutional duties together with its international commitments because economic progress must not jeopardize the dignity and safety and core rights of migrant workers. The ongoing exploitation and exclusion that interstate migrant

¹⁰ *Maneka Gandhi v. Union of India*, (1978) 1 SCC 248.

¹¹ *Bandhua Mukti Morcha v. Union of India*, (1984) 3 SCC 161.

¹² *People's Union for Democratic Rights v. Union of India*, (1982) 3 SCC 235.

¹³ INDIA CONST. arts. 39, 41.

¹⁴ *Id.* arts. 42, 43.

¹⁵ *Consumer Educ. & Rsch. Ctr. v. Union of India*, (1995) 3 SCC 42.

¹⁶ Int'l Labour Org., *India and the ILO*, <https://www.ilo.org>.

¹⁷ International Covenant on Economic, Social and Cultural Rights arts. 6–7, Dec. 16, 1966, 993 U.N.T.S. 3.

workers experience demonstrates how constitutional protections fail to provide them with actual benefits.

3 EVALUATION OF THE INTER-STATE MIGRANT WORKMEN ACT, 1979 AND THE NEW LABOUR CODES

The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act 1979 established rules for the hiring and employment of migrant workers who move between states.¹⁸ The law emerged as a direct response to employers who used *Dadan* labor systems to exploit workers in Odisha by hiring them through middlemen and forcing them into debt bondage while paying them extremely low wages and subjecting them to dangerous work environments.¹⁹ The Act required companies that hired international migrant workers to register their businesses while companies that needed inter-state recruiting services had to obtain contractor licenses.²⁰ The law required employers to provide their workers with equal pay and specific payments for work-related travel and medical treatment and accommodations and safe work conditions that protect their health.²¹ The law created essential protections for migrant workers who face heightened risks because of their specific work conditions.

The 1979 Act had progressive legal frameworks but its implementation failed because enforcement programs were weak and migrant workers used informal labor systems. Most migrant workers continued to be recruited through unregistered contractors, leaving them outside the protection of statutory safeguards.²² Employers frequently failed to provide proper accommodation, health facilities, safety equipment, or social security benefits, particularly in high-risk sectors such as construction and sanitation work. The absence of proper insurance coverage and workplace safety standards has repeatedly exposed migrant labourers to fatal accidents and occupational hazards. The vulnerability of interstate migrant workers in India has increased through incidents of mob violence and social discrimination. Beyond statutory defaults, interstate migrant workers frequently face social marginalization and xenophobic backlash in destination states. High-profile local crimes often catalyze generalized suspicion against migrant populations, leading to incidents of vigilante violence, social exclusion, and extra-legal harassment. These instances underscore the acute lack of social security and institutional protection afforded to migrant laborers, directly undermining their constitutional guarantees of equality and human dignity under Articles 14 and 21.

¹⁸ Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, pmbi.

¹⁹ S.K. CHAUBE, *THE MAKING AND WORKING OF LABOUR LAWS IN INDIA* 214–16 (1990).

²⁰ Inter-State Migrant Workmen Act §§ 4–9.

²¹ *Id.* §§ 13–18.

²² JAN BREMAN, *AT WORK IN THE INFORMAL ECONOMY OF INDIA* 112–15 (2013).

The Occupational Safety, Health and Working Conditions Code, 2020 combined thirteen labor laws including the Inter-State Migrant Workmen Act of 1979 to create simpler labor regulations which organizations would find easier to follow.²³ The Code expanded the definition of interstate migrant workers to include self-employed migrants and introduced provisions for portability of benefits, database registration and journey allowance.²⁴ The new regime raises concerns about its capability to preserve current protections because people believe it will operate as a threat to existing safeguards.²⁵ The 1979 Act protected establishments which employed five or more interstate migrant workers while the OSH Code established a new threshold of ten or more workers which will exclude many migrant laborers from receiving legal protections.²⁶ The critics of the system claim that it depends too much on self-registration and digital compliance systems which will make it harder for workers without literacy skills and proper documents and technological access to participate.

The labour codes aim to modernize India's labour governance system through their implementation which requires proper execution at local sites for successful results. The shift from welfare-based regulations to compliance-oriented systems will decrease the ability to hold employers and contractors accountable. Migrant workers face dangerous work environments because they do not receive regular pay and work without insurance and have no way to report their problems. The ongoing occurrence of deadly worksite accidents with abusive hiring methods together with public violence shows that only passing new laws will not provide real protection for migrant workers. Essential rights-based approaches require active enforcement of labor inspections together with accessible social security systems to establish actual worker rights through statutory provisions.

4 CONTEMPORARY CHALLENGES AND ACCESS TO JUSTICE FOR INTERSTATE MIGRANT WORKERS

Interstate migrant workers in India experience extreme wage exploitation and unsafe working conditions because labour welfare legislation fails to protect their rights. Many migrant labourers are employed through informal contractual arrangements where employers frequently withhold wages, delay payments, or pay below statutory minimum wages.²⁷ Workers in construction and sanitation and mining and factory jobs must work in dangerous conditions because their employers fail to provide necessary safety equipment and medical

²³ Occupational Safety, Health and Working Conditions Code, 2020.

²⁴ *Id.* §§ 2(zm), 21, 60.

²⁵ *Id.* § 1(4).

²⁶ Aditi Haldar & Anjan Chakrabarti, *Labour Codes and Informalisation of Work in India*, 56 *ECON. & POL. WKLY.* 45, 48–49 (2021).

²⁷ JAN BREMAN, *FOOTLOOSE LABOUR: WORKING IN INDIA'S INFORMAL ECONOMY* 89–92 (1996).

support and insurance benefits. Fatal workplace accidents involving migrant workers remain common due to poor compliance with occupational safety standards. The absence of written contracts and formal employment records further weakens the ability of workers to seek compensation or legal remedies against exploitative employers and contractors.²⁸

Interstate migrant workers face their biggest obstacle because social security and welfare programs do not provide benefits that can be used across different states. Migrant workers frequently lose access to ration benefits, healthcare services, housing assistance, and welfare entitlements when they move from their home states to destination states.²⁹ The “One Nation One Ration Card” scheme was developed to enhance food security benefit distribution; however, implementation gaps together with documentation requirements continue to make it difficult for many workers to access these benefits.³⁰ The informal and temporary nature of migrant employment prevents workers from receiving provident fund benefits together with insurance coverage and maternity leave. Women migrant workers experience multiple additional vulnerabilities which include wage discrimination together with unsafe housing conditions and workplace harassment and trafficking risks and insufficient maternal healthcare services.³¹ The unorganized employment system makes female migrant laborers who work in domestic work and brick kilns and construction sectors invisible to labour regulation systems.

The COVID-19 pandemic showed all the structural problems which exist in India’s system for managing migrant workers. The nationwide lockdown which started in March 2020 left millions of interstate migrant workers stranded without access to employment and food and transportation and shelter.³² The humanitarian crisis led to mass reverse migration as workers moved back to their home villages through unsafe foot journeys which covered hundreds of kilometres. Multiple reports showed how people died because of starvation and exhaustion and road accidents and treatment refusal during the lockdown period.³³ The crisis showed two problems because of missing databases for migrant workers and the failure of states to work together and existing labor laws which lacked emergency social protection systems. The State uses judicial intervention during the pandemic to show its duty

²⁸ Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, §§ 13–18.

²⁹ Ravi Srivastava, *Internal Migration in India: Integrating Migration with Development and Urbanization Policies* 14–16 (UNESCO 2020).

³⁰ Ministry of Consumer Aff., Food & Pub. Distrib., *One Nation One Ration Card Plan*, GOV’T OF INDIA, <https://dfpd.gov.in>.

³¹ KUNTALA LAHIRI-DUTT & GOPA SAMANTA, DANCING WITH THE RIVER: PEOPLE AND LIFE ON THE CHARS OF SOUTH ASIA 167–69 (2013).

³² Alakh N. Sharma, *Impact of COVID-19 on India’s Migrant Workers*, 55 ECON. & POL. WKLY. 18, 19–21 (2020).

³³ Rukmini S., *Tracking the Human Cost of India’s Lockdown*, SCROLL.IN (May 2020), <https://scroll.in>.

under Article 21 to protect migrant workers' rights which include their right to life and their right to dignity.³⁴

The ability of interstate migrant workers in India to access justice services stands as their most considerable obstacle. Workers do not understand their legal rights and the grievance mechanisms established by labour laws.³⁵ Migrant workers face multiple obstacles which prevent them from seeking help at labour authorities and courts. Access to justice remains a fundamental hurdle for interstate migrant workers. Entrenched informational asymmetry prevents laborers from navigating statutory grievance redressal mechanisms or asserting their legal rights. Moreover, state enforcement mechanisms remain severely constrained by institutional understaffing, administrative delays, and inadequate labor inspection regimes. When legal disputes arise, the absence of written employment contracts and the transient nature of informal work enable employers to evade accountability, rendering statutory guarantees largely ineffective.³⁶ Workers face legal barriers because their work contracts remain undocumented and their employers vanish once disputes emerge. Interstate migrant workers face systemic barriers which prevent them from accessing their rights as mandated by constitutional and statutory protections within the Indian justice system.

5 RECOMMENDATIONS FOR STRENGTHENING THE PROTECTION OF INTER-STATE MIGRANT WORKERS

5.1 Strengthening Labour Law Enforcement

- Labour inspection mechanisms under central and state governments must be strengthened through regular workplace inspections, particularly in sectors which depend heavily on migrant workers like construction and sanitation and mining and manufacturing.³⁷
- Employers and contractors who breach wage and occupational safety and accommodation regulations should face strict penalties.
- Authorities should enforce safety requirements and protective equipment standards and workplace insurance regulations which apply to migrant workers.

³⁴ *In re Problems & Miseries of Migrant Labourers*, Suo Motu Writ Petition (C) No. 6 of 2020.

³⁵ Asha Hans, *Labour Migration and Human Rights in India*, 47 INDIAN J. LAB. ECON. 113, 118–20 (2004).

³⁶ INT'L LABOUR ORG., INDIA WAGE REPORT: WAGE POLICIES FOR DECENT WORK AND INCLUSIVE GROWTH 62–64 (2018).

³⁷ Occupational Safety, Health and Working Conditions Code, 2020, §§ 35–38.

5.2 Creation of a Comprehensive Migrant Worker Database

- The government should establish a centralized national database for interstate migrant workers to facilitate identification and welfare distribution and legal protection.
- The Occupational Safety, Health and Working Conditions Code, 2020 registration systems should be simplified to enable users to access registration through online and offline methods.³⁸
- Multilingual registration centres and assistance mechanisms should be introduced to ensure inclusion of illiterate and technologically disadvantaged workers.

5.3 Ensuring Portability of Social Security Benefits

- People need to maintain their welfare benefits which include ration entitlements and healthcare access and insurance and pensions and maternity benefits across different states.
- The “One Nation One Ration Card” program requires full implementation together with expansion to cover additional welfare benefits.³⁹
- Social security benefits should extend to both informal and temporary migrant workers who have no fixed employment contracts.

5.4 Gender-Sensitive Protection Measures

- Special safeguards must be introduced for women migrant workers against workplace harassment, trafficking, wage discrimination, and unsafe living conditions.
- Employers must establish secure housing arrangements that include sanitation facilities and maternity leave and medical services for their female migrant workers.⁴⁰
- Labour welfare policies should incorporate gender-sensitive monitoring and complaint mechanisms.

5.5 Improving Access to Justice and Legal Awareness

- States need to create migrant worker grievance resolution centers and multilingual legal support centers at both their source locations and their destination locations.
- Dispute resolution systems need to be developed as fast-track procedures which will handle cases involving wage theft and workplace injuries and labor exploitation.⁴¹

³⁸ *Id.* §§ 21, 60.

³⁹ Ministry of Consumer Aff., Food & Pub. Distrib., *One Nation One Ration Card Plan*, GOV^T OF INDIA, <https://dfpd.gov.in>.

⁴⁰ INDIA CONST. art. 42.

⁴¹ Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, § 22.

- Trade unions and civil society organizations together with local authorities should run educational programs which will teach migrant workers about their rights under both the Constitution and existing laws.

5.6 Strengthening Interstate Coordination and Policy Implementation

- States need to improve their coordination with one another because they need to track both recruitment procedures and their distribution of worker benefits.
- States need to implement systems which will handle two tasks: they need to track migrant worker information and they need to work together on resolving labor disputes and providing emergency support.
- The implementation of labor welfare regulations and programs needs to undergo assessment through both periodic audits and social accountability programs.

5.7 Adopting a Rights-Based Labour Governance Framework

- The primary objective of labour reforms should be to establish human dignity and equality rights together with social justice principles which should not be implemented through business operation and compliance evaluation methods.
- Interstate migrant workers must be recognized as rights-bearing citizens entitled to safe working conditions, fair wages, healthcare access, and social security under Articles 14 and 21 of the Constitution.⁴²
- The rights-based approach needs to establish effective enforcement mechanisms together with welfare accessibility programs so economic growth will not harm vulnerable migrant labour communities.

6 CONCLUSION

The interstate migrant workforce in India exists as a highly vulnerable group which faces extreme social exclusion despite their crucial role in driving economic development and urban expansion throughout the nation. The Constitution provides equal rights and personal dignity together with freedom of movement through Articles 14, 19 and 21 yet migrant workers experience different realities which show they face exploitation and dangerous working environments and unstable pay and social bias and loss of access to government benefits.⁴³ The Inter-State Migrant Workmen Act of 1979 introduced a major legal framework for managing migrant workforce activities while protecting employee rights

⁴² INDIA CONST. arts. 14, 21.

⁴³ *Id.* arts. 14, 19, 21.

yet its implementation faced challenges because of weak enforcement and administrative shortcomings and the prevalent use of informal workforce systems. The statutory protections which should protect migrant laborers prove to be ineffective because of the various incidents that demonstrate workplace deaths and the lack of safety equipment and the attacks against these workers.

The Occupational Safety, Health and Working Conditions Code, 2020 establishes a unified set of labour regulations which aims to update India's labour management system, but implementation defects and protection reductions still create implementation problems. The COVID-19 migrant crisis further exposed the structural weaknesses of the existing system and highlighted the urgent need for a rights-based approach to labour governance grounded in social justice and human dignity.⁴⁴ The protection of rights requires both legislative changes and operational enforcement systems which include complaint resolution mechanisms, benefit transfer options and improved coordination between states. The State must maintain dignity for workers while protecting their rights because the treatment of interstate migrant workers involves both labour regulations and constitutional human rights obligations.

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⁴⁴ *In re* Problems & Miseries of Migrant Labourers, Suo Motu Writ Petition (C) No. 6 of 2020.

PART II

Displacement, Sovereignty and International
Law

CHAPTER 4

Refugees, Statelessness and the Limits of State Sovereignty: A Human Rights Perspective with Reference to India

ADITYA KUMAR*

This paper examines the complex relationship between refugee protection, statelessness, and state sovereignty through a human rights lens, with specific reference to India. Situating the discussion within the broader context of the global refugee crisis, the paper highlights the unprecedented rise in forced displacement and the growing challenges faced by host states, particularly in the Global South. It critically engages with the evolution of international legal norms governing nationality, including the right to a nationality, the prohibition of arbitrary deprivation of nationality, and the principle of non-refoulement.

Adopting a comparative methodology, the paper analyzes the extent to which these principles constrain state discretion in matters of citizenship and migration. It further evaluates India's refugee and citizenship framework, characterized by the absence of a formal asylum regime and reliance on ad hoc executive policies. Particular attention is given to the Citizenship (Amendment) Act, 2019, assessing its compatibility with constitutional guarantees and international human rights standards, especially the principles of equality and non-discrimination.

The paper also explores the practical limitations of international protection through a case study of the Rohingya crisis, illustrating the tensions between humanitarian obligations and state interests. It argues that while international law increasingly recognizes individual rights in matters of nationality and protection, its enforcement remains inconsistent and often subordinate to sovereign concerns. Ultimately, the paper contends that a rights-based approach to citizenship and refugee protection is essential to reconcile state sovereignty with evolving international human rights obligations.

Keywords: Citizenship; State Sovereignty; Statelessness; Non-Refoulement; International Human Rights Law.

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1 CONCEPTUAL FRAMEWORK: REFUGEES, STATELESSNESS, AND STATE SOVEREIGNTY

1.1 Refugees and Statelessness: Legal Definitions

The concepts of refugee, statelessness and state sovereignty are interconnected in a way that influences the working and understanding of international law. Under international law a refugee is someone who is unable or unwilling to return to his or her country of origin for fear of persecution. This persecution can be based on any or more than one of the following namely race, religion, nationality, membership of a particular social group, or political opinion¹. On the other hand a stateless person is someone who is not considered a national or citizen by his or her state of origin².

The concept of state sovereignty implies complete authority of the state over its territory and population. Population management has long been a central function of the modern sovereign state, rooted in the Westphalian concept of sovereignty which emphasizes control over territory, borders and movement³. Modern nation states have used documents like passports and visas to legitimize and restrict movement of nationals and aliens in and out of their territory. Citizenship is the legal bond between an individual and the state that enables states to define legitimate and illegitimate movements of people to and from its territory. However forced migration and statelessness have challenged these traditional concepts.

1.2 State Sovereignty and Contemporary Challenges

Historically, political communities like nomadic societies and empires such as the Ottomans had fluid borders and internal migration systems⁴. In contrast, the modern nation-state evolved to govern specific populations, distinguishing “insiders” from “outsiders” to deliver services and enforce obligations like taxation. Today, migration raises profound moral questions. Should states, beyond economic and political concerns, have an ethical duty to admit migrants or refugees? Is migration a basic human right, or does national sovereignty override the claims of outsiders?

The use of coercion – detaining, deporting, or denying entry to migrants – inevitably poses ethical challenges. Moreover, the system of citizenship based on birth location perpetuates inequality, limiting life chances by the accident of birthplace. In a much more

¹ Convention Relating to the Status of Refugees art. 1(A)(2), July 28, 1951, 189 U.N.T.S. 137.

² Convention Relating to the Status of Stateless Persons art. 1(1), Sept. 28, 1954, 360 U.N.T.S. 117.

³ Fiona B. Adamson, *Crossing Borders: International Migration and National Security*, 31 INT'L SEC. 165 (2006).

⁴ Andreas Wimmer & Nina Glick Schiller, *Methodological Nationalism and Beyond: Nation-State Building, Migration and the Social Sciences*, 2 GLOB. NETWORKS 301, 302–04 (2002).

globalised world where movement is easy and opportunities are unequally distributed, the question remains as to why shouldn't people be free to seek a better life elsewhere?

2 GLOBAL REFUGEE CRISIS AND PATTERNS OF FORCED MIGRATION

Over the years, it has become increasingly clear that the issue of illegal immigration is not a temporary phenomenon, but rather a persistent and long-term challenge. An international organization such as the United Nations High Commissioner for Refugees (UNHCR) was established⁵ with the assumption that its task would be limited in scope and duration. However, the continued existence and expanding role of such bodies demonstrate that this assumption was fundamentally flawed.

2.1 Scale and Trends in Global Forced Displacement

The World Migration Report 2024 notes that global forced displacement has reached record levels, with approximately 35.3 million refugees worldwide as of 2022. In addition, there are approximately 5.4 million asylum seekers, along with another 5.2 million individuals requiring international protection who are not formally recognized as refugees.⁶ According to UNHCR, the number of people forcibly displaced worldwide reached approximately 122.1 million by the end of April 2025, representing one of the highest global displacement figures on record. Based on the UNHCR Global Trends 2024 report with 2025 partial estimates there were approximately 73.5 million internally displaced people by the end of 2024, the largest category of forced displacement⁷. Conflict and climate-related disasters drive much of this internal displacement. Many refugees remain hosted in neighbouring countries, especially in low and middle-income regions. Approximately 4.4 million stateless individuals also form part of the displaced population, lacking legal nationality and fundamental protections.

2.2 Drivers and Geographic Patterns of Displacement

The protracted conflict in Syria, now entering its second decade, has resulted in approximately 6.5 million Syrian refugees worldwide by the end of 2022⁸. Similarly, Afghanistan remains the second-largest source of refugees, with external estimates placing the number at around 6.4 million, driven by decades of instability, conflict, and recent political

⁵ U.N. High Comm'r for Refugees (UNHCR), *About Us*, <https://www.unhcr.org> (last visited Apr. 3, 2026).

⁶ INT'L ORG. FOR MIGRATION, WORLD MIGRATION REPORT 2024 5 (Marie McAuliffe & L. A. Oucho eds., 2024).

⁷ U.N. HIGH COMM'R FOR REFUGEES (UNHCR), GLOBAL TRENDS: FORCED DISPLACEMENT IN 2024 (June 16, 2025).

⁸ U.N. HIGH COMM'R FOR REFUGEES (UNHCR), GLOBAL TRENDS: FORCED DISPLACEMENT IN 2022 14 (2023).

upheavals. South Sudan continues to be among the largest refugee-producing countries, with more than 2.2 million South Sudanese displaced as of 2022, a trend that began with widespread violence since 2016.

As of 2025, Turkey remained one of the world's largest hosts of refugees, accommodating approximately 2.7 million refugees mainly from Syria. Iran and Pakistan also featured among the top host countries, primarily sheltering refugees from Afghanistan and other neighbouring crises. Other major hosts in 2025 included Germany, Uganda, Bangladesh, Ethiopia, and Sudan⁹. In many of the least developed and fragile states including Bangladesh, Chad, Congo, Ethiopia, Rwanda, South Sudan, Sudan, Tanzania, Uganda and Yemen refugees made up a disproportionate share of the population and collectively hosted more than a quarter of the world's refugee population¹⁰.

2.3 Protection Gaps and India's Position

India, although not a signatory to the 1951 Refugee Convention or its 1967 Protocol, continues to host a sizeable refugee population. Refugees in India primarily originate from its immediate neighborhood in South Asia and South East Asia. India does not have a formal national asylum framework as it refuses to recognize refugees under a formal statutory framework making refugee regulation completely under executive discretion and selective engagement with UNHCR. This scattered policy by the state disrupts protection and legal clarity for refugees seeking protection in India¹¹.

According to UNHCR India holds around 52,000 refugees, primarily comprising Rohingya refugees from Myanmar and Afghan nationals who fled following the political transition in 2021¹². As per the Ministry of Home Affairs (MHA), India is also home to 95,000 to 100,000 Tibetan refugees as well as Sri Lankan Tamil refugees, numbering roughly 58,000 in government-administered camps in Tamil Nadu and an additional 34,000 living outside camp settings¹³.

3 STATE SOVEREIGNTY VS HUMAN RIGHTS: EMERGING LEGAL TENSIONS

3.1 From Absolute Sovereignty to Human Rights Constraints

In both practice and scholarship, there is growing evidence of a shift away from the traditional sovereignty concepts in granting of nationality certificates by states. This change is

⁹ U.N. HIGH COMM'R FOR REFUGEES (UNHCR), *supra* note 7.

¹⁰ U.N. High Comm'r for Refugees (UNHCR), *Refugee Statistics* (2025), <https://www.unhcr.org>.

¹¹ INT'L ORG. FOR MIGRATION, WORLD MIGRATION REPORT 2024 255 (Marie McAuliffe & L. A. Oucho eds., 2024).

¹² U.N. High Comm'r for Refugees (UNHCR), *India*, <https://www.unhcr.org> (last visited Apr. 15, 2026).

¹³ PRS LEGIS. RSCH., DEMAND FOR GRANTS 2025–26 ANALYSIS: HOME AFFAIRS (Mar. 4, 2025).

exemplified by the evolving terminology surrounding state membership. Historically, “nationality” and “citizenship” were distinct, with only the former carrying international significance¹⁴. Today, however, many use these terms interchangeably, with “citizenship” emerging as the dominant descriptor which brings implications of equality and rights¹⁵. Increasingly, there are calls to counter arbitrary denials of citizenship, recognizing “access to citizenship” as a fundamental right¹⁶.

Although international law has yet to fully standardize rules on dual citizenship, there is increasing recognition of individuals’ rights to maintain multiple nationalities¹⁷. Recent trends also show that stringent naturalization criteria for long-term residents are detested and a more liberal approach like *jus soli* should be encouraged for granting citizenship. Such developments show the growing influence of principles of human rights on nationality questions. In the context of state succession, regional institutions have critiqued discriminatory citizenship regimes, leading to policy reforms¹⁸. The ILC Draft Articles on Nationality (State Succession) emphasize the right to nationality based on habitual residence, aiming to remove discrimination in nationality questions¹⁹.

International bodies have played a pivotal role in shaping these norms. In 2004 CERD urged states to eliminate discriminatory barriers to citizenship and naturalization for long-term residents²⁰. The European Convention on Nationality further prohibits discrimination based on race in nationality laws. Most states now provide naturalization pathways, with the 1997 European Convention on Nationality requiring states to allow lawful and habitual residents to apply for citizenship. Consequently, naturalization has transitioned from being a privilege to a right, with procedural barriers increasingly reduced and critiqued²¹. Many countries including Japan, Korea, Panama, Spain, Portugal and Kuwait have been criticized for propagating citizenship regimes based on ethnicity, religion and discriminatory naturalization practices²².

¹⁴ Peter J. Spiro, *Citizenship and Nationality: Past, Present, Future*, 45 HARV. INT’L L.J. 501, 504 (2004).

¹⁵ Kim Rubenstein, *Citizenship in the Constitutional Framework*, in CITIZENSHIP IN A GLOBAL WORLD 17, 22 (2002).

¹⁶ ALICE EDWARDS, NATIONALITY AND STATELESSNESS UNDER INTERNATIONAL LAW 115 (2014).

¹⁷ U.N. HIGH COMM’R FOR REFUGEES (UNHCR), GUIDELINES ON STATELESSNESS NO. 4: ENSURING EVERY CHILD’S RIGHT TO ACQUIRE A NATIONALITY (2012).

¹⁸ EUR. COMM’N, REPORT ON CITIZENSHIP AND STATE SUCCESSION (2019).

¹⁹ Int’l Law Comm’n, *Draft Articles on Nationality of Natural Persons in Relation to the Succession of States*, U.N. Doc. A/56/10 (2001).

²⁰ Comm. on the Elimination of Racial Discrimination, *General Recommendation No. 30: Discrimination Against Non-Citizens*, ¶¶ 13–16, U.N. Doc. CERD/C/64/Misc.11/Rev.3 (2004).

²¹ PATRICK WEIL, HOW TO BE FRENCH: NATIONALITY IN THE MAKING SINCE 1789 142 (2008).

²² U.N. Special Rapporteur, *Report on Discriminatory Nationality Laws* (2017); Law of Return, 5710–1950, 4 L.S.I. 114 (1950) (Isr.); Código Civil [C.C.] [Civil Code] art. 22.1 (Spain).

3.2 Dual Nationality, Conflicts, and Institutional Responses

Opposition to such policies stems from the understanding that human rights norms should constrain states' abilities to deny citizenship. Conflicts arising from multiple citizenships further highlight the complexities of evolving nationality norms. Treaties, international sports federations, and courts have all grappled with issues of dual nationality²³. In *Garcia Avello v. Belgium* a European Court found Belgium's refusal to recognize Spanish naming conventions for dual-national children to be discriminatory²⁴. Such cases highlight the need for harmonized international rules to address conflicts between domestic legal systems. However, multiple citizenship also creates issues for individuals as was seen in the case of *Maheer Arar*. The case highlights how dual citizenship can offer less protection as compared to single citizenship or even statelessness under particular circumstances²⁵.

To address these issues many policy watchers have suggested creation of an international body under the UN to resolve conflicts on nationality²⁶. Similar bodies have been very effective in dealing with similar issues like the ICSID which was established under a World Bank treaty in 1966 and has successfully resolved investor-state disputes. Establishing a similar international citizenship tribunal could ensure that individual rights are upheld in matters of conflicting and non-recognition of nationality.

4 INDIAN CITIZENSHIP LAW AND INTERNATIONAL NORMS: THE CITIZENSHIP (AMENDMENT) ACT, 2019

4.1 Legal Framework of Citizenship and the CAA, 2019

The Citizenship (Amendment) Act, 2019 (CAA, 2019) has raised serious concerns regarding its impact on India's constitutional principles where the legislation tries to grant citizenship to persecuted minorities of Bangladesh, Pakistan and Afghanistan. Since these three countries have Islam as the majority religion any person that asks for refuge in India has to be from the minority religion, explicitly excluding everyone that follows Islam. The impugned legislation also picks only three countries in India's neighborhood excluding countries where Islam is not the majority religion raising serious questions about rationality and consistency of the classification. It is therefore essential to analyze the legislation not only within the domestic constitutional framework but also through the lens of international human rights

²³ FIFA, REGULATIONS GOVERNING THE APPLICATION OF THE STATUTES (2021).

²⁴ Case C-148/02, *Garcia Avello v. Belgium*, 2003 E.C.R. I-11613.

²⁵ COMM'N OF INQUIRY INTO THE ACTIONS OF CANADIAN OFFICIALS IN RELATION TO MAHEER ARAR, REPORT OF THE EVENTS RELATING TO MAHEER ARAR (2006).

²⁶ Convention on the Settlement of Investment Disputes Between States and Nationals of Other States art. 1, Mar. 18, 1965, 575 U.N.T.S. 159.

law, in order to assess India's international obligations and examine whether the enactment potentially constitutes a violation or circumvention of those obligations.

4.2 Compatibility with Constitutional and International Norms

The UN Convention on Refugees²⁷ and the Protocol Relating to the Status of Refugees²⁸ ask States to grant refugee status on grounds of 'race, religion, nationality, membership of a particular social group or political opinion' or fear of persecution²⁹. States are mandated under the convention to implement its provision without any kind of discrimination depending upon applicant's race, religion or country of origin³⁰. Although India is not a signatory to the 1951 Refugee Convention or its 1967 Protocol, the objectives and provisions of the CAA, 2019 stand in clear contradiction to the core principles enshrined in these international instruments. But India has adopted the Bangkok Principles which also talk about no refugee discrimination³¹. India is also a signatory to the principle of non-discrimination³².

The Supreme Court in its judgments has also stated the need for incorporation of international law within national law as long as they pass India's constitutional test.³³ India is not a party to the Vienna Convention³⁴ but some have tried to use the convention to convince India to apply non-discriminatory practice of legal application to uphold its international commitments. This becomes even more important because the principle under Article 26 of ICCPR is the same which is echoed under Article 14 of the Indian Constitution namely the right to equality. The claim of CAA, 2019 is under question when looked at international instruments which uphold equal treatment of refugees irrespective of their nationality. Besides, UDHR condemns any act that results in statelessness and the deprivation of nationality arbitrarily³⁵ and this right has undoubtedly become a part of customary international law³⁶. This further undermines the legal claim to the legal validity of the CAA, 2019 in the face of International standards.

²⁷ Convention Relating to the Status of Refugees art. 1, July 28, 1951, 189 U.N.T.S. 137.

²⁸ Protocol Relating to the Status of Refugees, Jan. 31, 1967, 606 U.N.T.S. 267.

²⁹ Convention Relating to the Status of Refugees art. 1, July 28, 1951, 189 U.N.T.S. 137.

³⁰ *Id.* art. 3.

³¹ Asian-African Legal Consultative Org., Bangkok Principles on the Status and Treatment of Refugees art. IV(5).

³² G.A. Res. 217 (III), Universal Declaration of Human Rights, arts. 2, 7, U.N. Doc. A/810 (Dec. 10, 1948); International Covenant on Civil and Political Rights art. 2(1), Dec. 16, 1966, 999 U.N.T.S. 171; International Covenant on Economic, Social and Cultural Rights arts. 2(2), 3, Dec. 16, 1966, 993 U.N.T.S. 3; Convention on the Rights of the Child art. 2, Nov. 20, 1989, 1577 U.N.T.S. 3.

³³ *State of W.B. v. Kesoram Indus. Ltd.*, (2004) 10 SCC 201.

³⁴ Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331.

³⁵ Universal Declaration of Human Rights art. 15.

³⁶ Ndjodi Ndeunyema, *Anudo v. Tanzania*, OXHRH BLOG (Apr. 19, 2018).

A rigorous analysis under Article 14 of CAA, 2019, would require it to pass the classification test as laid down in *State of West Bengal v. Anwar Ali Sarkar*³⁷. Under this test, a legislative classification is constitutionally permissible if it satisfies two conditions: first, the classification must be founded on an intelligible differentia distinguishing those included from those excluded and second, that differentia must bear a rational nexus with the object for which the legislation has been enacted. One must also remember that the object itself cannot be discriminatory because that would allow the state to justify classification by defining legislative objectives in terms of the class that the statute seeks to benefit³⁸. The CAA, 2019 creates a dual classification based on religion and country of origin. It extends a pathway to minority citizens of selected countries in India's neighborhood who purport Islam as state religion.

The justification of the legislation is stated in terms that the minorities in these states are persecuted on account of their religious beliefs. This is the first differentiation that is created under CAA, 2019 of choosing migrants only from Bangladesh, Pakistan and Afghanistan. The selection of countries for application seems arbitrary because Afghanistan is not India's immediate neighbor nor has Afghanistan been historically a part of the Indian nation-state³⁹ but it is included, while countries in the immediate neighborhood like Sri Lanka and Bhutan which are also theocratic states have been excluded.

The second concern relates to exclusion of similarly placed individuals from the application of the legislation. If the object of the legislation is to protect the minorities from religious persecution, then Ahmadiyya Muslims in Pakistan⁴⁰, Hazara Shias in Afghanistan⁴¹, Rohingya Muslims fleeing Myanmar⁴² and Tamil minorities from Sri Lanka⁴³ who have also experienced severe persecution remain outside the Act solely because they originate from countries excluded by the legislation or because their persecution is not recognized as having been inflicted by the religious majority in their respective countries. Individuals similarly situated cannot be denied equal protection merely because they belong to a different religion or originate from a country omitted by the statute. The constitutional validity of the

³⁷ *State of W.B. v. Anwar Ali Sarkar*, AIR 1952 SC 75.

³⁸ *Nagpur Improvement Trust v. Vithal Rao*, (1973) 1 SCC 500.

³⁹ JEFFREY ROBERTS, *THE ORIGINS OF CONFLICT IN AFGHANISTAN* 41 (2003).

⁴⁰ Linda J. Berberian, *Pakistan Ordinance XX of 1984: International Implications on Human Rights*, 9 LOY. L.A. INT'L & COMP. L. REV. 661 (1987).

⁴¹ HUM. RTS. WATCH, "THEY DON'T TREAT US LIKE HUMAN BEINGS": UNLAWFUL RETURNS OF AFGHAN REFUGEES AND ASYLUM SEEKERS FROM PAKISTAN (2025), <https://www.hrw.org>.

⁴² U.N. High Comm'r for Refugees, *Rohingya Emergency*, <https://www.unhcr.org/emergencies/rohingya-emergency> (last visited July 29, 2026).

⁴³ PEOPLES TRIBUNAL ON SRI LANKA, <http://permanentpeopletribunal.org/wp-content/uploads/2014/01/Sentenza-Sri-Lanka-and-Tamil-II.pdf> (last visited July 26, 2026).

legislation has been challenged before the Supreme Court and the vulnerability identified above would form the core of this constitutional challenge.

While international legal norms increasingly recognize the right to nationality and protection against statelessness, their practical application remains inconsistent. This gap becomes very clearly apparent in situations of mass displacement, where non-refoulement and non-discrimination are at odds with the interests of the state where refugees take shelter. The Rohingya crisis is the most contemporary example of such a situation in play before the world.

5 CASE STUDY: ROHINGYA CRISIS AND LIMITS OF PROTECTION

The Rohingyas have been subjected to discrimination and persecution by Myanmar and described by UN Secretary General as “one of, if not the, most discriminated people in the world”⁴⁴. In 1978, the Myanmar military began the operation “Dragon King” to find and take action against persons the military deemed to be illegal migrants⁴⁵. The Rohingyas came under this action because the Myanmar government believed that Rohingyas were not ethnically part of Myanmar and must be considered as outsiders. The government of Myanmar took all the land belonging to Rohingyas as they were seen as occupiers. Rohingyas were also stripped of their constitutional rights of holding properties and all these measures together resulted in the permanent displacement of Rohingyas from Myanmar into neighboring Bangladesh.

Nearly 0.2 million Rohingyas fled to the neighbouring Bangladesh and those who did not flee were persecuted in Myanmar by the state and its security forces. In 1992, Bangladesh was overrun by Rohingya refugees and Bangladesh as policy decided no longer to identify Rohingyas as refugees and they were refused entry into official refugee camps in Bangladesh and they were forced to reside in temporary camps outside the perimeters of official refugee camps.⁴⁶ In the 1990s as a result of long-term integration the Bangladesh government and UNHCR signed an MOU for the repatriation exercise during 1993-1997 with some 0.23 million Rohingya returning to Myanmar⁴⁷. In August 2017 Rohingya villages were burned, families killed, women raped which led to a large refugee influx into Bangladesh of Rohingyas from Myanmar for fear of persecution⁴⁸.

⁴⁴ António Guterres, Sec’y-Gen., U.N., Remarks at Joint Press Conference with President of the World Bank Jim Yong Kim (July 2, 2018).

⁴⁵ ALLARD K. LOWENSTEIN INT’L HUM. RTS. CLINIC, PERSECUTION OF THE ROHINGYA MUSLIMS: IS GENOCIDE OCCURRING IN MYANMAR’S RAKHINE STATE? (Apr. 11, 2020).

⁴⁶ Mercy Corps, *The Facts: Rohingya Refugee Crisis* (Apr. 13, 2020).

⁴⁷ U.N. HIGH COMM’R FOR REFUGEES, GLOBAL APPEAL 1999: MYANMAR AND BANGLADESH (1998).

⁴⁸ U.N. Hum. Rts. Council, *Report of the Independent International Fact-Finding Mission on Myanmar*, U.N. Doc. A/HRC/39/64 (Sept. 12, 2018).

Several news reports confirm that Rohingya refugees crossed into India from Cox's Bazar refugee camps in Bangladesh, entering through Tripura's porous border, often aided by human trafficking networks⁴⁹. India has neither signed the 1951 Refugee Convention nor its 1967 Protocol and lacks a domestic legal framework for refugee protection. In this legal vacuum, the Citizenship (Amendment) Act (CAA), 2019, effectively operates as a selective refugee policy. However, it excludes Muslim communities like the Rohingyas, who have fled genocide in Myanmar and are recognized globally as one of the most persecuted groups. Treated as illegal migrants in India, they face detention, deportation, and denial of basic rights.

Although not a signatory to key refugee treaties, India remains bound by customary international law and the principle of non-refoulement, as reflected in UDHR (Article 14), the ICCPR, and the Convention against Torture. Returning Rohingyas to Myanmar, where they face violence and persecution, goes completely against these international principles and yet the Supreme Court allowed deportation of Rohingyas citing national security, highlighting the gap between India's international obligations and its domestic practices⁵⁰.

6 RECONCILING SOVEREIGNTY, CITIZENSHIP AND MIGRATION – SYNTHESIS AND FINAL REFLECTIONS

A central argument of this paper is that the sovereign authority to grant or deny citizenship, once regarded as absolute, is increasingly constrained by international human rights norms. The twentieth century witnessed the emergence of international human rights norms that placed substantive limits on state discretion. The recognition of dual citizenship, the prohibition of involuntary expatriation, and the growing emphasis on preventing statelessness have destabilized rigid, exclusionary citizenship regimes. Sovereignty over citizenship has not disappeared, but it has been reconstituted operating within constitutional frameworks, international obligations, and moral expectations that increasingly challenge unqualified state power.

Migration today is not an anomaly but a structural feature of the global order, shaped by conflict, inequality, environmental stress, and economic interdependence. As a result, citizenship regimes increasingly function as mechanisms of filtration, distinguishing between those who may enter the legal and political community and those who remain perpetually excluded. Judicial responses to migration and entry control reveal the enduring strength of sovereign authority both at international and domestic level. International migration remains deeply political, arising from a world organized into territorially under the

⁴⁹ Suhasini Haidar, *Barred at Border: Record Arrests of Rohingya in 2018*, HINDU (Jan. 6, 2019).

⁵⁰ Mohammad Salimullah v. Union of India, W.P. (C) No. 793 of 2017.

exclusive control of sovereign states. Yet, the invocation of human rights norms and ethical considerations simultaneously unsettles this authority, raising questions about the legitimacy of exclusion based on different criteria.

The paper recognizes that unrestricted migration is neither feasible nor unproblematic. States face genuine challenges on economic displacement, cultural cohesion, political stability, and social order. Unregulated entry may intensify labour competition, provoke xenophobic responses, strain public resources, and exacerbate social conflict. These concerns explain the persistence of restrictive immigration regimes and the political appeal of exclusionary narratives. However, acknowledging these challenges does not resolve the deeper constitutional and moral dilemmas that arise when mechanisms of control extend beyond border regulation into the redefinition of membership itself.

Finally, the growing role of international institutions, humanitarian norms, and global public opinion illustrates that state responses to migration are no longer insulated from external scrutiny. While sovereignty remains central to immigration control, it now operates within a crowded normative space shaped by international law, constitutional principles, and competing claims of security and humanity. This convergence of pressures reveals that contemporary citizenship regimes are increasingly tested not at the border alone, but within the legal architecture that defines membership, belonging, and exclusion. This paper has argued that reconciling sovereignty with human rights requires citizenship classification to be tested against constitutional guarantees of equality rather than treated as a self-justifying exercise of sovereign discretion; the CAA, 2019 underlines precisely this tension and its outcomes before the Supreme Court will indicate how far Indian constitutional law is prepared to carry the principle.

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CHAPTER 5

Beyond ‘Refugee’ Status: Reimagining the Application of Non-Refoulement for Climate-Displaced Persons

PARAMESTI MUKHOPADHYAY* AND DR. PRASHNA SAMADDAR**

Escalating climate changes have led to the emergence of a category of ‘forced migration’ which still persists as an unresolved issue within the framework of international law. Persons being displaced due to severe climatic conditions continue to remain external to the purview of ‘refugees’ as embodied under the Convention ‘Relating to the Status of Refugees, 1951.’ This existing structure limits protection of ‘climate-displaced’ persons owing to an inadequate definition of ‘persecution’ provisioned under the Convention. Nonetheless, there is a crucial need for developing a mechanism that would ensure protective safeguards to climate-displaced persons. Hence, this paper contends that such development requires a re-evaluation of the principle of ‘non-refoulement’ in order to bridge the protection gap. The essence of non-refoulement warrants the protection of life and freedom by prohibiting contracting parties from expelling or returning persons who are given the status of ‘refugees’ by virtue of the Convention. Going beyond the conventional paradigms, this principle must be moulded to incorporate the climate displaced persons. Lack of recognition of climate-displaced persons as refugees under the Convention must not interfere with the obligation of states to protect climate-displaced persons. This paper advocates for a conceptual transition in the application of non-refoulement where the state responsibility remains grounded in ‘risk or harm based’ protection rather than ‘persecution based’ protection. Envisioning non-refoulement beyond the mere limits of persecution will aid in addressing the lacuna existing in the international law framework. Extending this ambit will offer an ‘integrated approach of refugee law and human rights law’ whereby the ‘principle of non-refoulement’ will guarantee the protection of rights of persons who are affected by climate-induced displacement.

Keywords: Migration, Refugee, Persecution, Climate-displaced, Non-refoulement, Protection.

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1 INTRODUCTION

‘It is for the people to determine the destiny of the territory and not the territory the destiny of the people.’¹

The rapid growth in drastic environmental conditions has gradually made displacement a matter of compulsion rather than choice. The latest report by the ‘Internal Displacement Monitoring Centre’ documents the displacement of 45.8 million people due to disasters in 2024 which accounts for nearly seventy percent of the total displacements.² Climatic events including excessive heavy rainfall, continued drought, tremendous cyclones, etc., have led 90 out of 123 million displaced people to survive in countries with utmost exposure to hazardous environmental conditions.³ The ‘issue of climate change’ acts as a ‘threat multiplier’ which leads to the increase in vulnerabilities relating to ‘poverty’, ‘insecurity’ and ‘weak governance’.⁴ The UNHCR identified this issue of climate crisis as a ‘risk-multiplier’ that exacerbates and amplifies prevailing ‘inequalities’ and ‘injustices’ comprising the repercussions of ‘conflict’, ‘violence’ and ‘forced displacement’ within and across borders.⁵ Declaration of *Ecosystem Threat Register (ETR)* in 2018 revealed that not less than 1.2 billion people have high risks of being displaced due to these threats by 2050.⁶ Despite this accelerating rate of ‘climate-displaced’ persons, international refugee law exposes a structural gap by not recognizing climate hazards as a well-grounded reason for which the fear of persecution can arise thereby repudiating such individuals from the status of a refugee.

The existing international framework elucidates a refugee as an individual who has a “well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion”.⁷ This narrow definition limits the application of the same to ‘climate-displaced’ persons. The ‘UN Framework Convention on Climate Change’ endorsed the *Cancun Agreement* which urged States to incorporate measures

¹ Western Sahara, Advisory Opinion, 1975 I.C.J. 12, ¶ 122 (Oct. 16).

² INTERNAL DISPLACEMENT MONITORING CTR., GLOBAL REPORT ON INTERNAL DISPLACEMENT (2025), https://api.internal-displacement.org/sites/default/files/publications/documents/idmc-grid-2025-global-report-on-internal-displacement.pdf?_gl=1*h4d1vl*_ga*MTg2MjI5NDEwMi4xNzc2MzkyNjA4*_ga_PKV55L6N8V*c zE3NzY0MjU0NDQkbzIkZzAkdDE3NzY0MjU0NDQkajYwJGwJGgw.

³ *How Climate Change Impacts Refugees and Displaced Communities*, USA FOR UNHCR, THE UN REFUGEE AGENCY (Apr. 22, 2026), <https://www.unrefugees.org/news/how-climate-change-impacts-refugees-and-displaced-communities/>.

⁴ Fatemeh Doshman Kosh, *Climate Refugees in the Crucible of International Law: From Identifying Normative Gaps to Proposing a Comprehensive Protection Framework a Synthetic Analysis of Contemporary Legal Scholarship and Institutional Approaches* (Apr. 20, 2026), <https://dx.doi.org/10.2139/ssrn.6309382> [<https://perma.cc/2LXN-HHM7>].

⁵ Nina Lakhani, *Climate Disasters Displaced 250 Million People in Past 10 Years, UN Report Finds*, GUARDIAN (Nov. 19, 2025), <https://www.theguardian.com/environment/2025/nov/09/climate-disasters-displaced-250-million-people-in-past-10-years-un-report-finds>.

⁶ *Climate Refugees – the World’s Forgotten Victims*, WORLD ECON. F. (June 18, 2021), <https://www.weforum.org/stories/2021/06/climate-refugees-the-world-s-forgotten-victims/>.

⁷ Convention Relating to the Status of Refugees, 1951, 189 U.N.T.S. 137 (entered into force Apr. 22, 1954).

to “enhance understanding, coordination and cooperation with regard to climate change induced displacement.”⁸ Adoption of ‘The New York Declaration for Refugees and Migrants’ by the ‘UN General Assembly in 2016’ endorsed the development of two global domains – ‘refugees’ and ‘other migrants.’⁹ The ‘Global Compact for Safe, Orderly and Regular Migration’ along with the COP24 (‘24th Conference of the Parties to the United Nations Framework Convention on Climate Change’) stressed on the dire circumstances of persons displaced due to climate change.¹⁰ Ian Fry, ‘special rapporteur on human rights and climate change to the United Nations’, recommended the adoption of a new protocol to the 1951 Geneva Convention¹¹ which would focus on individuals displaced due to climate change in its entirety.¹² Despite these recurring negotiations and several international instruments, climate displaced persons have neither been accorded a definition nor any legal protection. Hence the question persists – ‘when do individuals classify as climate refugees?’

The first attempt to define the category of ‘climate-displaced persons’ as ‘environmental refugees’ was made by the UNEP researcher, *Essam El-Hinnawi*, who elaborated ‘environmental refugees’ as “those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affected the quality of their life.”¹³ Nevertheless, this umbrella ambit was criticised on the basis of its generic criteria and no distinction among types of environmental refugees. The ‘OAU Convention’, 1969¹⁴ was another endeavour to extend protective safeguards to climate-displaced persons by clarifying that a “Refugee shall also apply to every person who, owing to external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his country of origin or nationality, is compelled to leave his place of habitual residence in order to seek refuge in another place outside his country of origin or nationality” but it failed in terms of providing global protections.¹⁵

Gradually, the term ‘climate refugees’ became the most commonly used expression which can be elucidated as “people who have to leave their habitats, immediately or in the near future,

⁸ Shaindl Keshen, Steven Lazickas & Lucía Solórzano, *Non-refoulement: A Legal Hope for the Protection of Environmental Migrants and Their Rights*, INT’L ORG. & UNITED NATIONS STUD. (Nov. 3, 2021), <https://multilateralism.sipa.columbia.edu/news/non-refoulement-legal-hope-protection-environmental-migrants-and-their-rights>.

⁹ EUR. PARLIAMENTARY RSCH. SERV., THE CONCEPT OF ‘CLIMATE REFUGEE’ TOWARDS A POSSIBLE DEFINITION (2023), [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698753/EPRS_BRI\(2021\)698753_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698753/EPRS_BRI(2021)698753_EN.pdf).

¹⁰ *Id.*

¹¹ Convention Relating to the Status of Refugees, 1951, 189 U.N.T.S. 137 (entered into force Apr. 22, 1954).

¹² Julian Hatter, “Climate Refugees” Do Not Exist as a Concept—But Countries Are Testing New Approaches to Offer Protection, MIGRATION POL’Y INST. (Mar. 19, 2026), <https://www.migrationpolicy.org/article/climate-migration-law>.

¹³ Diane C. Bates, *Environmental Refugees? Classifying Human Migrations Caused by Environmental Change*, 23 SPRINGER 466 (2002).

¹⁴ OAU Convention Governing the Specific Aspects of Refugee Problems in Africa, 1969, 1001 U.N.T.S. 45 (entered into force June 20, 1974).

¹⁵ Tyler Bergeron, *No Refuge for ‘Climate Refugees’ in International Law*, ENV’T, NAT. RES., & ENERGY L. BLOG (Jan. 20, 2023), https://law.lclark.edu/live/blogs/200-no-refuge-for-climate-refugees-in-international#_ftn8.

because of sudden or gradual alterations in their natural environment related to at least one of three impacts of climate change: rise in sea level, extreme weather events, and drought and water scarcity."¹⁶ Michael W. Doyle attempted to define 'climate refugees' as "someone liable to being returned to a country experiencing adverse climate effects that were – contributing to an increasing threat of loss of life, resulting in harms to family life or indigenous culture, not being adequately addressed by local policy measures and not supported by global measures for enhancing resilience".¹⁷ Various intergovernmental agencies prefer the term 'environmentally displaced persons' as they choose to restrict the usage of the term 'refugees' to transboundary movement or flight where there lies a fear of 'persecution' as per the 'Geneva Convention Relating to the Status of Refugees', 1951.¹⁸ Hence, the fundamental challenge that arises is that climate refugees are unable to assert their well-founded fear of persecution and thereby membership in one of the groups highlighted in the 'Geneva Convention, 1951'¹⁹ which excludes them from the bracket of 'refugees'.²⁰ This further leads to the elimination of climate-displaced persons from the implementation of the 'principle of non-refoulement.'

2 CONTOURS OF PERSECUTION

There is a dearth of a precise definition of 'persecution' under the present 'international refugee law' framework. 'Article 33 of the Geneva Refugee Convention, 1951'²¹ only outlines the components that comprise 'persecution' for the 'application of non-refoulement' rather than providing a comprehensive definition. Considering persecution as a pivotal constituent which underpins the premise of non-refoulement, it becomes crucial to establish and articulate its contours.

In 1991, a more principled framework was formulated by Hathaway who linked persecution with the denial of internationally recognised rights.²² Persecution can be interpreted as "serious human rights violations, including a threat to life or freedom, as well as other kinds of serious

¹⁶ Frank Biermann & Ingrid Boas, *Climate Change and Human Migration: Towards a Global Governance System to Protect Climate Refugees*, EUR. COMM'N (2010), https://www.globalgovernancewatch.org/library/doclib/20160205_ClimateChangeandHumanMigration.pdf.

¹⁷ Michael W. Doyle, "Forced Migrants," *Human Rights, and "Climate Refugees"*, CAMBRIDGE UNIV. PRESS (2025), <https://www.cambridge.org/core/books/lawless-zones-rightless-subjects/forced-migrants-human-rights-and-climate-refugees/1198282269488672E98798EC044763A9>.

¹⁸ Frank Biermann & Ingrid Boas, *Climate Change and Human Migration: Towards a Global Governance System to Protect Climate Refugees*, EUR. COMM'N (2010), https://www.globalgovernancewatch.org/library/doclib/20160205_ClimateChangeandHumanMigration.pdf.

¹⁹ Convention Relating to the Status of Refugees, 1951, 189 U.N.T.S. 137 (entered into force Apr. 22, 1954).

²⁰ Nandini Praveen, *Climate Refugees: A Comprehensive and Legal Analysis to Understanding Climate Change-Induced Migration and Displacement*, 2 J.L. & EMERGING TECH. 42 (2022).

²¹ Convention Relating to the Status of Refugees, 1951, 189 U.N.T.S. 137 (entered into force Apr. 22, 1954).

²² Daniel Wilsher, *Between Martyrdom and Silence: Dissent, Duress, and Persecution as the Suppression of Human Rights Under the Refugee Convention*, 33 INT'L J. REFUGEE L. (2021).

harm, as assessed in light of the opinions, feelings and psychological make-up of the applicant."²³ Article 9 of Council Directive 2004/83/EC explicates 'acts of persecution' as "*acts which are sufficiently serious to constitute a 'severe violation of basic human rights.'* This can be either in their 'nature or repetition' or through an 'accumulation of various measures.'"²⁴ Persecution was articulated and defined by Lord Hoffmann in the formula "*Persecution = Serious Harm + The Failure of State Protection*".²⁵

Although the concept of persecution is inherently anchored in severe violations of human rights and imposition of grave harm, its legal formulation is restricted to certain listed grounds specified under the Refugee Convention, 1951²⁶. This limited enumeration precludes climate-displaced persons from attaining refugee status and further protection by non-refoulement. This normative lacuna emphasises the need for alternative avenues to provide protection to individuals who are displaced due to climatic changes. One of the avenues can be extension of the applicability of non-refoulement beyond its conventional paradigms by incorporating a human rights approach.

3 "NON-REFOULEMENT" – A 'JUS COGENS NORM'?

The literal interpretation of 'Article 33'²⁷ provides that "no state shall expel or return a refugee to their own territory where his life or freedom would be threatened on account of his race, religion, nationality, membership of a particular social group or political opinion". Article 42(1) of the Refugee Convention²⁸ provides an affirmation regarding the immunity of Article 33 from any kind of reservation. A 'negative obligation' is imposed on States by virtue of Article 33²⁹ which prevents the exposure of individuals to persecution.³⁰

Various scholars advance the argument of according the status of '*jus cogens*' to this principle on the basis of its inalienability.³¹ Currently, it has been clarified that the 'principle of non-refoulement' comprises a part of 'customary international law' which makes it binding on all States irrespective of them being a party to the 'Refugee Convention, 1951'.³² The *San*

²³ Janna Weßels, *Sexual Orientation in Refugee Status Determination* (RSC Working Paper No. 74, 2011), <https://www.rsc.ox.ac.uk/files/files-1/wp74-sexual-orientation-refugee-status-determination-2011.pdf>.

²⁴ Richmond Chambers, *What Is "Persecution" Under the Refugee Convention?* (Jan. 31, 2020), <https://immigrationbarrister.co.uk/what-is-persecution-under-the-refugee-convention/>.

²⁵ *Id.*

²⁶ Convention Relating to the Status of Refugees, 1951, 189 U.N.T.S. 137 (entered into force Apr. 22, 1954).

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*

³⁰ Siddeeqa Iram, *Reimagining the Asylum Law in India: A Study on the Duty of Non-Refoulement*, 36 NAT'L L. SCH. INDIA REV. (2025).

³¹ Aoife Duffy, *Expulsion to Face Torture? Non-refoulement in International Law*, OXFORD UNIV. PRESS (June 25, 2008), <https://www.eui.eu/Documents/DepartmentsCentres/AcademyofEuropeanLaw/CourseMaterialsHR/HR2010/Chetail/ChetailReading1.pdf>.

³² Jean Allain, *The Jus Cogens Nature of Non-refoulement*, 13 INT'L J. REFUGEE L. (2001).

Remo Declaration, ratified by the ‘International Institute of Humanitarian Law’ in alliance with UNHCR explicitly advocates the ‘status of non-refoulement’ as a foundational part of ‘customary international law.’³³ The principle is now recognised as a norm of customary international law as it fulfils the criteria of ‘*consistent State practice*’ and ‘*opinio juris*’.³⁴ The UNHCR emphasized that ‘the principle of non-refoulement’ has surpassed its conventional origin to be realised as a norm of customary international law contemplating a mutual understanding of its mandatory character in the sphere of international law.³⁵ It is deliberated that the doctrine of non-refoulement is that ‘*jus cogens norm*’ that directly accords protection to other absolute rights including the ‘*right to life*’ which enhances its binding nature.³⁶ It is also argued that this ‘principle of non-refoulement’ is an ‘*obligation erga omnes partes*’ due to three main factors – objective of the Refugee Convention³⁷, shared interest of state parties in following the compliances under the treaty and its absolute nature.³⁸ Hence, it can be clearly established that non-refoulement is inherent and non-negotiable and thus implementation of the same must not be based on any form of discrimination.

4 NON-REFOULEMENT BEYOND REFUGEE LAW

There is paramount necessity to recognise that the ‘principle of non-refoulement’ is not wholly rooted in the ‘Refugee Convention, 1951’³⁹. Its normative framework pervades through a broad spectrum of international instruments which constructs ‘non-refoulement’ as a more comprehensive obligation. Gradually over the decades, the ‘principle of non-refoulement’ has been embedded in several human rights instruments thereby underscoring its core purpose – ‘protection of human dignity’ and ‘prevention of harm.’ The regime of ‘international human rights law’ has widened the ambit of non-refoulement by requiring States to provide shelter to non-nationals in circumstances where their ‘life can be

³³ GLOB. STRATEGIC LITIG. COUNCIL, EXPERT REPORT ON NON-REFOULEMENT AS A PRINCIPLE OF CUSTOMARY INTERNATIONAL LAW (2023), <https://www.global-council.org/resources/expert-report-on-non-refoulement-as-a-principle-of-customary-international-law>.

³⁴ Ruchi Lal, *The Principle of Non-Refoulement in International Law and Its Applicability in Protection of Refugees in India*, 10 RES. J. HUMAN. & SOC. SCI. (2019).

³⁵ Atle Grahl-Madsen, *Commentary on the Refugee Convention 1951*, DIV. OF INT’L PROT. OF THE UNITED NATIONS HIGH COMM’R FOR REFUGEES (1997), <https://www.unhcr.org/sites/default/files/legacy-pdf/3d4ab5fb9.pdf>.

³⁶ Helen Kerwin, *Teitiota and Climate Non-Refoulement: The International Law Obligation to Create Domestic Protection Mechanisms*, 59 U.S.F. L. REV. 502 (2025).

³⁷ Convention Relating to the Status of Refugees, 1951, 189 U.N.T.S. 137 (entered into force Apr. 22, 1954).

³⁸ Pavitra Khaitan & Jvalita Krishan, *The Obligation of Non-Refoulement and Its Erga Omnes Partes Character*, HARV. INT’L L.J. (Dec. 24, 2022), https://journals.law.harvard.edu/ilj/2022/12/the-obligation-of-non-refoulement-and-its-erga-omnes-partes-character/#_ftn47.

³⁹ Convention Relating to the Status of Refugees, 1951, 189 U.N.T.S. 137 (entered into force Apr. 22, 1954).

threatened' or be 'subjected to torture or inhuman or degrading treatment.'⁴⁰ *Ashfaq Khalfan* and *Chiara Ligouri* argued that the benefits obtained from the 'perspective of human rights' are three-fold. First, it reinforces the efforts for 'climate justice' at the global level; secondly, the ambit of 'international human rights' law advocates for broader 'legally binding obligations' which assist the States in designing more efficacious policies and the third advantage stems from the wide spectrum of 'human rights tools' which aids in seeking action and supervising outcomes.⁴¹

Obligation under non-refoulement has been expressly included in instruments like '*Convention against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment*'⁴² and '*International Convention for the Protection of All Persons from Enforced Disappearances*'⁴³. It can be also inferred from provisions included in '*International Covenant on Civil and Political Rights*', '*the Convention on the Rights of the Child*' and '*International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families*'.⁴⁴ Dispute settlement bodies like the 'International Court of Justice' and the 'European Court of Human Rights' asserted that the principle of non-refoulement is "*fundamental part of international human rights law, binding even on states that are not parties to the 1951 Refugee Convention.*"⁴⁵ A combined reading of 'international refugee law' and 'international human rights law' prescribes three conditions based on which the protection under this principle is extended – when an individual is within State jurisdiction, when a person is fleeing due to armed conflict and when an individual is compelled to leave due to direct and indirect measures.⁴⁶ Through this incorporation, this principle can provide 'protection to any individual under the jurisdiction of a State' subjected to the presence of any form of pertinent danger.⁴⁷

⁴⁰ INT'L. ORG. FOR MIGRATION, IML INFORMATION NOTE ON THE PRINCIPLE OF NON-REFOULEMENT (Oct. 13, 2023), https://www.iom.int/sites/g/files/tmzbdl2616/files/our_work/ICP/IML/2023-updated-impl-information-note-on-non-refoulement.pdf.

⁴¹ Jane McAdam & Sanjula Weerasinghe, *Climate Change and Human Movement* (UNSW Law Research Series No. 47, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3682410.

⁴² Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, 1984, 1465 U.N.T.S. 85 (entered into force June 26, 1987).

⁴³ International Convention for the Protection of All Persons from Enforced Disappearance, 2006, 2716 U.N.T.S. 3 (entered into force Dec. 23, 2010).

⁴⁴ INT'L. ORG. FOR MIGRATION, IML INFORMATION NOTE ON THE PRINCIPLE OF NON-REFOULEMENT (Oct. 13, 2023), https://www.iom.int/sites/g/files/tmzbdl2616/files/our_work/ICP/IML/2023-updated-impl-information-note-on-non-refoulement.pdf.

⁴⁵ GLOB. STRATEGIC LITIG. COUNCIL, EXPERT REPORT ON NON-REFOULEMENT AS A PRINCIPLE OF CUSTOMARY INTERNATIONAL LAW (2023), <https://www.global-council.org/resources/expert-report-on-non-refoulement-as-a-principle-of-customary-international-law>.

⁴⁶ Tilman Rodenhäuser, *The Principle of Non-Refoulement in the Migration Context: 5 Key Points*, HUMANITARIAN L. & POL'Y (Mar. 30, 2018), <https://blogs.icrc.org/law-and-policy/2018/03/30/principle-of-non-refoulement-migration-context-5-key-points/>.

⁴⁷ *Id.*

5 REIMAGINING NON-REFOULEMENT FOR CLIMATE REFUGEES

Jesús Verdú Baeza argues that one of the legal responses to climate-induced forced displacement would be to establish a connection between the notion of climate refugees and the necessity for ‘increased protection of human rights’ through a widened interpretation of prevailing international instruments.⁴⁸ Under ‘international refugee law’, the applicability of ‘non-refoulement’ is dependent on an existing fear of persecution which further denies recognition to climate-displaced individuals as ‘refugees’. Nonetheless, the ‘Preamble of the Refugee Convention’, 1951⁴⁹ itself emphasizes on “*fundamental rights and freedoms of human beings without discrimination*” as affirmed by ‘Charter of the United Nations and the Universal Declaration of Human Rights.’⁵⁰ Thus, the bedrock of the notions of ‘persecution’ and ‘non-refoulement’ can be considered to be rooted in ‘protection of human rights.’ This perspective can entail climate-induced displacement to be violative of human rights as massive harm is caused to them independent of their status of recognition under the Refugee Convention, 1951⁵¹.

The landmark ruling in *Teitiota v. New Zealand*⁵² significantly strengthened the status of the ‘principle of non-refoulement’ as a core obligation within the purview of ‘international human rights law’. This case revolved around *Ioane Teitiota* who claimed his deportation to Kiribati to be violative of his ‘right to life’ owing to the severe life threats posed by climatic factors on the small Pacific Island. Although the U.N. Human Rights Committee concluded that the present case did not show any deficiency, it went on to set a global precedent by upholding that “*a State will be in breach of its human rights obligations if it returns someone to a country where – due to the climate crisis – their life is at risk, or in danger of cruel, inhuman or degrading treatment triggered.*”⁵³ The Committee had stressed upon the existence of an actual risk of ‘irreparable harm’ as a requisite for deriving state protection for future cases. It was further analysed by the Committee that States have obligations under the ‘International Covenant on Civil and Political Rights (ICCPR)’⁵⁴. It emphasized that “*the obligation not to extradite, deport or otherwise transfer pursuant to article 6 of the Covenant may be broader than the scope of the principle of non-refoulement under international refugee law, since it may also require the protection of [non-citizens] not entitled to refugee status. Thus, States parties must allow all asylum seekers claiming a*

⁴⁸ Jesús Verdú Baeza, *Climate Refugees, Human Rights and the Principle of Non-Refoulement*, 11 EUROMEDITERRANEAN J. INT’L L. & INT’L REL. 6 (2023).

⁴⁹ Convention Relating to the Status of Refugees, 1951, 189 U.N.T.S. 137 (entered into force Apr. 22, 1954).

⁵⁰ *Id.*

⁵¹ *Id.*

⁵² *Ioane Teitiota v. New Zealand*, Judgement, CCPR/C/127/D/2728/2016 (U.N. Hum. Rts. Comm. Jan. 7, 2020).

⁵³ Melissa Godin, *Climate Refugees Cannot Be Forced Home*, U.N. Panel Says in Landmark Ruling, TIME (Jan. 20, 2020), <https://time.com/5768347/climate-refugees-un-ioane-teitiota/>.

⁵⁴ International Covenant on Civil and Political Rights, 1966, 999 U.N.T.S. 171 (entered into force Mar. 23, 1976).

real risk of a violation of their right to life in the State of origin access to refugee or other individualized or group status determination procedures that could offer them protection against refoulement.”⁵⁵ The court also upheld that “environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life.”⁵⁶ Similarly, the case of *Portillo Caceres v. Paraguay*⁵⁷ highlighted that environmental harm leads to the violation of multiple human rights enshrined in ‘ICCPR (International Covenant on Civil and Political Rights)’.⁵⁸ Thus, these judgements advocated for a wider interpretation of the ‘principle of non-refoulement’ which would ensure protection and dignity to those individuals who are subjected to climate-induced displacement.

The fundamental principle emerging from these rulings is the ‘international protection’ and ‘assistance’ of climate displaced persons by States even though they are not recognised as refugees *stricto sensu*.⁵⁹ Extended application of ‘principle of non-refoulement’ combined with ‘international human rights law’ imposes a necessary obligation on States not to return climate displaced persons to their countries where there lies a risk of ‘serious human rights violations resulting from climate change.’ In reference to the ‘protection of human rights in the context of climate change’, the ‘United Nations Special Rapporteur’ stated that “there is an urgent need to provide a legal regime to protect the rights of persons displaced across international borders due to climate change.”⁶⁰ This necessity of protection of climate displaced persons flows from their ‘individual humanitarian needs’ which surpasses the sovereignty of a State and the ‘interests of the state of origin, the transit state and the destination state’.⁶¹ This evolving jurisprudence throws light on the dire need to strengthen a human-rights oriented structure of the principle of non-refoulement that provides comprehensive protection to climate-displaced persons despite no refugee status.

⁵⁵ Helen Kerwin, *Teitiotia and Climate Non-Refoulement: The International Law Obligation to Create Domestic Protection Mechanisms*, 59 U.S.F. L. REV. 502 (2025).

⁵⁶ Jane McAdam, *Current Developments – Protecting People Displaced by the Impacts of Climate Change: The UN Human Rights Committee and the Principle of Non-Refoulement*, 114 AM. J. INT’L L. 717 (2020).

⁵⁷ *Portillo Caceres v. Paraguay*, Judgement, CCPR/C/126/D/2751/2016 (U.N. Hum. Rts. Comm. July 25, 2019).

⁵⁸ Megan Scopp, *Climate-Induced Displacement: Establishing Legal Protections for Climate Refugees* (2025), <https://dx.doi.org/10.2139/ssrn.5126351>.

⁵⁹ Andrea Caligiuri, *Invisible in Law: Environmental and Climate Migrants and the Gap in International Protection*, 111 QUESTIONS INT’L L., ZOOM-IN 2 (2025).

⁶⁰ Philippe A. Gagnon & Alexia Lagacé-Roy, *Climate Change and Migration: The State of International Refugee and Human Rights Law*, LIBR. OF PARLIAMENT HILLSSTUDIES (Nov. 11, 2025), https://lop.parl.ca/sites/PublicWebsite/default/en_CA/ResearchPublications/202402E.

⁶¹ Carina Dietmayer, *Fleeing the Climate: The Need for Protection of Climate Refugees in the Light of International Law*, 37 PACE INT’L L. REV. art. no. 6, at 306 (2025).

6 CONCLUSION

The existing international refugee legal framework remains structurally inadequate in addressing the ‘issue of climate refugees.’ They continue to remain outside the purview of defined refugees under the ‘Refugee Convention, 1951’⁶². Hence, recourse must be taken by extending the State obligation under the ‘principle of non-refoulement’ to provide protection instead of grounding the obligation in defined conventional ‘fear of persecution’. Recent judicial jurisprudence reflects on the competence of international human rights law to deal with climate-induced displacement.⁶³ It verified that the integration of human rights perspective into non-refoulement requires States ‘not to send individuals back to countries where drastic climate changes would expose them’ to ‘life threatening risks, cruel, inhuman or degrading treatment.’⁶⁴ The conventional application of the ‘principle of non-refoulement’ is based on the premise of ‘well-founded fear of persecution’ but persecution itself is not an isolated legal construct. Rather, the essence of persecution is derived from severe violations of human rights which further underpins the concept of ‘non-refoulement.’ The ‘principle of non-refoulement’ must be construed as a mechanism aiming at safeguarding and protecting human rights that can extend beyond the mere perseverance of a ‘formal refugee status’. The *‘jus cogens’* character of the ‘principle of non-refoulement’ and its recognition as customary international law provides a binding obligation on States to not practise refoulement which must be made applicable for climate refugees as well. Hence, States must have a legal duty to incorporate climate-displaced individuals into their territories despite no refugee status granted under the ‘Convention Relating to the Status of Refugees, 1951’ and the ‘1967 Protocol Relating to the Status of Refugees.’

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⁶² Convention Relating to the Status of Refugees, 1951, 189 U.N.T.S. 137 (entered into force Apr. 22, 1954).

⁶³ Jefferi Hamzah Sendut, *Climate Change as a Trigger of Non-Refoulement Obligations Under International Human Rights Law*, EJIL:TALK! (Feb. 6, 2020), <https://www.ejiltalk.org/climate-change-as-a-trigger-of-non-refoulement-obligations-under-international-human-rights-law/>.

⁶⁴ Sissy Katsoni & Jan-Phillip Graf, *The Future of “Climate Refugees” in International Law*, VÖLKERRECHTSBLOG (June 5, 2021), <https://voelkerrechtsblog.org/the-future-of-climate-refugees-in-international-law/>.

CHAPTER 6

Secondary Sanctions and the Fragmentation of International Law: Sovereignty, Supply Chains, and the Rise of Economic Coercion

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In contemporary geopolitics it is evident that secondary sanctions act as a primary tool to exert influence beyond one's territorial jurisdiction. These sanctions are usually used by powerful countries such as the USA to exert their influence on third party countries by restricting their trade with other countries with primary sanctions. Though usually such actions are defended as "actions taken in the interest of national security", these sanctions are used to force a State's will upon others and thereby it bypasses the multilateral institutions present in the international legal system.

Existing scholarship focuses primarily on the legality of secondary sanctions under international law, with respect to principles of sovereignty and non-intervention. However, this paper will focus on the recent developments such as the Russia-Ukraine conflict and the instability in the Middle East as these have created a need for a wider and more integrated analysis.

This paper argues that secondary sanctions are reshaping international legal order, global trade and supply chains. The paper will first examine the tension between extraterritorial jurisdiction and state sovereignty under international law. It will also study the impact of secondary sanctions on global supply chains and their role in 'de-risking' and trade realignment. Further the paper will analyse the rise of countermeasures such as anti-sanctions law and blocking statutes, which indicate increasing fragmentation of legal norms across jurisdictions.

Thus, this paper moves beyond the traditional legality debate and highlights the limited capacity of international law to regulate economic coercion in an increasingly multipolar world. This paper will employ a doctrinal method of research which will include the use of both primary sources such as international charters and secondary sources like journal articles.

Keywords: Secondary sanctions, Supply chains, Coercion, De-risking.

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1 INTRODUCTION

It is a common occurrence in the contemporary world for states or rather their leaders and officials to violate the fundamental rights of both their compatriots and outsiders through blatantly abrasive policies or actions. For instance, in 2022, Russia violated the sovereignty and territorial integrity of Ukraine by conducting a full-scale military invasion to expand its control. Such actions on an international level often attract opposition from other countries in the form of “sanctions”.¹ It is pertinent to understand that in modern international relations, States no longer exert influence on one another solely through military force, as economic instruments like sanctions are increasingly being utilised among the States to control the behaviour of each other.²

The use of such economic instruments is not a point of conflict, but the extent to which states now deploy such sanctions to govern the conduct of other states is contentious. Initially, states prominently employed only primary sanctions against a specific state. “Primary sanctions” refer to direct economic restrictions, such as trade embargoes or financial restrictions like blocking foreign assets or assistance, imposed on its own citizens to prohibit transactions with a targeted foreign state.³ But soon enough, states started to exert extra pressure on the target state through the use of secondary sanctions. It is often used as a tool to strengthen primary sanctions and involves penalising third-party countries that engage in economic relations with countries with primary sanctions⁴.

It is the nature of secondary sanctions to reach beyond territorial boundaries to coerce third-party States into compliance with the demands of another state’s foreign policy. It is this nature that creates a tension in the realm of international law.⁵ The USA is one of the most prominent countries that utilises these secondary sanctions to a large extent in the modern world. Making use of its central position in the global economy, it has forced foreign states to choose between halting trade with USA’s sanction targets or forfeiting access to the lucrative US market.⁶ Recently the USA increased the imposition of its secondary sanctions targeting foreign entities aiding Russia, Iran and North Korea. For example, the

¹ Dana Mohammed Danish Aladdin Sajadi, *The Russia-Ukraine War: Causes, Consequences and Solutions*, 5 EJMS 28, 29 (2024).

² Jeffrey A. Meyer, *Second Thoughts on Secondary Sanctions*, 30 U. PA. J. INT’L L. 905, 906–09 (2009).

³ Sarah Krulikowski, *Economic Sanctions: An Overview* (U.S. Int’l Trade Comm’n 2024).

⁴ Tom Ruys & Cedric Ryngaert, *Secondary Sanctions: A Weapon Out of Control? The International Legality of, and European Responses to, US Secondary Sanctions*, BRIT. Y.B. INT’L L. (2020).

⁵ Daniel Meagher, *Caught in the Economic Crosshairs: Secondary Sanctions and the American Sanctions Regime*, 89 FORDHAM L. REV. 1000, 1000–10 (2020).

⁶ Ruys & Ryngaert, *supra* note 4.

USA tightened secondary sanctions to pressure foreign firms from aiding Russia's war effort on Ukraine, specifically through oil transactions with firms like Rosneft and Lukoil.⁷

It is important to understand that traditionally, international law has grounded itself upon the principles of sovereignty, territorial jurisdiction and non-intervention. Secondary sanctions break the tradition of a State's power generally being confined to its territorial boundaries and allow the State to regulate the conduct of foreign entities with no direct territorial or jurisdictional link to the sanctioning State. While the existing scholarship primarily focuses on the legality of such sanctions, this approach remains limited in addressing their broader systemic impact.

This paper will hence work towards understanding the manner in which secondary sanctions actively reshape global trade and supply chains. Their influence on corporate behaviour, compelling economic 'de-risking' and contribution to realignment of international commerce will also be studied. An analysis on the emergence of countermeasures such as blocking statutes and anti-sanctions laws and their contribution to increasing fragmentation of legal norms across jurisdictions will also be studied. The paper argues that the growing use of secondary sanctions reflects a shift from a rule-based system of governance towards a more fragmented, power-driven framework and hence raises concerns about the legitimacy, coherence and trajectory of international law.

2 LEGAL FOUNDATIONS AND THE LIMITS OF INTERNATIONAL LAW

2.1 Understanding Secondary Sanctions

The use of economic sanctions as an instrument of political policy dates back several years, and they were traditionally used as "primary sanctions". Specifically, primary sanctions are the prohibitions on any kind of economic relations with the targeted regime for citizens and entities within the sanctioning country.⁸ Thus, the United States prohibits its citizens and corporations incorporated in the US from dealing economically with countries such as Iran and Cuba.⁹

Nonetheless, with changing times, the number of "secondary sanctions" has been increasing because of the globalization of trade. In contrast to primary sanctions, secondary sanctions are targeted at third-party countries and actors.¹⁰ Specifically, secondary sanctions

⁷ Amitabh Singh, *India's Tryst with Secondary Sanctions*, OBSERVER RSCH. FOUND. (July 30, 2025), <https://www.orfonline.org/expert-speak/india-s-tryst-with-secondary-sanctions>.

⁸ Meagher, *supra* note 5, at 1004.

⁹ Cecile Fabre, *Secondary Economic Sanctions*, 69 CURRENT LEGAL PROBS. 259, 261 (2016).

¹⁰ Ruys & Ryngaert, *supra* note 4, at 7.

are meant to prevent non-nationals and foreigners from having any dealings with or support of the regime that is subject to the primary sanctions.¹¹

Secondary sanctions are built on the idea of using the centrality of the sanctioning state in the world economy. Namely, secondary sanctions present a coercive option to neutral and third-party actors. This allows them to either stop dealing with the targeted state and avoid economic sanctions or proceed with economic transactions with the state under sanctions and suffer the dire consequences.¹² What makes the definition of secondary sanctions distinctive and what sets them apart from primary sanctions is that they impact third-party actors. Therefore, secondary sanctions weaponise global chokepoints in order to increase the pressure on the target country through the compliance of third parties who are forced to stop their relations with the targeted nation.¹³

2.2 Jurisdiction in International Law

The aggressive expansion of secondary sanctions creates serious questions regarding prescriptive jurisdiction, which can be defined as a state's competence to impose its law on particular actors or activities. According to customary international law, there exist two fundamental principles of jurisdictional power: territoriality and nationality. Specifically, the territoriality principle assumes that any country has the right to regulate the actions committed within its territory, while the principle of nationality grants a sovereign to rule over its nationals' actions regardless of the territory where the latter are committed.¹⁴

However, secondary sanctions are an attempt by the sanctioning countries to exert regulatory control over third-party nationals whose actions occur outside of the territory of the sanctioning state. In order to justify the extraterritorial reach of the legislation, sanctioning countries usually invoke the "effects doctrine".¹⁵ According to this doctrine, a country can extend the scope of its legal jurisdiction to extraterritorial conduct that is intended to and actually produces substantial effects within the country.¹⁶

The effects doctrine plays a vital role in explaining the extraterritoriality of laws and their legal bases. However, applying this doctrine in the context of secondary sanctions raises controversy. One can easily argue that the "effects" that a third-party company produces when trading with a sanctioned regime are too remote and weak to be viewed as a

¹¹ Meyer, *supra* note 2, at 906.

¹² Ruys & Ryngaert, *supra* note 4, at 1.

¹³ Dongan Tan, *The Decoupling Dilemma: How US Sanctions Erode Global Economic Governance*, 79 INT'L ORG. S134, S136 (2025).

¹⁴ Fabre, *supra* note 9, at 273–77.

¹⁵ Tobias Stoll et al., *Extraterritorial Sanctions on Trade and Investments and European Responses* 1, 53 (Eur. Parliament, PE 653.618, 2020).

¹⁶ *Id.*

substantial effect within the territory of the sanctioning country.¹⁷ For example, selling automotive parts to Iran by a company from one of the European countries does not threaten the territory of the United States in any way. Moreover, claiming that transactions which go through correspondent U.S. banks should be considered as an “exportation of services” is highly controversial and does not create a substantial link to the territory of the sanctioning country.¹⁸

2.3 Sovereignty and Non-Intervention

The use of extraterritorial jurisdiction inevitably conflicts with the most fundamental international principles of state sovereignty and non-intervention. Non-intervention means that every sovereign country enjoys the freedom to conduct itself both domestically and internationally, free from external pressure. In other words, the “*domaine réservé*”, as described by the International Court of Justice, guarantees that the sovereign country will enjoy full freedom of deciding its foreign policies, economic system, and international trading partners.¹⁹

However, imposing sanctions on foreign countries violates this fundamental principle. Sanctions put tremendous pressure on foreign governments and companies to give up their legitimate economic practices, because of the severe consequences that will follow if they do not comply. Thus, imposing secondary sanctions on countries is equal to forcing them to submit their sovereign rights and to adapt to the foreign policies of the sanctioning state.

2.4 The Legality Debate

The debate on the legality of secondary sanctions tends to be rather polarized and revolves around putting up national interests against the sovereignty of the international community. Supporters of secondary sanctions usually try to evade discussions on the effects doctrine altogether and view the imposition of sanctions as a condition of entering the domestic market. Accordingly, proponents of this practice believe that, unless bound by particular treaty obligations or rules of international law, States are free to determine the conditions for access to their domestic markets.

Advocates claim that apart from any international obligation in treaties, the sovereign right of the country is total freedom to deny access by other countries to their territory, financial institution, and currency. Therefore, it would be incorrect to call the secondary

¹⁷ Meyer, *supra* note 2, at 941.

¹⁸ Ruys & Ryngaert, *supra* note 4, at 21.

¹⁹ Marko Milanovic, *Revisiting Coercion as an Element of Prohibited Intervention in International Law*, 117 AM. J. INT'L L. 601, 622 (2023).

sanctions as ‘a violation of extraterritoriality’ because they represent only an attempt to deny some economic benefits to those who violate the interests of a country.

Arguments against secondary sanctions emphasise the extraterritorial nature of the practice, which is an abuse of rights. There is widespread criticism among the international community including the UN General Assembly and EU, which declares these practices as illegal because they involve illegitimate interference into the economic affairs of neutrals. As a consequence, the regions like the EU adopt blocking statutes prohibiting their companies from compliance with the sanctions.

Nevertheless, the main issue here is the absence of explicit prohibition on the imposition of secondary sanctions regardless of the numerous criticisms against this practice. Moreover, it cannot be claimed that there exists a strong legal regime in international law with effective enforcement tools. For example, no dispute settlement body like WTO or ICJ made a clear decision regarding invalidity of the secondary sanctions. Apart from this, the national security clause serves as a justification tool for sanctioning countries.

3 SECONDARY SANCTIONS AND THE RESTRUCTURING OF GLOBAL TRADE

3.1 Expansion of Sanctions in Contemporary Geopolitics

It is a fact that in the 21st century sanctions are no longer marginal diplomatic tools but central mechanisms which are utilised by states to pursue their geopolitical objectives, reshape alliances and change an adversary’s strategic capacity.²⁰ The concept of secondary sanctions only started developing around the 1990s with the collapse of the Soviet Union. As a consequence of their collapse, there was rapid market integration and the US dollar consolidated itself as the primary reserve currency, thus allowing the USA to occupy a central position in the global economy.²¹ Following this the Iran Sanctions Act (ISA) and the Helms-Burton Act, which targeted Cuba, were enacted and thus modern secondary sanctions were formally introduced.²² These acts punished firms from third-party countries that invested in the energy sectors of countries with primary sanctions.

Following this in the 21st century there was increased normalisation of secondary sanctions and its usage was expanded. Although following the post-cold war era, several international trade agreements like Trans-Pacific Partnership (TPP), World Trade Organization (WTO), etc., were signed with an aim to establish a rule-based commerce system, the last decade has seen a distinct pivot towards secondary sanctions that leverage global economic

²⁰ Ajay Kumar Godara, *Economic Sanctions as Geopolitical Weapons: Structural Power, Intermediary States, and the Fragmentation of Global Economic Order*, 8 IJPSG 204, 205–07 (2026).

²¹ *Id.*

²² *Id.*

chokepoints.²³ In 2018, the re-imposition of US sanctions on Iran, following the unilateral withdrawal from the Joint Comprehensive Plan of Action (JCPOA), marked the normalization of secondary sanctions as a tool of ultimate pressure.²⁴ The JCPOA was initiated to restrict Iran's nuclear program by capping their uranium enrichment in exchange for lifting international sanctions. The withdrawal was justified by stating that the agreement was defective and one-sided. Then in 2018 the USA imposed secondary sanctions on Iran to pressurize them into negotiating a new agreement.²⁵

Furthermore, in 2022, the escalation in the scale of utilization of this tool can be observed from the sanctions imposed by a USA-led coalition against Russia, condemning its hostile invasion of Ukraine. Unlike previous sanctions that usually aimed at smaller economies, the campaign against Russia targeted a major economy that involved the G20 countries and which was also well integrated into the global markets.²⁶ The coalition cut off Russian banks from the SWIFT messaging system, which allowed banks around the world to receive information about financial transactions, and also froze Russian Central Bank's foreign reserves. The USA imposed thousands of sanctions on Russia making it the world's most sanctioned nation and as early as 2024, the US has targeted over 16,000 entities and individuals aimed at disabling Russia's war machine and economy.²⁷ Such usage of secondary sanctions shows that they are no longer just an alternative to military force but have become a permanent feature of global economic governance.

3.2 Corporate Compliance and Economic Pressure

It can be understood from the above established arguments that secondary sanctions function through a mechanism of structured coercion. These sanctions do not explicitly prevent foreign firms from trading with the sanctioned entities but rather impose consequences such as exclusion from US correspondent banking, forfeiture of assets or debarment from US procurement which make continued engagement commercially untenable.²⁸ The USA is effective at imposing secondary sanctions due to the dominance of the US dollar, as almost half the cross-border banking transactions are denominated in dollars and this asymmetry clearly explains why European and Asian financial institutions consistently comply with

²³ POLICY DEP'T, DIRECTORATE-GENERAL FOR EXTERNAL POLICIES, EUR. UNION, EXTRATERRITORIAL SANCTIONS ON TRADE AND INVESTMENTS AND EUROPEAN RESPONSES (2020).

²⁴ *Id.*

²⁵ *Id.*

²⁶ Tan, *supra* note 13, at S135.

²⁷ Aleksei Zakharov, *Charting US Sanctions on Russia: Retrospect and Road Ahead*, OBSERVER RSCH. FOUND. (Aug. 1, 2025), <https://www.orfonline.org/expert-speak/charting-us-sanctions-on-russia-retrospect-and-road-ahead>.

²⁸ Ruys & Ryngaert, *supra* note 4, at 3.

US's secondary sanctions even when their own government objects to them as violations of sovereignty.²⁹

Secondary sanctions also produce a 'chilling effect' on foreign firms as they pre-emptively withdraw from markets and relationships that could possibly create exposure to sanctions risk, even where no explicit prohibition applies. For instance, from the fear of being caught in the crosshairs of the US Office of Foreign Assets Control (OFAC), banks often terminate services for clients in 'sanction risk' jurisdictions, even when those activities are not legally prohibited by their own domestic governments.³⁰

This type of behaviour effectively subordinates the foreign policy choices of sovereign states like the EU Member States to the security preferences of the sanctioning hegemon. As companies give more importance to US dollar liquidity over their own national trade policies, the sovereignty of third-party states is eroded by a "hidden coercion" that operates through private actors rather than diplomatic channels.

3.3 De-Risking and Supply Chain Realignment

The complementary risks that are associated with the imposition of unilateral secondary sanctions and economic coercion necessitate a defensive strategy known as 'de-risking'. It refers to the "proactive withdrawal or restriction of financial services by banks and firms from entire regions or sectors to avoid potential violations of extraterritorial sanctions."³¹ It essentially realigns the trade flows away from jurisdictions perceived as sanctionable. In the contemporary world the widespread adoption of de-risking strategies has led to a "decoupling dilemma" where, as each country seeks to insulate its economy for security reasons, a global integrated system becomes less attractive.

The expansive use of economic sanctions by powerful states accelerates the erosion of the liberal economic order and also can lead to what many scholars term as the 'fragmentation doom loop'.³² It refers to a situation at the global level where the dilemma triggers a cycle where, as each country breaks away from an integrated system to ensure economic security, the system itself becomes less attractive to all other participants, increasing their incentives to break away from the global integrated supply chains. While decoupling implies a complete exit, de-risking involves identifying and mitigating vulnerabilities. A common strategy adopted by countries to diversify their supply chains includes China+1 or Russia+1 strategies where companies maintain an essential presence in sanctioned countries like

²⁹ *Id.*

³⁰ *Id.*

³¹ Tan, *supra* note 13.

³² Christopher Clayton, *A Theory of Economic Coercion and Fragmentation* 1, 1–8 (NBER 2025).

Russia while also establishing a secondary, parallel hub in another country.³³ Applying such strategies allows the states to realign supply chains and alter the global financial architecture.

3.4 Impact on Developing Economies

It is pertinent to understand that while major powers can afford to build alternative infrastructures to facilitate trade, developing economies face a heavy burden under the current trade regime dominated by sanctions. In most cases, sanctions often lead to a sharp decrease in economic activity with reports highlighting an average drop of 3.0 to 4.3% in GDP growth rates of the target country.³⁴ For instance in 2015, the withdrawal of Merchants Bank of California in Somalia from remittance services affected 80% of the remittances sent from the USA which greatly affected the GDP of Somalia since remittances contributed significantly to the GDP.

These secondary sanctions also create a form of 'hidden coercion' where developing states are themselves not the targets of sanctions, but they still bear the structural costs of compliance architecture designed to serve the foreign policy objectives of powerful states. Even those developing nations that maintain a neutral position in geopolitical conflicts cannot escape from pressure exerted by secondary sanctions. For instance, Turkey faced intense pressure from the USA to curb its ongoing financial and trade transactions with Russia in 2024, despite being a NATO member state with sovereign entitlement to determine its own commercial relationships.³⁵

The erosion of such trade autonomy for developing economies has a significant effect as it can result in significant welfare losses and increased poverty. The employment of such sanctions and pressure violates the principle of non-intervention in the *domaine réservé*. *Domaine réservé* refers to the sovereign affairs that a state can decide freely. However, when a powerful state forces a third-party state to align with its internal trade laws, it undermines the sovereign equality of states.³⁶

³³ *Id.*

³⁴ Stoll et al., *supra* note 15.

³⁵ Ozgur Ozkan, *Turkey Faces Competing Pressures from Russia and the West to End Its 'Middleman Strategy' and Pick a Side on the War in Ukraine*, CONVERSATION (Oct. 26, 2023), <https://theconversation.com/turkey-faces-competing-pressures-from-russia-and-the-west-to-end-its-middleman-strategy-and-pick-a-side-on-the-war-in-ukraine-215134>.

³⁶ Majid Azarnush, *Secondary Sanctions from the Perspective of International Law*, 9 IJSR 183, 183–88 (2020).

4 FRAGMENTATION OF INTERNATIONAL LEGAL ORDER

4.1 Emergence of Countermeasures

The weaponisation of international trade flows via the imposition of secondary sanctions has not been left unchallenged. While the United States has used its centrality in international economic relations in a forceful way, other targeted and third-party countries have reacted by constructing their own protective legal structures. This has led to the creation of an actual legislative arms race that fractured international law.

Specifically, the EU revived the Blocking Statute (Council Regulation 2271/96)³⁷ in response to the United States' exit from the JCPOA and activation of the Helms-Burton Act.³⁸ Through the blocking statute, the EU aims to mitigate the effects of secondary sanctions in two major ways.³⁹ First, it prohibits EU companies from conforming to designated foreign sanctions. Second, it grants a "clawback" right for European companies to reclaim damages incurred through the enforcement of secondary sanctions.⁴⁰

Similarly, China has moved beyond the diplomatic opposition to legislation. Mimicking the American model of extraterritoriality, Beijing issued the "Unreliable Entity List" and anti-sanctions laws to deter foreign companies that comply with secondary sanctions and stop normal business with Chinese firms.⁴¹ In conjunction with the expansive National Security Law, which itself asserts extraterritorial jurisdiction, these measures show how the explosion of secondary sanctions results in defensive measures that fragment the uniform enforcement of international trade regulations.

4.2 Conflict of Laws and Legal Uncertainty

The multiplication of legal imperatives has resulted in a fundamental conflict of laws, leaving multinational companies caught in the crossfire of jurisdictions.⁴² An EU entity conducting business with a sanctioned country, such as Iran or Cuba, finds itself in a dilemma: to comply with the secondary sanctions of the United States is to be safe from the wrath of the OFAC, but at the same time, it is to violate the EU Blocking Statute.⁴³

³⁷ Council Regulation 2271/96, 1996 O.J. (L 309) 1 (EC).

³⁸ Cuban Liberty and Democratic Solidarity (LIBERTAD) Act of 1996, 22 U.S.C. §§ 6021–6091 (2018).

³⁹ Ruys & Ryngaert, *supra* note 4, at 81.

⁴⁰ *Id.* at 81–82.

⁴¹ Archived at <https://web.archive.org/web/20241008001740/http://english.mofcom.gov.cn/article/policy-release/questions/202009/20200903002580.shtml>.

⁴² Ruys & Ryngaert, *supra* note 4, at 86–87.

⁴³ Meyer, *supra* note 2, at 1014–15.

Indeed, the conflict of laws in practice has created a culture of overcompliance and “de-risking.” For fear of colossal penalties – BNP Paribas alone paid an \$8.9 billion fine⁴⁴ – European companies are known to forsake legitimate investment opportunities out of necessity. Even when the national courts issue rulings that uphold the blocking statute (such as the Dutch court case where the Exact company was compelled to fulfil a contract with Cuba, despite its apprehension over the consequences of the Helms-Burton Act), it leaves the company vulnerable to retaliatory actions by the United States.

4.3 The Erosion of Multilateralism

By engaging in secondary sanctions, the effectiveness of post-World War II multilateral systems is greatly threatened. With countries choosing to enforce unilateral sanctions instead of using multilateral mechanisms, institutions such as the World Trade Organization (WTO) experience severe erosion.⁴⁵ Before the proliferation of sanctions, trade issues were resolved within a rule-governed process through the dispute resolution of the WTO. However, in sanctioning countries, there is an increasing tendency to use national security as a reason to justify unilateral measures such as trade embargoes and boycotts.

Similarly, the increased unilateral approach weakens the role of the United Nations Security Council. Unable to agree on the implementation of effective multilateral sanctions due to veto deadlocks, dominant countries exploit the hegemony they hold over the critical choke points of international finance to unilaterally determine international trade relationships. As a result of this transition, the credibility of the multilateral approach deteriorates because the ability of each country to coerce others surpasses its ability to govern through rules.

4.4 From Legal Order to Geoeconomics

The use of secondary sanctions leads to a major shift in the functioning of the international order from a rule-based to a power-based system. Firstly, sovereignty is significantly undermined since the boundaries of domestic affairs (*domaine réservé*) are consistently pierced through economic coercion.⁴⁶ The concept of sovereignty fails when one nation coerces another neutral third party into changing its economic policies under the threat of financial ostracism.

Secondly, there is massive fragmentation of international law. States targeted by secondary sanctions and their economic allies develop a parallel economic structure to

⁴⁴ *Id.*

⁴⁵ Ruys & Ryngaert, *supra* note 4, at 71–72.

⁴⁶ *Id.*

withstand this pressure. Efforts such as creating payment mechanisms such as the Chinese Cross-Border Interbank Payment System (CIPS) or the European INSTEX initiative are made by targeted countries to circumvent the traditional network of global economic activity.⁴⁷ This leads to a phenomenon known as a “fragmentation doom loop”.⁴⁸ As countries engage in anti-coercion policy-making, the entire global economy breaks down into segregated competitive zones, losing all benefits of globalisation.

However, ultimately, it is power that takes precedence over the formality of law. The breakdown of the coherence of international law is not just an accidental malfunction, but a symptom of the political plurality and struggle of hegemony that exist. The breakdown of legal coherence leads to what is known in academia as “managerialism”.⁴⁹ Here, pure bargaining power and politics become far more influential than any uniform rules and procedures.

Therefore, secondary sanctions are not just short-term instruments for economic pressure, but long-term catalysts for change in international trade and the international division of labour, as they exploit economic interdependence as a political weapon. By doing so, they are directly contributing to the fragmentation of international law. They lead to a structural decoupling of the global economy that undermines legal certainty for the sake of geo-economic blackmail.

5 CONCLUSION

In summary, this paper has established that modern secondary sanctions have transcended their initial purpose of serving as a supporting tool of foreign policy. Rather, they now serve as highly effective means of economic coercion that project a state’s ability to regulate beyond its borders, posing fundamental challenges to the premises of international law. While there continues to be debate surrounding the legality of secondary sanctions, their continued proliferation due to the absence of an unequivocal legal prohibition indicates their use by dominant economies as a tool of enforcement.

From the doctrinal point of view, the use of secondary sanctions brings into light deficiencies in some traditional premises of international law, namely those concerning principles of jurisdiction, sovereignty, and non-intervention. Indeed, the justification of the application of secondary sanctions under the effects doctrine indicates the inconsistency between legal theory and practice in this area. In particular, by regulating foreign

⁴⁷ Tan, *supra* note 13, at S135.

⁴⁸ Christopher Clayton et al., *A Theory of Economic Coercion and Fragmentation* 1, 18–19 (Nat’l Bureau of Econ. Rsch., Working Paper No. 33309, 2025).

⁴⁹ Tomer Broude, *Keep Calm and Carry On: Martti Koskenniemi and the Fragmentation of International Law*, 27 TEMP. INT’L & COMP. L.J. 279, 291–92 (2013).

corporations with no connection to the territory of the state, secondary sanctions undermine state equality and the doctrine of “*domaine réservé*”.

Most significantly, however, the contemporary importance of secondary sanctions should be assessed primarily from the systemic point of view, rather than purely legally. Secondary sanctions represent a tool for regulating the behaviour of private parties, threatening them with being excluded from critical financial systems if their actions violate U.S. policy objectives. The “chilling effect” associated with secondary sanctions leads to trade reorientation by companies in question, which may prove detrimental to developing countries unable to sustain such shocks.

Thus, secondary sanctions can be perceived as means of an informally imposed global regulation that undermines multilateral institutions and rule-based international law. Furthermore, the proliferation of countermeasures, including the introduction of blocking statutes and anti-sanctions laws, represents another symptom of the current crisis in international law. It is accompanied by the erosion of existing legal frameworks, such as the World Trade Organization.

It can thus be said that secondary sanctions symbolize a shift from a rule-based international order towards one in which power asymmetries prevail. If this trend persists, the effectiveness of international law may be severely compromised.

* * *

PART III

Technology, Liberty and Security

CHAPTER 7

Deepfakes and Article 21 of the Indian Constitution: A Case for Legislative Intervention

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Deepfake technology backed by artificial intelligence has transformed the nature of digital harm. Unlike typical misinformation, deepfakes allow for the synthetic alteration of a person's face, voice, gestures, or identity in ways that can jeopardize privacy, dignity, autonomy, reputation, and mental tranquility. These rights are safeguarded under Article 21 of the Indian Constitution, which has been interpreted by judges to encompass the right to privacy, dignity, reputation, and even the right to be left alone. However, India's current legal approach to deepfakes remains fragmented. The Information Technology Act, 2000, the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, the Digital Personal Data Protection Act, 2023, the Bharatiya Nyaya Sanhita, 2023, and various civil actions, including personality-rights injunctions, offer victims a patchwork of remedies, but they do not constitute a cohesive deepfake law. Thus this paper contends that deepfakes constitute a direct constitutional danger to Article 21, and that India requires a specialized regulatory framework based on permission, provenance disclosure, fast takedown, victim compensation, and platform accountability.

Keywords: Deepfakes, privacy, dignity, reputation, legislative intervention, intermediary liability, Article 21

1 INTRODUCTION

“The danger of deepfakes lies not only in what is fake, but in the doubt they cast on what is real.”

Deepfakes are photos, movies, or sounds that have been manipulated or created with artificial intelligence, AI-powered tools, or audio-video editing software. They may show actual or imaginary persons and are considered a sort of synthetic media, which is typically developed by artificial intelligence systems by integrating diverse media sources into a new media artifact. What makes deepfakes fundamentally significant is not just their deception, but also their ability to steal a person's face, voice, gestures, and social meaning, and then redistribute

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that false identity on an internet scale. In India, the harms include non-consensual sexual images, impersonation fraud, political misinformation, harassment, and reputational damage. The government has noted that deepfakes can adversely harm dignity, reputation, privacy, and platform responsibility whereas current enforcement relies on a mix of the IT Act¹, IT Rules, DPDP Act², and the Bharatiya Nyaya Sanhita.

Article 21 of the Constitution serves as the legal foundation for regulating deepfakes. In *Justice K.S. Puttaswamy v. Union of India*³, the Supreme Court ruled that privacy is inherently linked to life and personal liberty, that privacy safeguards dignity and autonomy, and that informational privacy is a constitutionally protected interest. The Court acknowledged that privacy risks might come from both the state and non-state actors. This conclusion is critical to deepfake regulation because the majority of deepfake damages are created, magnified, or monetized by private actors and platforms rather than the state itself.

This paper contends that India's current legal framework is too fragmented to effectively combat deepfakes. It criminalizes specific aspects of the problem, such as impersonation, obscenity, fraud, and privacy violations, but not synthetic identity harm in general. A dedicated regulation is therefore required, not to prohibit valid satire, art, or political criticism, but to carefully limit malicious synthetic deception in accordance with Articles 19 and 21 of the Indian Constitution.

2 CONSTITUTIONAL HARM CAUSED BY DEEPFAKES UNDER ARTICLE 21

Article 21 has grown from a narrow safeguard against executive deprivation to a comprehensive source of substantive rights linked to a dignified existence. In a nine-judge constitution bench, the Apex Court in the landmark judgment of *Justice K.S. Puttaswamy (Retd.) v. Union of India* (2017) held that the right to privacy is a fundamental right protected under Article 21 of the Constitution and marked the pinnacle of this evolutionary process. The right to privacy is not absolute, but can be limited if such restrictions serve legitimate state interests and are necessary and proportional. This principle is significant for deepfake legislation because it indicates that limits on deepfake creation and dissemination can be constitutionally acceptable provided they protect privacy and dignity while staying reasonable. The Court also declared that privacy protects “the inner recesses of the human personality,” vital life choices, and forms the constitutional core of human dignity. Deepfakes violate all of these values. They take identity without consent, distort personal agency, and turn the individual into a manipulable data item. The hurt is thus more serious than mere defamation: it

¹ The Information Technology Act, 2000.

² The Digital Personal Data Protection Act, 2023.

³ (2017) 10 SCC 1.

is a type of synthetic personality dispossession. The Puttaswamy ruling stressed the importance of privacy in preserving human dignity and autonomy. A four-part test that covers all fundamental rights is outlined in the ruling. It offers a methodology for evaluating the constitutionality of deepfake legislation. By using appropriate and necessary methods, the test makes sure that limitations are not arbitrary but rather support justifiable state interests. In his ruling, Justice Chandrachud outlined a definition of dignity that goes beyond simply being free from torture or cruel treatment to include the right to be treated equally in society and to have one's fundamental human qualities respected. According to Puttaswamy, autonomy is the ability of people to make basic choices about their identities, lives, and bodies without outside intervention. Deepfakes pose a direct threat to these concepts of dignity and autonomy. Deepfakes violate people's dignity by portraying them as objects for sexual use and deception when they show them in fictitious situations, especially sexual ones, without their consent. They also undermine autonomy by using the individual's image and identity to make fraudulent statements and actions that the individual did not authorize and cannot control. In *Subramanian Swamy v. Union of India*⁴, the Supreme Court ruled that reputation is an intrinsic component of Article 21 and cannot be crucified at the altar of someone else's free expression. Deepfakes accomplish exactly that: they convincingly replicate authenticity, causing reputational injury before the deception is proven. The Subramanian Swamy decision showed that the state's duty to protect constitutional rights must be reasonable, proportionate, and not arbitrary. The court did not require the state to remove all threats to Article 21, but only to take reasonable precautions proportionate to the risk.

The Delhi High Court's decision in *Anil Kapoor v. Simply Life India & Ors*⁵ is one of the most direct Indian judicial responses to AI-enabled identity misuse. The Court prohibited defendants from utilizing Anil Kapoor's name, likeness, picture, voice, and personality with Artificial Intelligence, Machine Learning, deep fakes, face morphing, GIFs and other techniques. It acknowledged that technology capabilities today allow illicit users to impersonate celebrities, emphasizing that such misuse jeopardizes privacy, dignity, livelihood, and individuality. The Court said that fame and reputation can harm rights like the right to livelihood, the right to privacy, and the right to live with dignity enumerated under Article 21 of the Indian Constitution. The case also demonstrated how intellectual property rights over personal characteristics have other dimensions including rights protected by the Constitution of India. The Anil Kapoor case is significant because it marks the first time the Indian Supreme Court has directly addressed deepfakes as a constitutional issue. The Court's

⁴ *Subramanian Swamy v. Union of India*, (2016) 7 SCC 221.

⁵ *Anil Kapoor v. Simply Life India*, CS(COMM) 652 of 2023 (Del. HC Sept. 20, 2023).

willingness to hear petitions challenging deepfakes and offer interim remedies indicates that deepfakes create major constitutional problems.

One of the most well-known instances of gendered AI harm in India is the Rashmika Mandanna deepfake event⁶. A video of another lady was altered to include her face, and the fake video became viral on the internet. The Rashmika event is a prime example of privacy, autonomy, and dignity being infringed simultaneously from the standpoint of Article 21. Therefore, the case serves as an example of how deepfake injuries might be articulated constitutionally as infringement of the right to control one's identity and bodily image. The incident also represents a violation of Article 21's right to privacy. The improper collection, analysis, and manipulation of Mandanna's biometric data violated her informational privacy. The dissemination of fake sexualized images of Mandanna violated her right to manage information about herself.

The Sachin Tendulkar case⁷ exemplifies a distinct dimension, fake endorsement and reputational-commercial deceit. A deepfake video made it appear that Tendulkar was advertising a gaming application. According to reports, Mumbai police have filed a case against the gaming website and Facebook page in question. In this case, the hurt was not intimate-image abuse, but rather the manipulation of public trust and identity for financial benefit. The fact that such incidents require piecing together remedies through fraud, defamation, and cybercrime legislation demonstrates the lack of a unified deepfake law.

The deepfake incident involving Asha Bhosle highlighted the growing use of artificial intelligence to imitate a person's voice and likeness without their consent. Manipulated content fraudulently depicted her in situations in which she had no involvement, creating major concerns about identity theft and digital impersonation. The court awarded relief by prohibiting the transmission of such content, recognizing that unauthorized use of voice and persona breaches personality rights, which are inextricably tied to the right to privacy and dignity guaranteed by Article 21 of the Constitution. The case highlights the inadequacies of existing legal frameworks and reinforces the need for separate legislation to regulate deepfakes in India⁸.

⁶ *Rashmika Mandanna Deepfake Video Sparks Debate on AI Misuse*, HINDU (Nov. 6, 2023), <https://www.thehindu.com>.

⁷ *Deepfake Video of Sachin Tendulkar Promoting Gaming App Triggers Police Action*, INDIAN EXPRESS (Jan. 17, 2024), <https://indianexpress.com>.

⁸ *Music Legend Asha Bhosle Sues AI Firm and E-Commerce Sites over Voice and Image Misuse*, MONDAQ (Oct. 8, 2025), <https://www.mondaq.com/india/copyright/1688044/music-legend-asha-bhosle-sues-ai-firm-and-e-commerce-sites-over-voice-and-image-misuse>.

3 THE EXISTING LEGAL FRAMEWORK

Although Article 21 provides the constitutional basis for contesting deepfake harms in India, legislative and regulatory tools play a major role in practical enforcement. These include the Bharatiya Nyaya Sanhita (2023), the Digital Personal Data Protection Act (2023), the Information Technology Act (2000), and the IT Rules. However, rather than regulating deepfakes as a separate category of synthetic identity abuse, these laws primarily deal with the consequences of deepfakes, such as privacy violations, personation, obscenity, fraud, defamation, or false records. This results in a reactive legal system where victims frequently have to fit a single technology injury into multiple outdated legal categories.

The IT Act of 2000 remains the primary statutory weapon for addressing the harms produced by deepfakes. According to government explanations, the Act already encompasses acts such as identity theft, personation fraud, privacy violations, and the publication or transfer of obscene or sexually explicit information. In practice, rules often linked with these harms such as those dealing with privacy, impersonation, and obscene material are invoked when deepfakes are exploited for fraud, false endorsements, sexual exploitation, or reputational harm. Deepfakes made for fraud or impersonation may be covered by Section 66D of the IT Act, which deals with cheating by personation through computers or the internet. Deepfakes that show non-consensual intimate imagery may be subject to Section 67 of the IT Act, which deals with indecent dissemination. However, the problem is that the statute does not explicitly define or control deepfakes or synthetic media; instead, it captures them indirectly through pre-existing crime categories.

The intermediary framework established by the IT Rules has moved more directly toward deepfake governance. Previously, government recommendations regarded deepfakes as a type of illegal misinformation, requiring platforms to exercise caution in blocking and removing such content. More recently, official MeitY materials on revisions to synthetically generated information imposed stricter requirements, such as user declarations, visible labels, metadata or provenance identifiers, and quicker grievance resolution.

The Bharatiya Nyaya Sanhita, 2023, contains laws related to voyeurism, sexual harassment, and insult to modesty that may be used to combat specific types of malicious deepfake abuse, including non-consensual intimate imagery directed at women. Section 500 of the IPC and Section 356 of the BNS both deal with defamation. The BNS's Sections 67 and 67A deal with pornographic publications and images of children, and they may apply to deepfakes. Nevertheless, neither the BNS nor the IPC specifically addresses deepfakes as a separate harm category. Because ordinary defamation and obscenity laws do not address the unique mechanisms and harms caused by deepfake technology, their application to deepfakes is still insufficient.

4 THE CASE FOR LEGISLATIVE INTERVENTION

The first step in creating a specific deepfake law in India should be to clearly identify deepfake injury as a matter of privacy, autonomy, dignity, reputation, and informational integrity under Article 21. This would recast victims as rights-holders whose constitutional interests are directly harmed by synthetic media, rather than just as platform complainants. The law should include explicit definitions. It must differentiate between synthetically generated information, deepfakes, voice clones, face swaps, manipulative political material, consensual synthetic media, satire, parody, and creative transformation. Overbreadth would endanger free expression, while underbreadth would leave victims vulnerable. Following democratic debate, these boundaries should be established in a statute.

The law should establish a graded harm model. Non-consensual intimate deepfakes, child sexual abuse deepfakes, fraud deepfakes, election manipulation deepfakes, and forged official papers should be considered as aggravated offenses with harsher punishments and faster remedies. In contrast, lower-risk categories may be governed through labeling and disclosure rather than restriction. This method would more closely align legal responses with constitutional proportionality. India needs quick and victim-centered solutions. A new law should include emergency takedown orders, time-bound grievance resolution, evidence preservation, protection against re-uploading, search de-indexing where appropriate, and compensation for proven injury. Victim anonymity should be provided in sexual deepfake situations. These are aspects that cannot be left to randomly distributed platform policies and wide criminal provisions alone.

5 CONCLUSION

Deepfakes are more than just a technological inconvenience or a new type of online mischief: they are an outright attack on constitutional personhood. When confronted with synthetic manipulation, they undercut the individual's authority over identity, erode trust in true expression, and highlight the limitations of existing legal categories. Legislative involvement is therefore no longer an option. It is a constitutional requirement for Indian law to genuinely defend privacy, dignity, autonomy, reputation, and personality rights in the age of artificial intelligence. However, the current legal response is fragmented, relying on a hodgepodge of privacy, obscenity, impersonation, data protection, and intermediary liability provisions that only address a portion of the harm. This doctrinal and regulatory gap warrants specific legislative action. Any future regulation must precisely identify deepfakes, provide timely victim-centered remedies, enforce appropriate platform requirements, and

demand transparency measures such as provenance or disclosure, while being consistent with free expression safeguards.

* * *

CHAPTER 8

Digital Surveillance and Predictive Policing: A Rights-Based Analysis in India

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Artificial Intelligence is the advent of the new tech; it's a development in technology which uses algorithms to analyse the data fed to its system in milliseconds. The term predictive policing is not a new concept for law enforcement departments, since many decades the criminal records were used by the police personnel to predict hotspots of crime commission, policing. But, now after the birth of this technology, this method has now transformed into a new name, i.e. AI enabled predictive policing. Now, these tools are helping the law enforcement departments analyse a large number of datasets or criminal records to predict crime. But, in a country like India, which is still developing and is also experimenting with such technologies in such sensitive areas like law enforcement, proper implementation of such technologies becomes a must. Indian policing continues to operate under the colonial-era Police Act, 1861, supported by the Bharatiya Nagarik Suraksha Sanhita (BNSS) and other laws. With growing technological innovations, police agencies increasingly seek AI tools to anticipate, prevent, and analyse crime for improved public safety.

The paper explores and examines how such tools that are being used by predictive policing can lead to reinforcement of societal biasness and targeting of marginalised communities which can also lead to reinforcing of historical biasness, ultimately leading to violation of rights guaranteed under the Constitution of India, as such tools have their own drawbacks and can lead to several human rights issues if used unregulated. Through different tables, data and flowcharts this study explains how AI driven tools work in the different countries and how it can be shaped to be used efficiently in the Indian democracy which would also protect the basic rights of the citizens along with technological advancement.

Keywords: Artificial Intelligence, Predictive Policing, AI-surveillance, Civil Liberties, Ethical Policing

1 INTRODUCTION

Advent of Artificial Intelligence has defined the world a new era where things could be simpler and quicker. Several sectors like health, education, business, legal etc are adopting the use of Artificial Intelligence. With its positive aspect of analysing a vast amount of data

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in seconds and giving conclusions based on its data fed and algorithmic analysis, AI has proved itself the need of today's time.

Predictive policing basically means “to anticipate the crimes before occurring”. It mainly predicts “who is to commit crime? and where the crime would be committed?” Police departments use AI tools to predict the crime beforehand and act before happening. And in India, several states like Delhi, Telangana, Uttar Pradesh and Punjab are experimenting with such technologies in law enforcement. Such tools learn their patterns and give social scoring to individuals in society based on their past records and day to day behaviours, regarding how likely they are to commit crime, which signals police departments to keep an eye, and 24*7 CCTV surveillance systems are also being analysed by police systems for the same.

This research explores and examines how such tools that are being used by predictive policing can lead to reinforcement of societal biasness, societal injustice and targeting of marginalised communities by reinforcing of historical biasness which could lead to violation of fundamental rights guaranteed under the Constitution of India like right to privacy, right to freedom, right to form associations, right of equality, right to fair trial etc. It's high time to discuss the effects of such unregulated AI tools in areas like law enforcement which deals with people every day, and its decision can affect any individual or a society, based on algorithmic decision made by AI tools.

1.1 Literature Review

AI Powered Public Surveillance Systems: Why We (Might) Need Them and How We Want Them

by Catarina Fontes¹, in the article the author had examined the use of real-time face recognition technology in public settings to discuss the introduction of AI-powered surveillance systems and employ contact tracking applications designed for managing public health in contemporary society. Law enforcement may require population surveillance, but AI-enabled surveillance technologies have the potential to undermine social norms and established order. This does not imply that populations will not be willing to accept the trade-offs or that benefits will not outweigh potential threats; rather, it means that public authorities will have to exercise ever greater responsibility to control their own power as well as the power claimed by tech companies to provide the means for gathering and managing personal data created by daily activities.

¹ Catarina Fontes et al., *AI-Powered Public Surveillance Systems: Why We (Might) Need Them and How We Want Them*, 71 TECH. SOC'Y 102137 (2022).

Predictive Policing explained by Tim Lau. In his article he establishes² that though predictive policing is very useful and is also giving some positive results in prediction of crimes and places beforehand, but the local communities and the individuals who are being affected by it do not support this technology to predict crimes. It also establishes that these artificial intelligences are being fed on the historical data which is also raising the concern of biasness and which is resulting in unauthorised search and seizure of individuals who are being predicted by these techs and lacking human judgement.

Legal and human rights issues of AI: Gaps, challenges and vulnerabilities by Rowena Rodrigues, the literature critically argues³ about the AI-driven predictive policing and how it poses serious threats to fundamental human rights, mainly the rights to privacy and personal freedom. The study also focuses on the point that predictive systems rely on ongoing data collection, surveillance technologies, and behavioural monitoring, which significantly extends state surveillance into people's private lives. It also discusses the "Black Box" concern with such tools.

Algorithmic fairness in predictive policing by Ahmed S. Almasoud⁴, this article analyses the concerns of using AI-enabled predictive policing and answers how these systems are trained on pre-existing datasets as well as learn from pattern analysis and states how such tools can affect or can intrude upon the rights and freedoms of the individuals. These systems limit personal freedom by predicting criminal risk through pre-emptive policing, increased scrutiny, and heightened police presence in targeted communities. In this article it has been argued that data-driven anticipatory governance via the surveillance can weaken consent, and can also risk reduction of freedom of movement, expression, and autonomy, which are fundamental rights in democratic societies.

1.2 Research Problem

The development of AI deployment in various sectors of the society has raised various concerns and challenges to regulate such tools in the most ethical and legal manner. Use of such technology in sensitive areas of society makes it important to be regulated within the constitutional framework of India to safeguard the citizens. These technologies operate within legal frameworks that were not designed to regulate algorithmic surveillance or data-driven decision-making, creating uncertainty about their constitutional legitimacy. This study addresses the problem of how predictive policing can be assessed and governed within

² Tim Lau, *Predictive Policing Explained*, BRENNAN CTR. FOR JUST. (Apr. 1, 2020), <https://www.brennancenter.org/our-work/research-reports/predictive-policing-explained>.

³ Rowena Rodrigues, *Legal and Human Rights Issues of AI: Gaps, Challenges and Vulnerabilities*, 4 J. RESPONSIBLE TECH. 100005 (2020).

⁴ Ahmed S. Almasoud & Jamiu Adekunle Idowu, *Algorithmic Fairness in Predictive Policing*, 5 AI & ETHICS 2323 (2025).

existing Indian legal structures without undermining fundamental rights of the minority groups.

1.3 Research Objectives

1. To examine the existing legal and constitutional framework for regulation of AI enabled predictive policing.
2. To analyse the impact of predictive policing on fundamental rights, particularly privacy, personal liberty, and freedom.
3. To critically assess the risks of bias, discrimination, and arbitrariness in algorithmic policing practices.
4. To propose a rights-based regulatory framework for the ethical and constitutional use of predictive policing in India.

1.4 Research Questions

1. What is the current legal and institutional framework to deal with predictive policing in India?
2. How do the predictive policing tools affect the fundamental rights like privacy, freedom and personal liberty guaranteed by the constitution of India?
3. Do AI enabled predictive policing tools lead to bias, discrimination, or arbitrary state action in law enforcement?
4. What legal safeguards and institutional mechanisms are important to ensure that predictive policing operates within constitutional and human rights limits in India?

1.5 Methodology

This research work is based on the doctrinal method. It analyses the primary sources such as legislations – the Constitution of India, the Police Act of 1861, Bharatiya Nagarik Suraksha Sanhita of 2023 – as well as the important relevant judgements on privacy, liberty, and equality. The secondary sources, including scholarly articles, reports, national and international journals and the comparative legal materials, were examined to contextualise AI-driven predictive policing.

2 PREDICTIVE POLICING: MEANING AND CONCEPT

2.1 Meaning

In simple and literal sense “predictive” means “to anticipate” the future based on certain pre-existing data and the term “policing” means “the steps taken by the police to prevent

crime and maintain law and order”. So, the concept of predictive policing has not been formed after the birth of AI, but it pre-existed in the system before even the Artificial Intelligence existed in the tech world. Police used their crime records based on crime history, experience with their human judgement to predict crimes back then, but after the advent of Artificial Intelligence, the prediction and managing as well as analysing these digital data became simplified and has become easier to predict crimes in today’s era.⁵

As in this tech era, the crime records and police records have to the maximum extent been digitalised, and this digital data is being fed to Artificial Intelligence to predict the commission of crimes, which earlier was done by the human judgement. So, from the eyes of today’s advanced system of AI and large database in the policing department we can redefine the term predictive policing as, the forward-looking use of data analysis driven by algorithms to identify trends and correlations within large datasets, on the basis of which assessments of risk are generated for specific individuals or geographic areas and then translated into focused preventive interventions.

2.2 Concept and How It Works

Predictive policing uses advanced AI systems to anticipate the future crime hotspots and criminals. The following figure elaborates the different areas where such tools are aimed at while predicting the crimes. The different modes have been laid down:



FIGURE 1. *Modes of AI in predictive policing*

⁵ Craig D. Uchida, *Predictive Policing*, in *ENCYCLOPEDIA OF CRIMINOLOGY AND CRIMINAL JUSTICE* 3871 (2014).

2.3 How Predictive Policing Works

Below steps have been framed in chart format to understand the way AI tools function in prediction of crimes for the policing.

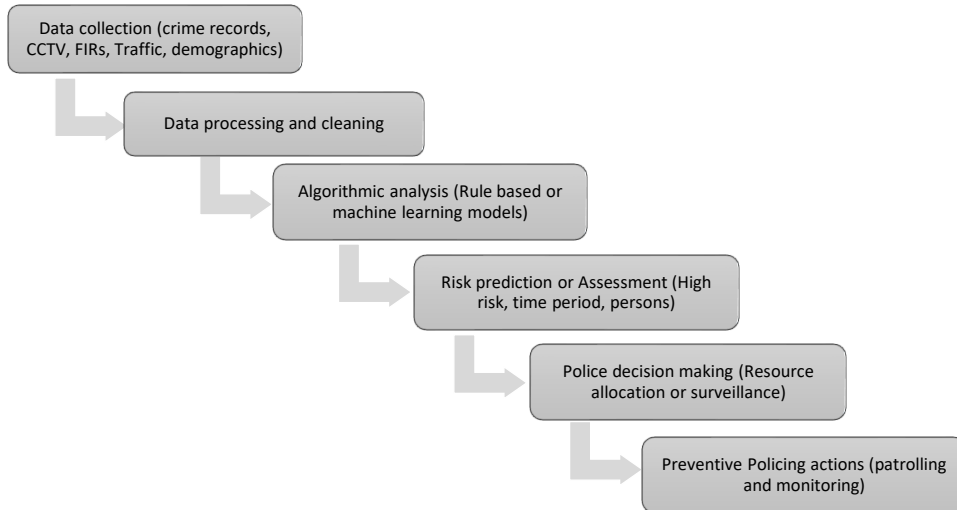


FIGURE 2. *Steps of predictive policing*

3 DIGITAL SURVEILLANCE: LAW ENFORCEMENT

With the growth and development of technology and computers, things have started to take a shift that is from pen paper to records in computer. For example, now digital repositories are being stored rather than the large sets piled up case files in court. Evidence recording at crime scene by the police is also being recorded via mobile phones to keep in digital form. Likewise, this shift has escalated after the advent of the artificial intelligence. Now, things are not just kept as record using the systems, but the data kept as digital repositories are now being analysed using AI tools to gain some sort of connection or link, depending on the purpose of the use.

The term digital surveillance refers to monitoring, collecting data and analysing those data via use of any digital device by the government or its representing bodies. In this 21st century, it's a way to put an eye on the citizens at public or some private areas too. As far as AI is concerned, its adoption and use have significantly increased in a few years via several areas of the society. And in addition, AI has also helped to provide analytical services. For example, anticipation of crime hotspots via CCTV surveillance. A recent study done by the ESI Thought Lab sponsored by various IT companies, done in 167 cities of the world, found that use of AI can contribute to crime reduction by 30-40%. The study however also

highlights that the cities' law enforcement have started the maximum use of tools like real time crime mapping, CCTV cameras and smart cameras for crowd management etc, for this the personal data of individuals like facial structure, biometric info are being used to about 84%, likewise 55% cities are using the data from body cameras or the in-car cameras, 46% from drones and aerial surveillance and the safety apps trackers are being used for the predictive policing purposes.⁶ Via this data it can be concluded that the digital surveillance has spiked the rates of being followed and being mapped by the eyes of the government, and this without the proper law and proper implication can lead to several ethical concerns as well as it also threatens the basic fundamental right of the citizens as stated by the Supreme Court in the famous Justice *K.S. Puttaswamy (Retd.) v. Union of India* judgement, *that the right to privacy is a fundamental right*⁷ and it should not be violated by the state at any cost.

4 LEGAL AND INSTITUTIONAL FRAMEWORK OF PREDICTIVE POLICING IN INDIA

In India, predictive policing has started to spread its webs across various states. States like Telangana, Delhi, Tamil Nadu, Uttar Pradesh, Maharashtra have started using AI tools in their policing systems for various purposes and bodies like the Indian Space Research Organization (ISRO) have created the Crime Mapping, Analytics and Predictive System (CMAPS) for the Delhi Police, being one of the most prominent applications regarding predictive policing⁸. CMAPS uses Geographic Information Systems (GIS) and crime data to identify high-incidence areas, support preventive patrols, and deploy resources strategically. Similarly, the Telangana Police have implemented drones, Integrated Command Control Centres, and AI-powered facial recognition systems for surveillance-based policing, especially in Hyderabad.

For example, during the 2020 Delhi riots, Delhi Police used facial recognition software to detain individuals which raised concerns about its validity and the possibility of unjust profiling. Such systems do not have a 100% accuracy rate, which can result in illegal arrest. In this case the digital surveillance affected the fundamental rights of the individual who was anticipated as criminal via the cameras analysis and police prediction.

⁶ ESI THOUGHTLAB, SMART CITY SOLUTIONS FOR A RISKIER WORLD (2021), <https://thoughtlabgroup.com/wp-content/uploads/2021/03/Smart-City-Solutions-eBook-.pdf>.

⁷ (2017) 10 SCC 1.

⁸ Vidushi Marda & Shivangi Narayan, *Data in New Delhi's Predictive Policing System*, in PROCEEDINGS OF THE 2020 CONFERENCE ON FAIRNESS, ACCOUNTABILITY, AND TRANSPARENCY 317 (2020).

4.1 Constitutional Foundation

The Constitution of India gives power to the law enforcement under article 22, exception regarding the preventive detention, but the Supreme Court establishes that such power should not be arbitrary and must be in accordance with the law. Moreover, articles 14, 19 and 21, backed up with the Justice K.S. Puttaswamy (Retd.) v. Union of India judgement, protect citizens from such power⁹.

4.2 Police and Surveillance Laws

Indian policing remains governed by the *Police Act, 1861*, a colonial statute that vests wide and indeterminate powers in the police without incorporating standards of rights protection or accountability, which raises concerns in the use of data being stored by the digital methods as per such outdated law.

Whereas the Information Technology Act, 2000, gives power to the state to intercept, monitor (section 69), block websites (section 69A) and control digital communications under the name of sovereignty, security, and public order. Likewise the Indian Telegraph Act, 1885 allows phone tapping (section 5(2)).

4.3 Criminal Procedural Laws

Bharatiya Nagarik Suraksha Sanbitha, 2023 further provides statutory authority for surveillance, monitoring, and preventive action based on suspicion or apprehended harm. Predictive policing is operationalised through these provisions by substituting human assessment with algorithmic risk profiling. However, the statutory scheme lacks legal standards for data use, transparency, proportionality, or procedural safeguards to test algorithmic outputs. Judgements like *A.K. Roy v. Union of India* (1982) and *State of West Bengal v. Anwar Ali Sarkar* (1952) emphasised the regulation of arbitrary power of the police.

4.4 Data Protection Laws

The newly enacted law, i.e. the Digital Personal Data Protection Act, 2023, protects the personal data of the citizens, but such data can be used by the government in the name of security and public order, which substantially weakens the privacy protection in practice. These carve-outs allow extensive data collection and processing for predictive policing¹⁰ with limited transparency or consent, while core principles like purpose limitation and data minimisation remain weakly enforceable against law enforcement. At the same time, India's

⁹ (2017) 10 SCC 1.

¹⁰ Matthias Leese, *Staying in Control of Technology: Predictive Policing, Democracy, and Digital Sovereignty*, 31 DEMOCRATIZATION 322 (2024).

surveillance laws, designed for conventional interception methods, fail to regulate algorithmic and large-scale data analysis enabled by predictive policing.

5 IMPACT OF PREDICTIVE POLICING ON FUNDAMENTAL RIGHTS

In the landmark judgement of Justice K.S. Puttaswamy (Retd.) v. Union of India, wherein the Supreme Court unequivocally recognized the right to privacy as an intrinsic facet of the right to life and personal liberty under Article 21, it was keenly observed by Justice D.Y. Chandrachud, that privacy protects the sanctity of personal intimacies, family life, marriage, procreation, domicile, and sexual orientation. So, the unregulated deployment of tools in predictive policing technologies could raise profound constitutional concerns like rights to equality (Articles 14–15), due process (Article 21), and privacy. Moreover, tools trained on biased and incomplete data could lead to more issues for vulnerable groups of the society. Following are points dealt in detail how AI enabled predictive policing impacts the constitutional fundamental freedoms of citizens.¹¹

5.1 Judicial Responses and Constitutional Standards

There are various cases which lay down the foundation tone for non-infringement of fundamental rights of the individuals by the honourable Supreme Court of India. Below is laid a table which classifies under five heads describing the rights affected, the impact, related case laws with judgements and lastly their relevance to how the predictive policing is impacting on the fundamental rights protected by the supreme law of India.¹²

TABLE 1. *Predictive Policing and Indian Constitution*

Articles under Indian Constitution	Impact by predictive policing	Case laws	Judgment held	Relevance
ARTICLE 14	Arbitrariness, Biasness and Discrimination	<i>State of West Bengal v. Anwar Ali Sarkar (1952)</i>	Arbitrariness of state action is unethical, legal safeguards are a must	No legal safeguards, lack of laws to regulate predictive police actions
		<i>E.P. Royyappa v. State of Tamil Nadu (1974)</i>	Arbitrariness is antithesis to equality	AI trained on biased data, inherently arbitrary

¹¹ Kelly Blount, *Using Artificial Intelligence to Prevent Crime: Implications for Due Process and Criminal Justice*, 39 AI SOC'Y 359 (2024).

¹² Manoj Meena & Aishvarya Joshi, *AI Policing in Criminal Justice: Methods & Concerns in Crime Detection and Prevention in India 2* (2023).

Articles under Indian Constitution	Impact by predictive policing	Case laws	Judgment held	Relevance
ARTICLE 19	Right to freedom of Movement, Expression and Association	<i>Kharak Singh v. State of U.P. (1963)</i>	Continuous surveillance impairs personal freedom and movement	Continuous surveillance, monitoring free movement
		<i>Anuradha Bhasin v. UOI (2020)</i>	Restrictions on fundamental freedoms must be necessary, proportionate and reasoned	Preventive and anticipatory policing lacks proportionality
ARTICLE 21	Right to Privacy & Personal Liberty	<i>AK Roy v. UOI (1982)</i>	Preventive powers affecting personal liberty require strict procedural safeguards.	Lack of laws to regulate preventive action of predictive policing
		<i>KS Puttaswamy v. UOI (2017)</i>	Laid test of legality, rationality and proportionality	Mass data and behavioural prediction fail proportionality test

6 BALANCING PUBLIC SAFETY AND CONSTITUTIONAL FREEDOMS

6.1 Ethical Challenges and Democratic Accountability

As far as ethics in AI is concerned, it's one of its biggest challenges. AI systems work on a concept known as "Black Box", which lacks transparency in its analysis, meaning AI fails to explain how and why it predicted or analyse its conclusion, like prediction of individual as prospective criminal. This drawback of AI systems poses a serious threat when we talk of implementing such technologies in a democratic country like India. Moreover, the lack of proper legal provisions also evolves the challenge of accountability, that if an AI system makes any mistake in recognising or predicting any individual as criminal, then who will be liable for its mistake. This can lead to rise in illegal detentions, unlawful surveillance etc. So, to deal with such issues, it's very important to keep check and balance of technologies with the legal system, so that the proper party responsible could be held liable and accountable as well as to analyse the most important question why such person has been flagged or why not? This could maintain the balance with public safety along with the technological development. Therefore, it is important to critically examine the implications of AI use in policing and development of robust frameworks that prioritise ethical considerations.

7 POLICY, LEGAL SUGGESTIONS AND WAY FORWARD

Technology and new systems are inevitable; it's part of growth and development of human nature. So, adoption and use of such tech become part of the process. But, to deal with such tech without hampering the life of people, and without affecting the community, in a way that tech is controlling the behaviours of human, sounds threatening and where it needs an eye on. India lacks proper governance, legal provisions or rules to deal with such technologies when they make any mistake. AI systems work on codes, they analyse and conclude what is fed to them via the codes, so they lack accountability, but if it analyses wrong who should be held liable. Along with this issue several ethical concerns are lined up which needs proper lawful governance, to save the fundamental rights of the citizens. This can pose a big threat on vulnerable communities like women, children, poor people, transgenders etc.

7.1 Policy Recommendations for Urban Policing Systems

AI enabled predictive policing in India is growing rapidly, and artificial intelligence is still in its infancy, which means in the long run or coming future, AI will be more advanced and developed. So, with its growth and application in sectors like law enforcement which directly deals with public and individuals and are bound by law to protect their rights, it becomes a must to work under the purview of legal safeguards, for which following recommendations are given to be included for making laws or acts or reforms in AI acts of India or amending present acts in this regard:

1. Inclusion of public in policy development
2. Rights-centric laws should be enabled
3. Comprehensive laws on AI for law enforcement
4. Independent regulating bodies
5. Statutory authorisation and defined scope
6. Non-discrimination and bias mitigation
7. Institutional preparedness and ethical training
8. Continuous evaluation and temporal limits

8 CONCLUSION

In India various artificial intelligence tools are being used by various states for the various purposes. India is accepting the transformation from documentation age to digital age, but the development of AI tools and technology not backed up by law raises serious ethical concerns which could lead to violation of the fundamental rights guaranteed to the citizens.

This paper addressed that the growth of artificial intelligence is inevitable, as well as the development and deployment of technologies as such, especially in sensitive domains like law enforcement, which directly deal with the citizens' rights and freedoms be completely prevented. However, in a democratic country like India digital surveillance must come with accountability and transparency and imposing liability in instances of misuse or adverse consequences. This paper clearly analyses via various important judgements and legal regulations and establishes an interrelationship between artificial intelligence and the fundamental rights, implying the potential infringement upon the rights guaranteed under the constitution and moreover the lack of laws to deal with such consequences. It raises several constitutional concerns like arbitrariness, chilling effect on the freedom and privacy etc. Therefore, the need of clear, specific and robust safeguards is the need of the hour now, which must be technology specific and answers the concerns of ethics, transparency and accountability. Therefore, this paper contributes with policy legal suggestions to deal with this concern in coming future by laying down the roadmap and policy recommendations like inclusion of public, enabling a rights-based legal framework, appointing independent multidisciplinary bodies etc, to deal with the concerns and challenges that such system comes with.

However, this paper also identifies a significant gap between the data currently stored in digital repositories and the way such data is used by institutional bodies to train artificial intelligence systems, particularly concerning its relevance to individuals and its future use. Moreover, the issue of the right to be forgotten becomes especially significant in this context, as the continued use of digitally stored data for training AI systems risks preserving an individual's identity indefinitely on digital platforms.

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CHAPTER 9

Cyber Security and Artificial Intelligence in Financial Systems: Confronting AI-Driven Threats to India's Digital Infrastructure

RAJAKULASEKHARAN V* AND KAUSHIK SUNDARARAJAN S**

The rapid integration of artificial intelligence (AI) into the financial systems, particularly in banking and payment infrastructure, has significantly intensified cybersecurity risks. While the existing legal framework provides a regulatory structure, it fails to address the AI driven risks. While the Digital Personal Data Protection Act, 2023 regulates data processing obligations and the Information Technology Act, 2000 provides a framework governing cyber offences, both the statutes operate within a technologically narrow paradigm which fails to take into account adversarial AI attacks, automated fraud, and algorithmic manipulation within financial ecosystems.¹ This gap in the law creates ambiguity in assigning liability, where responsibility for AI-driven cyber incidents causing financial loss is unclear and often diffused across developers, financial institutions, and intermediaries without clear standards.²

The paper seeks to investigate this contradiction through statutory interpretation, regulatory practices, and judicial precedents, particularly in the case of Shreya Singhal v. Union of India, where the Supreme Court of India underscored the necessity of precision in regulating technologically mediated conduct.³ It further examines how the regulatory approach of the Reserve Bank of India addresses cybersecurity risks in financial systems but fails to incorporate AI-specific accountability mechanisms, resulting in fragmented and ineffective governance. The paper adopts a doctrinal methodology that combines statutory interpretation, policy review, and comparative analysis to show that existing liability doctrines lack the essential structure to deal with autonomous AI driven cyber harms.

The analysis establishes that cybersecurity failures in financial systems arise not only from technological vulnerabilities but also from statutory design limitations, necessitating a risk-based, AI-specific regulatory framework aligning liability, institutional accountability, and adaptive governance.

Keywords: Algorithmic accountability, Digital Financial Infrastructure, AI Driven cyber threats, Cybersecurity regulation, Cyber risk attribution

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¹ Rajat Bhandari, *AI and Cybersecurity: Opportunities, Challenges, and Governance*, SSRN ELEC. J., at 5–7 (2025).

² Kapoor, *Adversarial Machine Learning Attacks in Cybersecurity Systems*, SSRN ELEC. J., at 8–10 (2023).

³ Shreya Singhal v. Union of India, (2015) 5 SCC 1, ¶¶ 87–90.

1 INTRODUCTION

The incorporation of Artificial intelligence on financial systems has changed the very nature of cybersecurity risks by embedding autonomous and data-driven decision-making within the banking and payment infrastructure. Apart from conventional cyber threats which are premised on unidentifiable unauthorised access or manipulation, AI driven cyber-attacks act through adaptive learning processes that obscure causation, intent, and execution. This transformation of cyber-attacks on banking systems challenges the foundational assumptions of existing legal framework which still rely on traceable human conduct and attribution.⁴ The rapidly changing Indian financial system and digital economy are governed by statutory frameworks such as the Information Technology Act, 2000 and the Digital Personal Data Protection Act, 2023, which regulate cyber offences and data processing obligations.

However, the legal framework of both these acts is anchored in certain sections such as Sections 43 and 66 of the Information Technology Act, which deal with unauthorised access and computer related offences,⁵ and sections 5 and 8 of the Digital Personal Data Protection Act, which impose limitations regarding lawful data processing and purpose limitation.⁶ These provisions operate within a narrow technological framework and have a static conception of risk, dealing with identifiable concerns and misconduct without accounting for autonomous decision-making systems which are capable of producing unpredictable outcomes.⁷ These statutes do not account for adversarial machine learning or autonomous AI behaviour.

The stance taken by the court and the judicial reasoning in India has also emphasised the necessity of proportion and precision in technologically mediated content. In the case of *Anuradha Bhasin v. Union of India*, the Supreme Court underscored the importance of narrowly tailored regulatory responses.⁸ Similarly the constitutional recognition of privacy of information in the case of *Justice K.S. Puttaswamy v. Union of India*, highlighted the evolving interface between technology and legal accountability.⁹

This paper seeks to analyse how the AI driven cyber within the financial systems in India generate a regulatory contradiction where the legal framework has ambiguity on who is liable in the case of technologically advanced harms. It adopts a doctrinal methodology

⁴ Ian J. Goodfellow, Jonathon Shlens & Christian Szegedy, *Explaining and Harnessing Adversarial Examples*, arXiv:1412.6572, at 3–5 (2014).

⁵ Information Technology Act, 2000, §§ 43, 66.

⁶ Digital Personal Data Protection Act, 2023, §§ 5, 8.

⁷ Nicolas Papernot, Patrick McDaniel, Somesh Jha, Matt Fredrikson, Z. Berkay Celik & Ananthram Swami, *The Limitations of Deep Learning in Adversarial Settings*, arXiv:1511.07528, at 8–10 (2015).

⁸ *Anuradha Bhasin v. Union of India*, (2020) 3 SCC 637, ¶¶ 70–75.

⁹ *Justice K.S. Puttaswamy (Retd.) v. Union of India*, (2017) 10 SCC 1, ¶¶ 180–183.

combining statutory and regulatory analysis to show that the existing legal framework dealing with technological crimes in the financial system is conceptually ill equipped to assign liability in such a context.¹⁰ The analysis additionally considers regulatory regimes in India, particularly those relating to cybersecurity institutions, to demonstrate how regulatory mechanisms remain fragmented and are inadequate for dealing with AI risks.¹¹

1.1 Literature Review

The existing body of literature examining the intersection of Artificial Intelligence (AI) and cyber security within the financial systems reveals significant analytical fragmentation, especially in addressing structural inadequacies and accountability gaps. Tapesh Meghwal, in his article “*Emerging Challenges in Regulating Artificial Intelligence Under Cyber Security Laws in India*,” analyses the limitations of Indian cyber security laws in dealing with AI driven attacks on financial systems, highlighting the issues of algorithmic opacity and the lack of liability attribution mechanisms, yet the analysis remains limited as it does not extend to sector-specific financial vulnerabilities. Similarly Ian Goodfellow in his work “*Explaining and Harnessing Adversarial Examples*,” demonstrates the susceptibility of AI systems to adversarial manipulation, establishing the unpredictability and instability of algorithmic outputs, yet the work remains highly confined to technical analysis without engaging with legal accountability framework.

The article titled “The Limitations of Deep Learning in Adversarial Settings,” a work done by Nicolas Papernot, further develops the argument stated in Ian’s article by formalising adversarial threat models, but does not engage with the translation of these technological vulnerabilities into questions of legal responsibility. Dr. Richa Singhal and Priyanka Bargujar in their work “Emerging Financial Scams In The Indian Banking Sector: Challenges And RBI’s Preventive Framework,” evaluate RBI’s preventive framework but overlooks implementation challenges. The article titled “Impact of Cyber-Attacks on Banking Institutions in India: A Study of Safety Mechanisms and Preventive Measures,” authored by Adarsh Mundhra analyses cyber threats within the banking sector by highlighting vulnerabilities, however the study lacks empirical validation to substantiate the effectiveness of the proposed reforms.

¹⁰ Tapesh Meghwal, *Emerging Challenges in Regulating Artificial Intelligence Under Cyber Security Laws in India*, SSRN ELEC. J. (Sept. 4, 2024), at 5–7.

¹¹ Reserve Bank of India, *Cyber Security Framework in Banks*, <https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=10435&Mode=0> (last visited Apr. 14, 2026).

1.2 Objectives of the Study

- 1) To critically evaluate how the cybersecurity and data protection laws in India are inadequate in addressing AI driven threats within the financial system.
- 2) To analyse the attribution deficit in existing legal framework in assigning liability for AI driven cyber incidents within the financial systems.
- 3) To construct a risk-calibrated and AI-specific legal framework aimed at addressing gaps in cybersecurity governance and liability attribution within financial systems.

2 AI DRIVEN CYBER THREATS AND THE TRANSFORMATION OF LEGAL RISK

The application of artificial intelligence to financial systems has fundamentally changed cybersecurity risk by introducing autonomous decision-making into banking and payment systems. In contrast to the traditional cyber threats based on human identifiable intervention, AI-driven threats are developed by self-learning algorithms and do not require direct management by humans. This change calls into question the traditional thinking on traceability and the foreseeable behaviour of systems, which has been the basis of cybersecurity regulations.¹²

This means that traditional approaches to the cyber risk assessment lose their effectiveness as the system's behaviour changes without prior software programming.¹³ The opacity of more complex AI systems hinders the capability to trace the thinking that went into the generation of these algorithms. Complex neural networks are often used as 'black-box' systems without easy-to-understand internal logic that can be easily interpreted by regulators and financial institutions. Without meaningful interpretability, it is difficult to comprehend the behaviour of algorithms when it comes to fraud detection, automated credit assessment and payment authentication. While the Delhi High Court in *Avnish Bajaj v. State (NCT of Delhi)*¹⁴ acknowledged the importance of traceability for assigning the responsibility of intermediaries, the concept of AI systems does a complete undermining of the factual assumptions that lie behind traceability.

Adversarial manipulation is another example of the way AI is changing cyber risk from its traditional perimeter defence approach. The hazards of AI-based systems are even more enhanced in financial systems through adversarial manipulation that exploits system vulnerabilities but does not cross the external security boundaries.¹⁵ Adversarial attacks exploit

¹² Goodfellow, Shlens & Szegedy, *supra* note 4, at 3–4.

¹³ Papernot, McDaniel, Jha, Fredrikson, Celik & Swami, *supra* note 7, at 9.

¹⁴ *Avnish Bajaj v. State (NCT of Delhi)*, 150 (2008) DLT 769, ¶¶ 20–24.

¹⁵ *What Is Adversarial Machine Learning?*, IBM, <https://www.ibm.com/think/topics/adversarial-machine-learning> (last visited Apr. 15, 2026).

vulnerabilities in a system by tweaking input parameters in a way that affects the output of the model without violating any security perimeters outside of the system, and thus can uncover risks not traditionally identified by cybersecurity against an external adversary.¹⁶ This intersection of autonomy, adaptability, and opacity shows that AI not only introduces new forms of cyber risk but also transforms how legal responsibility is assessed. These characteristics fundamentally undermine predictability, traceability and transparency.

3 FAILURE OF EXISTING LEGAL FRAMEWORK

India's current statutory framework which governs cybersecurity was enacted to regulate cyber offences and personal data protection instead of autonomous behaviour of AI systems. Consequently, the present regime also addresses human-directed cyber misconduct but remains silent on the regulation of AI model behaviour after deployment. This omission represents not only a technical limitation but a statutory one as contemporary AI financial systems continue to evolve through model adaptation while operating outside a dedicated legal framework governing their post training conduct.¹⁷

3.1 The Information Technology Act 2000

In India, the Information Technology Act 2000 is the primary law under which digital governance inside the country currently is governed. The IT Act primarily focuses on unauthorised criminal access, data theft and other related cyber offences through provisions such as sections 43 and 66 of the Act. However these provisions are only for unauthorised human conduct and not for autonomous algorithmic behaviour. The act neither defines AI systems nor prescribes legal obligations governing model deployment, algorithmic modification or post deployment supervision. Consequently, when harm arises from algorithmic model behaviour instead of human intervention, the statutory framework does not provide any mechanism for regulating the legality of that behaviour itself.

3.2 The Digital Personal Data Protection Act, 2023: The Illusion of AI Accountability

Unlike the IT Act, the Digital Personal Data Protection Act, 2023 governs the collection, processing, and retention of personal data. Its regulatory architecture is therefore data centric rather than model-centric, leaving the behaviour of trained AI systems largely outside

¹⁶ *Sound Practices: Implications of Fintech Developments for Banks and Bank Supervisors*, BANK FOR INT'L SETTLEMENTS, <https://www.bis.org/bcbs/publ/d431.htm> (last visited Apr. 15, 2026).

¹⁷ Dwiti Gambhir & Raghu Raja Mehra, *AI Liability and Accountability: A Review*, INT'L J. SCI. & RSCH. 846, 849–50 (2025).

its statutory scope.¹⁸ There are three main ways that DPDP legislation currently does not work in an AI context. The first is that consent (Section 6 of the act) does not work well for deep learning because once data has been applied to an AI model's weights, the subsequent withdrawal of that consent would not necessarily be able to propagate through the AI pipeline in an effective manner since the model has already learnt from that data. The second reason is that the legitimate use exemptions of the act (Section 7) are too broad and could allow for public sector entities to use high risk AI to provide social benefits/surveillance without proportionality safeguards.¹⁹

Finally, while the DPDP is a law that regulates digital personal data, it does not define how AI creates or derives inference, and thus the type of inference, such as embedding or profiling metrics, can at times be even more invasive than the data. The absence of any statutory obligation relating to model retraining, inference deletion or post-training accountability illustrates that the Act governs personal data rather than AI behaviour.

Although the DPDP Act does contain a provision regarding withdrawal of consent (Section 6), the overall application of the law would also require the capacity to erase or suspend the processing of the concerned personal data. This becomes untenable under circumstances where personal data has already been embedded within the weight parameters of a trained AI model. Upon completion of training of an AI model, it is typically impossible to extricate or expunge the trained representations from the model, except through model retraining or specialized machine unlearning techniques.

3.3 The Failure of Technological Neutrality

The conventional ability of the Indian law to withstand technological evolution by maintaining a stance of technological neutrality now becomes far more weakened in situations where technology, after deployment, continues to evolve under its own steam. An AI program differs from typical software in the manner that it keeps altering its own working and operational behaviour through learning – a paradigm for which technological neutrality in statutory drafting was never designed.

While the Bharatiya Sakshya Adhiniyam, 2023 provides the procedural preconditions required to permit the admissibility of an electronic record as evidence, it offers no mechanism to address issues regarding the explainability, reliability, and algorithmic bias of an AI output. Thus, while evidentiary admissibility is regulated in a procedurally orthodox manner, an autonomous AI output goes unscrutinized at a substantive reliability and evidentiary admission standard.

¹⁸ Arshpreet Singh & Shailja Thakur, *Data Protection and AI Under the Digital Personal Data Protection Act, 2023: An Indian Perspective*, 13 INT'L J. CREATIVE RSCH. THOUGHTS 115, 115 (2025).

¹⁹ *Id.* at 120.

4 LIABILITY BREAKDOWN IN AI-DRIVEN CYBER INCIDENTS

4.1 Legal Failure to Liability Indeterminacy

The primary legal challenge with autonomous AI goes beyond uncertainty about legal liability, however, and is the fragmentation of responsibility: under current liability concepts, liability is only possible if a legal entity is identified that decided on the harmful action for which liability should be claimed and that acted as the source of the harm, but the use of autonomous AI makes such a straightforward linkage of liability to an entity impossible post-deployment. The post-deployment liability analysis with autonomous AI does not only have uncertainties regarding legal liability, but also the question of whether liability can be attributed at all: under existing liability concepts, the question of liability can only be answered when a legal entity can be identified that made the decisions for the harmful action for which the liability is claimed, and that is the source of the harm, but the use of autonomous AI makes such an easy attribution of the liability neutral after implementation. It is not just the strain of doctrine that has been produced but the breakdown of structure in the capacity of law to distribute responsibility.²⁰

AI systems are based on a distributed architecture with developers, deployers (including financial institutions), and intermediaries. This multi-actor ecosystem divides the causal chain, and it is challenging to assign harm to one party that is identifiable. As observed in the literature, AI-induced harm can be caused by the interplay of various components of a system, instead of a particular human action, undermining the conventional liability models.²¹ This fragmentation produces what this paper characterises as an attribution deficit which is a structural inability within the existing legal doctrine to assign responsibility, given that harmful effects are generated by a multiplicity of human and algorithmic interactions, rather than one legally liable party.

4.2 Doctrinal Inadequacy: Negligence and Foreseeability

Duty of care, breach of duty, causation and reasonably foreseeable harm are all necessary to prove negligence liability. Each of these elements is complicated by the AI systems, as their behaviour could be different once they have been deployed. While developers may make reasonable design efforts, adaptive learning can also produce outputs, which were not intended or reasonably foreseeable.²² It is not negligence doctrine's fault, but rather the nature

²⁰ Sunil Kalagi et al., *Legal Liabilities of Artificial Intelligence: An Overview*, 12 SDG J. L. & SUSTAINABLE DEV. e3861, at 3–4 (2024).

²¹ *Id.* at 3–4.

²² *Id.*

of the factual assumptions on which negligence doctrine is grounded that are fundamentally changed by autonomous AI, such that the doctrine becomes less and less useful.

4.3 Strict Liability and the Problem of Distributed Control

The concept of strict liability that is commonly used with hazardous activities also does not work well with AI-driven situations. Strict liability assumes that a person has full control of an inherently hazardous activity which is no longer true in the case of autonomous AI, as the control of the operation is now fragmented among the developers, financial institutions, cloud service providers and ever evolving computational processes.²³ Algorithms are developed, implemented by financial institutions, and autonomously adapted by systems based on data inputs. This decentralization of authority makes strict liability conceptually fragile since there is no party that can be considered as having absolute power over the system.²⁴

4.4 Product Liability and the Dynamism of AI

The failure of product liability frameworks is further caused by their attention to static products. Artificial intelligence systems, in turn, are dynamic and in a state of constant evolution. A defect-free system at the time of deployment can later create undesirable results, as a result of adaptive learning.²⁵ Thus, the current doctrine has no systematic approach to dealing with defects that occur after the system is supplied, as a result of the post-deployment learning process, rather than pre-deployment design.²⁶

4.5 Indian Case Study: Algorithmic Trading and the NSE Co-Location Scandal

The NSE co-location case is an Indian case that exemplifies the complexity of liability in automated systems. In this scandal, some high-frequency trading (HFT) companies supposedly had priority access to the co-location servers of the National Stock Exchange, allowing them to execute algorithmic trades more quickly.²⁷

Though the case mainly concerned the question of market manipulation and violation of regulations, it also raised more structural-related questions concerning AI-driven systems. Algorithms made use of rapid-moving trading systems with little human input, and the benefit was integrated into the technological infrastructure, as opposed to deliberate action by humans.²⁸

²³ Gerhard Wagner, *Liability for Artificial Intelligence: A Proposal of the European Parliament*, 35 J. EUR. TORT L. 1, 15–17 (2020).

²⁴ *Id.* at 15–17.

²⁵ *Id.* at 12–14.

²⁶ *Id.*

²⁷ *In re* Nat'l Stock Exch. Co-Location Facility, O.P. No. 1 of 2019 (Sec. & Exch. Bd. of India Apr. 30, 2019).

²⁸ *Id.*

In terms of liability, there were a number of issues that arose:

- Attribution ambiguity: Did the liability lie with the exchange, brokers or the algorithm designers?
- Technological obscurity: The operation of trading algorithms was such that it was challenging to determine how benefit could be converted into injury.
- Systemic interaction: The consequences of the market were the result of the interaction of several automated systems but not an individual act.

This case exemplifies that in partially automated settings, the question of liability diffuses and disputes. These challenges will only tend to increase as financial systems implement AI-based decision-making, causing more uncertainty in accountability.²⁹

4.6 Liability Vacuum

The net impact of these doctrinal restrictions is the development of a vacuum of liability. Notwithstanding, the emerging attribution gap undermines both compensatory justice and deterrence as responsibility will not be attributed with the legal clarity desired because they are based on the assumption of sole human responsibility. What is emerging from autonomous AI is not just doctrinal defects, but a structural issue in the liability framework that assumes that we exercise our will alone.³⁰

5 REGULATORY FRAGMENTATION AND INSTITUTIONAL GAPS

5.1 Liability Vacuum to Governance Failure

With the development of AI-based financial systems it throws light not only on the doctrinal deficits but also the institutional constraints in the architecture of cybersecurity governance. The regulation of autonomous AI cannot happen in isolation, but needs to have co-regulation involving cybersecurity governance, financial regulation and data governance. In India, currently these functions are dispersed in different institutions that operate autonomously under their respective acts. At present, regulation is a scattered affair with specialized institutions like the RBI or authorities under the Digital Personal Data Protection Act, 2023. Both regulators would likely use their respective statutory remits towards creating detailed norms that regulate autonomous AI, but not financial infrastructure.³¹

²⁹ *Id.*

³⁰ Kalagi et al., *supra* note 20, at 12–14.

³¹ *Id.* at 6–9.

5.2 Findings of the Current Regulatory Frameworks

The Reserve Bank of India (RBI) is the key regulator of the financial system; the bank is more concerned with the classic risks, like credit and liquidity. The regulatory framework of AI has not yet addressed AI-specific risks, including algorithmic opaqueness and autonomous decision making.³² Similarly, the Digital Personal Data Protection Act, 2023 provides an exhaustive treatment of all legal and administrative duties concerning the processing of the personal data. Nevertheless, as an institutional matter, it only focuses on data governance, not on AI governance. While the legislation sets forth standards of permissible use, unlawful use and data fiduciary duties, it doesn't lay out systems of oversight pertaining to the updating and re-use of models and algorithmic performance assessment in the workplace. Cybersecurity laws and data protection rules will continue to remain segregated as the two converge more and more into the finance industry's fabric.³³

5.3 Institutional Gaps and Divided Oversight

The primary institutional flaw is not the existence of no regulation, but rather the absence of regulatory co-ordination. Responsibility for cyber security, financial regulation and privacy protection continues to be contained within separate regulatory silos which prevent any single regulator or body from monitoring the full lifecycle of AI. Such departmentalisation of control results in varied regulatory expectations on AI developments with substantial gaps in institutional oversight.³⁴

5.4 Structural Need to Coordinate Regulation

Regulatory fragmentation should be understood, then, as the structural consequence of these institution specific mandates, rather than as the absence of regulation. While India's financial and data protection regulators have strong individual supervisory powers, neither framework sets universal benchmarks that a regime for AI may need to track through the full system. This institutional break with the individual framework suggests we need coordinated regulation more than further statutory obligations. In this way institutional deficiencies lay the basis for the coordinated AI-specific regulation discussed in Part 6.

The regulatory lacuna explored herein, therefore, has not resulted in the total unavailability of data security or cybersecurity regulations, but a divorcing of these regulatory areas that leaves no one body with the ability to regulate AI systems during the whole system cycle. This separation provides a fundamental regulatory flaw in the context of this study.

³² Singh & Thakur, *supra* note 18, at 120–21.

³³ *Id.*

³⁴ *Id.*

6 CONCLUSION AND RECOMMENDATIONS

The analysis undertaken in this paper therefore shows that the legal challenges posed by AI-driven cyber threats in financial institutions extend far beyond technological innovation and reveals a structural disconnection between India's existing legal architecture and operational realities of AI. Collectively from the preceding parts we can infer that the current statutory, doctrinal and institutional framework continues to regulate human directed cyber activity while leaving AI model behaviour largely outside effective legal governance. These findings together demonstrate that the regulatory challenges are neither because of the absence of cybersecurity law nor the absence of data protection law, instead it is because of the absence of a coherent legal architecture which is capable of governing autonomous AI throughout its operational lifecycle.

The above section further elucidates that Indian legal architecture falls short not just in drafting of law but in the entire conception of the concept of liability. Doctrines that continue to rely on the notion of knowable actors, predictable behavior and knowable causal linkages fail miserably within the context of decision making taking place on adaptive AI systems that are networked within financial infrastructure. The argument, thus, warrants an overarching, AI-specific governance model with three overlapping principles at its core: required algorithm explainability within high-risk AI systems, full-lifecycle accountability beyond model deployment, and coordinated institutional regulation under existing cybersecurity, financial regulation, and data protection paradigms. The argument is not for a vast new body of law but for a body of law to adapt itself to the realities of autonomous AI to deal with today's problems.

Ultimately the paper demonstrates that challenges posed by AI driven cybersecurity are not because of the absence of cybersecurity regulation but based on the continued application of legal principles designed for human-directed conduct to autonomous computational systems. If India's statutory framework does not evolve beyond regulating cyber offences, personal data and financial supervision as separate regulatory domains, accountability within AI driven financial systems will remain fragmented and uncertain legally.

* * *

PART IV

Environment, Enterprise and Innovation

CHAPTER 10

Climate Change and Environmental Rights

TANU TIWARI*

Climate change, one of the most pressing challenges for the entire world, has set its onset with its implications being seen on the entire ecosystem. No one is to be blamed for this except the humans themselves. Rising temperatures, extreme weather events and biodiversity loss are clearly visible to everybody and it concerns not only a particular country but the entire world. Therefore, steps must be taken at international level in collaboration to integrate it at domestic level which points out to another important aspect, that is, environmental rights. This paper explores the intersection of climate change and environmental rights. It also goes on to explore the various causes of climate change. It examines the role of the National Green Tribunal, a specialized body formed to safeguard the environment. It also discusses the impact of environment on human lives, thus focusing on well-being of humans and ensuring a life of dignity. It further analyzes India's constitutional provisions and judicial interpretations that reinforce the right to a clean and sustainable environment. It also analyses institutional limitations of the National Green Tribunal which highlight the issue of stronger accountability mechanisms, inclusive governance, and sustainable practices that prioritize vulnerable communities, disproportionately affected by climate change impacts. Ultimately, the paper argues that addressing climate change through the lens of environmental rights provides a more holistic and ethical foundation for global action, ensuring ecological sustainability and human rights.

Keywords: Climate Change, Environmental Rights, Human Rights, Sustainable Development Goals, Climate Justice, United Nations Framework Convention on Climate Change.

1 PROBLEM STATEMENT

The National Green Tribunal (NGT), despite its statutory powers under Section 25 of the NGT Act, faces a structural limitation due to the absence of an enforcement wing. This has led to a persistent implementation gap across environmental orders. Waste management and river rejuvenation cases illustrate this gap most clearly, but similar challenges are evident in air pollution control, industrial compliance, and biodiversity protection. Such institutional weaknesses undermine constitutional guarantees of environmental rights under Article 21 and weaken India's climate governance framework.

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2 RESEARCH QUESTION

To what extent does the lack of an enforcement wing within the National Green Tribunal contribute to the implementation gap in environmental orders — particularly in waste management and river rejuvenation — and how does this limitation affect the realization of environmental rights in India's constitutional framework and climate change commitments?

3 INTRODUCTION

In 2026, all of the media channels, social media handles and newspapers were flooded with the news of heat waves, that India will be the hottest country in the world for two weeks. Well, this was never the case in the past and all such dramatic unfolding of climate conditions in India is resultant of Climate change. Climate change is a long-term change in the average weather patterns that have come to define Earth's local, regional and global climates. These changes have a broad range of observed effects that are synonymous with the term.¹ The world is moving towards a depressing state where even the basics of survival of humans are kicked off by humans themselves to replenish their greed, thereby failing future generations for momentary pleasures. Well, the talk is not limited only to the future generations but for the present ones as well. The emission of CO₂ by some people is causing harm to people who are not even directly or indirectly associated with the cause of such emission.

4 CLIMATE CHANGE & ENVIRONMENTAL RIGHTS

Bruce Duncan Phillips has rightly remarked, "The earth is not dying. It is being killed, and the people killing it have names and addresses." Climate change is worse than people can imagine. The people in the current scenario are not able to take the wrath of nature. Imagine a world where ozone layer will no longer be there, pollution will be at its maximum, land will become barren, moving out of houses will be suffocating, and taking a morning walk will be a luxury. The situation is bad and climate change is no good. The causes of climate change run deeper than we imagine; however, we still can rectify the issues and make this world a better place to live for us along with our future generations. The causes of Climate Change can mainly be classified into two – natural causes and anthropogenic causes. The natural causes include – solar cycle, volcanic gases, orbital wobbles, plate tectonics whereas

¹ *What Is Climate Change?*, NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, <https://science.nasa.gov/climate-change/what-is-climate-change/> (last visited Apr. 15, 2026).

the anthropogenic causes include – deforestation, urbanization, industrialization, waste management, water pollution, fossil fuel consumption.²

4.1 Waste Management as Mitigation

The root cause of climate change is greenhouse gases. The birth of the United Nations Framework Convention on Climate Change was to stabilize greenhouse gases to ensure that the production of food is not threatened as well as to enable economic development in a sustainable manner.³ These greenhouse gases create a blanket in the atmosphere thus trapping heat from the sun, as this blanket increases global warming and climate change also increases at an unprecedented rate. The greenhouse gases include⁴ –

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Fluorinated gases.

Methane emissions are mostly caused by landfills. As organic waste (food waste) breaks down in landfills, it releases methane. Methane is more than 28 times as potent as carbon dioxide at trapping heat in the atmosphere.⁵ Therefore, in order to protect the environment, methane must be significantly reduced. This can be achieved by responsible management of waste. According to Inger Andersen, Executive Director of UNEP, waste management is central to addressing the “triple planetary crisis” of climate change, biodiversity loss, and pollution.⁶

4.2 River Rejuvenation as Adaptation

River rejuvenation is the process of reviving or restoring the natural flow and health of a river that has been damaged due to natural activities such as silt deposition as well as human

² Satinder Kaur, *Climate Change: History, Causes, Evidences, Impacts and Adaptation Measures*, 9 QUEST J. RES. ENVTL. & EARTH SCI. 130 (2023), <https://www.questjournals.org/jrees/papers/vol9-issue3/0903130136.pdf>.

³ *United Nations Framework Convention on Climate Change*, U.N. CLIMATE CHANGE, <https://unfccc.int/process-and-meetings/united-nations-framework-convention-on-climate-change> (last visited May 14, 2026).

⁴ U.S. Env'tl. Prot. Agency, *Overview of Greenhouse Gases*, EPA.GOV, <https://www.epa.gov/ghgemissions/overview-greenhouse-gases> (last visited May 13, 2026).

⁵ U.S. Env'tl. Prot. Agency, *Importance of Methane*, EPA.GOV, <https://www.epa.gov/gmi/importance-methane> (last visited May 13, 2026).

⁶ Inger Andersen, Executive Director, United Nations Environment Programme, Speech at the International Forum on Green World Solidarity: Shifting from Waste to Value for a Sustainable Future, From Problem to Solution: Waste Management Can Help Address Triple Planetary Crisis (June 27, 2024, Baku, Azerbaijan), <https://www.unep.org/news-and-stories/speech/problem-solution-waste-management-can-help-address-triple-planetary-crisis>.

activities such as waste dumping, encroachment, and pollution.⁷ Water and water resources are very important for maintaining an adequate food supply and a productive environment for all the living organisms.⁸ Rejuvenation of rivers is very crucial as healthy rivers act as carbon sinks. A new international study led by researchers at the University of Birmingham suggests that beavers can transform river systems into powerful carbon dioxide sinks by reshaping wetlands and waterways.⁹ However, the case is not the same in the context of India as beavers are not found in India and hence these engineers cannot reengineer the Indian river systems. Rivers also protect the entire ecosystem against flooding by absorbing excess rainfall and simultaneously they also replenish the underground water reserves. Most importantly, healthy rivers are bearing the right to life, by providing water, an essential element for ensuring continuity of life.

4.3 Climate Justice

Climate justice is a type of environmental justice. Climate justice reinforces the idea of how important it is to ensure that everyone is exposed to a cleaner and healthy environment without any discrimination. However, the concept of sacrifice zones is still prevalent. “Sacrifice zones are often ‘fence-line communities’ of low-income and people of color, or ‘hot spots’ of chemical pollution where residents live immediately adjacent to heavily polluted industries or military bases.”¹⁰ This is a gloomy reality of the society that there are certain communities who are exposed and forced to live in such environments where it is almost impossible to live. Climate justice suggests that the countries, industries, businesses, and people that have become wealthy from emitting large amounts of greenhouse gases have a responsibility to help those affected by climate change, particularly the most vulnerable countries and communities, who often are the ones that have contributed the least to the crisis.¹¹

⁷ SCANPOINT GEOMATICS LTD., REJUVENATING RIVERS THROUGH SPATIAL TECHNOLOGY: RIVER REJUVENATION PROGRAMME WHITE PAPER 1 (2023), <https://www.sglgis.com/wp-content/uploads/Rejuvenating-Rivers-Through-Spatial-Technology.pdf>.

⁸ Zeyneb Kılıç, *The Importance of Water and Conscious Use of Water*, 4 INT’L J. HYDROL. 250 (2020), <https://d1wqtxts1xzle7.cloudfront.net/81446170/IJH-04-00250-libre.pdf>.

⁹ University of Birmingham, *Beavers Turn Rivers into Powerful Carbon Sinks, Study Finds*, SCITECHDAILY (May 10, 2026), <https://scitechdaily.com/beavers-turn-rivers-into-powerful-carbon-sinks-study-finds/>.

¹⁰ Robert D. Bullard, Book Review, <https://pmc.ncbi.nlm.nih.gov/articles/PMC3114843/> (last visited May 14, 2026) (reviewing STEVE LERNER, SACRIFICE ZONES: THE FRONT LINES OF TOXIC CHEMICAL EXPOSURE IN THE UNITED STATES (2010), 346 pp., ISBN 9780262014403).

¹¹ United Nations Development Programme, *Climate Change Is a Matter of Justice – Here’s Why*, CLIMATE PROMISE (June 30, 2023), <https://climatepromise.undp.org/news-and-stories/climate-change-matter-justice-heres-why>.

5 LEGAL FRAMEWORK: SECTION 25 AND BEYOND

Section 25 of the National Green Tribunal Act, 2010 states about “Execution of award or order or decision of Tribunal.”¹² It presents that the Tribunal’s orders, awards, or decisions are executed as if they were a decree passed by a civil court and the tribunal possesses powers similar to those of a civil court.

5.1 Limitations of Section 25

1. Section 25(2) of the Act states that the Tribunal may transfer any order or award made by the Tribunal to a civil court which would be having local jurisdiction and the civil court will execute the order passed by the National Green Tribunal. Hence, highlighting the issue that NGT is having no power or a specialized wing to carry out its own decrees. Also, one thing which is of high importance is that the local civil courts are already overburdened by their own nature of works and execution of decrees passed by the Tribunals burdens them more thus resulting in delay of such executions, and thereby the decree would lose its essence.
2. Section 25(3) mentions that in case of any unpaid environmental compensation “shall be recoverable from the aforesaid person as arrears of land revenue or of public demand.” India has a federal structure, and land revenue falls under the state list, so it is entirely under the state jurisdiction. Every state’s Land Revenue Act explicitly mentions that “collector” or “tehsildar” are legally empowered to recover state dues and arrears. So, dependency arises in the NGT, as they have no power to collect environmental revenue.
3. Jurisdictional limitations – The NGT can only execute orders linked to the seven Acts specified in Schedule I. There are many environmental cases on which NGT can’t even exercise its jurisdiction just because those cases are subject matters of the laws that are outside the jurisdictional limit of NGT to operate.

5.2 Section 26: Punishment for Non-Compliance

Section 26 of the NGT Act, 2010 states, “Penalty for failure to comply with orders of Tribunal.”¹³ It mentions that if anyone fails to comply with the order passed by the NGT, then that person shall be liable to imprisonment for a term which may extend to three years or with a fine whose upper limit could be ten crore rupees and not more or with both imprisonment and fine.

¹² The National Green Tribunal Act, 2010, § 25.

¹³ *Id.* § 26.

If the failure to comply with order continues, then such person shall be liable to pay additional fine which may extend to twenty five thousand rupees for every day such ignorance to comply with order continues.

In case a company is instructed to comply with order and they fail to comply with such order, then that company shall be liable to pay a fine which may extend to twenty five crore rupees, and if failure continues to persist then in that case, the company shall be liable to pay additional fine which may extend to rupees one lakh daily till the failure continues.

The additional fine in both cases will be payable after conviction for the first such failure of compliance.

5.3 Section 28: Liability of Government Departments

Section 28 of the Act states, “Offences by Government Departments.”¹⁴ If any department of government has failed to comply with the order passed by the NGT, then the Head of Department shall be held accountable. However, if such Head of Department remains successful in establishing that he/she had no knowledge of the offence committed or he/she had taken due diligence to prevent such offence in the first place then he/she can be relieved from the punishment bestowed by the law for committing such offence.

Sub-section 2 of the Section states that if any other officer is found to be guilty in any governmental department other than Head of Department, then that person will be held accountable and punished accordingly.

5.4 Limits of Punishment in Ensuring Restoration

Punitive measures like fines and penalties as mentioned in Sections 25, 26 and 28 do not always ensure ecological restoration. In most of the cases, the NGT leans heavily toward financial penalties. The reason of which is that the objective of the Act itself is “enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property.” The payments of these fines are usually considered as the routine payments for companies and polluters thereby defying the reason of imposition of such fines. Any method as such for the restoration of environment is not provided and that creates a flaw, because environment has been polluted. Now steps should be taken in order to restore the environment in its original state.

Although restoration of environment is tried by the tribunal while passing the judgments, the judges intend that the fines would be utilized in restoration of environment but the collected money finds itself being trapped in bureaucratic and state funds tussle. When

¹⁴ *Id.* § 28.

these funds get the green signal, in most cases environmental damage has become irreversible.

6 CONSTITUTIONAL AND STATUTORY PROVISIONS

Environmental degradation has been observed since the time humans set their foot on earth, however the extent of environmental degradation in the form of pollution rose during the 18th – 19th century which is commemorated as the Industrial Revolution. Serious public awareness emerged in the late 1960s, following major environmental crises,¹⁵ and this led to the realization that efforts at domestic level were not sufficient and rather required international efforts to protect the environment. Pressure was put on the international community to which the United Nations responded by convening the Stockholm Conference, 1972. This conference was attended by the then Prime Minister Smt. Indira Gandhi as a result of which the first legislation of India, “The Wildlife Protection Act”, was passed in 1972,¹⁶ and simultaneously 42nd amendment in the Constitution of India was introduced. The amendment explicitly incorporated concepts of environmental protection into the Constitution under Articles 48A and 51A(g).¹⁷

Article 48A of the Constitution of India states, “The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.”¹⁸ The Article has been placed under the Directive Principles of State Policy and the Article is self-explanatory in the sense that the state has been entrusted with the responsibility to protect and improve the environment and to safeguard the forests and wildlife of the country.

Article 51A(g) of the Constitution of India states, “to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.”¹⁹ In this Article the Constitution has made it a fundamental duty of every citizen to protect and improve the natural environment, thereby elucidating the fact that environmental protection requires everybody’s attention and efforts and not the state alone. It in a sense creates awareness to protect the environment among every citizen of the country. One among the major changes brought by the 42nd amendment was that protection of wild

¹⁵ “*Environmental Crisis*” in the Late 1960s, GIVE EARTH A CHANCE ENVIRONMENTAL ACTIVISM IN MICHIGAN, https://michiganintheworld.history.lsa.umich.edu/environmentalism/exhibits/show/main_exhibit/origins/-environmental-crisis-in-the-#content (last visited Apr. 16, 2026).

¹⁶ Tekameren I Jamir, *Wildlife Protection Act 1972 - A Simplistic Approach*, MORUNG EXPRESS, <https://morungexpress.com/wildlife-protection-act-1972-a-simplistic-approach> (last visited Apr. 15, 2026, 9:15 PM).

¹⁷ Advaita R. Prasad, *Policy Strategies to Augment India’s Environmental Concerns: An Analysis*, INT’L J. CREATIVE RES. THOUGHTS, ISSN: 2320-2882, at 3–4 (2024), <https://www.ijcrt.org/papers/IJCRT2408232.pdf>.

¹⁸ INDIA CONST. art. 48A, inserted by Const. (Forty-Second Amendment) Act, 1976.

¹⁹ INDIA CONST. art. 51A(g).

animals and birds was shifted from the state list to the concurrent list in order to create uniformity of legislation and probably to strengthen the laws throughout India to conserve the wild animals and birds.

When mentioning the Constitutional Provisions, the entire study is a failure if Article 21 of the Constitution of India is not mentioned. Article 21 has evolved itself over the period of time and the importance of this article can be understood from the fact that when all fundamental rights stand suspended during National Emergency, Article 20 and Article 21 are the only fundamental rights which cannot be curtailed.

Article 21 of the Constitution of India states, “No person shall be deprived of his life or personal liberty except according to procedure established by law.”²⁰ The Supreme Court in its judgment stated that right to decent environment including pollution free water and air and protection against hazardous industries comes within the ambit of Article 21.²¹

The statutory provisions cannot be neglected as they act as practical force of Constitutional provisions by imbibing them in its statute and reinforcing the very spirit of Constitutional provisions. As mentioned above the first ever statute in post-independence era was Wildlife Protection Act, 1972. The objective of the Act is “conservation, protection and management of wild life.”²² The recent amendment brought in the Act was in 2023 where CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) was incorporated in the Act.

Another Act in the line is Water (Prevention and Control of Pollution) Act, 1974. The objective of the Act is, “An Act to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.”²³

Next Act is The Air (Prevention and Control of Pollution) Act, 1981. The objective of the Act is, “An Act to provide for the prevention, control and abatement of air pollution, for the establishment, with a view to carrying out the aforesaid purposes, of Boards, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.”²⁴

There is a whole line of Environmental laws in India. If to be mentioned some of them are —

²⁰ *Id.* art. 21.

²¹ *Subhash Kumar v. State of Bihar*, (1991) 1 SCC 598.

²² Wildlife (Protection) Act, 1972.

²³ Water (Prevention and Control of Pollution) Act, 1974.

²⁴ Air (Prevention and Control of Pollution) Act, 1981.

The Indian Forest Act, 1927

The Forest (Conservation) Act, 1980

The Environment (Protection) Act, 1986

Hazardous Wastes (Management and Handling) Rules, 1989

The Public Liability Insurance Act, 1991

The Biological Diversity Act, 2002

The National Green Tribunal Act, 2010

7 RECOMMENDATIONS – PROPOSED AMENDMENTS TO THE NGT ACT

7.1 Establishment of the Environmental Enforcement Wing

Establishing a dedicated wing, directly under the administrative control of the NGT Chairperson. The wing must comprise environmental scientists, municipal solid waste experts, and a specialized Environmental Police Force on deputation from the Ministry of Environment, Forest and Climate Change (MoEF & CC).

7.2 Inclusion of All Categories of Environmental Laws under the Jurisdiction of the NGT

Currently, the NGT can only hear civil cases arising out of the seven specific environmental laws listed in Schedule I of the NGT Act 2010. Crucial green laws, such as the Wildlife Protection Act, 1972 and the Indian Forest Act, 1927 are entirely excluded from its jurisdiction. This fragmentation forces environmental litigation into a multi-forum tangle between High Courts and the NGT, slowing down enforcement.

7.3 Increasing the Number of Zonal Benches

Limited number of NGT zonal benches directly results in the enforcement gap. Presently, NGT has only 5 benches, among which one is the principal bench and four are zonal benches. The number of zonal benches of the tribunal needs to be increased that would decrease the burden on each zonal bench and as a result of which the efficiency of the tribunal would be increased on its own.

8 CONCLUSION

Environmental protection or mitigating Climate Change does not mean that development should not take place. Rather, we all have entered a tech-savvy world where a lot of options are available at a click. So a comprehensive model of sustainable development should be

adopted and put to use. The Sustainable Development Goals (SDGs) adopted by all United Nations member states must be put to actual reality. Three SDGs explicitly mention environmental protection. Those are²⁵ –

Goal 6 – Clean Water and Sanitation

Goal 11 – Sustainable Cities and Communities

Goal 13 – Climate Action

Protection of climate is not one person's responsibility; rather it is a joint responsibility. Environment does not affect any one person; it has its effect on each and every person and on each and every sphere of life. So, the need of the hour calls for joint effort in order to mitigate Climate Change. If each and every person and institution sincerely puts in their effort we can easily combat the challenge and if not completely, we can definitely minimize the repercussions. All in all, it is important to not only make laws but to give actual reality to those laws by strengthening the institutions that are formed for the cause.

* * *

²⁵ United Nations, *The 17 Goals*, SUSTAINABLE DEVELOPMENT GOALS, <https://sdgs.un.org/goals> (last visited May 10, 2026).

CHAPTER 11

Behind the Green Curtain: Corporate Greenwashing, Human Rights, and the Search for Accountability in International and Indian Law

NAYAMA SMITH JOSEPH*

Greenwashing refers to the practice where corporations make false or misleading claims about their environmental performance. Over the past few decades, this practice has grown from simple deceptive labelling to complex strategies involving ESG reporting, net-zero pledges, and sustainability certifications. While much research has focused on greenwashing as a consumer protection or marketing issue, its connection to human rights has not received enough attention. This paper explores two questions. First, whether corporate greenwashing acts as a mechanism that hides and enables human rights violations in global supply chains, carbon offset projects, and corporate sustainability narratives. Second, whether current international and domestic legal frameworks need reform to link anti-greenwashing rules with human rights accountability. The paper analyses key instruments such as the UN Guiding Principles on Business and Human Rights, the EU Corporate Sustainability Due Diligence Directive, and emerging anti-greenwashing regulations, along with the Indian legal framework including the ASCI Green Claims Guidelines and the CCPA Greenwashing Guidelines 2024. It undermines the right to information, the right to health, labour rights, and indigenous peoples' rights, and blocks access to remedy for affected communities. The paper argues that voluntary CSR approaches are not enough and recommends mandatory human rights due diligence covering greenwashing, independent verification of green claims, and stronger legal access for affected communities.

Keywords: Greenwashing, Human Rights, Corporate Accountability, ESG-Washing, Carbon Offsets, Indigenous Rights, Environmental Justice, Supply Chain Due Diligence, BRSR, ASCI Green Claims Guidelines.

1 INTRODUCTION

1.1 Background of the Study

The term “greenwashing” was first coined by environmentalist Jay Westerveld in 1986, when he criticised the hotel industry for promoting towel reuse as an environmental

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measure while engaging in wasteful practices elsewhere.¹ Since then, the practice has evolved significantly. Today, greenwashing is no longer limited to misleading product labels. It now includes corporate ESG reports, net-zero pledges, carbon neutrality claims, and sustainability certifications.² A study conducted by the European Commission in 2020 found that more than 53 percent of environmental claims examined were vague, misleading, or unfounded, and 40 percent were completely unsubstantiated.³

The problem has grown alongside rising consumer awareness. As people demand greener products, companies face pressure to appear sustainable, even when their actual practices remain harmful. This gap between corporate claims and corporate conduct lies at the heart of greenwashing. Academic research has studied greenwashing mostly as a problem of marketing ethics, consumer protection, or environmental law.⁴ However, one dimension has received far less attention: the connection between greenwashing and human rights.⁵

1.2 The Human Rights Perspective

Greenwashing is not just a marketing problem. It has serious human rights consequences. When corporations hide the truth about their environmental performance, they also hide the harm their operations cause to people. The right to information is undermined because consumers, communities, and investors are denied truthful data. The right to health is affected when polluting operations are marketed as clean while marginalised communities continue to suffer health hazards.⁶ Labour rights are violated when fast fashion and electronics brands project themselves as ethical while their supply chains rely on child labour, forced labour, and unsafe working conditions.⁷ Indigenous peoples' rights are threatened when carbon offset projects displace communities without securing their free, prior, and informed consent.⁸

¹ Thomas P. Lyon & A. Wren Montgomery, *The Means and End of Greenwash*, 28 ORG. & ENV'T 223, 224 (2015).

² A. Wren Montgomery, Thomas P. Lyon & Julian Barg, *No End in Sight? A Greenwash Review and Research Agenda*, 37 ORG. & ENV'T 3 (2024).

³ European Commission, Proposal for a Directive of the European Parliament and of the Council on Substantiation and Communication of Explicit Environmental Claims (Green Claims Directive), at 3, COM (2023) 166 final.

⁴ Magali A. Delmas & Vanessa C. Burbano, *The Drivers of Greenwashing*, 54 CAL. MGMT. REV. 64, 65 (2011).

⁵ Sebastião Vieira de Freitas Netto et al., *Concepts and Forms of Greenwashing: A Systematic Review*, 32 ENV'T SCIS. EUR. art. 19 (2020).

⁶ Subhabrata Bobby Banerjee et al., *Environmental Racism and Climate (In)Justice in the Anthropocene: Addressing the Silences and Erasures in Management and Organization Studies*, J. BUS. ETHICS, at 3 (2024).

⁷ Maria Ruggeri et al., *Facing the Risk of Greenwashing in the ESG Report of Global Companies: The Importance of Life Cycle Thinking*, CORP. SOC. RESP. & ENV'T MGMT., at 5 (2025).

⁸ NYU Environmental Law Journal, *Human Rights Abuses from Carbon Credits – A Critique of “Greenwashing” Lawsuits and Additional Litigation Techniques*, NEW YORK UNIVERSITY SCHOOL OF LAW (2024).

The United Nations Guiding Principles on Business and Human Rights, adopted in 2011, establish that corporations have a responsibility to respect human rights and to carry out due diligence to avoid infringing on the rights of others.⁹ Greenwashing directly undermines this responsibility. By hiding the true impact of corporate operations, it prevents accountability and blocks access to remedy for affected communities.

1.3 Research Questions

This paper addresses two research questions:

1. Whether corporate greenwashing constitutes a systemic mechanism that obscures and perpetuates human rights violations across global supply chains, carbon offset projects, and sustainability narratives.
2. Whether existing international and domestic legal frameworks should be reformed to integrate anti-greenwashing enforcement with human rights accountability mechanisms.

1.4 Structure of the Paper

The paper is divided into eight sections. Section 2 sets out the conceptual framework. Section 3 examines the common forms of corporate greenwashing. Section 4 analyses greenwashing as a human rights concern. Section 5 presents case studies from fast fashion, fossil fuels, and carbon offsets. Section 6 reviews the legal and regulatory framework at both international and Indian levels. Section 7 analyses whether reforms are needed and offers recommendations. Section 8 concludes.

2 CONCEPTUAL FRAMEWORK

2.1 Greenwashing: Origin, Evolution and Definition

There is no single universally accepted definition of greenwashing. Torelli and others, in a concept analysis of 79 scholarly definitions, identified six essential attributes: an environmental claim made by a private sector organisation, about a product or service, which cannot be substantiated, made with deceptive intent, and done to establish a competitive advantage.¹⁰ Lyon and Montgomery offered one of the most cited reviews, describing greenwashing as the selective disclosure of positive environmental information while

⁹ UNITED NATIONS, GUIDING PRINCIPLES ON BUSINESS AND HUMAN RIGHTS: IMPLEMENTING THE UNITED NATIONS PROTECT, RESPECT AND REMEDY FRAMEWORK princ. 17 (2011).

¹⁰ Roberto Torelli, Federica Balluchi & Katia Furlotti, *Defining Greenwashing: A Concept Analysis*, 16 SUSTAINABILITY 9055, 9060 (2024).

withholding negative information.¹¹ De Freitas Netto and others classified greenwashing into two broad types: firm-level greenwashing, which concerns the entire corporate image, and product-level greenwashing, which focuses on specific goods or services.¹²

More recently, Montgomery, Lyon and Barg have traced the shift from “Greenwashing 1.0,” which focused on firms, consumers, and NGOs, to “Greenwashing 2.0,” which now includes supply chains, governments, ESG investing, and net-zero commitments.¹³ Pizzetti, Gatti and Seele further introduced the concept of “vicarious greenwashing,” where a corporation becomes associated with greenwashing through the practices of its suppliers.¹⁴ These newer forms make greenwashing harder to detect and harder to regulate.

2.2 Human Rights in the Corporate Context

International human rights law traditionally placed obligations on states rather than on corporations. However, with the rise of multinational enterprises and their growing influence over global economies, the question of corporate responsibility for human rights became unavoidable. The Universal Declaration of Human Rights 1948, the International Covenant on Civil and Political Rights 1966, and the International Covenant on Economic, Social and Cultural Rights 1966 together form the core of international human rights protection.¹⁵

The most important development for corporate responsibility came in 2011 with the unanimous endorsement of the UN Guiding Principles on Business and Human Rights by the UN Human Rights Council.¹⁶ The UNGPs are built on three pillars: the state duty to protect human rights, the corporate responsibility to respect human rights, and the need for access to effective remedy. Under the second pillar, companies are expected to carry out human rights due diligence to identify, prevent, and mitigate adverse human rights impacts.¹⁷

¹¹ Lyon & Montgomery, *supra* note 1, at 226.

¹² de Freitas Netto et al., *supra* note 5, at 6.

¹³ Montgomery, Lyon & Barg, *supra* note 2, at 10.

¹⁴ Marco Pizzetti, Lucia Gatti & Peter Seele, *Firms Talk, Suppliers Walk: Analyzing the Locus of Greenwashing in the Blame Game and Introducing Vicarious Greenwashing*, 170 J. BUS. ETHICS 21, 23 (2021).

¹⁵ G.A. Res. 217 A (III), Universal Declaration of Human Rights (Dec. 10, 1948) [hereinafter UDHR]; International Covenant on Civil and Political Rights, Dec. 16, 1966, 999 U.N.T.S. 171 (entered into force Mar. 23, 1976) [hereinafter ICCPR]; International Covenant on Economic, Social and Cultural Rights, Dec. 16, 1966, 993 U.N.T.S. 3 (entered into force Jan. 3, 1976) [hereinafter ICESCR].

¹⁶ U.N. Human Rights Council, Rep. of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, John Ruggie, U.N. Doc. A/HRC/17/31 (Mar. 21, 2011).

¹⁷ United Nations, *supra* note 9, Pillar II.

2.3 The Intersection of Greenwashing and Human Rights

Greenwashing and human rights meet at a crucial point: the question of truth. Human rights depend on people having access to truthful information about the forces that affect their lives. When corporations lie about their environmental performance, they also hide the human costs of their operations. Nemes and others argue that sustainability certification, when not conducted rigorously, can act as “green cover” for corporations and governments to deepen the assault on ecosystems and indigenous rights.¹⁸ Similarly, Sultana describes how “carbon colonialism through greenwashing of narratives” plays out in rare earth mineral grabs, enclosures of commons, and the destruction of local communities for corporate gains.¹⁹

In short, greenwashing is not just a lie about the environment. It is a lie that hides harm to people. This is why it must be understood as a human rights issue and not only as a consumer protection or advertising concern.

3 FORMS AND TACTICS OF CORPORATE GREENWASHING

3.1 Vague and Unverifiable Environmental Claims

One of the most common forms of greenwashing involves the use of vague and unverifiable terms such as “eco-friendly,” “sustainable,” “natural,” “green,” and “climate-friendly.” These words sound reassuring but often mean nothing in practice. Gillespie identified “fluffy language” as one of the “ten signs of greenwash,” referring to words with no clear meaning.²⁰ The problem is that such claims cannot be verified by consumers or regulators, which makes them a powerful tool for deception.

3.2 Selective Disclosure and Misleading Certifications

Selective disclosure is another widespread practice. Companies highlight one small environmental initiative while hiding much larger harmful practices. For example, a company may promote a single recycled product line while continuing to generate massive amounts of waste elsewhere.²¹ Misleading certifications add another layer of deception. Some sustainability labels are issued by bodies that lack independence or adequate standards. MSI

¹⁸ Noemi Nemes et al., *An Integrated Framework to Assess Greenwashing*, 14 SUSTAINABILITY art. 4431, at 7 (2022).

¹⁹ Farhana Sultana, *The Unbearable Heaviness of Climate Coloniality*, 99 POL. GEOGRAPHY art. 102638, at 4 (2022).

²⁰ Ed Gillespie, *Stemming the Tide of “Greenwash”*, 18 CONSUMER POL’Y REV. 79, 80 (2008).

²¹ Zhi Yang et al., *Greenwashing Behaviours: Causes, Taxonomy and Consequences Based on a Systematic Literature Review*, 21 J. BUS. ECON. & MGMT. 1486, 1490 (2020).

Integrity's 2020 report, *Not Fit-for-Purpose*, found that many multistakeholder initiatives fail to address corporate accountability and instead serve to legitimise unsustainable practices.²²

3.3 ESG-Washing and SDG-Washing

As ESG investing has grown, so has ESG-washing, which is the misuse of environmental, social, and governance frameworks to attract investors without delivering real sustainability. Montgomery, Lyon and Barg note that the rise of ESG investing and net-zero commitments has become one of the two main themes driving renewed concern over greenwashing.²³ Similarly, SDG-washing occurs when companies claim to support the UN Sustainable Development Goals without meaningful action.

3.4 Carbon Neutrality and Net-Zero Claims

Net-zero pledges and carbon neutrality claims have become some of the most controversial forms of greenwashing. Many such claims rely heavily on carbon offsets rather than actual emission reductions. Böhm and others document how forest-based offset initiatives have been linked to the displacement of indigenous communities and minimal local benefits.²⁴ The European Union has responded by prohibiting product-level climate-neutral claims based solely on offsets under the Empowering Consumers for the Green Transition Directive.²⁵

4 GREENWASHING AS A HUMAN RIGHTS CONCERN

4.1 Right to Information and Transparency

The right to information is recognised under Article 19 of the Universal Declaration of Human Rights and Article 19 of the International Covenant on Civil and Political Rights.²⁶ Greenwashing directly undermines this right by providing consumers, investors, and affected communities with false or misleading information. Without truthful data, people cannot make informed choices, hold corporations accountable, or seek remedies. Nemes and

²² MSI INTEGRITY, *NOT FIT-FOR-PURPOSE: THE GRAND EXPERIMENT OF MULTI-STAKEHOLDER INITIATIVES IN CORPORATE ACCOUNTABILITY, HUMAN RIGHTS AND GLOBAL GOVERNANCE* 12 (2020).

²³ Montgomery, Lyon & Barg, *supra* note 2, at 15.

²⁴ Steffen Böhm, Yuxin Lin & Yanjun Chen, *Addressing Scandals and Greenwashing in Carbon Offset Markets: A Framework for Reform*, ENV'T SCI. & POL'Y, at 4 (2025).

²⁵ Directive (EU) 2024/825 of the European Parliament and of the Council of 28 February 2024 amending Directives 2005/29/EC and 2011/83/EU as regards Empowering Consumers for the Green Transition, 2024 O.J. (L 2024/825).

²⁶ UDHR, *supra* note 15, art. 19; ICCPR, *supra* note 15, art. 19.

others emphasise that the lack of transparent, verifiable information is one of the core features of greenwashing, making it a clear threat to the right to information.²⁷

4.2 Right to Health and Clean Environment

The right to health is protected under Article 12 of the ICESCR and has been interpreted to include the right to a clean and healthy environment.²⁸ Greenwashing endangers this right when polluting operations are marketed as clean while communities continue to suffer from exposure to toxins, air pollution, and water contamination. Banerjee and others show how climate solutions proposed by corporations often exacerbate racial injustices, with communities of colour disproportionately bearing the health costs of industrial operations that are publicly presented as sustainable.²⁹

4.3 Labour Rights and Supply Chain Exploitation

Labour rights, protected under the International Labour Organization's core conventions and ICESCR, are often violated in supply chains that are publicly marketed as ethical. Ruggeri and others highlight that in the electronics sector, despite known risks of forced labour and child labour in the extraction of critical raw materials, companies predominantly discuss future commitments in their ESG reports rather than quantify actual social impacts.³⁰ The 2013 Rana Plaza disaster in Bangladesh, which killed more than 1,100 garment workers, exposed how global fashion brands could promote themselves as responsible while sourcing from factories with deadly working conditions.³¹

4.4 Indigenous Peoples' Rights and Land Displacement

Indigenous peoples' rights, protected under the UN Declaration on the Rights of Indigenous Peoples 2007 and ILO Convention 169, include the right to free, prior, and informed consent for projects affecting their lands.³² Carbon offset projects marketed as climate solutions have repeatedly violated this right. Böhm and others document forced removals of indigenous peoples from ancestral lands linked to offset projects in the Republic of the Congo, the Democratic Republic of the Congo, Brazil, Colombia, Peru, Kenya, Malaysia,

²⁷ Nemes et al., *supra* note 18, at 9.

²⁸ ICESCR, *supra* note 15, art. 12.

²⁹ Banerjee et al., *supra* note 6, at 8.

³⁰ Ruggeri et al., *supra* note 7, at 7.

³¹ Ana Inês, Andreia Diniz & António C. Moreira, *A Review of Greenwashing and Supply Chain Management: Challenges Ahead*, 8 CLEANER LOGISTICS & SUPPLY CHAIN art. 100114, at 4 (2023).

³² G.A. Res. 61/295, United Nations Declaration on the Rights of Indigenous Peoples, art. 19 (Sept. 13, 2007) [hereinafter UNDRIP]; ILO Convention (No. 169) concerning Indigenous and Tribal Peoples in Independent Countries, June 27, 1989, 1650 U.N.T.S. 383 (entered into force Sept. 5, 1991).

and Indonesia.³³ The NYU Environmental Law Journal points to the case of the Cordillera Azul National Park in Peru, where Kichwa, Kakataibo, and Shipibo communities were dispossessed of ancestral lands without FPIC, while corporate buyers used the resulting carbon credits to make net-zero claims.³⁴

4.5 Environmental Racism and Climate Justice

Environmental racism refers to the disproportionate exposure of racial and ethnic minorities to environmental hazards. Bullard first documented how polluting facilities in the United States were disproportionately located in African-American and Latino neighbourhoods.³⁵ Greenwashing aggravates environmental racism by allowing corporations to project clean images while continuing to pollute marginalised communities. Sultana describes this as “climate coloniality,” where Global South communities bear the brunt of harms hidden behind Global North sustainability narratives.³⁶

4.6 Right to Remedy and Corporate Accountability

The third pillar of the UNGPs emphasises the right to effective remedy for victims of business-related human rights abuses.³⁷ Greenwashing blocks this right in two ways. First, it conceals the harm, making it difficult for victims to know they have been harmed. Second, it creates a false public narrative that undermines legal claims by affected communities. The NYU Environmental Law Journal notes that while NGOs have brought greenwashing-related lawsuits against companies like Shell and TotalEnergies, these cases rarely secure direct relief for indigenous and local communities facing the immediate impacts of offsetting schemes.³⁸

5 CASE STUDY: THE VERRA RAINFOREST CARBON CREDIT SCANDAL

5.1 Background

Verra administers the Verified Carbon Standard (VCS), the world’s largest voluntary carbon crediting program, and has issued more than a billion carbon credits since its founding in 2007. A substantial share of Verra’s portfolio consists of “avoided deforestation” credits issued under REDD+ methodologies (Reducing Emissions from Deforestation and Forest

³³ Böhm, Lin & Chen, *supra* note 24, at 6.

³⁴ NYU Environmental Law Journal, *supra* note 8 (describing the Cordillera Azul National Park case in Peru).

³⁵ ROBERT D. BULLARD, DUMPING IN DIXIE: RACE, CLASS, AND ENVIRONMENTAL QUALITY 15–18 (3d ed. 2000).

³⁶ Sultana, *supra* note 19, at 5.

³⁷ United Nations, *supra* note 9, Pillar III.

³⁸ NYU Environmental Law Journal, *supra* note 8.

Degradation), which reward landowners for forest that is *not* cut down by comparing actual outcomes against a hypothetical counterfactual baseline.

5.2 The Investigation

In January 2023, a nine-month joint investigation by *The Guardian*, the German weekly *Die Zeit*, and the nonprofit outlet Source Material alleged that more than 90% of Verra's rainforest offset credits were "phantom credits" that did not represent genuine emissions reductions.³⁹ The investigation drew on analysis showing that the threat to forests underlying Verra's baseline calculations had been overstated by roughly 400% on average, meaning developers were credited for preventing deforestation that was unlikely to have occurred in the first place. Corporate purchasers of Verra-approved rainforest offsets used to support environmental marketing claims included Disney, Gucci, Shell, Salesforce, BHP, and easyJet, among dozens of others.

5.3 Verra's Response and Institutional Fallout

Verra disputed the findings, characterizing the underlying research as "patently unreliable" and arguing that the studies relied on flawed geographic comparisons and unsuitable datasets.⁴⁰ Notwithstanding this rebuttal, the reputational damage was significant: Verra's CEO of fifteen years, David Antonioli, resigned shortly after the investigation's publication, and the market price of voluntary carbon credits fell sharply in the following months.⁴¹ The underlying academic analysis was subsequently peer-reviewed and published in *Science*, lending further weight to the original allegations.⁴²

5.4 Human Rights Dimension

The Verra scandal is not only a story about inflated environmental accounting; a parallel and arguably more serious line of scrutiny concerns the human rights costs borne by indigenous and local communities living inside certified project areas, costs that Verra's certification architecture was neither designed to detect nor required to remedy.

³⁹ Patrick Greenfield, *Revealed: More Than 90% of Rainforest Carbon Offsets by Biggest Certifier Are Worthless, Analysis Shows*, GUARDIAN (Jan. 18, 2023), <https://www.theguardian.com/environment/2023/jan/18/revealed-forest-carbon-offsets-biggest-provider-worthless-verra-aoe>.

⁴⁰ Verra, "Patently Unreliable": Verra Addresses Criticism of Rainforest Offset Credits with Detailed Technical Analysis (Jan. 31, 2023), <https://verra.org/patently-unreliable-verra-addresses-criticism-of-rainforest-offset-credits-with-detailed-technical-analysis/>.

⁴¹ REDD Carbon Offsets Don't Address the Climate Crisis and Are Linked to Allegations of Human Rights Abuse, REDD-MONITOR (2023), <https://reddmonitor.substack.com/p/redd-carbon-offsets-dont-address> (citing Barclays research on voluntary carbon market pricing).

⁴² Thales A.P. West et al., *Action Needed to Make Carbon Offsets from Forest Conservation Work for Climate Change Mitigation*, 381 SCIENCE 873 (2023).

1. *Free, Prior, and Informed Consent (FPIC) failures.* In Cambodia's Southern Cardamom REDD+ project, Human Rights Watch found that formal consultations with the eleven indigenous Chong communities inside the project zone did not begin until thirty-one months after the project's official start date, notwithstanding that the project documents themselves acknowledged the Chong had inhabited the area "for centuries."⁴³ Verra nonetheless certified the project as compliant with its own Climate, Community & Biodiversity standard, which purports to safeguard indigenous peoples' rights.⁴⁴
2. *Enforcement harms without corresponding accountability.* Communities in the same project reported crop destruction, restricted access to customary farmland, and livelihood loss from park-style enforcement, while Verra maintained no legally binding benefit-sharing requirement obligating project developers to compensate affected residents.⁴⁵ Verra has stated publicly that it "cannot require project proponents to compensate for breaches of any safeguarding requirements", which is an admission that its standard-setting role does not extend to remedial accountability.⁴⁶
3. *A recurring pattern, not an isolated failure.* Comparable disputes have surfaced at Verra-certified projects in Kenya (the Kasigau Corridor project) and elsewhere in Cambodia (the Keo Seima REDD+ project), where indigenous communities faced arrest, crop destruction, and property confiscation tied to unresolved land boundary disputes that project auditors failed to flag to Verra.⁴⁷

Taken together, these episodes illustrate that a private, fee-funded certifier operating without binding legal accountability mechanisms can simultaneously (a) misstate the environmental integrity of what it certifies and (b) fail to protect the *human rights* of populations most directly affected by the underlying projects – two failure modes traceable to the same root design flaw: verification without independent, enforceable oversight and without a legal remedy running to those actually harmed.

⁴³ HUMAN RIGHTS WATCH, CARBON OFFSETTING'S CASUALTIES: VIOLATIONS OF CHONG INDIGENOUS PEOPLE'S RIGHTS IN CAMBODIA'S SOUTHERN CARDAMOM REDD+ PROJECT (Feb. 29, 2024), <https://www.hrw.org/report/2024/02/29/carbon-offsettings-casualties/violations-chong-indigenous-peoples-rights>.

⁴⁴ Human Rights Watch, *Cambodia: Carbon Offsetting Project Violates Indigenous Group's Rights* (Feb. 28, 2024), <https://www.hrw.org/news/2024/02/28/cambodia-carbon-offsetting-project-violates-indigenous-groups-rights>.

⁴⁵ Colin Foreman, *New Report Slams Carbon Offset Project in Cambodia for Violating Indigenous Rights*, GRIST (Mar. 15, 2024), <https://grist.org/equity/carbon-offset-project-cambodia-slammed-by-human-rights-watch/>.

⁴⁶ *Voluntary Carbon Market Has Failed the Human Rights Test*, AL JAZEERA (Dec. 10, 2024), <https://www.aljazeera.com/opinions/2024/12/10/voluntary-carbon-market-has-failed-the-human-rights-test>.

⁴⁷ Leila Goldstein, *Can a Carbon Offset Project Really Secure Indigenous Rights in Authoritarian Cambodia?*, MONGABAY (July 25, 2024), <https://news.mongabay.com/2024/07/can-a-carbon-offset-project-really-secure-indigenous-rights-in-authoritarian-cambodia/>.

6 LEGAL AND REGULATORY FRAMEWORK

6.1 International Human Rights Instruments Applicable to Corporations

The UN Guiding Principles on Business and Human Rights remain the most authoritative international framework linking business conduct with human rights. They require corporations to carry out human rights due diligence, which includes assessing actual and potential human rights impacts, integrating findings, tracking responses, and communicating how impacts are addressed.⁴⁸ The OECD Guidelines for Multinational Enterprises, updated in 2023, complement the UNGPs by providing recommendations on responsible business conduct across sectors.⁴⁹

6.2 International Anti-Greenwashing Regulations

The European Union has taken the lead in regulating greenwashing. Directive 2024/825 on Empowering Consumers for the Green Transition, adopted in February 2024, amends the Unfair Commercial Practices Directive to ban generic environmental claims and prohibit product-level climate neutrality claims based solely on offsets.⁵⁰ The proposed EU Green Claims Directive would have required independent third-party verification of environmental claims, but the European Commission announced in June 2025 its intention to withdraw the proposal, leaving the Empowering Consumers Directive as the main anti-greenwashing instrument in the EU.⁵¹

In the United States, the Federal Trade Commission's Green Guides provide guidance on environmental marketing claims, but they are advisory rather than binding.⁵² Other countries including Australia, France, and the United Kingdom have also taken steps against greenwashing through advertising regulation and consumer protection law.

6.3 Mandatory Human Rights Due Diligence Laws

The EU Corporate Sustainability Due Diligence Directive, adopted in 2024, requires large companies operating in the EU to identify, prevent, and mitigate adverse human rights and environmental impacts across their operations and value chains.⁵³ The German Supply Chain Due Diligence Act, which came into force in January 2023, imposes similar

⁴⁸ United Nations, *supra* note 9, princ. 17.

⁴⁹ OECD, OECD GUIDELINES FOR MULTINATIONAL ENTERPRISES ON RESPONSIBLE BUSINESS CONDUCT (2023).

⁵⁰ Directive (EU) 2024/825, art. 1.

⁵¹ Press Release, European Commission, Commission Announces Intention to Withdraw Green Claims Directive Proposal (June 2025).

⁵² U.S. Federal Trade Commission, Guides for the Use of Environmental Marketing Claims, 16 C.F.R. pt. 260 (2012).

⁵³ Directive (EU) 2024/1760 of the European Parliament and of the Council on Corporate Sustainability Due Diligence, 2024 O.J. (L 2024/1760).

obligations on companies based in Germany.⁵⁴ France's Duty of Vigilance Law of 2017 was the first of its kind and has served as a model for subsequent mandatory due diligence legislation.⁵⁵

6.4 Indian Legal Framework on Greenwashing and Corporate Responsibility

India has developed a growing framework to address greenwashing and corporate human rights responsibility, though significant gaps remain. The key instruments include the Consumer Protection Act 2019, the ASCI Green Claims Guidelines 2024, the CCPA Greenwashing Guidelines 2024, and SEBI's Business Responsibility and Sustainability Reporting framework.

6.4.1 *Consumer Protection Act 2019*

The Consumer Protection Act 2019 provides the broad statutory basis for addressing misleading advertisements in India. Section 2(28) defines a "misleading advertisement" as one that falsely describes a product or service, gives a false guarantee, or deliberately conceals important information.⁵⁶ The Central Consumer Protection Authority, established under the Act, has the power to issue directions against misleading advertisements and impose penalties.⁵⁷ Greenwashing claims that deceive consumers about environmental attributes clearly fall within the scope of the Act.

6.4.2 *ASCI Green Claims Guidelines 2024*

The Advertising Standards Council of India issued its Guidelines for Advertisements Making Environmental or Green Claims, effective from 15 February 2024.⁵⁸ These guidelines define greenwashing as "unsubstantiated, false, deceptive, or misleading environmental claims about products, services, processes, brands or operations as a whole, or claims that omit or hide information, to give the impression that they are less harmful or more beneficial to the environment than they actually are."⁵⁹

The guidelines require that absolute claims such as "eco-friendly," "sustainable," and "planet friendly" be backed by robust data or credible accreditations. Comparative claims such as "greener" require evidence of environmental benefits over previous products or

⁵⁴ Lieferkettensorgfaltspflichtengesetz [Supply Chain Due Diligence Act], 2021, BGBl. I at 2959 (Ger.), in force Jan. 1, 2023.

⁵⁵ Loi n° 2017-399 du 27 mars 2017 relative au devoir de vigilance des sociétés mères et des entreprises donneuses d'ordre (Fr.).

⁵⁶ Consumer Protection Act, 2019, § 2(28).

⁵⁷ *Id.* § 10 (establishing the Central Consumer Protection Authority).

⁵⁸ Advertising Standards Council of India, Guidelines for Advertisements Making Environmental/Green Claims (effective Feb. 15, 2024).

⁵⁹ *Id.* pmb.

competitors. Aspirational and carbon offset claims must be supported by clear, actionable plans.⁶⁰ While the ASCI guidelines are a significant step forward, they remain a form of self-regulation and do not by themselves carry statutory force. However, the CCPA has clarified that violations of the ASCI code may also contravene the Consumer Protection Act 2019 and can be escalated for regulatory action.⁶¹

6.4.3 CCPA Greenwashing Guidelines 2024

On 15 October 2024, the Central Consumer Protection Authority issued the Guidelines for Prevention and Regulation of Greenwashing or Misleading Environmental Claims, 2024.⁶² These guidelines extend the 2022 Guidelines for Prevention of Misleading Advertisements and apply to all environmental claims made by manufacturers, service providers, traders, advertising agencies, and endorsers. They require that environmental claims be truthful, accurate, and substantiated with verifiable evidence. Advertisers must also disclose all material information in detail through QR codes, URLs, or other digital means.⁶³

6.4.4 Other Indian Regulatory Bodies

Several other Indian bodies play a role in regulating greenwashing. The Bureau of Indian Standards sets eco-labelling standards that guide companies in making substantiated environmental claims.⁶⁴ The Food Safety and Standards Authority of India regulates claims such as “organic” and “natural” in the food sector under the Food Safety and Standards (Organic Foods) Regulations 2017.⁶⁵ The National Green Tribunal, established under the National Green Tribunal Act 2010, has the power to hear environmental cases and has imposed penalties on companies for environmental violations, including cases where corporate claims did not match actual performance.⁶⁶

6.5 Gaps in the Indian Framework

Despite these developments, the Indian framework has significant gaps. First, there is no unified statute specifically addressing greenwashing. The regulatory response is spread across multiple bodies with overlapping jurisdictions. Second, the ASCI guidelines remain self-regulatory and depend on voluntary compliance. Third, the BRSR framework, while

⁶⁰ *Id.* Guideline 1 on Absolute Claims.

⁶¹ Press Release, ASCI, Joint Statement with the Department of Consumer Affairs (Mar. 2024).

⁶² Central Consumer Protection Authority, Guidelines for Prevention and Regulation of Greenwashing or Misleading Environmental Claims, 2024 (Oct. 15, 2024).

⁶³ *Id.* Guideline 4 on Disclosure Requirements.

⁶⁴ Bureau of Indian Standards Act, 2016.

⁶⁵ Food Safety and Standards (Organic Foods) Regulations, 2017.

⁶⁶ National Green Tribunal Act, 2010, § 14.

important, focuses on disclosure rather than on the substantive prevention of human rights abuses. Fourth, India lacks a mandatory human rights due diligence law comparable to the German LkSG or the EU CSDDD. Finally, access to justice for affected communities remains limited, particularly for indigenous and rural populations whose lands are affected by corporate operations.

7 WHETHER EXISTING FRAMEWORKS SHOULD BE REFORMED: ANALYSIS AND RECOMMENDATIONS

7.1 The Inadequacy of Voluntary CSR

Research consistently shows that the voluntary CSR approach has failed to prevent greenwashing. As Cominetti and Seele observed, 88.2 percent of CSR standards consist of soft law initiatives that are self-regulated by firms. This voluntary nature creates a grey zone where misleading green communication thrives.⁶⁷ The rise of mandatory due diligence laws in the EU and Germany reflects a recognition that voluntary approaches are insufficient to protect human rights.

7.2 Integrating Anti-Greenwashing Enforcement with Human Rights Accountability

A major gap in current regulatory frameworks is the separation of anti-greenwashing rules from human rights accountability mechanisms. Anti-greenwashing regulations typically fall under consumer protection or advertising law, while human rights obligations are addressed through separate due diligence laws. This fragmentation allows corporations to escape responsibility by complying with one framework while violating the other. Integrating these frameworks would mean that when a company is found to have made false environmental claims, the resulting liability would include both consumer deception and the underlying human rights harms that the claims concealed.

7.3 Strengthening Mandatory Due Diligence

Mandatory human rights and environmental due diligence laws should be expanded to explicitly address greenwashing. Companies should be required to verify not only that they are not causing human rights harms in their supply chains but also that their public sustainability claims accurately reflect their actual practices. A dedicated Indian statute on corporate due

⁶⁷ Michele Cominetti & Peter Seele, *Hard Soft Law or Soft Hard Law? A Content Analysis of CSR Guidelines*, 24 UWF UMWELTWIRTSCHAFTSFORUM 127, 130 (2016).

diligence, harmonising the requirements under SEBI's BRSR, the Companies Act 2013, and consumer protection law, would significantly strengthen accountability.⁶⁸

7.4 Empowering Affected Communities

Legal frameworks should grant affected communities, including indigenous peoples, workers, and consumers, clear legal standing to challenge corporate greenwashing claims. This includes the right to bring civil claims for damages, to seek injunctions against misleading advertisements, and to participate in regulatory proceedings. Strengthening access to remedy is central to the third pillar of the UNGPs and should be treated as a priority in any reform.

7.5 Towards a Unified International Framework

Ultimately, greenwashing is a transnational problem that cannot be addressed by national regulation alone. There is a strong case for a unified international framework that treats greenwashing not merely as a consumer protection issue but as a human rights concern requiring binding corporate accountability. The ongoing negotiations at the UN for a binding treaty on business and human rights present an opportunity to explicitly include provisions on corporate environmental disclosure and greenwashing.⁶⁹ Such a framework should include independent verification requirements, rules on carbon offset integrity, and enforceable rights of access to information for affected communities.⁷⁰

8 CONCLUSION

This paper has argued that greenwashing is not merely a marketing or consumer protection issue. It is a systemic practice that obscures, enables, and perpetuates human rights violations across global supply chains, carbon offset projects, and corporate sustainability narratives. The answer to the first research question is therefore affirmative: greenwashing does constitute a mechanism that undermines human rights. It violates the right to information by concealing truth. It harms the right to health and the right to a clean environment by legitimising polluting operations. It enables labour exploitation in supply chains marketed as ethical. It facilitates the displacement of indigenous communities through carbon offset

⁶⁸ Companies Act, 2013, § 135 (on Corporate Social Responsibility).

⁶⁹ United Nations, *supra* note 9, Pillar III; *see also* U.N. Open-ended Intergovernmental Working Group on Transnational Corporations and Other Business Enterprises with Respect to Human Rights, Draft Legally Binding Instrument (Updated Draft, 2023).

⁷⁰ Nemes et al., *supra* note 18, at 12.

projects marketed as climate solutions. And it blocks access to remedy by creating false narratives that shield corporations from accountability.

The answer to the second research question is equally clear: existing legal frameworks at both international and Indian levels are fragmented and inadequate. While important steps have been taken through the UN Guiding Principles on Business and Human Rights, the EU Empowering Consumers Directive, the EU Corporate Sustainability Due Diligence Directive, the German LkSG, and India's ASCI and CCPA guidelines along with SEBI's BRSR framework, these instruments operate in silos. Anti-greenwashing rules and human rights accountability mechanisms need to be integrated into a unified approach.

The recommendations offered in this paper, including strengthening mandatory due diligence to explicitly cover greenwashing, empowering affected communities through improved access to justice, and moving towards a unified international framework, provide a roadmap for reform. For India specifically, the adoption of a dedicated statute on corporate human rights and environmental due diligence, building on the BRSR framework and harmonising with the Consumer Protection Act 2019 and the Companies Act 2013, would be a significant step forward. Only through such integrated reforms can the gap between corporate green narratives and actual corporate conduct be closed. As long as greenwashing persists, the rights of the most vulnerable will continue to be sacrificed behind a curtain of green claims.

* * *

CHAPTER 12

Debt Restructuring for Micro, Small and Medium Enterprises: Appropriate Laws, Awareness and Enforcement

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Micro, Small and Medium Enterprises (MSMEs) are the most critical constitutions in the production and manufacturing economy. Their character, nature and scale of economies seem insignificant relative to the mid cap and Large cap Corporates. With specific reference to the MSMEs financial requirement the funding through debt is the pivotal subject that decides the rise and fall of the MSME enterprises. While MSMEs required a quicker and seamless sanctioning of loans the Banks concerns about the recovery of the loans and not allowing it to be categorized as Non-Performing Assets (NPAs). This study generated, as well as extracted data to find if there was a need to enact a new law or amend the existing laws related to debts and banking systems. All the stakeholders who are involved in the process of creating the debt, securing it, deploying it were interviewed. It concluded that the debt restructuring is essential to treat the loans, repayment consideration and restructuring of debts of MSMEs in a manner to differentiate it from the other corporate debts. Interpretation sharpness and enforcement of the acts in force are the significant consideration rather than authoring new laws or amending the existing laws. There is a requirement of more sensitisation and awareness programs among the MSMEs through their representative bodies.

1 INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) are a part of an economy which contributes the highest in the macroeconomic and microeconomic development indexes. Without the considerations of these enterprises the existential issue of large corporate companies will become insignificant. The contributions of MSMEs are recognised to be the most critical and significant to the overall nation's productivity and growth. They are the primary vendors or the composite of larger corporations.

Though MSMEs have the same legal structure as an entity, they largely differ in nature, character, language and culture of business, from the Mid-cap and Large-Cap corporates.

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Despite the difference in function and character of MSMEs, they are regulated by several economic laws and regulations such as Tax, Insurance, and Compliances to accounting standards and Company Secretarial and other regulations in the manner the large corporates are treated. Though the structure is the same the nature and characters differ starkly, especially in the treatment of Borrowings and recovery.

Generally the enterprises start out as unregistered enterprises and only as much as 9% of the unregistered entities get formalised¹ (Porta & Shleifer, 2014) and 90% of MSMEs fall under the informal sector (ILO, 2023). The policies and legal mechanisms are to encourage MSMEs to leverage on the ecosystem.

The greatest of all challenges of these MSMEs is related to the financial function related to structuring of the entity in contrast to the larger corporates which are fully structured and formalised. The corporates are to deal with challenges such as taxes and duties.

Not much of the legislation lays emphasis on a support mechanism under situations and events that naturally lead to a collapse of the debt asset. Focus is more on recovery from the enterprise rather than reconstructing the Bad or Collapsed asset even though the business is highly viable and caters to a strong and expanding market. On the other hand the bias against the lenders always exists not until the assets become bad.

There are various factors which may cause a loan to turn into an NPA. They may be broadly classified as Internal Factors and External factors. Debt becomes a bad loan and as under the provisions of the law and the RBI regulations they will be placed under consequential categories based on the norms of the payment of interest on time and adhering to the repayment requirements set by the lender or the banks. They may be placed under Special Mention Accounts (SMAs) and later as Non-Performing Assets (NPAs) if over a period of time such NPAs are still kept in the same status for a longer period of time it becomes inevitable for the banker or the NBFC or any institutional lender to use the provisions of the law and initiate recovery.

Loan restructuring is a process in which borrowers facing financial distress renegotiate and modify the terms of the loan with the lender to avoid default. It helps to maintain continuity in servicing the debt and gives borrowers a certain degree of flexibility to restore financial stability.

Rehabilitation provides for restructuring of payment norms and sanction of additional credits as per the need. The restructuring norms should be revised with improved relaxation in asset classification and provisioning for the deserving cases (businesses having potential to generate profits). Upgradation of Standard Accounts can be done only when all the outstanding credit facilities of the unit perform satisfactorily during the specified period.

¹ R. L. Porta & A. Shleifer, *Informality and Development*, 28 J. ECON. PERSPS. 109–26 (2014).

Several solutions are in practice and most of them are procedural most of which are under the framework of laws and regulations. There are specific laws, statutes and regulations which set frameworks and guidelines for classifying, recovery, restructuring the bad debts by an enterprise. These laws are applicable to all the enterprises irrespective of the nature and the size of its business. The consideration of smaller and more formal enterprises are treated the same under the law. The issues related to recovery and debt restructuring are not much known.

2 LEGISLATION DEALING WITH DEBT FINANCING AND MSME

Several regulatory frameworks and laws have been enacted and enforced such as Regulatory Framework for Debt Funding & Restructuring (2025-2026) where the RBI was raised to be the regulator. Debt funding and restructuring regulations in India are regulated by the Reserve Bank of India (RBI) and guided by the MSMED Act, 2006. All these acts have undergone significant revisions (2024-2026). Key reforms include increasing collateral-free loan limits, creating specialized frameworks for NPA. In this study a closer analysis is based on classifying and identifying appropriate laws relevant to the MSME financing and restructuring of the bad debts. It looks at the legal implications in redressal and restructuring mechanism for Sick MSMEs with particular relevance and scale using legislations specific to Non-Performing Assets or Loans. The revamping of the legal, procedural and institutional mechanisms for interventions to prevent bad debts is high. The revisions have been enacted in the acts like. Specific provisions were enabled under IBC (Amendment) Bill 2025 and SARFAESI Act, for out-of-court insolvency process (CIIRP) and restructuring responsibility specifically for MSMEs. Arbitration provisions were enabled for quicker remedies.

A summation of the understanding of the legal landscape for MSME especially in the Financing, credit access and debt reconstruction so far there have been provisions in Chapter III-A of the IBC which defines and offers an insolvency process exists precisely for MSMEs, pre-packaged to are MSMEs specific. However, there seems to be lack of percolation of understanding and interpretation of the statutes found therein for which the RBI has been issuing circulars since January 2019 for a fairness in understanding and implementation of the statutes. This study takes a deeper analysis in order to bring to light the requirement of provisions to treat the Financing, classifying and restructuring of debts are adequately covered so as to a clarity and adequacy in understanding and enforcement of such laws. The problem focuses on the legislature, existing statutes and mechanisms that the MSMEs claim to be the biggest stumbling block of their progress and contribution to the nation's overall economic growth.

3 LITERATURE REVIEW

MSMEs are the most significant and crucial contributors to economy and employment. Finance is the lifeblood of business especially MSMEs. MSMEs secure their fund in the form of debt primarily for early growth stages (Kumar and Sharma, 2016)². Financing poses challenges for MSMEs (borrower) and the Banks (Lenders) (Mugunthan S, AS Pillai, et al., 2018)³. The nature, limited exposure and information, the low quantum of the loan to the high cost of it is the reason for failure (Chandrasekhar Mund, 2020)⁴.

Various financial policies and measures led by RBI have constituted several committees. Frequent notifications and circulars have been issued to reform to revive the MSME sector. The objective of the government with schemes and initiatives such as ECLGS, SAMRIDH, Specific funds to MSMEs, and reforms in taxes specific to MSMEs was implemented to help MSMEs to restructure their (Kadaba et al., 2023)⁵.

There is completely no awareness about the legal support systems for interpretation of statutes in particular context to debt restructuring, this is reported (Gautam, 2022).⁶ Very few studies and publications are available to have analysed the relation between legislation their reforms and have attempted to understand the impact of the procedures of existing laws in specific relationship the debt reconstruction. Few studies have also addressed the restructuring possibilities by Institutions like banks and NBFCs (Divya and Swati, 2025).⁷ Shri and Elizabeth (2022)⁸ have reported on the challenges in debt restructuring with specific reference to the Banks and the borrowers in Pune in the state of Maharashtra. Amit and Vijaylaxmi (2022)⁹ have considered the need of such Law and Policy Reforms in India studied and published with the pandemic background. It is very evident that there is a need for an investigation into the lacunas that address the regulation of restructuring for MSMEs through legislation.

² S. Kumar & P. Sharma, *Financing Patterns of SMEs in India During 2006 to 2013 - An Empirical Analysis*, 28 J. SMALL BUS. & ENTREPRENEURSHIP 97–131 (2016).

³ MUGUNTHAN S., A.S. PILLAI, MUKESH KUMAR, GAUTAM PRAKASH, Y. R. A. & M., SPECIAL STUDY ON ISSUES AND CHALLENGES IN ACCESS TO FINANCE FOR MSMEs 35 (June 2018).

⁴ C. S. Mund, *Problems of MSME Finance in India and Role of Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)*, 11 IOSR J. ECON. & FIN. 01–06 (2020).

⁵ D. M. Kadaba, P. Aithal & K. Sharma, *Government Initiatives and Digital Innovation for Atma Nirbhar SMEs/SMEs: To Achieve Sustainable and Inclusive Economic Growth*, 8 INT'L J. MGMT. TECH. & SOC. SCIS. 68–82 (2023).

⁶ N. Gautam, *Addressing the Gap Areas Crucial for Survival by Focusing on the Key Growth Determinants of Micro, Small and Medium Enterprises in India: A Critical Analysis Pertaining to Textile Sector MSMEs*, 70 INDIAN ECON. J. 577–96 (2022).

⁷ Divya & Swati S., *Role of NBFCs on MSME Financing: A Special Reference of Credit Accessibility and Economic Growth*, 14 INT'L J. BUS. ETHICS DEV. (2025).

⁸ SHRI P.S.B. & ELIZABETH J., A REPORT ON ISSUES AND CHALLENGES IN FINANCING MSME IN PUNE, MAHARASHTRA (Indian Institute of Banking & Finance 2022).

⁹ Amit K.K. & Vijaylaxmi S., *Law and Policy Reforms in India Amidst COVID-19 to Mitigate Risk in Infrastructure Structured Project Financing*, 19 US-CHINA L. REV. 35–52 (2022).

SIDBI (2011) has explicitly brought out¹⁰ the exact need of legal intervention as a The Global Best Banking Practices in Micro, Small and Medium Enterprises (MSME) Financing. Shal et al. (2025) have explored, though not deeply, but have found¹¹ that there is an attribute of legal mechanism which can make the restructuring procedures easier and more viable.

4 METHODOLOGY

The primary data was generated using a questionnaire in the form of Google forms with questions that are to be mandatorily answered was sent to identified target respondents as well as random mails and phone numbers through mail and WhatsApp. Interviews in-person, over video or voice calls were also conducted.

The respondents were grouped as Lenders, Borrowers and Influencers. Lenders and Borrowers are the 'Primary Respondents' and the Influencers are 'Supportive Respondents'. There were 100 targeted respondents and 200 random target heads but specific to either a BANK or NBFC (Lenders), Directors or Partners of an MSME, Professionals (Lawyers, Chartered Accountants, Corporate lawyers (who were pursuing cases in DRT or any such debt dispute redressal body) and Company Secretaries). Personal and critical personal data was not called for and any identity was coded as requested.

The borrowers were further classified into Formal and Informal, also as Manufacturing, Services and Trade/Retail. Data on the MSME borrowers was acquired from CODISIA and Coimbatore District Industrial Centre.

The Primary data was collected, collated, curated and tabulated. This data was so structured and designed to be compared with the secondary data extracted from various sources including print material, online peer-reviewed journals, guidelines, reports, statutes and also extracts of judgements. The web portals of the relevant departments were used to scout and curate data. Data sourced for a period of 15 years spanning from 2010 to 2026.

Two-dimensional plotting was done because the study was a very simple analysis and preliminary data is also presented as presentation 2D tabular format or 2D Bar chart. SPSS statistical tools were used to analyse data and holographic representations model were to visualize differences.

¹⁰ SIDBI, THE GLOBAL BEST BANKING PRACTICES IN MICRO, SMALL AND MEDIUM ENTERPRISES (MSME) FINANCING AND DEVELOPMENT (Policy Paper Series, 2011).

¹¹ Shal et al., *Exploring MSME Loan Defaults: The Role of Borrower and Loan Characteristics from a Micro-level Perspective*, J. ECON. THEORY & PRAC., at 1–26 (2025).

5 RESULTS

Data generated and acquired for the purpose of this study are presented below. There were 5 questions which were centric and set the premise to the study and based on which the data collection was constructed. The principal question was to know if legal reforms are required for the debt restructuring specific to MSMEs.

Table 1. The Respondents Profile Scape

Table 1 shows the demography of responses out of 300 emails sent 100 in specific known sources and 200 to sources connected through LinkedIn there were only 224 responses in total. Of the 224 total responses the maximum response came from the borrowers followed by the Professionals and then the lawyers. Responses from known sources had higher participation than the unknown sources to the questionnaire. The bias was removed using the weighted average as 212 closed off to 200 as unbiased and balanced responses.

	MSME	BANK	PROF	REGU	LAW	INDB
Total No. of forms sent	100	20	100	20	50	10
No. Response Received	75	10	80	10	45	4
Need Amendment	52	2	10	0	20	0
Need Enforcement Not Amendment	10	8	70	10	20	4

Table 1 shows the aspiration of respondents in the need for reforms. Irrespective of the bankers (Lenders) or MSME owners (Borrowers) both the sides are expecting a reform to safeguard both the sides' interest. The bankers are interested because of dealing with rising NPAs because of non-disposal, the borrowers interested in accessing the fund rather than a plan for repayment. Both parties wanted support systems that enable a smooth and faster debt solution. The majority of the respondents agreed that they were not able to understand nor were they aware of the intricate details and grounds of the debt restructuring. All the respondents agreed that there should be a structural change in the laws being enforced. Some who had insights of the laws in force expressed that the laws in force are good enough but the interpretation mechanisms have no scale of standards and references. However all of them had agreed to the fact that the MSMEs are being treated in the same scene despite the fact that they should have specific considerations.

From the Table 1 it could be inferred that the total respondents were keen on regularising and strictly enforcing the regulations rather than enacting a new bill or amending existing statutes. This apparently was mentioned during the interviews that it will take a minimum of 5 years for the bill to come to enactment or 3 years for an amendment to be clear and enforced properly.

Table 2. Reason stated by MSME Defaulters for exclusive law/amendment is needed for debt restructuring.

	Classification of NPA	Special Legal treatment of MSME	Financial Mismanagement
Manufacturing	98%	100%	85%
Services	62%	100%	50%
Formalised	95%	95%	75%
Non-Formal	80%	10%	40%

Table 2 shows data wherein it can be inferred that both the service sector and the manufacturing sector responses were significant on the need for regulation in classification norms for the assets and a special consideration be given for the MSMEs in terms of all financial laws and regulation and more specifically on the point of Restructuring of debts. The entire borrowing fraternity admitted to the fact that there is lack of financial understanding that leads to financial mismanagement. The significant finding that both the service sector and the service sector all the responses (100%) registered that they need an exclusive law or reform. A provision or an explanation to interpret the existing statutes is the most preferred means of remedy to debt restructuring.

All respondents need reforms in Insolvency and Bankruptcy Code (2016) and SARFAESI Act (2002). 50% and above of all the respondents have registered that if not reforms more clarity is needed and 95% and above of the Borrowers need clarity on stand because they feel the delay of turnaround is hampering their decision. 85% of the Bankers (the lenders) are expecting reforms or remediation with subjects pertaining to the IBC (2016). Industrial representative bodies are also in concurrence to the same.

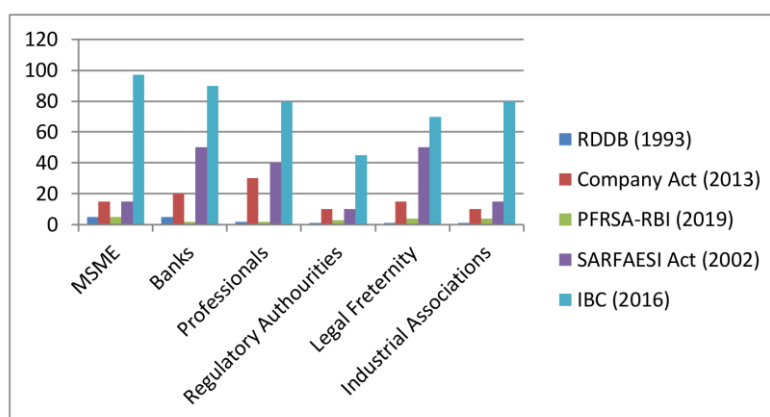


FIGURE 1. *The Laws that warrant more clarity with specific reference to MSME Debt restructuring – Overall response of Stakeholders.*

The study took the considerations of three categories of respondents who were directly or indirectly involved in the debt restructuring for the enterprises. Debt being a major source of financing the business the MSMEs opt for a debt based funding rather than equity based funding. The character and nature of the MSMEs differ largely from the larger enterprises. The founder of an MSME with the same nature of entity, for example a private limited company, if is also the founder and owner of a large corporate, one would deal with the laws and proceedings differently. It is understood that several factors influence the loan to be classified as NPA. These factors can be categorized as internal factors and external factors which are characterized by those that are in control of the entities' decision making are internal and those that influence the entities' decision making are external. Further the factors influencing were classified for better clarity into, financial and non-financial factors. Those factors like compliance and regulatory factors did not directly account for in the statement of accounts hence called non-financial factors.

The Study indicates that despite several legislative reforms that enable a seamless progression for the MSMEs and the better management of debt recovery and lowering of NPAs in Banking systems, the clause in an act or statute or regulation, should have the proviso or explanation be specific and clear in directions and intent of the statute to the context of the MSMEs being treated in each statute.

The significant findings of the study are that there are two enforcements in order one being the procedural enforcement and the other being the statutory enforcement. It is clear that the procedures are implemented properly if the law is clear and not ambiguous. Though the SARFAESI Act and the IBC are relatively new enforcements the provisions therein are contextual and objective to regulate the repayment of the debts. The regulatory authorities have been handling the law for a long time and hence their responses towards its amendment or specific enactment of laws are not aspired.

6 CONCLUSIONS

There are scientific studies which could be adopted for monitoring and reviving of any sick industries but the provisions of the law should take it up and bring it as a provision. More than making a new law or amending an Act in-force, it is found that it is the enforcement along with provisions for clear judicial interpretations that would enable a better restructuring of the debt to MSMEs. It is important to have sensitisation and awareness programs for all and the lead to be taken by the industrial representative bodies of MSME.

CHAPTER 13

Balancing Innovation and Ethics: An Analysis of the Patenting of Human Genetic Material

JANANISRI M*

The rapid growth of biotechnology, especially in the area of human genetics, has brought forth significant scientific progress while also raising serious ethical and legal concerns. Developments such as genetic engineering and CRISPR gene editing have expanded the limits of traditional patent systems, particularly when it comes to determining whether human genetic material qualifies as an invention. This phenomenon creates a continuous conflict between promoting innovation and protecting fundamental ethical values. This paper examines how Indian patent law aims to maintain this balance. It analyses the key legal provisions and judicial interpretations that restrict the patenting of naturally occurring genetic material, while still recognising the possibility for scientific advancement. In order to understand India's position, the paper compares it with the approaches that are being followed in the United States and the European Union, where the courts have taken different views on the patentability of genetic material. The paper uses a qualitative research method, where it analyses the relevant literature, case laws and statutory frameworks to identify the existing gaps and challenges that can arise in this area of study. It focuses on important issues such as the difference between discovery and invention, the ethical concerns surrounding the commercialisation of human biology, and the broader impact it has on the access to healthcare and research. Overall, this paper highlights the importance of establishing a more balanced and ethically conscious patent framework. The paper argues that while innovation is important and should be encouraged, it should not come at the cost of human dignity or the larger public interest.

Keywords: Biotechnology Patents, CRISPR, Ethics, Human Genetic Material and Section 3

1 INTRODUCTION

The intersection of biotechnology and intellectual property law has emerged as one of the most debated topics in this area of study. As the science in today's world is advancing rapidly, the legal system can struggle to keep pace.¹ This is especially clear in human genetics, where this conflict is not just commercial but also closely tied to personal, philosophical,

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¹ Bao Tran, *The Intersection of Biotechnology and Patent Law*, PATENTPC, <https://patentpc.com/blog/the-intersection-biotechnology-patent-law> (last visited Apr. 15, 2026).

and medical factors. When a researcher isolates a gene sequence linked to a hereditary disease, a lot of questions arise as to whether that is an invention or a discovery. Can a corporation own a piece of human biology? These are real questions that are asked worldwide about the same issue. We all know that patents aim to encourage invention by granting exclusive rights, but applying them to human genes or embryos raises concerns about human dignity and public welfare, where the tension arises between the ethical considerations and legal protection. This paper aims to explore how the patent systems can balance two important things, that is, the need for innovation along with the ethical safeguards.

2 STATEMENT OF PROBLEM

The main problem that the paper is aiming to identify and address is in the patenting of human genetic material, where there is a regulatory gap that is created. Traditional patent laws are drafted in a way that does not have the ability to address the daily advancements and complexities that are present in human genetics or living organisms, *per se*. The paper more importantly looks into India's approach towards this issue and tries to attempt a comparison of the approaches that are taken by other different jurisdictions, which are the United States and the European Union, in the context of human genetic material, which is distinct from the broader aspect of biotechnological patents.

3 SCOPE AND LIMITATION

The paper mainly focuses on the Indian aspect of the research gap, and that is in comparison with the jurisdictions of the United States and the European Union. These jurisdictions have important patent law models that have different approaches on the patents granted for genetics. The approaches that are taken are evident such as the Indian law specifically under Section 3 provides a set of standards, while the U.S. does it through Supreme Court rulings and EU does it through the Biotech Directive and cases from the European Patent Office. The paper's scope is only limited to these jurisdictions and does not cover a global perspective. The paper does not focus on empirical research and relies mainly on doctrinal research.

4 RESEARCH OBJECTIVE

The paper has two main objectives and they are:

- i. To analyse the Indian patent law that is dealing with the human genetic material, with the help of legal provisions and judicial interpretations.

- ii. To compare the above Indian approach with the U.S. and EU jurisdictions, showing how different jurisdictions handle the same issue.

By doing this, the paper will be able to analyse as to whether the current frameworks are able to create the balance between the concepts of innovation and the ethical concerns.

5 RESEARCH METHODOLOGY

The research that is done in this paper is a doctrinal study, where it looks into the doctrinal analysis of the patent law, case laws and articles, to understand what the legal stance is on the issue of biotechnology patent. Additionally the paper looks into other jurisdictions to have a better understanding on how different jurisdictions treat genetic patents.

6 LITERATURE REVIEW

6.1 Biotechnology and Intellectual Property Rights in India: Legal Framework, Challenges and Emerging Jurisprudence²

If you look into this article, it offers a thorough examination of the Indian patent law framework as it applies to biotechnology, with a particular focus on the Section 3 exclusions under the Patents Act, 1970. The paper traces the evolution of Indian patent law from its initial exclusion of living organisms to the more expansive position it has taken post-2002, highlighting the pivotal role that was played by the case of *Dimminaco AG* in recognising the patentability of the processes that involve living organisms. The paper clearly analyses each relevant sub-section of Section 3 and provides a clear explanation as to how these provisions function in practice. The paper however does not deeply delve into the concept of human genetic material patent, this is because it is far distinct from the broader biotechnology patent.

6.2 Biotechnology Patents: Untangling the Double Helix of Innovation, Ethics and Legal Challenges³

Now, this article provides a deep analysis on the ethical and legal tension that can arise in the biotechnology patents, and the paper is structured in such a way that it includes several concepts such as the doctrine of product of nature, moral utility doctrine, property rights theory, and the concept of the sacredness of life. The paper also looks into the landmark

² Anandhi A., *Biotechnology and Intellectual Property Rights in India: Legal Framework, Challenges and Emerging Jurisprudence*, 3 LAWFOYER INT'L J. DOCTRINAL LEGAL RSCH. 645 (2025).

³ Suhana, *Biotechnology Patents: Untangling the Double Helix of Innovation, Ethics and Legal Challenges*, 9 J. INTELL. PROT. STUD. 97 (2025).

Diamond v. Chakrabarty decision to understand the approach that was taken in this case. The paper has not examined the position of India in the treatment of the cases when it comes to the discovery-invention distinction under Indian law.

7 BASICS OF HUMAN GENETICS

7.1 Meaning of Human Genetic Material

Genetic material basically refers to the biological information that is encoded in the DNA and RNA of living organisms. In human beings, this information is organised into 20,000 to 25,000 genes that are distributed into 23 pairs of chromosomes. Each of the genes carries the instructions for producing the proteins in the body that perform a specific biological function. The identification, isolation, and manipulation of these genes is the base of modern biotechnology.⁴

In the context of the patent law, human genetic material becomes very much significant when it is being isolated from its natural environment and is characterised through the laboratory methods. But this gives rise to the very question as to whether such an isolated material can constitute an ‘invention’ or is just a ‘discovery’ which is already existing in nature, and this has been the central issue for many debates.⁵

7.2 Distinction between Discovery and Invention

The patent frameworks worldwide are all based on the principle that patents are there to protect the inventions and not the discoveries as such. A discovery is the identification of something that is already existing, while an invention is something that is created and is new. The distinction between these two can be said to be easy to understand in the general sense, but when it comes to the field of genetics this general principle becomes very much complicated.

Under the Indian Patents Act, 1970, Section 2(1)(j) basically defines what an ‘invention’ is and states that it is a new product or a process that is involving an inventive step and is capable of industrial application.⁶ And it must be noted that Section 3(c) explicitly excludes from patentability “the mere discovery of a scientific principle or the formulation of an abstract theory or discovery of any living thing or non-living substance occurring in nature.”⁷

⁴ NAT'L HUM. GENOME RSCH. INST., <https://www.genome.gov/about-genomics/fact-sheets/A-Brief-Guide-to-Genomics> (last visited Apr. 16, 2026).

⁵ <https://pmc.ncbi.nlm.nih.gov/articles/PMC2220019/>.

⁶ The Patents Act, 1970, § 2(1)(j).

⁷ *Id.* § 3(c).

Both of these sections together mean that a naturally occurring gene sequence, even if it was previously unknown to science, cannot be patented in India simply because it has been identified and isolated.

However, when a gene sequence is modified, engineered, or expressed in a novel context through human intervention, the position becomes more nuanced. Complementary DNA (cDNA), for instance, is synthesised in the laboratory from messenger RNA and does not occur in nature in the same form.⁸

7.3 International Agreements

The TRIPS Agreement requires member countries to grant patents for biotech inventions, but it does allow exclusions for plants, animals, and essentially biological processes. It also permits exceptions based on public order or morality. India has used these flexibilities to exclude genetic sequences from patentability, treating them as natural phenomena under Section 3 of its Patents Act. The 2024 WIPO Treaty on Genetic Resources and Traditional Knowledge introduces a mandatory disclosure requirement for patent applicants. However, the treaty has serious weaknesses. Under Article 5.3, a patent cannot be invalidated solely because the applicant failed to disclose something. Article 3.5 also prohibits patent offices from having any verification obligations.⁹ This is a concern for India, which already has strong domestic provisions under Sections 25 and 64 of its Patents Act, allowing pre-grant and post-grant opposition based on disclosure. And it must be noted that signing this treaty could actually weaken India's existing legal safeguards.

8 THE TENSION BETWEEN ETHICAL AND LEGAL ASPECTS OF HUMAN GENE PATENTING

8.1 The Concept of Ethics

The patenting of human genetic material raises one of the most extreme ethical questions that a legal system can address. At its core, the main objection is very simple, that is, can something that is intrinsic to human biology, such as a gene that exists within every person who carries it, really become the exclusive property of a corporation or research institution? Many scholars argue that gene patents amount to a form of commodification of the human body, which in some respects is comparable to the commodification of persons that the law rightly prohibits. This objection is expressed through several theoretical frameworks. The

⁸ Ramya Nagaraj, *Intersection of Biotechnology and Patent Law in India: A Critical Study on the Impact of Human Genetics Innovation*, 7 INT'L J.L. MGMT. & HUMAN. 1286 (2024).

⁹ WIPO Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge, May 24, 2024, GRATK/DC/7.

doctrine of the sacredness of life holds that life forms possess an inherent dignity that is incompatible with the logic of ownership.¹⁰

In the Indian context, this can be strongly related to the cultural and religious traditions that regard that human beings cannot be used for commercial appropriations.¹¹

Gene patents incentivise the enormous investments that are required to sequence, isolate, and characterise genetic material, and to develop diagnostic tests and therapies based on that material. Without patent protection, researchers argue, the market would fail to produce the information and tools that can improve human health.¹² This is the central tension within India's patent regime and also highlights the tension between TRIPS compliance and global competition versus ethical values, biodiversity, and farmers' rights.

John Locke's labour theory of property offers something like a middle path. If a researcher has put in significant intellectual and physical effort to isolate and characterise a gene sequence that would otherwise have remained hidden from medicine, there is a reasonable argument that they deserve some form of exclusive right over that specific product of their labour.¹³ The problem is that this argument proves too much. It would justify patents on almost any isolated natural substance, no matter whether any genuine creative contribution has been made beyond simply identifying what nature had already produced.

8.2 Public Health Access

One of the most significant consequences of human gene patents is their impact on access to healthcare. When a single entity holds a patent over a gene associated with a particular disease, it acquires the power to control the use of that gene in diagnostic testing and treatment. This can result in dramatically higher costs for patients and reduced availability of testing in lower-income settings.

The controversy involving *Myriad Genetics* in the United States clearly exemplified this issue. Myriad held patents over the BRCA1 and BRCA2 genes, mutations in which are strongly associated with hereditary breast and ovarian cancer. The company's monopoly over these genes meant that it could set prices for BRCA testing at levels that were unaffordable for many patients, and it could also prevent other laboratories from developing competing tests. It was only when the US Supreme Court struck down patents on naturally occurring DNA sequences in 2013 that these barriers were lifted.¹⁴

¹⁰ Suhana, *supra* note 3, at 101–02.

¹¹ Anandhi A., *supra* note 2, at 670.

¹² *Id.* at 668–69.

¹³ Suhana, *supra* note 3, at 101.

¹⁴ *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 585–86 (2013).

So any legal framework that uses monopoly rights over human genetic material to restrict access to essential diagnostic tools or treatments must be judged against this constitutional standard. The 2013 *Novartis case*, while it dealt with pharmaceutical patents rather than gene patents directly, set an important precedent. Patent protection must not compromise public health access, and this principle applies just as strongly to the genetic context as well.¹⁵

8.3 CRISPR and New Technological Advancements

The rise of CRISPR-Cas9 gene editing technology has added a new layer of complexity to the already persisting issues. CRISPR allows scientists to make precise, targeted modifications to DNA sequences with a speed and accuracy that earlier techniques could not achieve. It has applications ranging from the correction of genetic disorders in human embryos to the enhancement of agricultural crops and the development of novel therapeutic agents.¹⁶

In India, CRISPR-based inventions raise particular challenges and certain questions. If the technique is used to edit a naturally occurring human gene sequence, does the resulting modified sequence constitute an invention? If so, what degree of modification is required to cross the threshold from discovery to invention? The existing framework under the Patents Act does not provide clear answers to these questions, and the ICMR's ethical guidelines, while prohibiting germline modification and the creation of designer babies, do not address the patent law implications of CRISPR research in somatic cells.¹⁷

9 JUDICIAL INTERPRETATIONS

9.1 Indian Judicial Interpretations

The Indian patent framework, particularly post-2005, has developed a unique character defined by stringent thresholds for patentability, especially concerning life forms and incremental pharmaceutical innovations. Indian case law shows a judicial effort to clarify the limits of Section 3 of the Patents Act, 1970, which outlines certain exceptions to patentability.

¹⁵ *Novartis AG v. Union of India*, (2013) 6 SCC 1.

¹⁶ Sahar Ebrahimi, Mohammad Ali Khosravi, Abbasali Raz, Morteza Karimipoor & Parviz Parvizi, *CRISPR-Cas Technology as a Revolutionary Genome Editing Tool: Mechanisms and Biomedical Applications*, 27 IRAN. BIOMED. J. 219, 219–46 (2023), <https://pmc.ncbi.nlm.nih.gov/articles/PMC10707817/>.

¹⁷ Pallabi Bhattacharyya, Kanikah Mehndiratta, Souvik Maiti & Debojyoti Chakraborty, *Rare Genetic Disorders in India: Current Status, Challenges, and CRISPR-Based Therapy*, 49 J. BIOSCI. 28 (2024), <https://www.ias.ac.in/article/fulltext/jbsc/049/0028>.

9.1.1 *Dimminaco A.G. v. Controller of Patents and Designs*

The first significant judicial pronouncement on the patentability of processes involving living organisms came from the Calcutta High Court in *Dimminaco AG v. Controller of Patents and Designs* (2001).¹⁸ The case involved a patent application for a process to prepare a live vaccine for Bursitis infection in poultry. The Patent Office rejected the application on the ground that the end product contained a living virus and was therefore not a “manufacture” or a vendible substance. Reversing this decision, the High Court held that the term ‘manufacture’ should be interpreted pragmatically. If the process results in a commercially valuable product that can be bought and sold it qualifies as patentable subject matter, regardless of whether it contains living material. This decision established a foundational precedent: the presence of life per se is not a bar to patentability under Indian law if human technical ingenuity has produced a useful commercial product.

9.1.2 *The “Human Intervention” Test and Essentially Biological Processes*

A more recent and direct application of the “human intervention” standard can be found in the Madras High Court’s 2024 decision in *Sakata Seed Corporation v. Deputy Controller of Patents and Designs*.¹⁹ This case addressed the exclusion for “essentially biological processes” under Section 3(j). Sakata had developed a method for producing a cytoplasmic male sterile Eustoma plant through a process of backcrossing and screening. The Controller rejected the application, deeming the backcrossing method an essentially biological process. The High Court overturned the rejection, holding that the claimed invention was not a mere natural phenomenon. The court noted that the process involved specific human interventions that were decisive for the final result. By relying on the European Patent Office’s definition of an essentially biological process, the court found that the technical human steps moved the invention beyond the scope of the Section 3(j) exclusion. This judgment provides crucial clarity for plant and genetic innovations in India, confirming that if a claimed method involves a non-trivial technical step by a human actor, it is not excluded.

9.1.3 *The “Therapeutic Efficacy” Standard*

The landmark Supreme Court decision in *Novartis AG v. Union of India* (2013) provides the definitive interpretation of the enhanced efficacy requirement under Section 3(d).²⁰ While this case concerned a pharmaceutical compound (the beta crystalline form of Imatinib Mesylate), its reasoning is directly applicable to any patent claim over a “new form

¹⁸ *Dimminaco A.G. v. Controller of Patents & Designs*, AID No. 1 of 2001 (Cal. HC Jan. 15, 2001).

¹⁹ *Sakata Seed Corp. v. Deputy Controller of Patents & Designs*, (I)CMA(PT) No. 122 of 2023 (Mad. HC Jan. 2024).

²⁰ *Novartis AG v. Union of India*, (2013) 6 SCC 1.

of a known substance,” which could include modified or isolated genetic sequences. The Court held that the term “efficacy” in Section 3(d) must be interpreted as “therapeutic efficacy”, which basically means the capacity of the substance to produce a desired or intended beneficial change in the patient. Novartis’ claimed invention offered improved flow properties and thermodynamic stability but did not demonstrate enhanced therapeutic benefit over the known form of the drug. Consequently, the patent application was rejected. This ruling establishes a significantly higher bar for incremental innovations in India compared to the United States or Europe. For human genetic material, this suggests that merely isolating a gene or creating a structurally modified variant (e.g., a new crystalline form of a protein) may not be patentable unless the applicant can demonstrate a genuine improvement in its therapeutic function.

9.2 United States Judicial Interpretation

In contrast to India’s detailed statutory exclusions, United States patent law is governed by the broad language of 35 U.S.C. § 101, which provides for the patentability of “any new and useful process, machine, manufacture, or composition of matter.”²¹

9.2.1 *Diamond v. Chakrabarty*

The foundational case for biotechnology patents in the United States is the Supreme Court’s 1980 decision in *Diamond v. Chakrabarty*.²² The Court was tasked with determining whether a genetically engineered bacterium capable of breaking down crude oil was patentable. In a landmark ruling, Chief Justice Burger famously declared that the distinction is between natural products, whether living or inanimate, and human-made inventions. The Court held that Chakrabarty’s bacterium was a non-naturally occurring manufacture or composition of matter and was a product of human ingenuity. This decision expanded the view on genetically modified organisms, cell lines, and, eventually, isolated human genes.

9.2.2 *Property Rights and the Human Body*

A crucial ethical counterpoint to the expansive patentability doctrine was provided by the Supreme Court of California in *Moore v. Regents of the University of California* (1990).²³ John Moore’s physician had used his spleen cells to create a valuable, patented cell line without his informed consent regarding the commercial use. The court held that Moore had no property right in his excised cells, a decision intended to avoid hindering socially important medical research. However, the court simultaneously ruled that physicians have a fiduciary

²¹ 35 U.S.C. § 101.

²² *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).

²³ *Moore v. Regents of the Univ. of Cal.*, 51 Cal. 3d 120 (1990).

duty to disclose any research or economic interests they may have in a patient's biological materials. This case embodies a balance which is basically facilitating the commercialization of human tissue for innovation but imposes strict informed consent requirements as an ethical safeguard.

9.2.3 *Mayo v. Prometheus and Myriad Genetics*

The expansive framework that was set in the case of Chakrabarty was significantly curtailed by a pair of Supreme Court decisions in the 2010s. First, in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.* (2012), the Court invalidated patents on a method for optimizing drug dosage based on metabolite levels in the blood.²⁴ The Court reasoned that the correlation between metabolite levels and drug efficacy was an unpatentable law of nature, and the additional steps (administering the drug and measuring the metabolites) were merely routine and conventional activities. And in order to be patent-eligible, a claim that incorporates a law of nature must add "significantly more" than an instruction to "apply it."

This principle was applied directly to human genes one year later in *Association for Molecular Pathology v. Myriad Genetics, Inc.* (2013).²⁵ Myriad had secured patents on the isolated BRCA1 and BRCA2 gene sequences, giving it a monopoly on diagnostic testing for hereditary breast and ovarian cancer. The Supreme Court unanimously held that a naturally occurring DNA segment is a product of nature and is not patent-eligible merely because it has been isolated. The Court drew a critical distinction, however, holding that complementary DNA (cDNA), which is synthesised in a laboratory from mRNA and is not naturally occurring, is patent-eligible. The Myriad decision had an immediate and profound public health impact, dismantling Myriad's testing monopoly and lowering costs for patients, but it left open many questions regarding the patentability of other modified genetic materials and diagnostic methods.

9.3 European Union Judicial Interpretation

The European approach, embodied in the European Patent Convention (EPC) and the EU Biotechnology Directive (98/44/EC), represents a middle path.

9.3.1 *Monsanto Technology LLC v. Cefetra BV*

The scope of protection afforded by a gene patent in the EU was clarified by the European Court of Justice (ECJ) in *Monsanto Technology LLC v. Cefetra BV* (2010).²⁶ Monsanto held a European patent for Roundup Ready (RR) soybeans. When soy meal produced from

²⁴ *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66 (2012).

²⁵ *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576 (2013).

²⁶ *Monsanto Tech. LLC v. Cefetra BV*, 2010 E.C.R. I-06765.

RR soybeans in Argentina (where no patent protection existed) was imported into the EU, Monsanto sued for infringement. The ECJ, interpreting Article 9 of the Biotech Directive, held that a patent on genetic information only extends to material in which the DNA “performs its function.” Because the DNA in the processed soy meal was “dead material” that no longer performed its function of herbicide resistance, there was no infringement. This judgment represents a significant policy choice to limit the downstream reach of gene patents on commodity products, thereby protecting trade and food security.

9.3.2 *Harvard Oncomouse*

The European Patent Office (EPO) has developed a sophisticated “balancing test” to assess the morality exclusion under Article 53(a) EPC. In the *Harvard Oncomouse* case, the EPO granted a patent for a transgenic mouse genetically engineered to be susceptible to cancer.²⁷ The Board of Appeal reasoned that the immense potential medical benefit of having a reliable animal model for cancer research outweighed the ethical concerns regarding animal suffering. Conversely, in a later case concerning a transgenic mouse for hair loss research, a patent was denied on the grounds that the limited medical benefit could not justify the animal suffering involved.

9.4 Comparative Analysis

The judicial approaches of India, the United States, and the European Union reveal fundamentally divergent philosophies toward human genetic patenting. Indian courts, guided by Section 3 of the Patents Act, have adopted the most restrictive stance. The *Dimminaco* decision established that living organisms could be patented only where human intervention produces a commercially valuable product, while *Sakata Seed* reinforced the “human intervention” test for biological processes. The *Novartis* ruling further tightened standards by requiring demonstrated “therapeutic efficacy” for incremental innovations, creating a substantially higher threshold than Western jurisdictions.

The United States initially embraced expansive patentability through Chakrabarty’s “anything under the sun made by man” doctrine, but the Supreme Court dramatically reversed course in *Mayo* and *Myriad*, holding that isolated naturally occurring DNA sequences are unpatentable products of nature. The Court preserved patentability only for synthetic cDNA, reflecting a belated recognition of ethical concerns.

The European Union occupies a middle ground. Through the Biotech Directive and EPO decisions like *Harvard Oncomouse*, EU jurisprudence employs a utilitarian balancing test weighing medical benefits against ethical costs. The *Monsanto* decision further limited

²⁷ Case T 0019/90, *Harvard/Onco-mouse*, [1990] O.J. EPO 476.

gene patent scope by requiring that patented DNA “perform its function” for infringement to occur. Collectively, these jurisdictions demonstrate an evolving global consensus toward restricting genetic patentability while preserving incentives for genuine biotechnological innovation.

10 CONCLUSION AND RECOMMENDATIONS

This paper has demonstrated that the patenting of human genetic material occupies a precarious intersection between incentivising scientific progress and safeguarding fundamental ethical values. India’s statutory framework, particularly Sections 3(c) and 3(j) of the Patents Act, provides robust exclusions against patenting naturally occurring genetic sequences. Judicial interpretations in *Dimminaco*, *Sakata Seed*, and *Novartis* have further clarified that only inventions involving substantial human intervention and demonstrated therapeutic efficacy merit protection. However, significant regulatory gaps persist, particularly concerning CRISPR-based technologies and the precise threshold at which modified genetic material becomes patentable subject matter.

The comparative analysis reveals that while the United States has retreated from its historically permissive *Chakrabarty* era through *Myriad* and *Mayo*, and the European Union maintains a calibrated balancing approach, India’s framework offers stronger ethical safeguards but lacks clarity regarding emerging biotechnologies. The 2024 WIPO Treaty on Genetic Resources, despite introducing disclosure requirements, contains concerning limitations under Articles 3.5 and 5.3 that could potentially weaken India’s existing domestic safeguards.

Based on these findings, the following recommendations are proposed:

First, the Indian Patent Office should issue comprehensive guidelines specifically addressing CRISPR-related inventions, establishing clear thresholds distinguishing unpatentable discoveries from patentable human interventions.

Second, Parliament should consider amending Section 3 to explicitly address synthetic biology and gene-editing technologies, ensuring the law keeps pace with scientific advancement.

Ultimately, the patent system must remain a servant of human welfare rather than an impediment to it. Innovation deserves encouragement, but never at the cost of commodifying human biology or restricting access to life-saving diagnostics and treatments.

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Law in Transition

Rights, Sovereignty and Regulation in a Changing World

A person asks the State to recognise who they are. A worker crosses a State border and finds that the protections of home do not travel with them. A family flees a flood that no treaty foresaw. A face is borrowed by software and made to say what its owner never said. A small firm finds its loan reclassified overnight. In each case the question is the same: does the law as it stands reach the situation, and if not, what should be done about it?

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