

# IILM LAW JOURNAL

## Volume IV Issue 1, 2026

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**Volume IV, Issue No. 1, 2026**

**Chief Editor**

**Prof. (Dr.) Babita Singh Parasain**

**IILM School of Law**

**IILM University  
Knowledge Park-II,  
Greater Noida  
(INDIA)**

This volume should be cited as Vol. IV, IILMLJ Issue 1, 2026

**IILM Law Journal ISSN:  
2583-8806 (Online)**

**Published By:** IILM School of Law, IILM University, Greater Noida, Uttar Pradesh, India

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## **EDITORIAL**

In this era of technological Changes, changing geopolitics and demands of social justice, law continues to be one of the key tools for maintaining balance. At the center of governance lies the Constitution, not as a static document, but as an evolving one which responds to the changing needs of the society. We as constitutional scholars are aware that legal debates or economic reforms are testing grounds of constitutional promises and commitments. This issue brings forward scholarly pieces that delve into these contemporary challenges.

Instead of considering the law in vacuum, the pieces examine the law through constitutional morality. One of the central issues discussed in this issue revolves around the protection of fundamental rights and human dignity. The articles reflect upon structural deficiencies and explore the concept of reformative justice in relation to the juvenile mental health and free legal aid provided by the constitution that are a matter of contemporary concern in modern society. Further, there are articles which highlight the structural exclusion of marginalized people from health care programs and articles that provide a unique jurisprudential perspective on the rights of a dead person in view of Article 21. Just as crucial is the need of law to keep pace with the new innovations while protecting the constitutional rights of citizens. There are also articles discussing the problems of Artificial Intelligence in respect of copyright authorship as well as the cyber warfare and its impact on national security framework and some timely articles on intellectual property regimes examine the role of women in digital transformation.

Beyond the borders of countries, the complexities of global governance need a closer look. The issue focuses on the disintegration of the international law-based order and examines the challenges of the Law of the Sea. Using comparative governance, it learns from the examples of the food safety policies of India and the United Kingdom, whereas regional environmental responsibility is considered within the framework of energy justice and stakeholder theory. Moreover, these discussions are grounded theoretically through the examination of the complications related to the ratification of Constitutional Amendment Bills by the states and through the call for the importance of the Mīmāṃsā hermeneutics in the interpretation of modern statutes.

We express our heartfelt thanks to our contributing authors, editors and peer reviewers for their dedication to academic excellence. We hope that this issue will inspire further discussion and help shape the future course of the legal and constitutional field in the law domain.

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# **Governing Nutrition and Food Safety: Comparative Policy Perspectives from India's POSHAN Abhiyaan and the UK's Healthy Start Scheme**

**-Ms. Sheena Das N M<sup>1</sup>**

**-Dr. V R Dinkar<sup>2</sup>**

## **ABSTRACT**

*Governance of food systems has to deliver safe and nutritious food for all. Two governance models-India's POSHAN Abhiyaan and the UK's Healthy Start Programme, this paper examines as examples of how nutrition and food safety are translated into policy.*

*In the case of India, the model was developed using a developmental state approach with three elements. First, it adopted a 'convergence' strategy of bringing together different areas of government activity. Second, it included community involvement through 'participatory development'. Third, it promoted changes in behavior at an individual level. In contrast, the UK model used a welfare state approach with three strategies of its own. First, it provided a right or entitlement to certain services. Second, it offered targeted forms of financial assistance. Third, it employed regulatory mechanisms.*

*The paper examines whether the two models incorporate processes that promote accountability, digital innovation, and intersectoral coordination in order to achieve the United Nations' Sustainable Development Goals (SDG 2 and SDG 3) regarding access to healthy and sustainable food production. Through comparative analysis, the paper finds that effective governance in the area of food and nutrition is achieved when linkages exist across preventive public health, food safety, and social welfare. Therefore, the study concludes that India's participatory governance model and the UK's rights-based service delivery model can contribute to the development of globally resilient and equitable food systems governance.*

**Keywords:** Food systems governance, Nutrition policy, Food safety, Comparative public policy, Welfare state and developmental state, Sustainable Development Goals (SDGs)

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## Introduction

The food we eat shapes not only our own health but also the well-being of our communities and nations. Going beyond being a private matter, safe and nutritious food is a public responsibility enshrined in law, administration, and everyday life.<sup>3</sup> Around the globe, governments are beginning to learn that food safety and nutrition are not separate agendas but rather twin responsibilities of the modern State.<sup>4</sup> The ‘*Global strategy for food safety 2022-2030*’ reminds policymakers that you cannot have good nutrition without confidence in the safety of the food supply. Simultaneously, the *State of Food Security and Nutrition in the World 2023* estimate finds 2.4 billion people faced shortage of consistent access to necessary safe and nutritious food.<sup>5</sup> The human story behind the numbers reflects children who cannot grow, mothers that cannot thrive, and systems which must do better.<sup>6</sup>

The National Family Health Survey (NFHS-5, 2019–21), in India, shows that more than one in three children under five are stunted and nearly one in five wasted.<sup>7</sup> So, the hunger is no longer just about quantity but about quality, safety, and access. The Indian government started the POSHAN Abhiyaan scheme in 2018 under the ‘Ministry of Women and Child Development (MoWCD)’. Furthermore, the Indian government started the ‘*Mission Saksham Anganwadi*’ and ‘POSHAN 2.0’ in 2021.<sup>8</sup> The purpose of both these schemes is to integrate everything related to health, nutrition, and sanitation. Most importantly, with an aim to promote optimum utilization of technology like digital monitoring with accountable governance. *The National Food Security Act, 2013* guarantees the right to adequate food, and thereby nutrition, to all children, pregnant women and lactating mothers.<sup>9</sup>

The key innovation of POSHAN is convergence ministries and state departments that once worked in isolation now share data, budgets, and results.<sup>10</sup> The *Operational Guidelines of*

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<sup>3</sup> FAO & WHO, *Framework for Action on Food Safety* (2020).

<sup>4</sup> WHO, *Global Strategy for Food Safety 2022–2030* (2022); FAO et al., *The State of Food Security and Nutrition in the World 2023* (2023).

<sup>5</sup> UNICEF, *The State of the World’s Children 2019: Children, Food and Nutrition* (2019).

<sup>6</sup> INT’L INST. FOR POPULATION SCIS. & ICF, NATIONAL FAMILY HEALTH SURVEY (NFHS-5), 2019–21: INDIA 356 (2021).

<sup>7</sup> Ministry of Women & Child Dev., *POSHAN Abhiyaan Overview* (2018).

<sup>8</sup> National Food Security Act, No. 20 of 2013, India Code (2013); Ministry of Women & Child Dev., *Mission Saksham Anganwadi and POSHAN 2.0 Guidelines* (2021).

<sup>9</sup> National Food Security Act, 2013, §§ 4–6, No. 20, Acts of Parliament, 2013 (India); NITI Aayog, *National Nutrition Strategy: Nourishing India 4* (2017).

<sup>10</sup> Ministry of Women & Child Dev., *Operational Guidelines for Convergent Action Plan under POSHAN Abhiyaan 5* (2020); Ministry of Women & Child Dev., *Streamlining Guidelines on Quality Assurance...* 6 (2021).

*Convergent Action Plan under POSHAN Abhiyaan* (2020) and *Streamlining Guidelines on Quality Assurance* (2021) elaborate on the necessary local official coordination for safe procurement, hygienic storage and periodic sampling of meals served through Anganwadi Centres.<sup>11</sup> Through the *POSHAN Tracker*, data relating to nutrition delivery and food-safety audit is now tracked in real-time. The digital turn is a silent revolution: citizens are no longer seen as mere beneficiaries of charity but as rights-holders to safe and adequate nutrition.<sup>12</sup>

Across the globe, the United Kingdom is on a different complementary path. The *Healthy Start scheme* created by Statutory Instrument 2005/3262, has amended in 2020, is managed by the *National Health Service* and overseen by the FSA.<sup>13</sup> The UK approach uses electronic vouchers and fortified supplements through retail outlets instead of community kitchens.<sup>14</sup> For Indian people, *Jan Andolan (people's movement)* creates change through participation.<sup>15</sup> For the UK, legal entitlement, transparency and inspection drive the change process.<sup>16</sup> Every approach is an expression of a national temperament: India believes in collective action and the UK relies on administrative precision.<sup>17</sup> Both share the same moral core of protecting vulnerable lives through safe and nutritious food. Nutrition narrative of India did not start with POSHAN. It goes back to the *Integrated Child Development Services (ICDS, 1975)* and the *Mid-Day Meal Programme*, now known as PM-POSHAN.<sup>18</sup> The egg-based meals targeted a variety of locations, including schools and medical facilities.<sup>19</sup> The recent changes made by FSSAI of India, introducing AYUSH nourishment-based dishes in Anganwadi menu signify a new integration of science, safety, and culture.<sup>20</sup> This development is in line with the FAO's "*Nutrition-Sensitive Food Systems*" which link farming, processing, and health.<sup>21</sup>

The work continues to be in progress. India must enhance the uniformity of implementation and consumer awareness, while the UK must enhance inclusion and equity in welfare

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<sup>11</sup> Ministry of Women & Child Dev., *POSHAN Tracker: Leveraging Technology for Suposhit Bharat* (2024).

<sup>12</sup> The Healthy Start Scheme and Welfare Food (Amendment) Regulations 2005, SI 2005/3262 (U.K.).

<sup>13</sup> NHS Digital, *Healthy Start Scheme Guidance 9* (2022).

<sup>14</sup> Public Health England, *Healthy Start Scheme Evaluation Report 11* (2021).

<sup>15</sup> NIRDPR, *Jan Andolan Guideline V2* (2020), nirdpr.org.in.

<sup>16</sup> Food Standards Act 1999, c. 28 (U.K.).

<sup>17</sup> Ministry of Women & Child Dev., *Evaluation of ICDS Scheme of India* (2020).

<sup>18</sup> PRS Legis. Res., *Demand for Grants 2025–26: Health and Family Welfare* (2025).

<sup>19</sup> Food Safety & Standards Auth. of India, *Eat Right India Movement Report* (2023).

<sup>20</sup> FAO, *Transforming Food Systems for Improved Nutrition* (2021).

<sup>21</sup> J. Crossley, *Evaluating the Impact of the UK's Healthy Start Scheme on Low-Income Families*, 45 *Brit. J. Pub. Health* 881 (2023).

delivery.<sup>22</sup> Both systems showcase that nutrition and food safety are not a different concern shared by ministries, rather than being solely one nation's concern.

Consequently, this article makes use of a comparative-policy framework to look into how an institutional design, technology, and rights-based governance can collaboratively build safer and more nurturing societies. A hybrid model of food-systems governance should combine India's participatory energy with the UK's regulatory precision to outline the countries public health prospects.

## Review of Literature

New research on nutrition and food safety governance shows that the global thinking in this area has evolved. Unsafe food is a major impediment to good nutrition according to WHO's '*Global Strategy for Food Safety 2022-2030*', but particularly with children and women.<sup>23</sup> Likewise, the FAO's (Food and Agriculture Organization) *Framework for Action on Food Safety* (2020) links risk-based food governance with nutrition-sensitive agriculture and encourages countries to adopt regulatory systems that are integrated and comprehensive.<sup>24</sup>

In India, the NITI Aayog's *National Nutrition Strategy* (2017) offered the conceptual basis for a convergence between ministries through *POSHAN Abhiyaan*, which requires data-focused monitoring and accountability.<sup>25</sup>

An analysis of the *ICDS Scheme* (2020) by the MoWCD highlighted long-standing deficiencies in the implementation of the scheme-infrastructure, the quality of food and training were the prominent issues.<sup>26</sup> These were to be addressed through the *Mission Saksham Anganwadi and POSHAN 2.0* initiative.<sup>27</sup> ICMR's Dietary Guidelines for Indians 2024 reinforced this policy direction link of nutrient adequacy with safe food practices, which is now part of FSSAI's Eat Right India campaign.<sup>28</sup>

Studies show the link between sanitation, food handling and nutritional impact. According to studies based on NFHS-5 data, household hygiene, maternal education, and safe feeding

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<sup>22</sup> Food & Agric. Org. of the United Nations, *The State of Food Security and Nutrition in the World* (annual report series).

<sup>23</sup> WHO, *Global Strategy for Food Safety 2022–2030* (2022).

<sup>24</sup> FAO & WHO, *Framework for Action on Food Safety* (2020).

<sup>25</sup> NITI Aayog, *National Nutrition Strategy: Nourishing India 4* (2017).

<sup>26</sup> Ministry of Women & Child Dev., *Evaluation of ICDS Scheme of India*, supra note 15, at 2

<sup>27</sup> *Id.*

<sup>28</sup> Indian Council of Med. Res., *Dietary Guidelines for Indians* (2024); FSSAI, *Eat Right India Movement Report* (2023).

environments are critical, like calorie intake.<sup>29</sup> The *Rashtriya Poshan Maah Campaign Reports* (2023) show how public participation and behaviour change can increase awareness of safe nutrition practices.<sup>30</sup>

In contrast, an exploration of the UK's *Healthy Start Scheme* by Crossley's (2023) focuses on welfare delivery, accountability and the impact of a rights-based regulatory framework on maternal autonomy.<sup>31</sup> The Food Standards Agency controls the nutritional support to food safety standards in a way that offers an example of how welfare and regulations can work in harmony.<sup>32</sup>

When taken together, this body of literature suggests that sustainable nutrition policy should go beyond programme boundaries and build governance linkages across safety, health and community empowerment, which is the foundational principle of this comparative analysis.

## Scope and Objective

This study extends to more than just a simple evaluation of welfare schemes. This paper examines how governments, particularly India and the UK, translate the intertwined consumers' goals of nutrition and food safety into legal and administrative action. The research is located within the frameworks of *POSHAN Abhiyaan* and *Mission Saksham Anganwadi* and *POSHAN 2.0* of India, and the *Healthy Start Scheme* of National Health Service (NHS) of United Kingdom.<sup>33</sup>

This analysis goes to the comparative field of study on the premise that an effective nutrition policy is inseparable from food safety governance. It strives to answer three key questions.

**3.1** What institutional designs used in these programs guaranteed both nutritional adequacy and safety standards for vulnerable groups?

**3.2** How Do Digital Monitoring Systems Enhance Accountability and Transparency? For Example, India's *POSHAN Tracker* And UK's *Digital Voucher Delivery*.

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<sup>29</sup> Lovely Jain et al., Association of Child Growth Failure Indicators with Household Sanitation Practices in India (1998–2021), 10 JMIR Pub. Health Surveillant. e41567 (2024).

<sup>30</sup> UNICEF India, *Rashtriya Poshan Maah Campaign Report* (2023).

<sup>31</sup> J. Crossley, Evaluating the Impact of the UK's Healthy Start Scheme on Low-Income Families, 45 Brit. J. Pub. Health 881 (2023).

<sup>32</sup> Food Standards Agency, *Annual Food Safety and Hygiene Report* (2023).

<sup>33</sup> Ministry of Women & Child Dev., *Mission Saksham Anganwadi and POSHAN 2.0 Guidelines* (2021); The *Healthy Start Scheme and Welfare Food (Amendment) Regulations 2005*, SI 2005/3262 (U.K.).

### 3.3 What lessons can each country draw from the other to create a hybrid governance model combining community participation with enforceable legal entitlements?<sup>34</sup>

The study attempts to connect the academic worlds of food safety regulation and nutrition policy. The study seeks to contribute to global discussions about integrated food-systems governance.<sup>35</sup> This is an exercise in not only comparing policies but also understanding what commitments to human dignity and health they imply.

## Methodology

By employing a comparative qualitative approach, this research relies on a policy analysis.<sup>36</sup> This relies only on primary government publications, legislative texts, institutional reports as well as peer-reviewed studies that are uploaded and cited here.<sup>37</sup> The Indian sources include *POSHAN Abhiyaan* and guidelines for *POSHAN 2.0*, the *National Food Security Act, 2013* and *NFHS-5 data*. The UK sources include *Healthy Start Scheme Regulations*, NHS guidance and Food Standards Agency reports.<sup>38</sup> The review is organized through three thematic lenses on governance design, digital accountability and citizen participation. Through the interpretation of the produced content and a cross-check against international standards (FAO's Framework for Action on Food Safety; WHO's Global Strategy for Food Safety 2022-2030), a comparison assessment will be carried out.<sup>39</sup> This interpretive method helps analyse how the two countries have incorporated the right to safe and nutritious food into their respective welfare regimes.<sup>40</sup>

## Findings and Discussion

Solving discourse on governance of nutrition and food safety in India and the UK reveals two distinct paths with common institutional and ethical destinations. Both systems not only recognize food as a commodity but emphasize it also as a legal and moral right. Although distinct institutional designs, the participatory model in India and the rights-based welfare

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<sup>34</sup> Ministry of Women & Child Dev., *POSHAN Tracker: Leveraging Technology for Suposhit Bharat* (2024); NHS Digital, *Healthy Start Scheme Guidance* (2022).

<sup>35</sup> FAO, IFAD, UNICEF, WFP & WHO, *The State of Food Security and Nutrition in the World 2023* (2023).

<sup>36</sup> John W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* 45 (4th ed. 2018).

<sup>37</sup> NITI Aayog, *National Nutrition Strategy: Nourishing India* (2017). *supra* note 23 at 3.

<sup>38</sup> *National Food Security Act, No. 20 of 2013*, India Code (2013), <https://www.indiacode.nic.in>; NHS Digital, *Healthy Start Scheme Guidance* (2022).

<sup>39</sup> FAO & WHO, *Framework for Action on Food Safety* (2020); WHO, *Global Strategy for Food Safety 2022–2030* (2022).

<sup>40</sup> Ministry of Women & Child Dev., *POSHAN Abhiyaan Overview*, *supra* note 5, at 2

architecture in the UK, both pursue the same goal of enabling citizens to access safe, hygienic, nutritious and affordable food.<sup>41</sup>

### ***INDIA: The Governance of Convergence***

India has witnessed a good evolution in nutrition governance since the inception of the ‘Integrated Child Development Services’ (ICDS) in 1975.<sup>42</sup> The legacy of ICDS continues with POSHAN Abhiyaan and Mission Saksham Anganwadi and POSHAN 2.0 for the formal convergence of ministries, data and community.<sup>43</sup>

The 2013 Act gives a legal foundation to the system by recognizing nutrition as a legal entitlement and providing nutritional support to women and children through Anganwadi Centres.<sup>44</sup> India’s clear priority is on digital accountability. The *POSHAN Tracker*, introduced by the Ministry of Women and Child Development, is an integrated monitoring platform that collects data from 1.3 million Anganwadi Centres across the country.<sup>45</sup> It records service delivery, child growth parameters and food distribution live to plug leakages and allow better coordination among the Centre and states. The *Streamlining Guidelines on Quality Assurance* (2021) institutionalizes safe procurement, standardization of menus and periodic testing of food consistent with FSSAI’s *Eat Right India* movement, which promotes hygienic and wholesome diets in public institutions.<sup>46</sup>

India’s governance approach thus integrates community engagement with technological oversight. The Rashtriya Poshan Maah campaign has been celebrated every year since 2018. This initiative involves citizens, self-help groups, and local governments, to promote awareness of safe food and nutrition for children.<sup>47</sup> NITI Aayog and Accountability Initiative assesses new campaigns to make people aware but gap in implementation in rural districts with inadequate

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<sup>41</sup> FAO, IFAD, UNICEF, WFP & WHO, *The State of Food Security and Nutrition in the World 2023* (2023).

<sup>42</sup> Ministry of Women & Child Dev., *Evaluation of ICDS Scheme of India*, supra note 15, at 2.

<sup>43</sup> Ministry of Women & Child Dev., *Mission Saksham Anganwadi and POSHAN 2.0 Guidelines*, supra note 6, at 2

<sup>44</sup> National Food Security Act, supra note 36.

<sup>45</sup> Ministry of Women & Child Dev., *POSHAN Tracker*, supra note 32, at 5.

<sup>46</sup> Ministry of Women & Child Dev., *Streamlining Guidelines on Quality Assurance, Roles and Responsibilities of Duty Holders* (2021); Food Safety & Standards Auth. of India, *Eat Right India Movement Report* (2023).

<sup>47</sup> UNICEF India, *Rashtriya Poshan Maah 2023 Campaign Report*, supra note 28, at 4.

resources (2023).<sup>48</sup> Through the challenges, POSHAN 2.0 will change the paradigm from welfare distribution to coordinated governance based on transparency and prevention.<sup>49</sup>

India's distinct endeavor to integrate cultural practices with scientific nutrition is evident in AYUSH food principles merging with ICMR's Dietary Guidelines for Indians (2024).<sup>50</sup> The effectiveness of these strategies will depend on the local capacity, the training of Anganwadi workers and quality assurance. The Evaluation of ICDS Scheme (2020) notes that while the coverage of services has grown, the food safety infrastructure remains uneven in marginalized regions.<sup>51</sup>

### ***The United Kingdom. The Regulation of Benefits***

The '*Healthy Start*' scheme of the United Kingdom reflecting a rights-based welfare scheme within the framework of the National Health System as per Statutory Instrument 2005/3262 and amended in 2020.<sup>52</sup> The initiative is designed to provide assistance to pregnant women and children from eligible low-income households with an electronic benefit card to purchase milk, fruits, vegetables, and infant formula.<sup>53</sup> This digital mechanism helps to cut down on administrative inefficiency while allowing for traceability and transparency in fund usage.

One of the strengths of this scheme is having regulatory coherence. Jointly overseen by the '*National Health Service*' (NHS) and '*Food Standards Agency*' (FSA) created under the *Food Standards Act* 1999; the FSA ensure that food supplied through this scheme is compliant for safety and labelling.<sup>54</sup> While in India a multi-ministerial convergence is the approach, the UK strategy relies more on statutory mandates and independent regulatory agencies. This model prefers uniformity and legal enforcement efforts more than participatory mobilization.

There are a few restrictions even in this efficiency. According to the Public Health England's *Healthy Start Scheme Evaluation Report*, 2021, barriers include lack of awareness in eligible families, delayed activation of benefits and limited acceptance by retailers.<sup>55</sup> Recent parliamentary discussions point to an evolution in the program. There are suggestions made to

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<sup>48</sup> Ministry of Women & Child Dev., *supra* note 6, at 2. Budget Briefs (2023); NITI Aayog, National Nutrition Strategy: Nourishing India (2017).

<sup>49</sup> Ministry of Women & Child Dev., *POSHAN Abhiyaan Overview*, *supra* note 5, at 2

<sup>50</sup> NITI Aayog, Evaluation of ICDS Scheme of India (2020).

<sup>51</sup> The Healthy Start Scheme and Welfare Food (Amendment) Regulations 2005, SI 2005/3262 (U.K.).

<sup>52</sup> NHS Digital, Healthy Start Scheme Guidance (2022).

<sup>53</sup> Food Standards Act 1999, c. 28 (U.K.).

<sup>54</sup> Public Health England, Healthy Start Scheme Evaluation Report (2021).

<sup>55</sup> UK Parl. Deb., HC Deb (Jan. 2024) on Healthy Start Program Expansion

expand digital coverage. Furthermore, integrating nutrition education components has also been discussed.<sup>56</sup>

### ***Comparative Reflections: Shared Lessons and Divergent Strategies***

Both countries have realized that the governance of food and nutrition cannot be separated from the regulatory framework for food safety. In India, the FSSAI's *Eat Right India* initiative is analogous to the UK's FSA framework, linking safety standards with campaigns.<sup>57</sup> Yet they differ fundamentally in their implementation of accountability. India focuses on community monitoring and local behaviour change through Anganwadi's, while the UK relies on legally enforceable entitlements and bureaucratic transparency.

#### The comparative analysis produces three findings

- Digital technology is reinventing nutrition governance in both contexts. The *POSHAN Tracker* and the *Healthy Start Digital Card* systems demonstrate how real-time data can reduce leakages and fraud while also increasing trust in public systems.<sup>58</sup> Due to India's scale and diversity, strong local capacity and data literacy is essential for sustained digital oversight.
- On policy, they differ on institutional integration vs specialization. By integrating welfare, health, and agriculture, the model of India aims for inter-ministerial convergence.<sup>59</sup> On the other hand, the UK is assisted by statutory organizations such as the NHS and FSA having clear jurisdiction. Using both to improve processes have disadvantages, the one that certifies guidelines often results in overlapping functional work while the specialized one's drive precision and neglect the social determinants of health and nutrition.<sup>60</sup>
- To some extent, policy premises differ through diverse moral philosophies. India's participatory "Jan Andolan" ("people's movement) reflects its developmental-state ethos and collective responsibility.<sup>61</sup> The UK's rights-based welfare reflects its strength of

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<sup>56</sup>Food Safety & Standards Auth. of India, *Eat Right India Movement Report* (2023); Food Standards Agency, *Annual Food Safety and Hygiene Report* (2023).

<sup>57</sup> Ministry of Women & Child Dev., *POSHAN Tracker*, supra note 32, at 5

<sup>58</sup> Ministry of Women & Child Dev., *Operational Guidelines for Convergent Action Plan under POSHAN Abhiyaan* (2020). NHS Digital, *Healthy Start Scheme Guidance*, supra note 50.

<sup>59</sup> Public Health England, *Healthy Start Scheme Evaluation Report* (2021).

<sup>60</sup> Ministry of Women & Child Dev., *POSHAN Abhiyaan Overview*, supra note 5, at 2

<sup>61</sup> NHS Digital, *Healthy Start Scheme Guidance*, supra note 50, at 7

belief in entitlement and equality before the law.<sup>62</sup> Food is depicted as a right and not a privilege in both cases. Senator Amartya states that freedom from hunger is a measure of justice itself.<sup>63</sup>

### ***The Global Dimension***

Across the world the two systems are in line with the idea of “nutrition-sensitive food systems” proposed by FAO and WHO.<sup>64</sup> FAO’s Transforming Food Systems for Improved Nutrition (2021) and WHO’s ‘*Global Strategy for Food Safety 2022–2030*’ call for the establishment of national frameworks that bring health, agriculture, and consumer protection sectors together.<sup>65</sup>

The stand of India’s multi-sectoral design closely relates to this, whereas the model of the UK showcases how safety and access can be operationalized by means of digital welfare. The two countries are members of the UN’s *Decade of Action on Nutrition* (2016–2025) and their experiences complement each other. Through grassroots outreach, India focuses on inclusivity and awareness while the UK uses codified standards for precision and accountability. When considered together, participatory and precision approaches illustrate two halves of the global governance equation, both necessary to building resilient food systems. The comparative findings indicate that the future of nutrition and food safety governance lies in India’s participatory inclusiveness and the UK’s institutional clarity. A framework for the twenty-first century that combines digital transparency, legal accountability and citizen power could fundamentally transform the matter of securing the right to safe and nutritious food for nations.

### **Comparative Policy Synthesis**

When the comparison of India’s *POSHAN Abhiyaan* with that of the United kingdom’s *Healthy Start Scheme*, we have witnessed two different policy ecosystems joined by one constitutional and moral objective, the right to safe and adequate nutrition.<sup>66</sup> India approaches the challenge from the perspective of developmental convergence while the UK approaches it from the perspective of statutory entitlement. However, their paths are increasingly converging under

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<sup>62</sup> Amartya Sen, *Development as Freedom* 160 (1999).

<sup>63</sup> FAO & WHO, *Framework for Action on Food Safety* (2020).

<sup>64</sup> WHO, *Global Strategy for Food Safety 2022–2030* (2022).

<sup>65</sup> FAO, *Transforming Food Systems for Improved Nutrition* (2021).

<sup>66</sup> FAO, IFAD, UNICEF, WFP & WHO, *The State of Food Security and Nutrition in the World 2023* (2023).

the global food-systems governance initiatives of FAO, WHO and United Nations Sustainable Development Goals.

### ***Governance Architecture and Legal Foundations***

India's nutrition governance is premised on constitutional provisions which make a promise of welfare through the welfare clause in Article 39 and the directive for better nutrition and standard of living for all Indians in Article 47.<sup>67</sup> This is further operationalized under the National Food Security Act 2013 and the POSHAN Abhiyaan.<sup>68</sup> This framework considers nutrition a state responsibility and social right, establishing a network of inter-ministerial convergence through MoWCD, FSSAI, and state department.<sup>69</sup> In contrast, the UK places nutrition in the context of a public health and welfare law. The Healthy Start Scheme was introduced under The *Healthy Start Scheme and Welfare Food (Amendment) Regulations 2005*, with oversight from the National Health Service and the Food Standards Agency, each of which operates independently and with a clear statutory function.<sup>70</sup> The UK's approach illustrates how welfare delivery can adhere to the rule of law; social welfare benefits are not delivered on a discretionary basis but are a right, guaranteed in law, for those who qualify.<sup>71</sup> Unlike that, India's framework relies more on executive coordination and public participation. It is inspired by the spirituality of Jan Andolan, the people's movement rather than mere legalistic enforcement. The difference emphasizes a bigger philosophical divide: India's approach reflects a collective moral duty while that of UK individual legal right.<sup>72</sup>

### ***Institutional Coordination and Policy Delivery***

Institutional coordination characterizes both systems, though in contrasting fashions. The *POSHAN Abhiyaan* of India is a perfect representation of horizontal integration involving many ministries.<sup>73</sup> These ministries include health, food, education, rural development, and agriculture.<sup>74</sup> The Operational Guidelines for Convergent Action Plan (2020) formalized this

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<sup>67</sup>INDIA CONST. arts. 39, 47.

<sup>68</sup> WHO, Global Strategy for Food Safety 2022–2030 (2022); supra note 62 at 8. United Nations, Sustainable Development Goals: Goal 2, Zero Hunger (2015).

<sup>69</sup> INDIA CONST. arts. 39, 47 supra note 65

<sup>70</sup> Ministry of Women & Child Dev., *POSHAN Abhiyaan Overview*, supra note 5, at 2

<sup>71</sup> The Healthy Start Scheme and Welfare Food (Amendment) Regulations 2005, SI 2005/3262 (U.K.); Food Standards Act 1999, c. 28 (U.K.).

<sup>72</sup> Public Health England, Healthy Start Scheme Evaluation Report (2021).

<sup>73</sup> NITI Aayog, National Nutrition Strategy: Nourishing India (2017). Supra note 35 at 5.

<sup>74</sup> *Id.*

structure. The guidelines also include the shared Data Dashboards, Joint Review Missions and POSHAN Tracker.<sup>75</sup>

In the UK, vertical specialization is adopted: the NHS ensures delivery, while the FSA regulates safety, and Public Health England educates and creates awareness.<sup>76</sup> Every body works within a defined legal limit with no overlap. The UK shows how specialized institutions can remain accountable through regulation and audit, while India shows how governance can attain communities in remote locations despite administrative complexity.<sup>77</sup>

Food systems governance within the scope of “whole-of-government” is a response both countries have made to the FAO and WHO global call. But the effectiveness depends on political and institutional culture.<sup>78</sup> The flexibility of India allows for innovation as well as inclusivity. But it also weakens enforcement. In contrast, the rigidity of the UK ensures safety at the risk of bureaucratic detachment from citizens.<sup>79</sup>

### ***Digital Governance and Transparency***

Digital governance is a key point of convergence. India's POSHAN Tracker and UK's Healthy Start Digital card system show how technology can enhance transparency, reduce leakage and enhance trust in the system.<sup>80</sup> India's platform captures real-time child growth data, supply chain traceability, and service coverage at all 700-plus districts.<sup>81</sup> The digital card launched by the UK enables beneficiaries to buy approved food items, while simultaneously recording the transaction for audit purposes.<sup>82</sup> Nonetheless, digital governance comes with access and literacy issues. In India, the rural digital divide can restrict real-time reporting and system updates; in contrast, technology in the UK must safeguard user privacy and prevent data misuse.<sup>83</sup> The two experiences highlight that technology should not replace human intervention but should complement it in participatory governance.

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<sup>75</sup>Ministry of Women & Child Dev., Operational Guidelines for Convergent Action Plan under POSHAN Abhiyaan (2020).

<sup>76</sup>Ministry of Women & Child Dev., POSHAN Tracker: Leveraging Technology for Suposhit Bharat (2024).

<sup>77</sup> NHS Digital, Healthy Start Scheme Guidance (2022).

<sup>78</sup> Food Standards Agency, Annual Food Safety and Hygiene Report (2023).

<sup>79</sup> FAO & WHO, Framework for Action on Food Safety (2020).

<sup>80</sup> Accountability Initiative, Mission Saksham Anganwadi and POSHAN 2.0 Budget Briefs (2023).

<sup>81</sup> Ministry of Women & Child Dev., POSHAN Tracker: Leveraging Technology for Suposhit Bharat (2024).

<sup>82</sup> Ministry of Women & Child Dev., Streamlining Guidelines on Quality Assurance, Roles and Responsibilities of Duty Holders (2021).

<sup>83</sup>NHS Digital, Healthy Start Scheme Guidance 9 (2022).

### ***Food safety as a cross-link of policies***

Maybe the most significant lesson is how both countries embed food safety into their national nutrition policies. In India, the Eat Right India Movement by FSSAI along with Streamlining Guidelines for Quality Assurance (2021) ensures that supplementary nutrition distributed through Anganwadi Centres is safe as per national standards.<sup>84</sup> In the UK, the Food Standards Agency (FSA) Checks safety and labelling of products used under *Healthy Start*, just as in Ireland.<sup>85</sup> The Indian model allows for safety checks to be embedded at the community level at delivery as in the UK's regulatory inspection and standard enforcement.<sup>86</sup> The FAO's *Framework for Action on Food Safety* (2020) proposes just such a combination of local regulation and national oversight.<sup>87</sup> As such, both nations put global food-safety governance into action, where India provides bottom-up vigilance and the UK offers precision from the top.

### ***Rights, Participation, and Accountability***

The accountability structures of UK and India are defined by their contrasting governance type and entitlement. In India, citizens are directly part of the government's Rashtriya Poshan Maah campaign and formation of Panchayat-level Nutrition Committees and a Community Based Event.<sup>88</sup> Thus, nutrition is becoming as much a social movement as a policy. In the UK, accountability is guaranteed by statutory reporting, parliamentary oversight, and citizen audit under the Freedom of Information Act 2000.<sup>89</sup>

Despite the differences, both systems embody the 'right to food', as recognized in '*Universal Declaration of Human Rights*' (art.25) and '*International Covenant on Economic, Social and Cultural Rights*' (art.11).<sup>90</sup> India's NFSA 2013 fulfils this through domestic law whereas the UK does so through welfare statute and safety regulation.<sup>91</sup>

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<sup>84</sup>J. Crossley, Evaluating the Impact of the UK's Healthy Start Scheme on Low-Income Families, 45 Brit. J. Pub. Health 881 (2023).

<sup>85</sup> Food Safety & Standards Auth. of India, Eat Right India Movement Report (2023).

<sup>86</sup> Food Standards Act 1999, s. 28 (U.K.).

<sup>87</sup> Public Health England, Healthy Start Scheme Evaluation Report (2021).

<sup>88</sup> FAO & WHO, Framework for Action on Food Safety (2020).

<sup>89</sup> UNICEF India, Rashtriya Poshan Maah 2023 Campaign Report (2023).

<sup>90</sup> Freedom of Information Act 2000, s. 36 (U.K.).

<sup>91</sup> Universal Declaration of Human Rights, G.A. Res. 217A (III), U.N. Doc. A/810 (Dec. 10, 1948); Int'l Covenant on Econ., Soc. & Cultural Rights, Dec. 16, 1966, 993 U.N.T.S. 3.

Thus, each model articulates the same right through distinct governance discourses: that of India is participatory and moral; that of the UK, legal and administrative.

### ***Movement Towards a Hybrid Model for Food Systems Governance***

The comparison analysis reveals potential areas of mutual learning for both systems. The UK may provide India ideas on how to *codify accountability*, embedding safety and entitlement in law. India's experience with *community mobilization* can teach a vital lesson to UK which can help transform the local community from passive recipients into active agents of change.<sup>92</sup>

A hybrid model that captures India's inclusiveness while reflecting the regulatory precision of the UK is ideal. It would use computerized tools to monitor processes in real-time, provide for independent audits of food safety, and empower communities through education and participatory platforms.<sup>93</sup>

The recommendation for “integrated food-systems governance”, jointly advocated by the FAO and the WHO, is already pointing in that direction by urging countries to combine local empowerment with international standards.<sup>94</sup> In the end, the synthesis carries within it a common message that food safety and nutrition are not two parallel processes but one continuum of human rights.<sup>95</sup> Regardless of whether it is community kitchens or digital vouchers, what both systems boil down to is trust, the public's belief that what they receive is enough and safe.

## **Policy Recommendations**

To integrate food safety and nutrition governance is not merely a technical requirement; it is morally essential. This has been evidenced by comparative proof from India and UK. In the future, we have no option to ensure that the food citizens receive is safe and sufficient. Based on strengths and limitations identified in both systems, the following recommendations can help achieve a more accountable, inclusive, and resilient food governance framework.<sup>96</sup>

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<sup>92</sup>The National Food Security Act, No. 20 of 2013, INDIA CODE (2013).

<sup>93</sup>NITI Aayog, Evaluation of ICDS Scheme of India (2020); NHS Digital, Healthy Start Scheme Guidance (2022)

<sup>94</sup>WHO, Global Strategy for Food Safety 2022–2030 (2022).

<sup>95</sup>FAO, Transforming Food Systems for Improved Nutrition (2021).

<sup>96</sup>FAO, IFAD, UNICEF, WFP & WHO, The State of Food Security and Nutrition in the World 2023 (2023).  
Supra note 64 at,9.

### ***Integration with Institutions and Legal Certainty***

India should have a codified nutrition law to bring together the *POSHAN Abhiyaan* and the FSSAI standards within the ambit of a single law like the UK which has a *Food Standards Act 1999*.<sup>97</sup> This will ensure legal certitude, clarify accountability chains and eliminate question of overlapping jurisdictions of the ministries. India's inter ministerial convergence can be used by the UK to enhance collaboration between welfare agencies and local health authorities to foster behavioral change, especially in poorer communities.<sup>98</sup>

### ***Enhancing the Structure of Food Safety***

The two nations must set up their last-mile food safety intervention infrastructure. In essence, India should have regional food safety testing labs interconnected with Anganwadi Centres and the FSSAI's *Eat Right India protocol* integrated into the training of front-line workers.<sup>99</sup> The UK ought to foster partnerships between *Healthy Start program*, local retailers, and communities to enhance food safety education, especially those related to infant feeding practices and labelling literacy.<sup>100</sup>

### ***Transparency regarding problem statement and data used***

Digital governance is a common strength which requires ethical protection. India could consider an open-data dashboard for its POSHAN Tracker that anonymizes data on nutrition outcomes.<sup>101</sup> This will permit monitoring by civil society while maintaining privacy.<sup>102</sup> Like the UK's existing voucher platform for refunds, impact analytics for its voucher platform can also be useful.<sup>103</sup> To curb data misrepresentation and misuse, and India can create mutual standards on data protection of food and nutrition schemes that avoid exclusion in agriculture from the artificial intelligence (AI) machine learning (ML) world.<sup>104</sup>

### ***Capacity Building and Public Awareness***

The success of any food safety and nutrition policy ultimately depends on those who implement it. India should enhance the capacity-building program for Anganwadi workers, supervisors and district officials through compulsory training on food hygiene, safety measures and dietary

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<sup>97</sup>Food Standards Act 1999, c. 28 (U.K.); The National Food Security Act, No. 20 of 2013.

<sup>98</sup> Ministry of Women & Child Dev., Operational Guidelines for Convergent Action Plan under POSHAN Abhiyaan (2020).

<sup>99</sup> Food Safety & Standards Auth. of India, Eat Right India Movement Report (2023).

<sup>100</sup> Public Health England, Healthy Start Scheme Evaluation Report (2021).

<sup>101</sup> Ministry of Women & Child Dev., POSHAN Tracker: Leveraging Technology for Suposhit Bharat (2024)

<sup>102</sup> *Id.*

<sup>103</sup> NHS Digital, Healthy Start Scheme Guidance (2022).

<sup>104</sup> United Nations Dev. Programme, Data Privacy and Governance in Public Health Systems (2023).

diversification.<sup>105</sup> To raise awareness about nutritious and safe food in migrant and low-income communities, the UK can embed a public communication campaign like India's Rashtriya Poshan Maah.<sup>106</sup>

### ***Towards a Global Food Systems Compact***

India and the United Kingdom should work together to initiate an international "Food Systems Safety Compact" under the auspices of FAO and WHO with shared indicators on nutrition, hygiene and governance accountability.<sup>107</sup> A framework of this type would support the achievement of the Sustainable Development Goals (SDG) on Zero Hunger (SDG 2) and Good Health and Well-being (SDG 3) by enhancing globally harmonized but locally adaptable models of implementation.<sup>108</sup>

The food safety and nutrition nexus therefore is not just a policy reform. It is a redefinition of ethical obligation by the state to save life.<sup>109</sup> As India and the UK refine their systems, they both bring out the same truth that safe food is the most fundamental expression of justice in a civilized society.

### **Conclusion**

Food means more than mere sustenance; it is how societies talk about justice, equity and care. The UK's Healthy Start Scheme & India's POSHAN Abhiyaan may differ on a constitutional basis, but they are focused on the same common good; a child's right to safe & adequate nutrition & food.<sup>110</sup>

The governance model of India, which is based on convergence which evolves a vision of the developmental state which envisages but mobilize the citizen as a partner. The UK's system depends on law and administration, which provides predictability and uniformity through clear legislative mandate.<sup>111</sup> Both frameworks highlight different strengths: the participatory inclusiveness of India and institutional rigor of UK.<sup>112</sup>

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<sup>105</sup> Ministry of Women & Child Dev., Streamlining Guidelines on Quality Assurance, Roles and Responsibilities of Duty Holders (2021).

<sup>106</sup> UNICEF India, Rashtriya Poshan Maah 2023 Campaign Report (2023).

<sup>107</sup> FAO & WHO, Framework for Action on Food Safety (2020).

<sup>108</sup> United Nations, Sustainable Development Goals (2015).

<sup>109</sup> Amartya Sen, Development as Freedom 168 (1999).

<sup>110</sup> FAO, IFAD, UNICEF, WFP & WHO, The State of Food Security and Nutrition in the World 2023 (2023).  
Supra note 94 at 12.

<sup>111</sup> The National Food Security Act, No. 20 of 2013, The Healthy Start Scheme and Welfare Food (Amendment) Regulations 2005, SI 2005/3262 (U.K.). supra note 31 at 4

<sup>112</sup> NITI Aayog, National Nutrition Strategy: Nourishing India (2017). Supra note 71 at 9.

The takeaway from these experiences is that the best governance model is participatory and precise. India's POSHAN Tracker and the UK's digital voucher platform show how technology can provide transparency and accountability in nutrition governance, but both require ethical responsibility and citizen trust.<sup>113</sup>

According to the FAO and WHO's frameworks, countries should look at nutrition and food safety as integrated dimensions of sustainable development rather than as isolated sectors.<sup>114</sup> Our food systems are being reshaped by climate change, urbanization, and market globalization. The urgent question is who will ensure safety and nutrition.<sup>115</sup>

In the end, it's not how rich the country is but how it feeds the poor which is important. Through different journeys, India and the UK show that safe and nutritious food for all is a governance challenge and a promise, a promise that sustains life, dignity and the future of humanity itself.<sup>116</sup>

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<sup>113</sup> Ministry of Women & Child Dev., POSHAN Tracker: Leveraging Technology for Suposhit Bharat (2024); NHS Digital, Healthy Start Scheme Guidance (2022).

<sup>114</sup> FAO & WHO, Framework for Action on Food Safety (2020).

<sup>115</sup> WHO, Global Strategy for Food Safety 2022–2030 (2022). *supra* note 66 at 9.

<sup>116</sup> Amartya Sen, Development as Freedom 184 (1999).

# **Bypassing Environmental Impact Assessment: A Critical Legal Analysis of Wind Energy Governance and Energy Justice in India**

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**-Mr. Rohit Tamang<sup>2</sup>**

## **ABSTRACT**

*Under the Electricity Act of 2003, together with the National Action Plan on Climate Change, as well as various renewable energy frameworks, the country has shifted toward wind power as, more sustainable alternative to fossil fuels. But as wind farms expanded, a set of legal, ecological, and social worries surfaced. One big regulatory issue is that onshore wind projects are excluded from the mandatory Environmental Impact Assessment requirement, as reflected in the EIA Notification of 2006. This exemption, made project delivery quicker, yet it also reduced environmental oversight and weakened meaningful public participation.*

*This research paper analyses how wind energy is governed in India, but through the lens of energy justice, it suggests urban and industrial areas end up capturing most of the wind energy gains, while marginalized local communities end up carrying much of the environmental burden and social costs. Even if the Supreme Court and the National Green Tribunal have attempted to align climate ambitions with environmental safeguards, implementation in practice remains uneven: some sites receive closer attention, whereas other regions almost get none. To reach real adjustments, several practical and legal steps are needed too, such as removing the EIA exemption, implementing Free, Prior and Informed Consent in a manner that is not only “paper-compliant”, addressing cumulative ecological impacts with seriousness, and creating a dedicated Wind Energy Regulation Act. Taken together, these steps are essential to ensure that India’s renewable energy transition is both environmentally sustainable and socially fair.*

**Keywords:** Wind Energy, Energy Justice, Environmental Impact Assessment, Renewable Energy Governance, Sustainable Development

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## Introduction

India is at the moment going through a big shift in the way it thinks about energy, sort of drifting away from the usual dependence on oil, coal and gas, and instead turning more toward renewable energy sources. This shift is pushed by two main aims, namely fulfilling its international climate commitments and also helping with the country's own developmental priorities.<sup>3</sup> The Electricity Act of 2003 really mattered here, because it brought in Renewable Purchase Obligations and it also made grid connectivity easier, so that renewable power could be absorbed into the overall system.<sup>4</sup> Then, in 2008, the National Action Plan on Climate Change (NAPCC) offered a broad blueprint for how clean energy should be managed, and how strategy should be shaped.<sup>5</sup> After that, the National Electricity Plan 2023 kept the momentum going further, setting a bold goal of reaching 500 gigawatts of non-fossil fuel capacity by 2030.<sup>6</sup> Also, the Green Energy Open Access Rules 2022 have made it less complicated for commercial and industrial consumers to reach renewable electricity straight away, almost in a direct line, rather than going through the usual channels.<sup>7</sup>

Collectively, these initiatives show the government's ongoing work to slowly and steadily bring down carbon emissions in the power sector. Wind energy has a major role in this whole plan. The National Institute of Wind Energy has, in particular, noted that India's wind energy potential is 695.5 GW at a hub height of 120 meters.<sup>8</sup> This outlook is backed up by regulatory measures, like the Renewable Purchase Obligations (RPOs) laid out in Section 86(1)(e) of the Electricity Act, 2003,<sup>9</sup> and then there are market based levers such as Renewable Energy Certificates (RECs), which are supervised by the Central Electricity Regulatory Commission.<sup>10</sup> Also, several states add financial incentives, for example waivers on electricity duty.<sup>11</sup> Even so, something new has come up as a legal issue: the very policies pushing wind energy

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<sup>3</sup> See Press Release, Press Info. Bureau, India Ranks Third Globally in Renewable Energy Installed Capacity (Nov. 20, 2025), <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2250039>.

<sup>4</sup> Electricity Act, 2003, § 86(1)(e) (India).

<sup>5</sup> Prime Minister's Council on Climate Change, National Action Plan on Climate Change (June 2008) (India).

<sup>6</sup> Cent. Electricity Auth., National Electricity Plan 2023 (2023) (India).

<sup>7</sup> Ministry of Power, Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, G.S.R. 418(E) (June 6, 2022) (India).

<sup>8</sup> Nat'l Inst. of Wind Energy, India's Wind Potential Atlas at 120m agl (2017), [https://niwe.res.in/static/pdf/India%27s\\_Wind\\_Potential\\_Atlas\\_at\\_120m\\_agl.pdf](https://niwe.res.in/static/pdf/India%27s_Wind_Potential_Atlas_at_120m_agl.pdf).

<sup>9</sup> Electricity Act, 2003, § 86(1)(e) (India).

<sup>10</sup> Cent. Electricity Regulatory Comm'n, Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation Regulations, 2010 (India).

<sup>11</sup> See generally Ministry of New & Renewable Energy, Centre Rules, <https://mnre.gov.in/en/centre-rules/> (last visited June 20, 2026).

expansion is also seen as weakening environmental and social guardrails, and today's legal framework just does not sufficiently settle these mismatches.

The Environmental Impact Assessment (EIA) Notification of 2006 shows a kind of contradiction, in that it mostly leaves out onshore wind farms from EIA obligations that are treated as mandatory for thermal and other industrial projects.<sup>12</sup> While that kind of exemption may have helped numerous projects move faster, it has also created a situation where oversight is thin, or maybe basically absent. In *Kallpavalli Vriksha Pempakamdarula Paraspara Sahayaka Sahakara Sangam Ltd. v. Union of India*, the National Green Tribunal examined allegations that the placement of wind turbines in Andhra Pradesh caused deforestation, reduced groundwater, and even accelerated erosion of grazing lands problems that, according to the complaints, were not actually assessed before any work started.<sup>13</sup> Since 2017, at least 25 big land disputes have surfaced because of renewable energy developments, affecting well over 30,000 people.<sup>14</sup> These clashes seem to indicate that the “green” tag, especially in the case of wind energy, has kind of worked as a shield, stopping it from getting the same sort of environmental check that other infrastructure usually has to go through. The whole back and forth about climate mitigation and environmental governance keeps moving across different academic viewpoints. People pushing fast decarbonization often say regulations should be streamlined, so India can reach its 2030 aims with less friction. Still, voices like Chandra Bhushan argue that when you let certain sectors skip environmental assessments before they are fully established, it may open the door to bigger, system-wide frailties. He discusses what is going on in the Himalayas, hinting that leaving out small hydropower projects might have caused environmental harm.<sup>15</sup> Bhargavi Rao then critically looks at India's method for renewable energy, and she calls it “top down”, which can accidentally leave out certain communities or groups. She also notices that the government often skips environmental clearances, even when those clearances are supposed to be meaningful.<sup>16</sup> Still, much of the present research tends to place environmental law and energy justice in totally separate boxes, like they are in different realms or something. Environmental lawyers talk about regulatory

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<sup>12</sup>Ministry of Env't, Forest & Climate Change, EIA Notification, 2006, S.O. 1533 (Sept. 14, 2006) (India).

<sup>13</sup>*Kallpavalli Vriksha Pempakamdarula Paraspara Sahayaka Sahakara Sangam Ltd. v. Union of India*, MANU/GT/0143/2015 (Nat'l Green Trib. 2015) (India).

<sup>14</sup> Land Conflict Watch, Renewable Energy and Land Conflicts in India (2023); see also Priyanka Shankar, Land Conflicts on the Horizon as India Pursues a Clean Energy Future, Mongabay-India (July 23, 2021), <https://india.mongabay.com/2021/07/land-conflicts-on-the-horizon-as-india-pursues-a-clean-energy-future/>.

<sup>15</sup> See Chandra Bhushan, *In India, Wind Power Projects Don't Have to Follow Any Environmental Norms*, Ctr. for Sci. & Env't (2013).

<sup>16</sup> See as Renewable Sector Grows, Need for Regulating It Comes to the Fore, Mongabay-India (Apr. 2023), <https://india.mongabay.com/2023/04/as-renewable-sector-grows-need-for-regulating-it-comes-to-the-fore/>.

blind spots, while energy justice scholars Benjamin Sovacool especially have built useful frameworks for distributional, procedural, and recognition justice.<sup>17</sup> But even with that, there is not enough doctrinal work that really pulls these ideas together inside the Indian legal system.

Also, the energy justice framework has largely been influenced by Western experiences and hasn't really been tailored enough for India's own context, especially its caste based land hierarchies, plus the long standing traditional tenure arrangements that still shape who controls land in many regions.<sup>18</sup> This study tries to close that gap by looking at how the EIA exemption can lead to not only environmental harm but also legally acknowledged injustices, all within a reworked energy justice framework. The research uses a doctrinal legal approach and runs a qualitative content analysis on case laws, environmental clearances, and policy documents, with the goal of critically assessing India's wind energy regulatory framework, in practice.

## **Conceptual and Theoretical Framework**

### ***An Overview of Renewable Energy and the Role of Wind Power***

The Inter-Governmental Panel on Climate Change describes renewable energy as energy obtained from natural processes that are replenished as quickly as, or faster than, they are consumed, including solar radiation, wind, hydropower, biomass, and geothermal heat.<sup>19</sup> Since the Paris Agreement, countries worldwide have increased their renewable energy expansion supported by the imperative to cut greenhouse gas emissions through their energy transition practices.<sup>20</sup> The Electricity Act, 2003 facilitates India's move toward clean energy by prescribing requirements for renewable energy adoption and development through regulatory frameworks which include Renewable Purchase Obligations and preferential tariff systems.<sup>21</sup> Wind energy gets classified as "green" or "clean" energy yet it has emerged as an issue of considerable scholarly and legal discussion.<sup>22</sup> The establishment of wind farms requires extensive land development and equipment and material production which results in environmental damage that people frequently ignore because of the facility's "green"

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<sup>17</sup> Benjamin K. Sovacool & Michael H. Dworkin, *Global Energy Justice* 45–72 (2014).

<sup>18</sup> See Integrating Energy Justice and SDGs in Solar Energy Transition: Analysis of the State Solar Policies of India, 18 *Energies* 3952, 3955 (2025) (noting that large-scale renewable projects reinforce caste and gender inequalities); Ctr. for Env't & Energy Dev., *Caste, Class and Gender in Determining Access to Energy* 12 (2023).

<sup>19</sup> Intergovernmental Panel on Climate Change, *Climate Change 2023: Synthesis Report* 5 (2023)

<sup>20</sup> Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104

<sup>21</sup> The Electricity Act, No. 36, Acts of Parliament, 2003, § 86(1)(e) (India).

<sup>22</sup> Benjamin K. Sovacool, *The Dirty Energy Dilemma: What's Blocking Clean Power in the United States*, 8 *Yale J. on Reg.* 243, 267 (2014).

designation.<sup>23</sup> The promotion of wind energy initiatives in India causes conflicts which occur between animal grazing areas and forested regions and water resources because it alters the ecological balance between these interconnected systems.<sup>24</sup> The Supreme Court, in *T.N. Godavarman Thirumulpad v. Union of India*, recognized these issues and ruled that even projects with ecological benefits must undergo thorough environmental assessments to avoid unintended ecological harm.<sup>25</sup>

### ***Understanding the Energy Justice Approach***

The Energy Justice Framework establishes normative boundaries which permit evaluation of energy systems and their social impact on equity through system transitions. The research done by Benjamin Sovacool and Michael Dworkin identifies three essential pillars which include distributional justice and procedural justice and recognition justice.<sup>26</sup>

- The research field of distributional justice studies what constitutes equitable energy distribution by examining both energy benefits and energy disadvantages through the lens of clean energy infrastructure, which researchers believe may lead to unfair outcomes for marginalized communities while delivering advantages to urban and industrial users.<sup>27</sup> In India, these distributional disparities are apparent in the concentration of wind farms in rural, often tribal regions, where local communities face the costs of land acquisition and suffer from visual and noise pollution without receiving equivalent access to electricity.<sup>28</sup>
- The field of procedural justice examines whether decision-making processes operate fairly by showing that affected stakeholders must take part in energy planning and project development because their participation creates essential decision-making processes.<sup>29</sup> The Indian legal system has increasingly adopted participatory requirements, as demonstrated in the *Vellore Citizens' Welfare Forum v. Union of India* case, where the Supreme Court of India directed that industrial projects must undergo environmental impact assessments and public consultation before receiving approval.<sup>30</sup>

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<sup>23</sup> Dunlap & Fairhead, *The Green Extractivist Nexus*, in *Routledge Handbook of Energy Transitions* 345 (2025).

<sup>24</sup> Shakti Sustainable Energy Found., *Technical EIA Guidance Manual for Wind Power* 12 (2011), [https://shaktifoundation.in/wp-content/uploads/2017/10/EIA-Guidelines-Wind-Power\\_1.pdf](https://shaktifoundation.in/wp-content/uploads/2017/10/EIA-Guidelines-Wind-Power_1.pdf).

<sup>25</sup> *T.N. Godavarman Thirumulpad v. Union of India*, (2012) 3 S.C.C. 277 (India).

<sup>26</sup> Benjamin K. Sovacool & Michael H. Dworkin, *Global Energy Justice* 23–45 (2014).

<sup>27</sup> Gordon Walker, *Environmental Justice: Concepts, Evidence and Politics* 18 (2012).

<sup>28</sup> Land Conflict Watch, *Renewable Energy and Land Conflicts in India* 8 (2021).

<sup>29</sup> Sovacool & Dworkin, *supra* note 8, at 31.

<sup>30</sup> *Vellore Citizens' Welfare Forum v. Union of India*, (1996) 5 S.C.C. 647 (India).

The complete removal of wind energy projects from Environmental Impact Assessment (EIA) procedures prescribed by the EIA Notification 2006 requirements leads to a major decrease in procedural safeguards which were designed to protect local communities.<sup>31</sup>

- The energy systems establish rights to knowledge and identity verification for indigenous peoples and their territorial rights and their ecological wisdom and land cultural value.<sup>32</sup> In India, this form of justice requires the government to recognize traditional land rights for pastoral communities which includes the Kallpavalli herders who lost their ancestral grazing territory because of wind energy development.<sup>33</sup> The National Green Tribunal became involved in *Kallpavalli Vriksha Pempakamdarula v. Union of India* because the ruling established judicial rights recognition through post-event legal processes.<sup>34</sup>

### ***Environmental Governance and Its Impact on Sustainable Development***

The core principle of environmental governance, known as sustainable development, demands that current demands are fulfilled without compromising the capacity of future generations to meet their own needs.<sup>35</sup> India formally embraced this principle following the Supreme Court of India decision in *Vellore Citizens' Welfare Forum v. Union of India*, where sustainable development was acknowledged as part of its environmental law framework influenced by international obligations.<sup>36</sup> The Court introduced a balancing approach which established economic growth as an essential requirement that should not result in environmental destruction which would threaten both public health and ecological system stability.<sup>37</sup> In India, the wind energy sector sort of wrestles with a real issue : how to keep its environmental conservation goals in line with the plain need for power generation. The National Green Tribunal has told that renewable energy projects must follow environmental regulations, while also having to back climate change mitigation and keep to ecological limits.<sup>38</sup> In the matter of *Sarvesh Kumar Sharma v. Union of India*, the Tribunal asked for careful and thorough environmental appraisals for wind energy projects that are placed in areas considered

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<sup>31</sup> Ministry of Env't, Forest & Climate Change, EIA Notification, 2006, S.O. 1533 (India)

<sup>32</sup> Sovacool & Dworkin, *supra* note 8, at 38.

<sup>33</sup> *Kallpavalli Vriksha Pempakamdarula v. Union of India*, Appeal No. 10/2011 (Nat'l Green Trib. 2014)

<sup>34</sup> *Id.*

<sup>35</sup> World Commission on Env't & Dev., *Our Common Future* 43 (1987)

<sup>36</sup> *Vellore Citizens' Welfare Forum*, (1996) 5 S.C.C. at 658

<sup>37</sup> *Id.* at 660.

<sup>38</sup> *Sarvesh Kumar Sharma v. Union of India*, O.A. No. 101/2013 (Nat'l Green Trib. 2014)

ecologically sensitive. This ruling brings in a fresh legal approach which, in a way, weaves environmental protection together with the push for energy security.<sup>39</sup>

### ***Environmental Law Principles***

India deals with its environmental problems by leaning on legal doctrines that are pretty well settled.

- In the matter of *Vellore Citizens' Welfare Forum v. Union of India* the court, did note how crucial the Precautionary Principle is, it basically asks for advance action to block environmental damage, even if the scientific proof is not totally certain yet =.<sup>40</sup> The principle provides that the special importance for wind energy projects because their total environmental effects on bird populations and soil structure and water flow in the area take time to show their effects which create permanent threats to ecological systems.<sup>41</sup>
- The ruling in *Indian Council for Enviro-Legal Action v. Union of India* saw the Supreme Court of India establish the Polluter Pays Principle mandates that polluters must finance both preventive measures and remediation efforts.<sup>42</sup> The principle in wind energy operations creates essential financial responsibility questions about turbine decommissioning and land restoration and community compensation which current regulations do not address.<sup>43</sup>
- The judgment in *M.C. Mehta v. Kamal Nath* saw the Supreme Court of India declare that the State holds natural resources in trust and must protect them for public use. which remain outside private ownership and commercial use that threatens public welfare.<sup>44</sup> The State bears a legal duty to protect communal resources, which include wind and air currents, from private energy developers who would use them excessively according to the doctrine.<sup>45</sup>
- The current generation must protect natural resources according to the Intergenerational Equity principle as held in *Subhash Kumar v. State of Bihar*, considering that these resources are meant to be protected for posterity.<sup>46</sup> The principle establishes a time-

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<sup>39</sup> Id

<sup>40</sup> *Vellore Citizens' Welfare Forum*, (1996) 5 S.C.C. at 659

<sup>41</sup> WWF India, *Wind Energy and Biodiversity: A Review of Impacts* 15 (2019)

<sup>42</sup> *Indian Council for Enviro-Legal Action v. Union of India*, (1996) 3 S.C.C. 212 (India)

<sup>43</sup> Prayas (Energy Grp.), *Wind Energy in India: An Assessment* 28 (2020).

<sup>44</sup> *M.C. Mehta v. Kamal Nath*, (1997) 1 S.C.C. 388 (India)

<sup>45</sup> Id. at 411

<sup>46</sup> *Subhash Kumar v. State of Bihar*, (1991) 1 S.C.C. 598 (India)

based framework for environmental decision-making processes which guarantees that present-day wind energy projects will not inhibit environmental options for future generations nor create excessive challenges for unborn people.<sup>47</sup>

## **Emergence and Growth of Wind Power in India**

India has developed into a major wind energy force in the world because of its ongoing status as the fourth biggest nation for wind power capacity, which has lasted until March 2025.<sup>48</sup> India's wind capacity reached 54.5 gigawatts (GW) by December 2025 because the country experienced continuous capacity growth, which resulted from successful policy implementation and technological advancements and reduction of operational costs.<sup>49</sup> The year 2025 experienced the most significant annual capacity growth in the sector, which reached 6.3 GW, showing a substantial increase from the 3,253.39 megawatts added during fiscal year 2024-25.<sup>50</sup> Wind energy now constitutes the second most significant part of India's renewable energy system, which solar power leads.<sup>51</sup> Wind energy capacity exists in several states which provide good wind conditions and implement state policies that support wind energy development. Gujarat leads with 14.8 GW of cumulative installed wind capacity as of December 2025, followed by Tamil Nadu with 12 GW and Karnataka with 8.4 GW.<sup>52</sup> Maharashtra and Rajasthan complete the top five states with wind capacities of 5.8 GW and 5.2 GW, respectively, contributing to around 85% of India's total installed wind capacity alongside that of its leading states.<sup>53</sup> The Muppandal Wind Farm is recognized as the largest onshore wind farm in India., exists in Tamil Nadu, the first state to accelerate wind energy expansion in the country The company continues to produce wind power as its primary renewable energy source.<sup>54</sup> The month of April 2024 to March 2025 saw Karnataka become the top state for wind capacity expansion after installing 1,331.48 megawatts of new capacity. This accomplishment was made possible through wind resource mapping and evaluation

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<sup>47</sup> Id. at 602

<sup>48</sup> Ministry of New & Renewable Energy, Renewable Energy Statistics 2024–25 3 (2025), <https://cdnbbsr.s3waas.gov.in/s3716e1b8c6cd17b771da77391355749f3/uploads/2025/11/202511061627678782.pdf>.

<sup>49</sup> Mercom India, India Records Highest-Ever Wind Capacity Additions at 6.3 GW in 2025 (Jan. 22, 2026), <https://mercomindia.com/india-records-highest-ever-wind-capacity-additions-at-6-3-gw-in-2025>.

<sup>50</sup> Id

<sup>51</sup> Ministry of New & Renewable Energy, *supra* note 1, at 12.

<sup>52</sup> Mercom India, *supra* note 2.

<sup>53</sup> Id

<sup>54</sup> Renewable Affairs, Top Wind Energy-Producing States in India (Latest Data 2025) (Nov. 29, 2025), <https://renewableaffairs.com/wind-energy-producing-states-in-india/>.

studies conducted by the National Institute of Wind Energy (NIWE) at hub heights of 80 Metres, 100 Metres, and 120 metres.<sup>55</sup>

### ***Policy Framework***

The advancement of wind energy generation in India benefits from a multi-tiered policy framework which comprises national missions and hybrid strategies and regulatory requirements. As a comprehensive climate policy framework, the National Action Plan on Climate Change (2008) laid the normative and institutional foundation for the execution of the National Solar Mission, thereby advancing a coherent national strategy for renewable energy governance implementation through wind power as part of India's climate change mitigation system.<sup>56</sup> The National Wind-Solar Hybrid Policy established its first milestone when it allowed facilities to conduct combined wind and solar power operations which used shared resources. The initiative improved land usage and reduced energy production variations while it boosted overall grid system performance.<sup>57</sup> In December 2023, India adopted the National Repowering and Life Extension Policy aimed at wind power projects, established a program to replace all outdated turbines which produced under one megawatt with new high-capacity turbines which can increase power output by 25% during peak times.<sup>58</sup> The primary market driver which stimulates wind energy deployment consists of Renewable Purchase Obligations (RPOs).

The statutory framework under Section 86(1)(e) of the Electricity Act, 2003 obliges relevant stakeholders in the electricity sector to purchase a prescribed quantity of power generated from renewable sources.<sup>59</sup> The responsibility for setting national RPO objectives rests with the Ministry of New and Renewable Energy, while the enforcement entrusted to State Electricity Regulatory Commissions, which oversee compliance, grant certificates, and impose penalties for non-adherence.<sup>60</sup> By enacting the Green Energy Open Access Rules, 2022, the Ministry of New and Renewable Energy has advanced the development of renewable energy regulation by

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<sup>55</sup> Id

<sup>56</sup> Prime Minister's Council on Climate Change, Nat'l Action Plan on Climate Change (2008)

<sup>57</sup> Ministry of New & Renewable Energy, Nat'l Wind-Solar Hybrid Policy (2018).

<sup>58</sup> Pralhad Joshi, Minister for New & Renewable Energy, Statement in Lok Sabha (July 31, 2025), in KNN India, India's Wind Energy Capacity Hits 51.67 GW, Led by Gujarat, Tamil Nadu & Karnataka (July 31, 2025), <https://knnindia.co.in/news/newsdetails/sectors/energy/indias-wind-energy-capacity-hits-5167-gw-led-by-gujarat-tamil-nadu-karnataka-pralhad-joshi>.

<sup>59</sup> The Electricity Act, No. 36, Acts of Parliament, 2003, § 86(1)(e) (India)

<sup>60</sup> Madhavi Sharma, Legal Framework for Renewable Energy Projects in India, Jus Scriptum (Aug. 5, 2024), <https://www.juscriptumlaw.com/post/legal-framework-for-renewable-energy-projects-in-india>.

facilitating the renewable energy procurement procedures while enabling businesses to use renewable energy sources directly.<sup>61</sup>

### *Institutional Mechanisms*

The Electricity Act of 2003 establishes a dual commission system which India uses to create its wind energy regulatory framework. The Central Electricity Regulatory Commission undertakes three major functions, which involve regulating and administering interstate power transmission and establishing tariffs for central government projects and overseeing the market for Renewable Energy Certificates (RECs).<sup>62</sup> The CERC approved tariffs for wind-solar hybrid projects totaling 2.4 GW in March 2026 and authorized competitive bidding tariffs of ₹3.97 per kilowatt-hour for 300 MW of wind power which connects to the interstate transmission system because these tariffs followed both Section 63 of the Electricity Act, 2003, in accordance with the wind energy procurement guidelines prescribed by the Ministry of Power.<sup>63</sup> State Electricity Regulatory Commissions (SERCs) constitute the primary regulatory framework at the state level which control wind energy development through their state boundaries by establishing feed-in tariffs and approving power purchase agreements and enforcing Renewable Purchase Obligations (RPO) regulations between their areas.<sup>64</sup> The three states of Tamil Nadu and Gujarat and Karnataka have successfully used SERC systems to create special tariff systems which include wheeling and banking services and to provide tax breaks that include electricity duty and cross-subsidy surcharge exemptions.<sup>65</sup> The National Green Tribunal (NGT) functions as the central resolution mechanism for environmental conflicts which arise from wind energy projects. In the case concerning Kallpavalli Vriksha Pempakamdarula and the Union of India, the Tribunal looked at the kind of two-sided effect that wind turbine installations in Andhra Pradesh were causing. This progress ended up, doing two things at the same time, there was the clearing of forest cover, but also a noticeable dropping in groundwater levels. So, it wasn't just one simple outcome, more like a tangled matter with multiple strands.<sup>66</sup>

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<sup>61</sup> Ministry of Power, Green Energy Open Access Rules, G.S.R. 834(E) (2022) (India).

<sup>62</sup> The Electricity Act, No. 36, Acts of Parliament, 2003, §§ 76–79 (India).

<sup>63</sup> Mercom India, Central Electricity Regulator Approves Tariff for SECI's 300 MW Wind Projects (Dec. 18, 2025), <https://mercomindia.com/central-electricity-regulator-approves-tariff-300-mw-wind-projects>; see also Solar Quarter, CERC Approves Tariffs for 2.4 GW Wind-Solar Hybrid Projects (Mar. 23, 2026), <https://now.solar/2026/03/23/cerc-approves-tariffs-for-2-4-gw-wind-solar-hybrid-projects-to-boost-indias-clean-energy-capacity-solarquarter/>.

<sup>64</sup> The Electricity Act, No. 36, Acts of Parliament, 2003, § 82 (India).

<sup>65</sup> Sharma, *supra* note 13.

<sup>66</sup> Kallpavalli Vriksha Pempakamdarula v. Union of India, Appeal No. 10/2011 (Nat'l Green Trib. 2014).

## Legal and Regulatory Framework Governing Wind Energy

### *Constitutional Structure and Governance*

Even though the Indian Constitution doesn't, in a direct way, set up a distinct constitutional right to a clean environment, it still is the main legal framework that, basically, sustains environmental regulation in India. Moreover, the Constitution serves as an implicit support for the renewable energy regime in India.<sup>67</sup> By adopting a liberal construction of Article 21, the Supreme Court has incorporated environmental quality within the ambit of the fundamental right to life. In *Subhash Kumar v. State of Bihar*, the Supreme Court unequivocally recognized this position and ruled that "the right to live includes the right to enjoyment of pollution-free water and air for the full enjoyment of life" which established that environmental harm breaches people's essential rights.<sup>68</sup> Courts use this judicial interpretation to examine wind energy projects which should be protected from environmental damage because they operate to achieve climate goals. While the Directive Principles cannot be enforced through courts, they nevertheless place a constitutional responsibility on the State to safeguard and improve the environment. By virtue of Article 48A, added in 1976 through the Forty-Second Amendment, the State is expected to undertake measures for environmental conservation and the protection of biodiversity.<sup>69</sup> Every citizen is constitutionally required under Article 51A(g) to participate in environmental conservation efforts and exhibit compassion towards all living organisms.<sup>70</sup> According to the jurisprudence developed by the Supreme Court of India, Article 21 mandates the State to undertake measures for environmental protection alongside sustainable development efforts.<sup>71</sup> The constitutional framework which governs wind energy creates a conflict because Article 48A mandates the State to promote renewable energy initiatives while protecting environmental resources that will face potential harm from these initiatives.

### *Environmental Laws Applicable*

Wind-based energy projects in India are regulated by a broad spectrum of environmental laws and compliance mechanisms which create a complicated system of rules that operators must

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<sup>67</sup> Lovleen Bhullar, Constitutional Environmental Duties of Individuals, U. Birmingham L. Sch. Blog (Jan. 16, 2023), <https://blog.bham.ac.uk/lawresearch/2023/01/constitutional-environmental-duties-of-individuals/>

<sup>68</sup> *Subhash Kumar v. State of Bihar*, (1991) 1 S.C.C. 598, 602 (India).

<sup>69</sup> India Const. art. 48A

<sup>70</sup> India Const. art. 51A(g)

<sup>71</sup> *M.C. Mehta v. Union of India*, (1987) 1 S.C.C. 395 (India)

follow. The Environment Protection Act of 1986 serves as the main regulatory framework because it enables India to meet its obligations under the Stockholm Declaration through Article 253.<sup>72</sup> The Central Government uses this Act to acquire all powers needed for environmental protection and enhancement according to the Act's Section 3(1) requirements.<sup>73</sup> Directives to shut down or operate factories which cause environmental pollution can be issued under this section. The classification system designates wind energy projects as "white category" projects because these projects show no pollution emissions. The environmental authorities hold inspection rights to assess their operation activities because of broad definitions which define both "environment" and "environmental pollutant" in the Act and allow them to investigate when environmental incidents happen.<sup>74</sup> The Forest (Conservation) Act of 1980 establishes rules which prevent forest areas from being transformed into other types of land unless the Central Government provides formal approval.<sup>75</sup> Wind farms located within forest areas or biodiversity hotspots like the Western Ghats and Eastern Ghats must follow legal procedures which include compensatory afforestation and net present value assessment requirements.<sup>76</sup> The Wildlife (Protection) Act of 1972 basically requires developers to make sure wind turbines are set up in a manner that keeps crucial wildlife habitats intact, and it should also not disturb bird and large mammal migration routes,<sup>77</sup> sort of. Then the Biological Diversity Act of 2002 says that whenever a project uses biological resources, those plans have to be intimated to the State Biodiversity Authority. But in practice the way these rules are enforced, it differs, from place to place because each region uses its own procedures.<sup>78</sup>

### ***Land Acquisition and Use***

*The LARR Act 2013 is kind of the main legal framework when it comes to getting land for wind energy initiatives.<sup>79</sup> Under that legislation, Social Impact Assessments (SIAs) should be started within six months after the acquisition process begins, and they include assessments by experts from several fields.<sup>80</sup>*

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<sup>72</sup> The Environment (Protection) Act, No. 29, Acts of Parliament

<sup>73</sup> Id. §§ 3(1)

<sup>74</sup> Alaya Legal, Renewable Energy and Biodiversity – Legal Framework (July 26, 2023), <https://alayalegal.com/articles/renewable-energy-and-biodiversity-legal-framework/>.

<sup>75</sup> Maheshwari & Co., Land Acquisition for Renewable Energy Projects in India (Jan. 30, 2026), <https://www.maheshwariandco.com/blog/land-acquisition-for-renewable-energy-projects-in-india/>.

<sup>76</sup> The Forest (Conservation) Act, No. 69, Acts of Parliament, 1980 (India).

<sup>77</sup> The Wildlife (Protection) Act, No. 53, Acts of Parliament, 1972 (India)

<sup>78</sup> The Biological Diversity Act No. 18 of the Acts of Parliament 2002 regulates India.

The Act also lays out that for private sector projects, consent has to be secured from 70% of landowners.<sup>81</sup> For public-private partnership projects, it is higher, 80% of landowners, has to approve. The stipulations have brought about major obstacles for wind farms which the Ministry of New and Renewable Energy reported as land acquisition problems that caused project delays and cost increases.<sup>82</sup> A major conflict occurs between environmental regulations and land use regulations because wind energy projects must comply with the LARR Act and its SIA requirements while the EIA Notification 2006 states they do not need Environmental Impact Assessments.<sup>83</sup> The dual nature of the regulatory system leads to gaps in execution because developers use this system to avoid conducting complete environmental studies while they handle land acquisition challenges. The LARR Act rehabilitation and resettlement enforcement faces increased difficulties because developers prefer leasing land instead of purchasing it.<sup>84</sup>

### ***Environmental Impact Assessment regulatory procedures***

The EIA Notification, 2006, introduced in exercise of powers conferred by the Environment (Protection) Act, 1986, establishes that wind energy projects do not need environmental clearance for their development.<sup>85</sup> During its 2021 parliamentary proceedings, the Ministry of New and Renewable Energy acknowledged the environmental advantages of solar and wind energy projects so they fall outside the Environmental Impact Assessment EIA Notification 2006 requirements for environmental clearance.<sup>86</sup>

The government continues to apply the blanket exemption because people believe that wind energy production does not harm the environment. Scientific studies demonstrate that wind energy production creates negative

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<sup>79</sup> The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, No. 30, Acts of Parliament, 2013 (India).

<sup>80</sup> Maheshwari & Co., supra note 8.

<sup>81</sup> Asia Law Portal, Navigating the Complexities of Land-Related Legal Issues in the Indian Transmission and Renewable Energy Sectors (Jan. 31, 2025), <https://asialawportal.com/navigating-the-complexities-of-land-related-legal-issues-in-the-indian-transmission-and-renewable-energy-sectors/>

<sup>82</sup> Id

<sup>83</sup> Maheshwari & Co., supra note 8.

<sup>84</sup> Asia Law Portal, supra note 15.

<sup>85</sup> Ministry of Env't, Forest & Climate Change, EIA Notification, 2006, S.O. 1533 (India).

<sup>86</sup> Rajya Sabha Unstarred Question No. 306, Answered on Nov. 30, 2021 (Ministry of New & Renewable Energy), <https://sansad.in/getFile/annex/255/AU306.pdf>.

environmental impacts through land use changes and noise pollution and bird deaths.<sup>87</sup> The industry still needs to conduct ecological assessments of its new turbine installations because all environmental impacts from wind-solar hybrid projects and repowering operations remain unstudied.<sup>88</sup> The National Green Tribunal has legally intervened to solve this problem yet the wind sector operates without proper environmental protections because EIA requirements do not need to be followed.<sup>89</sup>

### ***Regulatory Gaps***

India's wind energy industry faces challenges because the country does not have an effective legal system that supports complete industry development. India's industry, is basically regulated under the Electricity Act, 2003, together with guidelines from the central government and state focused setups that fall under the Ministry of New and Renewable Energy.<sup>90</sup> In practice there are several authorities involved, so you end up with unevenness tariff structures, and even environmental benchmarks across different states.<sup>91</sup> And when we do not yet have a dedicated wind energy law, then topics like decommissioning, cumulative impact assessments, sharing of community benefits, and grid integration are treated via executive directives instead of through true legislative routes.<sup>92</sup> The fact that electricity sits in the concurrent list in the Seventh Schedule makes things even more messy, because states can steer land use decisions, fiscal encouragements, and intrastate transmission approaches in a fairly large way.<sup>93</sup> The existing legal framework enables swift capacity expansion but it fails to resolve the distributional imbalances and environmental problems which arise from wind energy facilities.

## **Environmental Conflicts in Wind Energy Development**

### ***Land Use Conflicts***

Wind energy development in India has led to significant land disputes because wind projects require land in rural and semi-arid areas which includes agricultural and communal territories for turbine development. Wind farm development requires extensive land use because it needs

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<sup>87</sup>Shakti Sustainable Energy Found., Technical EIA Guidance Manual for Wind Power 12 (2011), [https://shaktifoundation.in/wp-content/uploads/2017/10/EIA-Guidelines-Wind-Power\\_1.pdf](https://shaktifoundation.in/wp-content/uploads/2017/10/EIA-Guidelines-Wind-Power_1.pdf).

<sup>88</sup> Ministry of New & Renewable Energy, National Repowering and Life Extension Policy for Wind Power Projects (2023).

<sup>89</sup> Kallpavalli Vriksha Pempakamdarula v. Union of India, Appeal No. 10/2011 (Nat'l Green Trib. 2014).

<sup>90</sup> Madhavi Sharma, Legal Framework for Renewable Energy Projects in India, Jus Scriptum (Aug. 5, 2024), <https://www.jusscriptumlaw.com/post/legal-framework-for-renewable-energy-projects-in-india>

<sup>91</sup> Id

<sup>92</sup> Id

<sup>93</sup> India Const. seventh sched., list III, entry 38 (electricity).

space for both turbine foundations and the building of access routes together with transmission infrastructure and maintenance buildings which results in landscape disruption and the loss of customary land use patterns.<sup>94</sup> The local herding and farming community in Rajasthan's Thar Desert expresses their concern over the disappearance of grazing territory and the permanent damage to orans which serve as sacred groves for community-managed forests that provide essential water resources and animal feed and protect the region's traditional cultural heritage.<sup>95</sup> Wind energy development has invaded communal land spaces which has led to financial losses for herders who depend on their pastoral way of life because of reduced milk output and land distribution problems.<sup>96</sup> Pastoral communities face their most acute challenges because they have historically depended on common property resources. The Raikas and Meghwal's of Rajasthan face both physical displacement and the loss of their traditional rights which exist outside of official revenue records.<sup>97</sup> The term "green colonialism" has been coined by scientists to describe how the growth of modern renewable energy initiatives replicates the exclusionary practices of ancient resource extraction, where local populations were left out of both decision-making and the sharing of benefits.<sup>98</sup> Wind energy projects undergo implementation because the legal system permits this process to happen without the required Social Impact Assessments are to be performed in line with the statutory requirements of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.<sup>99</sup>

### ***Biodiversity and Ecological Concerns***

The ecological consequences of wind energy development extend well beyond changes in land use, which create serious threats to bird species and their natural environments. India, positioned along key migratory pathways, has wind farms in coastal, desert, and hilly areas that intersect crucial bird migration routes, leading to bird collisions and habitat disturbances.<sup>100</sup> At the Samakhiali wind farm in Kutch, Gujarat, research identified 47 bird carcasses from eleven

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<sup>94</sup> Land Conflict Watch, Renewable Energy and Land Conflicts in India 8 (2021)

<sup>95</sup> The Electricity Hub, Wind Turbines in India's Thar Desert Stir Controversy (Aug. 26, 2024), <https://theelectricityhub.com/residents-in-indias-thar-desert-are-protesting-the-impact-of-wind-turbines-claiming-they-have-lost-grazing-land-and-suffered-from-damage/>

<sup>96</sup> Id.

<sup>97</sup> Id.

<sup>98</sup> Sareen & Shokrgozar, Green Colonialism and Renewable Energy in Rajasthan, in Renewable Energy Expansion and Ecological Consequences in the Thar Desert 4 (2025).

<sup>99</sup> The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, No. 30, Acts of Parliament, 2013, §§ 4–7 (India).

<sup>100</sup> Bombay Nat. Hist. Soc'y, Threat to Birds and Bats (2025), <https://bwcindia.org/web/awareness/LearnAbout/BirdsandWindEnergy.html>.

species over three years, including the globally vulnerable Dalmatian pelicans and near-threatened painted storks, with an estimated annual mortality rate of 0.478 birds per turbine.<sup>101</sup> The Thar Desert contains wind farms that show higher bird mortality rates than any other wind farm location in the world because raptors need safety from their soaring flight patterns while turbine blades operate at higher altitudes.<sup>102</sup> The ecological impacts of wind turbines extended beyond their direct effects, which a 2018 Nature Ecology & Evolution study examined through research conducted on the Chalkewadi plateau in the Western Ghats. Wind turbine installation reduces predatory raptor bird populations by 75 percent, which results in a 75 percent lower presence of these birds in areas with wind turbines.<sup>103</sup> Raptors, which serve as their natural predators, face a dangerous situation because the declining raptor population has created a sudden increase of fan-throated lizards. The critically endangered Great Indian Bustard, with a population of fewer than 150, is severely threatened by collisions with wind turbines and power lines in Rajasthan and Gujarat. The Supreme Court established a High-Powered Committee in 2019 to create turbine removal recommendations from essential habitats, which would protect this species.<sup>104</sup>

### ***Noise and Visual Pollution***

Wind turbines result in acoustic pollution and visual intrusion which affects local communities while their direct effects on ecosystems remain. The rotating blades produce low-frequency noise which disrupts sleep and increases stress levels and interferes with traditional communication methods used in rural communities.<sup>105</sup>

The transformation of untouched landscapes together with shadow flicker and rural industrialization has caused property values to decline while local people lost their cultural ties to the land. Indian environmental regulations fail to address these problems which exist throughout the country.<sup>106</sup>

For communities whose sense of identity is tightly braided with their land, the slow deterioration of landscapes that hold sacred and cultural meaning, like the orans in Rajasthan,

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<sup>101</sup> Selvaraj Ramesh Kumar et al., Avian Mortalities from Two Wind Farms at Kutch, Gujarat and Davangere, Karnataka, 124 Curr. Sci. 371 (2018).

<sup>102</sup> Vajiram & Ravi, Wind Farms of Thar Desert Record World's Highest Bird Mortality Rate (Aug. 3, 2025), <https://vajiramandravi.com/current-affairs/thar-desert-wind-farms-study/>.

<sup>103</sup> Maria Thaker et al., Wind Farms Have Cascading Impacts on Ecosystems Across Trophic Levels, 2 Nature Ecology & Evolution 1198 (2018).

<sup>104</sup> Bombay Nat. Hist. Soc'y, supra note 7.

<sup>105</sup> Id

<sup>106</sup> Id

really rattles them. It's not just about the view or resources, but the whole feeling of belonging, and sometimes it seems like everything loosens at once.<sup>107</sup>

### ***Judicial Responses***

The National Green Tribunal (NGT) is basically the main authority for settling environmental matters connected to wind energy projects, like wind farms and such. In the matter of *Kallpavalli Vriksha Pempakamdarula v. Union of India*, the Tribunal went through the evidence and found that wind turbines in Andhra Pradesh contributed to deforestation, also groundwater depletion, and even a reduction in the grazing land. Because of that, the Tribunal then told the industry to take corrective action, since it did not put in place enough environmental safeguards, and well, it didn't manage it properly.<sup>108</sup> The NGT has consistently emphasized that while renewable energy initiatives are vital for combating climate change they must conform to environmental legal requirements while preserving the sustainable thresholds of ecosystem functioning.<sup>109</sup> In *M.K. Ranjitsinh v. Union of India*, the Supreme Court of India affirmed that the impacts of climate change are encompassed within the scope of the right to life under Article 21 of the Constitution of India and emphasized that energy planning must account for biodiversity protection.<sup>110</sup> The Court first required that power lines be buried underground in essential breeding habitats for the Great Indian Bustard. The order underwent modifications because it would have blocked renewable energy development, which demonstrated how judges worked to protect ecosystems while fighting climate change.<sup>111</sup> The Supreme Court of India, in *Ridhima Pandey v. Union of India*, addressed the governments must reduce emissions through concrete actions while maintaining environmental and energy policy consistency across different administrative departments.<sup>112</sup>

## **Energy Justice and Social Implications**

### ***Distributional Inequality***

The growth of wind energy in India reveals a significant imbalance because businesses receive more benefits from the projects than the communities who host them. The advantages of large-

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<sup>107</sup> Effects, The Problem with Wind Farms on the Sacred Orans (May 23, 2023), <https://edgeeffects.net/orans-wind-farms/>.

<sup>108</sup> *Kallpavalli Vriksha Pempakamdarula v. Union of India*, Appeal No. 10/2011 (Nat'l Green Trib. 2014).

<sup>109</sup> *Sarvesh Kumar Sharma v. Union of India*, O.A. No. 101/2013 (Nat'l Green Trib. 2014).

<sup>110</sup> *M.K. Ranjitsinh v. Union of India*, (2024) 3 S.C.C. 1 (India).

<sup>111</sup> *Bombay Nat. Hist. Soc'y*, *supra* note 7.

<sup>112</sup> ET Edge Insights, India's Clean Energy Push Faces a New Threat—Climate Litigation (Jan. 13, 2026), <https://etedge-insights.com/industry/energy/indias-clean-energy-push-faces-a-new-threat-climate-litigation/>.

scale renewable energy projects research show that they benefit regional areas and national territories through improved energy security and greater foreign investment and enhanced international climate standing while local communities must handle all negative consequences.<sup>113</sup> The Charanka solar park developers received attractive feed-in tariffs which ensured high returns on their investments and the Gujarat state government gained revenue from power sales to other states and from land lease agreements.<sup>114</sup> The Rabari herders who belong to local pastoralist groups lost their grazing areas and their source of income without receiving any form of compensation or energy access.<sup>115</sup> The pattern of distributional injustice exists at different geographical levels. Wind farm villages enable upper-caste people who hold wealth to obtain additional benefits which include income from construction equipment rentals and business possibilities directed towards migrant workers. The process of land conversion creates adverse consequences which primarily affect both marginalized pastoralists and small-scale farmers.<sup>116</sup> Wind farms generate electricity for distant urban and industrial centers which leads to a situation where local communities do not obtain any benefits from the power production. Residents living in Jaisalmer's Rajasthan wind cluster villages that contain turbines experience power outages which can last for multiple days because the generated electricity is transmitted to cities situated at great distances from their location.<sup>117</sup> Researchers use the term "energy colonialism" to describe the practice of resource extraction which allows energy resources to be taken from remote areas and used for urban growth while the benefits are not shared with the local population.<sup>118</sup>

### ***Procedural Injustice***

The wind energy sector in India experiences its most severe energy injustice through procedural injustices which occur throughout the sector. The EIA Notification of 2006 grants wind projects an exemption from Environmental Impact Assessment requirements which eliminate their need to conduct public consultation that all other industrial projects must perform.<sup>119</sup> Developers can

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<sup>113</sup> Komali Yenneti & Rosie Day, *Distributional Justice in Solar Energy Development in India: The Case of Charanka Solar Park*, Sustainability (2015),

[https://pureoai.bham.ac.uk/ws/files/28134199/Charanka\\_dist\\_justice\\_without\\_format.pdf](https://pureoai.bham.ac.uk/ws/files/28134199/Charanka_dist_justice_without_format.pdf).

<sup>114</sup> Id.

<sup>115</sup> Id.

<sup>116</sup> Id.

<sup>117</sup> The Electricity Hub, *Wind Turbines in India's Thar Desert Stir Controversy* (Aug. 26, 2024), <https://theelectricityhub.com/residents-in-indias-thar-desert-are-protesting-the-impact-of-wind-turbines-claiming-they-have-lost-grazing-land-and-suffered-from-damage/>.

<sup>118</sup> Sareen & Shokrgozar, *Green Colonialism and Renewable Energy in Rajasthan*, in *Renewable Energy Expansion and Ecological Consequences in the Thar Desert* 4 (2025).

<sup>119</sup> Ministry of Env't, Forest & Climate Change, *EIA Notification, 2006*, S.O. 1533 (India).

begin their work because of this regulatory gap which enables them to proceed with their projects while avoiding community participation because they consider the local community as non-active members who should receive infrastructure benefits.<sup>120</sup> The absence of procedural protections creates a serious problem in Scheduled Areas which the Provisions of the Panchayats (Extension to the Scheduled Areas) Act 1996 (PESA) controls because PESA requires all projects in Gram Sabha territory to receive full project benefit and drawback details during their discussion process.<sup>121</sup> Suzlon Energy installed wind turbines on Adivasi land in Maharashtra's Dhule-Nandurbar region without receiving consent from the Gram Sabha which violated both PESA and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 requires that governmental authorization be secured before undertaking projects on tribal lands.<sup>122</sup> The state enables corporate land acquisition while neglecting Adivasi land rights which leads to procedural exclusion because administrative officials show bias against indigenous people.<sup>123</sup>

### ***Recognition Injustice***

The systematic exclusion of tribal and rural populations from recognition their territorial rights and ecological knowledge and cultural traditions result in their social marginalization. The Adivasi community in Maharashtra demonstrates this situation because they were denied ownership rights over cultivated forest land which multinational corporations received for wind energy development.<sup>124</sup> The government's actions contravene the Maharashtra Restoration of Land to Scheduled Tribes Act, 1974, which prohibits the transfer of Adivasi land transfers to non-Adivasis through its land deal approval of Suzlon while it fails to protect Adivasi lands.<sup>125</sup> The sacred landscapes experience recognition injustice because invaders access these protected grounds. Wind turbines in Rajasthan have invaded orans, which are sacred groves that local communities protect. The groves function as essential water storage sites, animal feeding grounds, and cultural heritage protection areas.<sup>126</sup> The practice of designating these various

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<sup>120</sup> Frontiers in Sustainable Energy Policy, Moving Beyond "Believers vs. Deniers" Labels: A Public Response-Centered Framework for Energy Justice in the Emerging Renewable Energy Sector, 4 Frontiers Sustainable Energy Pol'y 1469707 (2024)

<sup>121</sup> The Provisions of the Panchayats (Extension to the Scheduled Areas) Act, No. 40, Acts of Parliament, 1996 (India)

<sup>122</sup> Adivasi Struggle for Land Rights, Wind-Watch.org (Mar. 2, 2004), <https://docs.wind-watch.org/adivasistruggle.html>.

<sup>123</sup> Id.

<sup>124</sup> Id.

<sup>125</sup> Id.

<sup>126</sup> Edge Effects, The Problem with Wind Farms on the Sacred Orans (May 23, 2023), <https://edgeeffects.net/orans-wind-farms/>.

landscapes, which serve multiple functions, as industrial wasteland demonstrates epistemic violence according to scholars because it establishes land classifications that treat indigenous land ties as insignificant.<sup>127</sup> The Supreme Court's statement in *M.K. Ranjitsinh v. Union of India* about climate change causing irreversible damage to specific indigenous cultures appears false because the Court supports development projects that force indigenous people to leave their traditional territories.<sup>128</sup>

### ***Human Rights Perspective***

The wind energy project conflicts create human rights violations that go beyond procedural and distributional matters since they involve infringements of rights protected by domestic constitutional law and international law. In *Olga Tellis v. Bombay Municipal Corporation*, the Supreme Court of India interpreted Article 21 of the Constitution of India to encompass the right to livelihood as a fundamental aspect of the right to life which is jeopardized when pastoralists and farmers lose their land and water rights because of wind energy developments.<sup>129</sup> People lose their right to take part in decisions that affect their communities when Gram Sabha consultations get ignored or their outcomes face dishonest treatment according to Article 21 and the PESA and Forest Rights Act frameworks.<sup>130</sup> Environmental justice develops as a human rights standard which requires that environmental degradation should not result in greater harm to marginalized communities.<sup>131</sup> India is required to recognize and secure the rights of indigenous groups, particularly their ability to grant free, prior, and informed consent projects which affect their ancestral lands because of its commitment to the UN Declaration on the Rights of Indigenous Peoples. The required commitment remains unfulfilled through the execution of wind energy initiatives.<sup>132</sup> Civil society groups submitted recent reports to UN human rights bodies which demonstrated how large renewable energy projects in Rajasthan and Gujarat and Madhya Pradesh caused forced community relocations and environmental destruction and health problems while operating like fossil fuel industry

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<sup>127</sup> Id

<sup>128</sup> Captain Forest, Is the Human Right to be Protected from Climate Change Enough? Decolonial Reflections on an Indian Renewable Energy Case (Dec. 3, 2025), <https://www.captainforest.com/human-rights-climate-change-india-renewable-energy/>.

<sup>129</sup> *Olga Tellis v. Bombay Mun. Corp'*, (1985) 3 S.C.C. 545 (India).

<sup>130</sup> Adivasi Struggle for Land Rights, *supra* note 10.

<sup>131</sup> IDR Online, Power to the People: Centering Human Rights in Renewable Energy Development (Aug. 30, 2024), <https://idronline.org/article/climate-emergency/power-to-the-people-centring-human-rights-in-renewable-energy-development/>.

<sup>132</sup> G.A. Res. 61/295, U.N. Declaration on the Rights of Indigenous Peoples (Sept. 13, 2007).

operations which hide their exploitation through a "green" disguise.<sup>133</sup> The ruling in *M.K. Ranjitsinh v. Union of India* saw the Supreme Court of India interpret Article 21 of the Constitution of India as encompassing the right to protection against climate change which extends under Article 21 that marks a significant evolution for legal reasoning.<sup>134</sup> The Court failed to consider local harmful impacts from renewable energy projects as critical scholars show, while it also failed to make space for impacted community members to share their experiences. This situation will result in climate justice becoming a routine administrative work which maintains colonial development models.<sup>135</sup> Energy justice requires two actions which include accelerating renewable energy deployment and providing marginalized communities with decision-making authority to steer the transition while protecting their rights. The rights of marginalized communities require protection through their participation in all decision-making processes. All decision-making processes require their participation to protect their rights.<sup>136</sup>

## Critical Analysis of Legal and Policy Framework

### *Conflict Between Climate Goals and Environmental Protection*

The governance structure regulating wind energy in India is shaped by inherent tensions between climate policy objectives and the preservation of natural ecosystems. In *M.K. Ranjitsinh v. Union of India*, Article 21 was given an extended constitutional interpretation by the Supreme Court of India, affirming that climate change protection constitutes an integral aspect of the fundamental right to life, thereby guaranteeing citizens their constitutionally protected entitlement to "freedom from climate change's negative impacts".<sup>137</sup> The existing judicial progress remains ineffective because there are no legal systems which can effectively manage renewable energy growth while protecting natural habitats. The planned achievement of 500 GW of non-fossil fuel capacity by 2030 is advanced through combined efforts under the National Action Plan on Climate Change and successive electricity planning frameworks, yet they fail to incorporate necessary biodiversity safeguards and comprehensive impact assessments for wind energy projects. The governance strategy presents a time-critical

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<sup>133</sup>Centre for Financial Accountability, Fossil Fuel-Based Economy and Human Rights: Submission by Indian Civil Society Groups (Mar. 7, 2025), <https://www.cenfa.org/fossil-fuel-based-economy-and-human-rights-submission-by-indian-civil-society-groups/>.

<sup>134</sup> *M.K. Ranjitsinh v. Union of India*, (2024) 3 S.C.C. 1 (India).

<sup>135</sup> Captain Forest, *supra* note 16.

<sup>136</sup> IDR Online, *supra* note 19.

<sup>137</sup>*M.K. Ranjitsinh v. Union of India*, (2024) 3 S.C.C. 1, 15 (India).

requirement for renewable energy adoption, which it considers more important than environmental preservation efforts. The regulatory framework permits wind energy developers to bypass Environmental Impact Assessment (EIA) obligations which they should follow according to the EIA Notification of 2006.<sup>138</sup> In its policy stance, the Ministry of New and Renewable Energy has said that solar and wind energy developments are excluded from the applicability of the EIA Notification 2006, because they have ecological benefits.<sup>139</sup> There is a growing debate among scientists about the idea that renewable energy sources are basically free from environmental harm. Research has shown some nasty side effects, like the deaths of birds, and the destruction of habitats because of land development.<sup>140</sup>

Legally though, there are situations where environmental protection projects can move forward without mandatory environmental assessments, or at least that is the common belief. It almost feels like these established guidelines create a kind of route to dodge evaluations, even if this is not always plainly stated.

### ***Challenges in the Enforcement of Environmental Safeguards***

The inability of environmental laws to reach their intended targets is mostly related to weak enforcement, and it shows up pretty clearly when you look at how major conservation laws are handled, like the Forest (Conservation) Act, 1980, the Wildlife (Protection) Act, 1972, and the Biological Diversity Act, 2002.

In practice these laws lay out certain responsibilities for developers, but developers tend to satisfy them with only the most basic compliance steps, like, the minimum required thing, rather than actually doing the fuller work.<sup>141</sup>

The National Green Tribunal found that wind power projects in environmentally sensitive regions continue to operate without obtaining essential permits. The Tribunal required a comprehensive assessment for projects located in sensitive zones in the *Sarvesh Kumar Sharma v. Union of India* case, but this requirement has not been adopted as a standard practice by other cases.<sup>142</sup> The central and state governments divide their regulatory duties which results in

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<sup>138</sup> Prime Minister's Council on Climate Change, Nat'l Action Plan on Climate Change (2008); Ministry of Power, Nat'l Elec. Plan (2023).

<sup>139</sup> Ministry of Env't, Forest & Climate Change, EIA Notification, 2006, S.O. 1533 (India).

<sup>140</sup> Rajya Sabha Unstarred Question No. 306, Answered on Nov. 30, 2021 (Ministry of New & Renewable Energy), <https://sansad.in/getFile/annex/255/AU306.pdf>

<sup>141</sup> The Forest (Conservation) Act, No. 69, Acts of Parliament, 1980 (India); The Wildlife (Protection) Act, No. 53, Acts of Parliament, 1972 (India); The Biological Diversity Act, No. 18, Acts of Parliament, 2002 (India)

<sup>142</sup> *Sarvesh Kumar Sharma v. Union of India*, O.A. No. 101/2013 (Nat'l Green Trib. 2014).

reduced enforcement power because this division creates situations where developers can escape responsibility for their actions.<sup>143</sup>

### ***Prioritizing Energy Capacity Over Justice Concerns***

India adopts capacity-oriented measures as the basis for its renewable energy policy targets its primary measurement system while failing to ensure fair distribution of energy resources. The Green Energy Open Access Rules and the National Wind-Solar Hybrid Policy have been formulated to enhance the pace of clean energy expansion but they fail to meet their goals of distributing community benefits while achieving a fair transition.<sup>144</sup> The statutory RPO framework under Section 86(1)(e) of the Electricity Act, 2003 establishes market demand requirements but it does not compel businesses to develop regional workforce needs or share revenues fairly with local stakeholders or provide energy access to nearby communities.<sup>145</sup> The RPO framework under Section 86(1)(e) of the Electricity Act, 2003, stimulates market demand without mandating local job creation, revenue sharing, or guarantees of energy access.<sup>146</sup> Academic studies show that Indian policies focus on total co-benefits while neglecting existing structural inequalities and the land rights of marginalized Communities.<sup>147</sup>

### ***Gaps in EIA Process for Wind Energy***

The lack of mandatory EIA for wind energy represents a major procedural gap.<sup>148</sup> The EIA schedule totally excludes wind power from its regulations which apply to all projects regardless of their size or location or their total environmental effects.<sup>149</sup> Wind farm affected communities must wait until construction finishes before they can start seeking formal compensation through the limited upgradable options available.

### ***Lack of Community-Centric Governance***

The governance system results in an outcome which fails to give proper value to priorities that serve the needs of local communities. The Electricity Act, 2003 alongside the National

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<sup>143</sup> Id.

<sup>144</sup> Madhavi Sharma, Legal Framework for Renewable Energy Projects in India, Jus Scriptum (Aug. 5, 2024), <https://www.juscriptumlaw.com/post/legal-framework-for-renewable-energy-projects-in-india>.

<sup>145</sup> Madhavi Sharma, Legal Framework for Renewable Energy Projects in India, Jus Scriptum (Aug. 5, 2024), <https://www.juscriptumlaw.com/post/legal-framework-for-renewable-energy-projects-in-india>.

<sup>146</sup> Ministry of Power, Green Energy Open Access Rules, G.S.R. 834(E) (2022) (India); Ministry of New & Renewable Energy, Nat'l Wind-Solar Hybrid Policy (2018)

<sup>147</sup> The Electricity Act, No. 36, Acts of Parliament, 2003, § 86(1)(e) (India).

<sup>148</sup> Integrating Energy Justice and SDGs in Solar Energy Transition: Analysis of the State Solar Policies of India, 18 *Energies* 3952, 3955 (2025).

<sup>149</sup> Ministry of Env't, Forest & Climate Change, *supra* note 3.

Electricity Plan 2023 lacks explicit recognition of Free, Prior and Informed Consent (FPIC) requirements.<sup>150</sup> The PESA and Forest Rights Act both require Gram Sabha approval in Scheduled Areas yet their requirements face common violations.<sup>151</sup> The Supreme Court climate rights decisions do not relate to the real-life situations faced by displaced communities while the National Green Tribunal lacks complete power to implement its environmental protection work.<sup>152</sup> The process of achieving authentic energy justice requires a complete shift in governance systems which should give empowerment to marginalized groups as they take part in the energy transition instead of experiencing its impacts.

## **Recommendations and Reform Proposals**

### ***Legal Reforms***

The Wind Energy Regulation Law needs to be developed as a comprehensive legal framework to solve India's current problem which lacks wind energy legislation. All wind energy projects require Environmental Impact Assessments because legislation mandates this requirement for all project sizes while the law needs assessment protocols for cumulative environmental effects together with decommissioning responsibilities.<sup>153</sup> The EIA Notification of 2006 should remove its wind energy project exemption and introduce a tiered assessment system which evaluates locations based on their ecological value and environmental effects.<sup>154</sup>

### ***Institutional Reforms***

The wind energy sector needs better coordination between national ministries and state agencies and local government bodies to achieve effective governance because institutional reform requirements must be met. The Ministry of New and Renewable Energy should establish a cohesive regulatory framework to simplify environmental clearance processes and land acquisition procedures and tariff determination methods.<sup>155</sup> Local governing entities, such as Panchayats and Gram Sabhas, should receive full decision-making power to approve wind

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<sup>150</sup> Frontiers in Sustainable Energy Policy, Moving Beyond "Believers vs. Deniers" Labels: A Public Response-Centered Framework for Energy Justice in the Emerging Renewable Energy Sector, 4 Frontiers Sustainable Energy Pol'y 1469707, at 3 (2024).

<sup>151</sup> G.A. Res. 61/295, U.N. Declaration on the Rights of Indigenous Peoples (Sept. 13, 2007).

<sup>152</sup> The Provisions of the Panchayats (Extension to the Scheduled Areas) Act, No. 40, Acts of Parliament, 1996 (India); The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, No. 2, Acts of Parliament, 2007 (India).

<sup>153</sup> Madhavi Sharma, Legal Framework for Renewable Energy Projects in India, Jus Scriptum (Aug. 5, 2024), <https://www.juscriptumlaw.com/post/legal-framework-for-renewable-energy-projects-in-india>.

<sup>154</sup> Ministry of Env't, Forest & Climate Change, EIA Notification, 2006, S.O. 1533 (India).

<sup>155</sup> Sharma, *supra* note 1.

projects in their areas, which requires them to move from their current advisory status to become the main decision-making authority.<sup>156</sup>

### ***Promoting Energy Justice***

To implement Free, Prior and Informed Consent (FPIC) mechanisms at the community participation requirements the project will implement FPIC protocols based on international standards and United Nations Declaration on Indigenous Peoples Rights.<sup>157</sup> Communities which host projects should receive benefit-sharing agreements that provide them with more than one-time payments through equity rights and job promises and renewable energy access rights.<sup>158</sup>

### ***Protecting the Environment***

The planning process for biodiversity protection requires administrators to designate specific areas as exclusion zones which will prevent wind energy projects from operating in protected habitats and migratory routes and ecologically sensitive zones according to the Wildlife Protection Act of 1972 and the Biological Diversity Act of 2002.<sup>159</sup> Zoning regulations must adopt landscape-level planning approaches which assess turbine density and bird collision probabilities and water system effects to guarantee that renewable energy initiatives do not create environmental harm.<sup>160</sup>

## **Conclusion**

India's approach to handling wind energy points to a kind of contradiction in the wider push toward cleaner power. Basically, the work meant to fight climate change and the goal of environmental justice are often treated as if they belong to different worlds, even though sometimes there is a bit of overlap. What this study shows is that leaving wind projects out of the EIA Notification, 2006 is not just a small slip. It looks more like a deliberate choice, leaning toward raising capacity first, rather than making sure there's a fair and balanced distribution,

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<sup>156</sup> The Provisions of the Panchayats (Extension to the Scheduled Areas) Act, No. 40, Acts of Parliament, 1996 (India).

<sup>157</sup> G.A. Res. 61/295, U.N. Declaration on the Rights of Indigenous Peoples (Sept. 13, 2007).

<sup>158</sup> IDR Online, Power to the People: Centering Human Rights in Renewable Energy Development (Aug. 30, 2024), <https://idronline.org/article/climate-emergency/power-to-the-people-centring-human-rights-in-renewable-energy-development/>.

<sup>159</sup> The Wildlife (Protection) Act, No. 53, Acts of Parliament, 1972 (India); The Biological Diversity Act, No. 18, Acts of Parliament, 2002 (India).

<sup>160</sup> Shakti Sustainable Energy Found., Technical EIA Guidance Manual for Wind Power 45 (2011), [https://shaktifoundation.in/wp-content/uploads/2017/10/EIA-Guidelines-Wind-Power\\_1.pdf](https://shaktifoundation.in/wp-content/uploads/2017/10/EIA-Guidelines-Wind-Power_1.pdf).

or a respectful sharing of resources. When you put together the lack of impact assessments, the way Gram Sabha consent in Scheduled Areas is ignored, and the labelling of multi-functional landscapes as “industrial wasteland”, it can see a pattern the research calls “green extractivism”. That term kind of basically describes a modern iteration of colonial resource extraction, just now it’s being sold under the cover of renewable energy.

The legal cases discussed here, including Kallpavalli and M.K. Ranjitsinh, show the judiciary still wrestling to line up constitutional duties for environmental defense with the bigger climate goals. Still, tweaking what courts say cannot really do the job of the legislative adjustments that are genuinely needed. The Supreme Court’s decision in the Ranjitsinh case, where protective measures were relaxed so overhead power lines could run through bustard habitats, really makes it plain how those safeguards can get chipped away. Even in climate policies that sound progressive, protections can shrink once the energy objectives take the higher seat. And beyond that, there are three notable gaps that current research and policy have not yet handled in a solid, effective way.

Currently, Indian laws do not really require a cumulative impact assessment for wind energy clusters, even while there is steady evidence of a broader biodiversity decline. On top of that, the energy justice framework, which is mostly built from Western academic literature, hasn’t been reshaped enough to deal with India’s caste-linked land hierarchies and older forms of landholding. That gap is becoming a serious problem. Also, since electricity sits under the concurrent list in the Seventh Schedule, responsibility splits between national climate aims and state level land management can create enforcement cracks, the kind that usually only show up once trouble is already happening.

This research therefore maintains that unless three concrete reforms are put in place, India’s renewable energy targets for 2030 will miss both legal strength and ethical grounding, in a way that is not sustainable. The reforms being proposed are: (i) removing the EIA exemption and bringing in a multi-level evaluation approach; (ii) putting FPIC plus benefit sharing arrangements straight into legislation; and (iii) creating a Wind Energy Regulation Act, so questions around decommissioning, grid coordination, and community equity are handled more clearly. When looking at how we’re moving toward renewable energy, it matters not only because of the number of gigawatts that get installed, but also because there’s this whole other side.

It's equally important to make sure people rights are respected, and that justice is actually being put in action, not just sitting there as theoretical, promises that sound good. In other words, more than installed capacity, you want to verify what happens on the ground, day to day, even when the plans look nice on paper.

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# Assessing Environmental Governance in Guwahati: An Analysis of Enforcement Mechanisms Through Stakeholder Perspectives

-Ms. Arista Priyadarshini<sup>1</sup>

-Prof. V Sudesh<sup>2</sup>

*“The truly healthy environment is not merely safe but stimulating.*

*- William H. Stewart*

## ABSTRACT

*Growing urbanization in India has undoubtedly intensified pressures on environmental governance, particularly in ecologically delicate cities such as Guwahati, Assam. Situated along the Brahmaputra River and serving as the gateway to Northeast India, Guwahati has witnessed accelerated urban expansion and growth driven by infrastructure development, migration, and economic activities. This article assesses environmental governance in Guwahati by analyzing the functioning of enforcement mechanisms through the perspectives of some key stakeholders, that includes major regulatory authorities, urban planner, advocate, civil society organizations, and affected communities. Adopting an interdisciplinary framework that integrates environmental law, urban governance, and environmental justice, the study examines how national and state-level environmental legislations are interpreted and implemented at the urban level. Drawing on stakeholder interviews, policy analysis, and media reports, this article highlights gaps between statutory mandates and on-ground enforcement of such laws in Guwahati. The findings reveal that environmental governance in Guwahati is often fragmented, reactive, and constrained by institutional overlap, limited accountability, and uneven stakeholder participation in major decision-making process. By foregrounding stakeholder experiences, the article underscores the need for more inclusive, transparent, and preventive enforcement strategies ensuring environmentally sustainable and socially equitable urban development.*

**Keywords:** *Urbanization, Environmental governance, Environmental degradation, Enforcement mechanism, Equitable urban development.*

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## **Introduction**

Urbanization is not a novel concept, rather a long-standing issue. Globally, it has been impacting every corner of the country in unimaginable ways from a very long time. Societies have undergone profound transformations from agrarian to urban Centres very rapidly. The process of societal development seems to be an inevitable process, which is particularly a consequence of fast-paced economic growth, a trend perceptible in both developed and developing nations. However, among all other nations, countries like India have experienced a particularly unfathomable rise in urban populations, heightening the demand for housing, infrastructure, transportation, and other vital facilities to fulfill the demands of increasing populace. This surge has eventually contributed to urban congestion and has brought about serious challenges to environmental stability and sustainable development (Punyamurthy, 2023). Industrial expansion and urban development have tremendously changed the lifestyles of people and the structure of urban regions. However, this transformation in India, involving excessive population growth and unchecked expansion of urban areas to accommodate this rising population has severely deteriorated environmental conditions placing immense pressure on land and natural resources.

Over the past few decades' urbanization has intensified in India driven largely by rapid economic growth, industrial expansion creating numerous employment opportunities for every section of people, particularly in the urban regions. Attracted by better and enhanced living standards and other fundamental life sustaining services, people from rural and underdeveloped areas often migrate to nearby urban regions, resulting in significant growth both in urban population and its spatial extent. This process of population shifting and urban expansion is commonly known as urbanization. This concept further encompasses two interrelated concepts, one is urban growth and another is urban progression. Urban growth mainly explains the growth in population, whereas, urban progression pertains to the overall development and advancement of the urban areas, economic development, social structures, and environmental sustainability. It appears to be a complex and multifaceted process involving a wide-ranging repercussion. Despite its unnumerable contributions to urban economic growth, it has simultaneously intensified several environmental issues in the nation. India's environmental condition has always been under a threat because of the ongoing urban development activities. The expansion of cities, construction of roads, flyovers and industrial expansion, have led to loss of biodiversity and climate change. From degrading quality of air and water, extreme weather conditions, disturbed rainfall pattern, excessive generation of waste to inordinate strain

on natural resources, India's environment is facing multiple challenges that threaten both human health and sustainability of our ecosystem.

Every urban region in India have experienced the environmental consequences of ongoing urban renewal or development projects. Urban development in Guwahati, one of India's fastest growing cities and known as the gateway to Northeast India, highlights a complex interplay between urban progression and environmental justice. The situations raise some questions regarding the effectiveness of the enforcement mechanisms within the city's environmental governance framework. Despite having proper enforcement agencies to implement environmental laws in the city, prominent environmental issues and violations still continue to persist. It is undeniable that urban development and extensive modification of the city have brought certain positive changes, but the scale of environmental violations occurring in the process have given rise to other issues raising serious questions about the strength of the environmental laws and accountability of the enforcement agencies.

### **A Growing Conflict in Guwahati: Development vs. Environment**

Across the globe, among many other countries, India is also known to be a densely populated country. Following its independence from British rule, India was immediately hit by the wave of urbanization, driven largely by the adoption of a mixed economy pattern that facilitated economic growth and development. Along with the growth of heavy industries, infrastructures and public sector enterprises, private sector also flourished, opening new opportunities for people especially in the cities. Expansion of trade and business, healthcare facilities, educational institutions and better transportation lured many people from rural regions to settle in the nearby Urban Centres. According to the 1901 census, population residing in urban areas was around 11.4%. This count increased at a rapid pace with every census to such an extent that a survey report by UN State of the World Population conducted in 2007, highlighted that by 2030, almost 40.76% of country's population is expected to settle in the urban areas. Also, according to World Bank, India along with some major nations like China, Nigeria, Indonesia and even United States, is anticipated to become a major contributor to the global urban population growth by 2050. The scale of urban population growth is becoming incomprehensible in India paving way for more development and construction of infrastructures for economic growth, housing etc., further triggering many other problems like

proliferation of slums due to lack of housing, a decline in the standard of living conditions in urban areas, and majorly, causing massive environmental damage.<sup>3</sup>

The city of Guwahati, being most important city in entire North East India, has experienced spatial expansion for uncountable times during its history of growth. Guwahati was ancient Assam's political, religious, and cultural hub well-known for its administration, education, and temples. It has always attracted people from nearby regions, seeking livelihood, trade, education and other economic advantages. With more than a million residents, this city is a true melting pot of individuals from all across Northeast India. It also serves as a major centre for regional railway connectivity and is a proud home to the sole international airport in the area, thus attracting people of all levels.<sup>4</sup> Over the last two decades, the city has experienced rapid urban growth and development. The borders of the city have been extended to occupy the nearby rural or suburban regions. This expansion of the city area had taken place mostly due to the undeniable need for coping up with the increasing population pressure on land. Hence, in due course of time the city has changed its original nature from a small town in 1901 to its present form of capital city with cosmopolitan culture and hub of opportunities.<sup>5</sup>

Rapid urban development around the city of Guwahati has significantly transformed the city's physical, economic, and social landscape in a very short period of time. While infrastructure expansion and urban growth have contributed to numerous economic opportunities for all sections of people, they also have intensified environmental challenges. Pollution, being the primary challenge, unplanned and haphazard land use, and increasing vulnerability of marginalized communities, water logging etc. have created tension among the urban dwellers. The uncontrollable surge in the population growth, industrial activities, increasing vehicle ownership and emissions have worsened the air pollution levels in the city, causing the AQI level to reach more than 300 recently<sup>6</sup>, which shows how hazardous the air quality is. Guwahati is geographically shaped like a bowl, surrounded by hills, which worsens the air quality as the pollutants get trapped. In addition, the city's outdated public transportation system, growing dependence on personal vehicles contribute significantly to elevated emissions of harmful

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<sup>3</sup> Srikrishna.G, 'A Study on Urbanization in India-Issues and Challenges', 4 *Journal of Emerging Technologies and Innovative Research (JETIR)* 1326 (2017)

<sup>4</sup> Guwahati: Where Economic and Ecological Connectivity Collide, *available at*: <https://cities4forests.com/> (Last visited on February 16, 2026)

<sup>5</sup> Kamal Kumar Talukdar, 'Impact of Urban Growth on Land use, A Case Study of Guwahati City, Assam', 7 *International Journal of Engineering Science Invention (IJESI)* 26 (2018)

gases like carbon monoxide and particulate matter. Increasing vehicles leading to of roads and prolonged idling periods have further exacerbated pollution levels.<sup>7</sup> From past few years, Guwahati has been going through an entire urban renewal process with construction of roads, infrastructures, and fly-overs all around the city. Guwahati's ongoing infrastructure expansion aimed at modernization and improved connectivity, has paradoxically left its residents significantly disconnected from the civic comfort that everyone deserves. Many examples show how poor planning, project completion delays, and relentless weather conditions have pushed the public to the brink, eventually turning everyday life into persistent trial of endurance. Inadequate coordination between enforcement agencies has further ignited the disruptions, while frequent road closures and unceasing constructions impede mobility. These instances have created doubts in the minds of people about the administration system as their trust in urban governance has eroded, highlighting the urgent requirement for more resilient and public-centred planning approaches.<sup>8</sup>

Another major concern revolving around the city is cutting down of huge number of trees which used to be a part of the major green cover of the city. Over the past few years, city has witnessed a considerable pressure of becoming a smart city, as government has been investing heavily in infrastructure projects such as upgraded roads, flyovers, new parks and many more. As the process of urban progression flourishes in the city, a huge section of residents is coming to the forefront voicing serious concerns over the environmental costs of urban beautification projects implemented in the city. From revamping the Brahmaputra riverfront to constructing flyovers and designing every corner of the city, people fear that Guwahati's development is coming at the expense of its green cover and original identity.<sup>9</sup> These projects have undoubtedly enhanced sectors like tourism, employment and recreation for public, but many concerned citizens often perceive these changes as a fundamental loss rather than a progression. Age old trees that have been standing over for a century, helping in keeping temperature of the city cool, have been cut down over night. As a result of these acts of deforestation, Guwahati can no longer handle heat which is increasing every year. To some extent environmental changes, such as extreme heat and unpredictable weather condition, can be handled by the wealthy people having all the

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<sup>7</sup> Bishal Das, Priom Seal, *et.al.*, 'Spatial econometric assessment of urban form and seasonal variation impacts on ambient air quality index in Guwahati city of Assam', 3 *Discover Environment* 2 (2025)

<sup>8</sup> Guwahati's infrastructure failures leave city flooded and residents stranded, *available at:* <https://guwahatipius.com/> (Last visited on February 20, 2026)

<sup>9</sup> Concrete over canopy: Citizens alarmed by Guwahati's urban makeover, *available at:* <https://www.indiatodayne.in/> (Last visited on February 20, 2026)

facilities to tackle such weather conditions. But what about the marginalized section of people? They become victims to these changes.<sup>10</sup> The absence of a long-term environmental vision and continuous violation of environmental laws has raised serious concerns among people who are environmentally concerned.

Economic growth and development of a country are inevitable and essential for improving the quality of life and holistic well-being of the people. Such development in a country have always played a crucial role in generating more opportunities for people, improving their living standards, enhancing infrastructures, and promoting social and economic progress. India, as a developing nation has been undergoing a continuous transformation since gaining independence, striving to achieve growth and modernization. In the recent years this developmental trajectory has been further intensified through large scale initiatives undertaken in the name of transforming Indian cities into “Smart Cities”. While these initiatives aim to promote technological innovation, urban efficiency and sustainable living, they have also accelerated remarkable urban expansion and infrastructural development activities across the country, thereby reshaping the urban landscape in significant ways. Unfortunately, such large-scale transformations are often accompanied by significant price, which in India have manifested in the form of severe environmental degradation. Degrading environmental quality is not a problem limited to one Indian city, rather it has emerged as a persuasive issue affecting every region across the country.

Assam has also been impacted by this trend of rapid urbanization and environmental stress. Within the state, Guwahati, being the largest and fastest growing city attracting people from all-over North-East region, has been particularly affected, facing significant environmental challenges consequently. While the city generates numerous opportunities for people, its urban growth has also led to widespread changes across its natural landscape. The Assam Government has proposed some ambitious plans to create a State Capital Region (SCR) by bringing Guwahati together with nearby areas.<sup>11</sup> This plan aims to develop the city into a smart city comprising of every facility necessary to fulfil growing needs of people. Unfortunately, these actions taken by the government has added new challenges to the city, especially in maintaining a balance between rapid development with environmental sustainability and

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<sup>10</sup> Concrete over canopy: Citizens alarmed by Guwahati’s urban makeover, *available at:* <https://www.indiatodayne.in/> (Last visited on Feb24, 2026)

<sup>11</sup> Urban expansions in Northeast India: A case study of Guwahati, Assam, *available at:* <https://www.orfonline.org/> (Last visited on February 24, 2026)

uplifting environmental justice. Pollution, improper waste disposal practices, water logging during rainy season and continuous deforestation has worsened the climate conditions as well which have been further intensified because of the developmental activities around the city. It seems that such developmental plans lack proper planning and implementation. The researcher, therefore, has taken the city of Guwahati as the research area and aims to cover key environmental issues arising from urbanization in the city. This paper also seeks to analyse the enforcement practices and persistent environmental justice concerns in the city.

India is known to have an extensive body of environmental laws. Guwahati operates within a formal environmental governance framework comprising of enforcement agencies like municipal bodies and state authorities; however, the current environmental situation highlights the ineffectiveness of enforcement mechanisms, reflecting the existence of a gap between the existing environmental legal framework and their actual enforcement particularly. Such underlying regulatory issues undermine environmental protection efforts and perpetuate environmental injustice, affecting marginalized and vulnerable communities in Guwahati. The author seeks to address this gap by analyzing the current environmental situation in Guwahati and assessing the effectiveness of environmental enforcement mechanisms in Guwahati. This study finally aims at evaluating their role promoting or impeding environmental justice amid the ongoing urban progression.

### ***Relevance and Significance of the Study***

Urbanization in rapidly growing cities of the Global South has increasingly raised serious concerns regarding environmental degradation, uneven development and socio-spatial inequalities. India has emerged as one of the most significant victims of unplanned growth, in the Global South. The unimaginable pace of quantitative and qualitative growth in Indian cities has far outstripped the capacity of governance bodies to regulate such population growth, infrastructural boom and environmental protection. Loss of green cover impacting the ecological stability and resulting into several other environmental issues are the outcomes of such imbalance between urban development and environmental sustainability, the impact of which may not be uniformly experienced across societies. As a country with diverse social groups who are socially as well as economically differentiated, people frequently experience disproportionate exposure to adverse environmental and developmental outcomes in the country. Guwahati, as the largest urban centre in the Northeast India, and a gateway to the

region, exemplifies these challenges related to urban growth and expansion, which have placed immense pressure on its fragile ecosystem and vulnerable communities.

Guwahati, as an Indian city, is under the obligation to follow the range of environmental laws that apply to every Indian city. As being stated under the environmental regulations, this city also comprises of the major environmental enforcement agencies that functions in order to maintain the environmental quality of the city. Despite having the institutional bodies and wide range of environmental regulations, persistent environmental violations indicate a gap between policy formulation and enforcement mechanism. Investigating these loopholes will further help in identifying the systematic weaknesses, institutional capacity constraints, lack of accountability and regulatory overlaps. This study also aligns with the principles of environmental justice, which emphasize the disproportionate exposure of the marginalized communities. Guwahati is mostly occupied by people, who have migrated in search of better opportunities for life. A majority of the migrated population belongs to low-income group and particularly informal settlers who do not have proper housing facilities in the city. Living in such a growing urban city is a challenge for such people making them vulnerable to immediate changes. Environmental issues like, severe water logging and artificial flood because of blocked and poorly maintained drainage system have always caused extreme difficulties for people living in the city. Pollution is also a common problem that has been accelerated by the ongoing urban development activities, increasing vehicular emissions and open burning of solid wastes.

Urban development in Guwahati appears to have taken place at the cost of environmental sustainability. This study is highly relevant because understanding city's governance failures in enforcement will contribute to broader discussions on urban resilience and sustainable city planning. Furthermore, the urban development trajectory has often externalized environment costs on to marginalized groups making it essential to examine whether enforcement mechanism equitably protect all residents.

### **Mapping Environmental Enforcement and Governance in Guwahati: Institutions, Challenges, and Inequalities**

The concept of urbanization comprises of two different facets. One resembles a quantitative growth that occurs because of increasing population growth. This quantitative growth can be termed as urban growth. Urbanization also drives urban progression, that resembles a development in the quality of the urban regions such as infrastructure development and creation

of every necessary facility to satisfy needs of the growing population. This urban progression is inevitable as it becomes necessary when population in an urban region increases rapidly. This urban transition in Guwahati, mainly resulting from a shift in a population from areas that is dispersed across small rural settlements, in which agriculture is the dominant economic activity, towards the city which is identified by larger and denser urban settlements characterized by a dominance of industrial and other service activities,<sup>12</sup> has brought numerous changes in its economy, environment and governance mechanism. To analyse and assess the effectiveness of the enforcement mechanisms in Guwahati in addressing environmental issues amid rapid urban development, it is crucial to identify the institutional, legal and socio-economic challenges that shapes and influences the implementation of and enforcement of environmental regulations in Guwahati.

### ***Institutional and Legal Framework of Environmental Enforcement in Guwahati***

The responsibility to protect environment in the urban areas depends not only on the existence of extensive environmental laws, but also on the capability and effectiveness of the institutions responsible for their implementation. Guwahati, as the rapidly expanding urban centre of Assam, has been constantly facing complex environmental challenges as repercussions of the wide range of developmental activities in and around the city. Environmental governance in the city is carried out through not one but a network of national, state, municipal, and local bodies, each entrusted with specific responsibility that may be either authoritative or regulatory in nature. These institutions function according to the national or state-specific legal framework to address the growing environmental challenges in the city. A critical examination of this institutional framework is essential for understanding how environmental standards are enforced at the state or grassroot level. Recognizing the legal mechanisms and the intrinsic deficiencies shaping environmental enforcement in Guwahati, will help the researcher in revealing the practical functioning of the enforcement agencies.

The responsibility of safeguarding and enhancing environmental quality, amidst escalating growth-oriented interventions, mainly lies upon few crucial departments, that includes Guwahati Municipal Corporation (GMC), Guwahati Metropolitan Development Authority (GMDA), Assam Pollution Control Board, State Environmental Impact Assessment Authority (SEIAA) and State Expert Appraisal Committee (SEAC). The Directorate of Town and Country

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<sup>12</sup> Abhilasha Kashyap, 'Population influx in the metropolitan city, Guwahati, and regional development of other districts in Assam', 10 *Humanities & Social Sciences Reviews*, 2 (2022)

Planning Department also plays an important role in planning, developing, and managing the urban areas. They are responsible for creating the Master Plans for an orderly growth, to ensure sustainable development and land use for betterment of the district. Given the pace of urban expansion and development in Guwahati, these institutions collectively form the core of the city's environmental governance framework, with each department entrusted with specific responsibilities and supervisory functions. Guwahati Municipal Corporation functions as the primary local urban governance body in the city responsible for many environmental services, ranging from maintaining the drainage system, sanitation and solid waste management to addressing various construction related activities within their municipal jurisdiction. On the other hand, Guwahati Metropolitan Development Authority is primarily responsible for urban planning and regulating development within the metropolitan area. It is further entrusted with different responsibilities like preparation and implementation of master plans, zoning regulations, and granting development permissions. In a developing city like Guwahati, where every day new measures have been undertaken to facilitate development, this department has a crucial role to play.

Environmental regulation and control of pollution in the city are overseen by the Assam, Pollution Control Board, which operates under the Water (Prevention and Control of Pollution Act) 1974 and the Air (Prevention and Control of Pollution) Act, 1981. The Board is entrusted with the responsibilities to monitor pollution levels, grant consent to establish and operate industries, and to ensure compliance with stated environmental rules. Guwahati has been experiencing a rise in the pollution level as a result of rising industrial activities, excessive vehicular emissions, and most importantly construction-related pollution. Considering these environmental challenges in the city, the Board's monitoring and enforcement functions have become increasingly critical in maintaining the environmental quality. Recent years have seen the growing projects that are being implemented to develop the country. Guwahati has also witnessed implementation of several urban renewal and expansion projects. Many people have also questioned about the impact of such projects as the implementation of some projects have caused various other serious issues making it difficult for people to reside in Guwahati. While talking about the project appraisal and granting of allowance, two major departments come into play. One being the State Environmental Impact Assessment Authority (SEIAA) and other is State Expert Appraisal Committee (SEAC). Both these departments are responsible for evaluating and granting environmental clearances to development projects. In the time of growing urban infrastructure projects, their role seems to be prominent. However, their

functioning seems to have been questioned, particularly in the light of several large-scale development projects to adequately comply with environmental standards in Guwahati. In the past few years, a number of fly overs have been constructed across the city to improve communication and reduce traffic congestion. However, these construction projects have been criticized on the ground of being harmful for the environment. There has been a growing trend of public resistance and advocacy highlighting the inadequate enforcement of environmental regulations in the city, indicating systematic weaknesses in regulatory oversight.

### ***Persistent Environmental Challenges: Manifestations of Weak Environmental Enforcement in Guwahati***

The significant push to transform Guwahati into a ‘Smart City’ has accelerated urban development and expansion across the city. While these initiatives aim to improve urban efficacy and living standards, they also have intensified environmental pressures resulting in a range of persistent environmental challenges. These challenges point towards deeper shortcomings in the enforcement of environmental regulations. According to Assam Forest Department, in the past five years, this city has seen the felling of more than 15000 mature trees, in order to pave the way for concrete structures.<sup>13</sup> In 2025, citizens of Guwahati came together to protest against the proposed construction of the new flyover, that would range from Noonmati to Dighalipukhuri area, raising serious concerns over its impact on the city’s cultural and environmental heritage, that is Guwahati’s one of the most prominent green spaces. The region is a home to dense cover of mature trees, which are estimated to be centuries old and a habitat for thousands of birds, making it a vital ecological zone in the city.<sup>14</sup> Environmentalists, historians, and local residents have argued the construction would lead to irreversible damage which the city cannot afford in a time where the city is already undergoing massive environmental degradation. The city has been facing the urban Heat Island (UHI) effect, which occurs when highly urbanized and particularly concertized regions register higher temperatures than the surrounding sub urban regions. In 2023 and 2024, Guwahati has experienced intense record-breaking high temperatures, clearly showing how climate change has impacted the weather conditions. The incremental reduction in green cover, increasing vehicular emissions and other hazardous activities of man are responsible for adverse effects on air quality too.<sup>15</sup>

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<sup>13</sup> Guwahati’s infrastructure failures leave city flooded and residents stranded, *available at:* <https://guwahatipius.com/> (Last visited on February 26, 2026)

<sup>14</sup> Residents in Guwahati Protest Against Cutting of Trees to Construct Flyover, *available at:* <https://www.ndtv.com/> (Last visited February 26, 2026)

<sup>15</sup> Guwahati’s green cover is declining but is key to its climate resilient future, *available at:* <https://questionofcities.org/> (Last visited on February 28, 2026)

The trees surrounding the historic Dighalipukhuri area were marked yellow for removal under the government's ambitious plan to construct this 5.44 km long flyover, envisioned as Guwahati's 11<sup>th</sup> flyover and the longest one till date in the state. What began as a local demonstration turned out to be a broader civic movement. Public outrage intensified when responses to a Right to Information (RTI) application revealed that the massive infrastructure project had received approval without any environmental impact assessment being conducted.<sup>16</sup> The disclosure came as a shock to many, raising questions about environmental governance in the State, its transparency and due process. Another concerning issue that agitated public was that the unchecked cutting of trees and the government's assurance of uprooting and relocating the trees in different places and unplanned construction projects, were undertaken without public consultation. No public hearing was conducted that could involve local residents and their knowledge and ideas. These instances reflect systematic failures and lack of accountability in the governance mechanisms.

Another prominent environmental issue in Guwahati is the serious waste management system. Rampant garbage dumping, irregular garbage collection leading to overflowing dustbins, a familiar sight for the people living in the city, turning this lively thriving city into a potential health and environmental disaster. During rainy season these piles of garbage that are left unattended for days, overflows to the road, thus creating multiple health and hygiene concerns. The GMC, responsible for regulating hygiene and sanitation in the city, often attributes the deteriorating waste management situation to rapid population growth, staff shortages and lack of modern equipment. Citizens and experts argue that these environmental challenges could be addressed through improved planning and stricter enforcement of regulations. Public apathy and careless waste disposal practices contribute to the worsening situation.<sup>17</sup> Another long-standing issue, that has become an inescapable part of life for the people in Guwahati, is water logging. Few hours of rain, and the bustling streets of the city turn into a river. Water logging in Guwahati is the most persistent challenge that residents have been facing from a very long time. The drainage system in the city is in the most degrading situation. Unplanned constructions, occupying of wetlands that earlier used to capture water, throwing of all forms of garbage into nearby drains clogging majority of the drains, are the sole reason for the waterlogged roads. Illegal constructions have also interfered with the drainage system through

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<sup>16</sup> Protests, Court Notice, Union Govt Involvement: Marking of Old Trees for Guwahati Flyover Sparks Uproar, *available at*: <https://thewire.in/> (Last visited on March 1, 2026)

<sup>17</sup> From Growth to Garbage: Guwahati's Urban Boom Turns Toxic, *available at*: <https://www.sentinelassam.com/> (Last visited on March 2, 2026)

which water used to flow. The drains that often require to be cleaned remains blocked for many days. This stagnant water not only hampers daily lives but also becomes the source of deadly diseases. Water logging in Guwahati amidst all the developmental projects, indicates how the city needs to be planned better.<sup>18</sup> Year after year, even moderate rainfall triggers waterlogging, paralyzing daily lives of people. This is a sheer result of years of systematic failures, ill-conceived infrastructure development and urban expansion and encroachment on natural waterways. Urban sprawl in Guwahati is largely unplanned. Migration of people from nearby regions to Guwahati, has expanded the city's original geographic boundary into the fragile ecological zones without proportionate infrastructural expansion. Every initiative been taken in the past years to tackle this long-standing issue in the city seems to be sporadic. This urban flooding issue in the city is not an irreversible consequence of geographic transformation, but a disaster made worse by human choices and neglect.<sup>19</sup>

### ***Environmental Injustice and Unequal Exposure to Environmental Change in Guwahati***

Cities in India have been experiencing rapid pace of urban renewal and development in every possible way alongside a noticeable environmental change. India has witnessed a drastic change in its climate conditions that is reflected through extreme weather conditions and irregular rainfall patterns. The impact of environmental change in a country is not the same on every person. An urban city is inhabited by people belonging to disparate economic backgrounds having contrasting living standards. These growing and bustling cities are mostly occupied by population who have migrated from nearby under developed or rural regions in search of opportunities. Some people live lives constrained to survival earning only enough to sustain themselves in the city. When any change particularly, an environmental change takes place it poses several challenges for such marginalized and vulnerable section of the society. It is not only confined to people in cities, but also rural people whose earning depends only on agriculture, becomes the main victim of such environmental degradation. Unequal exposure to environmental change reflects environmental injustice. Guwahati is also undergoing a severe urban transformation leading to a significant amount change in the quality of its environment. The impact of this environmental change in the city is not proportionately distributed resulting into environmental injustice which is often manifested through the unequal exposure of socially

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<sup>18</sup> Water Logging in Guwahati: A Crisis Worsened by Poor Drainage, *available at:* <https://nagalandtribune.in/> (Last visited on March 4, 2026)

<sup>19</sup> Not Nature, But Neglect the Real Cause of Guwahati's Urban Flooding, *available at:* <https://www.guwahatipius.com/> (Last visited on March 5, 2026)

differentiated people to environmental risks and challenges such as artificial flooding, air and water pollution and inadequate waste management leading to infectious health issues.

Residents of informal settlements and low-income neighborhoods in Guwahati, are the main victims of drastic environmental change. Whether it is extreme heat and irregular rainfall patterns or water-logged roads destroying houses and businesses, economically vulnerable section bears the pain. Certain neighborhoods in Guwahati, frequently become isolated islands getting submerged during heavy rains and getting disconnected from receiving essential services because of flooded and blocked roads. Many houses, constructed with temporary or low-quality materials, in these locations have been destroyed by the persistent water logging issue, resulting in repeated economic losses for households that already struggle to meet basic needs. The year 2024 saw a steep rise in this issue with the Guwahati's Railway Station and its airport being submerged because of water overflow, causing troubles for passengers.<sup>20</sup> The researcher being a resident of Guwahati, has personally experienced such challenges. For this study, discussions have been made with some people belonging to the marginalized sections seeking their perspectives and opinions. It was revealed by some daily wage workers how unsafe they feel when their neighborhood is submerged under water because of water logging. Many times, water has destroyed their houses, made with temporary setting, forcing them to rebuild repeatedly. They also expressed how such situations impact their livelihoods as they struggle on a daily basis to earn enough for their survival. The unequal urban development model prioritizes infrastructure and services in economically and politically influential areas while neglecting the working class, particularly the marginalized neighborhoods. As a result, the low-income group of people often are pushed to environmentally vulnerable spaces which is characterized by poor settlements which are prone to several issues like water logging.

The impact of climate change in Assam is unfolding in two interlinked spaces: its rural agriculturally dominated regions and its rapidly expanding urban Centres. Changing rainfall patterns, frequent floods because of extreme rains and excessive heat has disrupted the rural livelihoods where agriculture, farming and fishing occupies a prominent place in shaping people's lives. Extreme floods in some parts of Assam have washed away many houses, leaving those vulnerable people behind to suffer for days for their survival. In contrast, some years have seen a dearth in rainfall resulting in drought and destroyed agriculture. This devastating "flood-

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<sup>20</sup> Guwahati's flood paralysis: A city struggling under decades of Neglect, *available at*: <https://mahabahu.com/> (Last visited on March 8, 2026)

drought” conditions have left the farmers with failed harvest and a significant financial loss. These reasons have compelled a majority of the rural population to shift to the nearby urban regions in search of better livelihood. As an outcome of such migration, urban areas of Assam have become densely populated with majority belonging to a low income or lower middle-class categories. Among all the other cities in Assam, Guwahati has become hotbeds of urban climate risks. Unplanned urban expansion, uneven settlements occupying the wetlands, continuous construction activities and persisting poor drainage system, have created numerous challenges for people in the city. The uneven settlements, which appears to have grown with migration, are characterized by precarious livelihoods, overcrowded and lacking basic amenities. Social impact of climate change disproportionately impacts the marginalized and the vulnerable sections of the society. Indigenous groups, women, daily wage workers and the children of such marginalized communities are the main sufferers or consequences of environmental change.<sup>21</sup> From facing displacement, bearing burdens related to water collection, receiving basic health care facilities to surviving in such extreme weather conditions such as excessive heat waves and cold extremes, these people confront multiple overlapping challenges that deepen their social and environmental vulnerability.

## **Stakeholder Views on Environmental Regulation and Compliance**

While talking about economic growth and environmental sustainability, two major concepts intersect, i.e., Environmental legal framework and its compliance. Economic growth is inevitable, but it must align with environmental stability. At the recent times, the increasing emphasis on economic growth, in some instances, has resulted in environmental concerns receiving comparatively less importance. In India there is no paucity of laws, whether it is related to civil, criminal or environmental matters. Despite the existence of a comprehensive legal framework, challenges continue to persist, particularly in the timely and effective implementation of environmental regulations. Several studies, researches and policy discussions have identified certain loopholes and challenges that has appeared to be the significant factors affecting the effectiveness of environmental enforcement in the country. In case of environmental matters, India has appropriate authorities that are responsible for enforcing environmental regulations. Government, companies, businesses, communities, environmental organizations, each engage with environmental governance and enforcement from different

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<sup>21</sup> Bishal Das, Priom Seal, *et.al.*, ‘Spatial econometric assessment of urban form and seasonal variation impacts on ambient air quality index in Guwahati city of Assam’, 3 *Discover Environment* (2025)

positions of interest and accountability. Knowing these varied stakeholders' views are important to understand Guwahati's environmental enforcement mechanism amidst rapid urban progression, and also to suggest effective measures that ensures compliance and balance between economic growth and environmental sustainability.

To get insights into the practical challenges of environmental enforcement at the state level, researcher has selected the city of Guwahati, Assam as the research area. For this purpose, it was necessary to gather perspectives from individuals associated with and directly involved in the mechanism of environmental governance in the city. The researcher has, therefore, conducted an in-depth interview with five key stakeholders selected through purposive sampling method. A semi structured questionnaire was formulated covering the key aspects of environmental governance, challenges and compliance; to guide the selected stakeholders, whose opinions helped the researcher to understand the ongoing situation and arrive at the conclusion. The stakeholders include the Chairman of Assam State Pollution Control Board (ASPCB), Town Planner of Guwahati Metropolitan Development Authority (GMDA), an Urban Planner, a citizen led environmental protection group, known as 'Reclaim Guwahati', actively involved in cleaning drives and environmental activism, and an Advocate who is actively involved in dealing with environmental matters. These regulatory authorities, playing a major role in influencing environmental enforcement in Guwahati, have commonly highlighted the existing gap in implementation of environmental laws in the city, along with the lack of interdepartmental coordination. The responses were carefully analyzed by the researcher to identify the persisting and recurring patterns as well as concerns.

The Chairman of ASPCB highlighted few major factors that actually influenced urban growth in Guwahati and initiated environmental challenges. He initially explained how shifting of Assam's capital from Shillong to Guwahati marked the earliest step in laying the foundation for urbanization in Guwahati. This transition triggered administrative expansion and set Guwahati on the path of rapid urbanization. Last 3 to 4 decades, the city has experienced a surge in population growth, housing and other infrastructure development, together increasing the load in the city. When Dispur, located within the Guwahati metropolitan area, was made the capital of Assam, city witnessed the establishment of many government offices and growth in other sectors as well, thus attracting people from nearby regions to settle in the city in search of employment opportunities and better livelihood. Secondly, he explained how the massive paddy fields and the agricultural area was occupied while constructing the 21 km stretch Bypass from Jalukbari Chariali to Basistha Chariali. These paddy fields, which belonged to the

tribal communities were occupied by luring them to sell their lands, which made them leave those lands and settle in the hills. Thirdly, he expressed how the major hillocks in Guwahati suffered encroachment, marking a major tragedy in the history of city's overall development. Hill cutting, felling of trees resulting into landslides as the water washes away the land when it falls, have further created issues like urban flooding. Drains became choked as all the accumulated land raised the bed of the drains, thus diminishing the drains' holding capacity. He also expressed how the hot gases or air gets trapped within the city because of the increasing number of high-rise buildings, leading to a concept commonly called as Urban Heat Island. Excessive heat in the past few years is the outcome of UHI. While discussing about enforcement mechanism, he expressed how irresponsible people in Guwahati are including the police and other officers. Many don't care about following rules and some even don't realize how their activities are turning Guwahati into an environmentally challenged place. He also pointed out the lack of inter-agency coordination among the major environmental regulatory bodies is the main reason for weak environmental governance in the city. Each department works in isolation and lack of sufficient members in each departments worsens the functioning.

While interviewing the Town Planner of GMDA, the researcher received responses and opinions similar to those expressed by the Chairman regarding Guwahati's ongoing environmental challenges and the main factors influencing them. At the beginning he discussed the main factors responsible for the declining environmental quality in Guwahati. He expressed that, the number of architects required to design well planned layouts, zoning plans and various other urban development and infrastructure construction projects. He also highlighted the lack of financial capacity of the department, that constrains the effective implementation of developmental and environmental initiatives. While discussing about the technological support available for departmental functioning, he expressed concern over the lack of technological advancement, noting that much remains to be done in order to make Guwahati a technologically advanced city, particularly in the area of regulation. He also added another challenge to his discussion i.e., the insufficient man power available with the enforcement agencies.

In order to understand the legal loopholes and enforcement challenges regarding environment in the city, the researcher interviewed an advocate who is actively involved with environmental matters. He stressed upon the weak implementation of environmental regulatory framework in the city and lack of coordination among the major regulatory bodies. One critical point that he highlighted was the absence of a 'Green Forum', to immediately deal with the environmental matters at the initial stage, and most importantly a dedicated tree act to protect the urban trees

that falls outside the purview of the Forest Conservation Act. Urban trees in Guwahati are under the threat of getting cut or translocated for the ongoing and upcoming future urban development and expansion initiatives. Thousands of trees have been cut down and some are translocated as well for constructing flyovers, without public consultation, since we do not have a particular act to manage trees that falls within the urban city. However, environmentalists argue that, despite the translocation of trees, the probability of their survival remains very low. In the absence of adequate technological support for such large-scale initiatives, age old trees, particularly those over 100 years old, have a very limited chance of surviving after translocation.

The responses received from the urban planner and the citizen led group revealed significant convergence in their views on the city's environmental challenges. Both emphasised that unplanned urban development and expansion, inadequate regulatory enforcement and weak coordination among the environmental regulatory bodies have contributed to environmental degradation in Guwahati. The urban planner has specifically pointed on the lack of coordination among these regulatory bodies and moving forward with the constructing infrastructures without a proper scientific planning. She highlighted the persisting challenge of insufficient engagement of local public who have better idea about their own locality. A group of sensible citizens have been engaged with cleaning drives on a regular basis has expressed their concern about the degrading environmental quality and lack of awareness among the public about their responsibilities. Felling of trees and unregulated urban progression has been a real time problem that is the underlying factor contributing to environmental deterioration in Guwahati. A question remains among the public: What kind of city is Guwahati turning into, A short lived spectacle of concrete jungle or a sustainable, inclusive and green capital, safe for our generations?

## **Conclusion and Suggestions**

Assam, once globally known to be a geographically rich and climate friendly state of India, is now undergoing a threat, emerging as climate vulnerable regions, experiencing a sharp rise in extreme weather conditions, unstable rainfall patterns, prolonged heat waves and many more. Guwahati, being the major urban hub of the state, is both a victim of environmental change, and at the same time a significant contributor to the environmental challenges faced by the state. This research work helped the researcher in understanding the main factors driving intense urban growth and expansion in Guwahati. Progression of a city is inevitable and

necessary for the welfare of the people; however, it becomes a curse when it also destroys the natural environment and its inherent capacity to maintain ecological balance. This city is undergoing similar situation, as the quality of the environment is degrading every day as a result of unplanned human actions, majority being a part of the developmental process ongoing in the city. Researcher, after discussing the matter with some important stakeholders, was able to know the exact reasons that are responsible for the degrading environmental quality, and several institutional challenges and loopholes, that plays a critical role in the enforcement of environmental regulations. It is important to bring some changes in the legal framework and compliance mechanism. Enforcement of laws depends on variety of factors that all together aid in effective enforcement. There seems to be no dearth of laws, but the main loophole exists in the implementation of these laws. Regulatory and institutional constraints, political constraints, socio-economic constraints and various other procedural constraints often weaken the effective enforcement of legal framework. One important challenge that regulatory authorities often witness is the lack of coordination among each other in addressing the issues. This is not only confined to Guwahati but every other city in India suffers from this unique regulatory constraint.

Political influence is also not a novel issue in India. We have witnessed how politically strong and corrupted people often have a good influence and thus interfere in the functioning of authorities.<sup>22</sup> The sugar industry in Maharashtra provides a perfect setting to examine the role played by political connections in environmental governance. It has been observed that many industries having political backup faces lenient monitoring and gets an easy access to decision making also. In contrast, the firms or industries lacking political support are often subject to strict scrutiny and enforcement actions.<sup>23</sup> Though most studies on political connections often reveal how politically powerful people gain benefits, however very limited researches have been conducted that examines how political connections influence environmental monitoring and enforcement. Many people in India also hesitate to raise voices against the government actions, giving some corrupted authorities the opportunity to continue their misconduct without the fear of being accountable. Though this situation has changed drastically, in the recent times, with many environmental activists coming to the forefront, still a large portion of people fail to voice their opinions either because of lack of knowledge or out of fear and hesitation. Experts

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<sup>22</sup> Raj Upadhyay, "Political Corruption and Its Impact on Governance and Economic Development in India" 7 *Indian Journal of Law and Legal Research* 2048 (2025)

<sup>23</sup> Losing the Shield: How Political Connections Shape Environmental Enforcement, *available at*: <https://www.isid.ac.in/> (last visited on June 20, 2026)

say that, India does not need any other environmental law as it has a comprehensive framework compared to many countries in the world, but what India actually needs is the proper functioning of the bureaucracy. Laws must be properly implemented with effective planning and interpretations, otherwise it is of no use. Information collected by the researcher exposes that regulatory authorities often lack expert officials who can ensure proper execution. An independent authority is required to oversee the functioning of the regulatory authorities and instruct them to work efficiently. After analyzing the data obtained through interactions with the above-mentioned stakeholders, the researcher proposes the following measures which if implemented, would significantly improve the enforcement mechanism and environmental quality in Guwahati. Following are the major suggestions:

- Though we have enough laws, but looking at the current situation of urban tree felling, that the city is undergoing, the researcher highlights the urgent need to have an act, namely, “*The Urban Tree (Protection and Preservation) Act*”, dedicated solely to the urban trees, that plays a very important role in maintaining the temperature and ecological balance inside the city. This act must include provision for appointing “tree officers” having sufficient scientific and practical knowledge on every type of tree, procedural safeguards for cutting/transplanting urban trees, penalties, and civic enforcement. The deteriorating air quality with high AQI levels demands a significant green cover inside the city.
- It is very crucial to enhance and strengthen inter departmental and inter agency coordination among the major environmental regulatory bodies in the State. As the state’s largest urban centre and a region facing significant environmental pressures, Guwahati requires integrated and coordinated efforts from all the concerned departments to address the issues in a timely and effective manner. Such concerted effort is inevitable for proactive monitoring, regulating and mitigating of environmental degradation and ensuring sustainable urban development. Along with ensuring cooperation, it also essential to appoint technically expert officials to form well planned projects and address the newly emerging complex environmental issues.
- There is an urgent need to have a dedicated ‘*Green Forum*’ at the city or state level, to address the growing environmental challenges in a timely and effective manner, which in turn would aid in proactive decision-making, swift resolution of environmental grievances, and continuous monitoring of compliance with environmental laws and policies. Judicial dependency often leads to delays during irreversible environmental damage.

- Lastly, the researcher would like to emphasize the importance of raising public awareness about the adverse impacts of unplanned activities related to urban progression and expansion as well as the need for a responsive civic participation in environmental protection. Sensitizing people about the sustainable urban practices is essential in ensuring balanced and sustainable urban development.

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# Health Interventions and Legal Aid Exclusion Among Sex Workers in India: Evidence from Naco's HIV Programme Data

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## ABSTRACT

*India's National AIDS Control Organization (NACO) has, over three decades and five phases of the National AIDS and STD Control Programme (NACP), constructed one of the world's most extensive public health architectures for reaching key populations. The entire system focuses on female sex workers (FSWs) because they serve as the main subject for HIV Sentinel Surveillance and Targeted Intervention (TI) coverage requirements and Integrated Biological and Behavioral Surveillance (IBBS) and population mapping activities. The most recent NACO data document an estimated 9,95,499 FSWs nationally and an HIV prevalence of 1.85 per cent among them -approximately 8.4 times the general adult prevalence of approximately 0.20 per cent. The same population suffers from a critical shortage of access to legal assistance and official workplace protections and institutional mechanisms for rights-based complaints. This paper draws descriptively on the most recent NACO datasets -including the HIV Estimates 2023, the Programme Mapping and Population Size Estimation (PMPSE) 2020–22, the IBBS 2014–15, and the Sankalak 2023 -to establish that the State's epidemiological capture of sex workers as health programme beneficiaries has not been accompanied by commensurate recognition of their legal personhood. The study contends that the Immoral Traffic (Prevention) Act of 1956, institutional stigma within the legal aid system, and a programmatic philosophy that still views prostitutes as carriers to be controlled rather than as citizens who deserve protection practically create this gap between the epidemiological issue and the legal subject.*

**Keywords:** NACO, Female Sex Workers, HIV targeted interventions, Legal Aid, ITPA, NACP health-law gap, access to justice

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## Introduction

When India's National AIDS Control Organization (NACO) undertakes its population size estimation exercises, it does something that no other institutional actor in the country has managed with comparable rigor: it counts female sex workers. The first round of the Programme Mapping and Population Size Estimation (PMPSE) exercise, conducted between 2020 and 2022 across 651 districts spanning 32 states and union territories, estimated 9,95,499 FSWs nationally -ranging from a lower bound of 9,02,277 to an upper bound of 10,88,712.<sup>3</sup> The density varies dramatically: from 0.34 per 1,000 adult women in some states to 17.25 in others, illuminating regional concentrations that drive the programme's geographic prioritization. NACO also tracks their HIV status, condom use, access to STI treatment, and uptake of testing through the biennial HIV Sentinel Surveillance (HSS) and the IBBS. In the most recent HIV Estimates 2023, the HIV prevalence among FSWs stands at 1.85 per cent,<sup>4</sup> a figure that -alongside 3.26 per cent among men who have sex with men (MSM) and 9.03 per cent among injecting drug users (PWID)- confirms the concentrated character of India's epidemic and the continued centrality of key populations to the national HIV response.

The programmatic complexity of the investigation leads to different results when researchers ask about the number of women who participated in the legal aid system. How many people who were arrested for solicitation under Section 8 of the Immoral Traffic (Prevention) Act 1956 (ITPA) received information about their right to free legal assistance which exists under Section 304 of the Code of Criminal Procedure and Article 39A of the Constitution of India? The individuals who were detained in "protective homes" under Sections 15–17 of the ITPA received legal representation at their review hearings in front of the Magistrate. The research demonstrates through evidence collected from different states that only a small number of people exist. NACO's data contain multiple epidemiological indicators which show the degree of vulnerability different groups face. The information provides complete silence about the ability to access legal services.<sup>5</sup>

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<sup>3</sup> P Kumar and others, 'Programmatic Mapping and Population Size Estimation of Key Population in India: Method and Findings' (2025) 5 *PLOS Global Public Health* e0004475 <https://doi.org/10.1371/journal.pgph.0004475>. accessed 10 March 2026.

<sup>4</sup> National AIDS Control Organization, *HIV Estimates 2023: Factsheets* (Ministry of Health and Family Welfare, Government of India 2024).

<sup>5</sup> Constitution of India arts 14, 21 and 39A; Legal Services Authorities Act 1987 s 12.

This silence is not incidental. It reflects a structural condition: the NACP is a public health programme rather than a justice delivery mechanism. Its instruments are calibrated to measure condom uptake, HIV positivity rates, and TI coverage -not access to counsel or police accountability. The result is an institutional logic in which sex workers are systematically visible as subjects of healthcare intervention and systematically invisible as bearers of constitutional rights. This paper examines the contours of this disjunction. It uses NACO's own programme data -descriptively, as epidemiological and programmatic context -to make the case that the scale of unmet legal need among India's FSW population is at least as serious as the unmet health need that the NACP has spent three decades addressing.

Section 2 situates the NACO data within the epidemiological landscape. Section 3 analyses the TI coverage architecture and its limitations. Section 4 examines the legal framework that simultaneously exposes sex workers to criminal liability while withholding meaningful protection. Section 5 builds the argument about legal aid exclusion and proposes a framework of indicators that NACO's monitoring system currently lacks. Section 6 draws together the reform implications. Section 7 concludes.

## **The Epidemiological Landscape: Reading NACO's Data on Female Sex Workers**

India's HIV epidemic is classified by UNAIDS and NACO as "concentrated": overall adult (15–49 years) HIV prevalence was 0.22 per cent in 2019<sup>6</sup> and fell to approximately 0.20 per cent (0.17–0.25) in 2023.<sup>7</sup> With an estimated 2.54 million (2.17–3.04 million) people living with HIV (PLHIV) nationally, India holds the second-largest PLHIV population globally. The aggregate mildness in the general population, however, masks acute concentrations in specific key populations.

NACO's surveillance consistently confirms a transmission dynamic sustained by forward transmission from HRGs -FSWs, MSM, and PWID -to the broader population through bridge communities: clients, regular partners, and spouses. Epidemiological stability at the national level, when it depends on persistent vulnerability in key populations, is inherently fragile.

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<sup>6</sup> National AIDS Control Organization, *ANC HIV Sentinel Surveillance Plus 2021: Technical Report* (Ministry of Health and Family Welfare, Government of India 2022).

<sup>7</sup> National AIDS Control Organization, *India HIV Estimates 2023: Technical Report* (Ministry of Health and Family Welfare, Government of India 2024).

Table 1 presents the HIV prevalence across key populations compared with the general adult population, drawn from the NACO HIV Estimates 2023 and the ANC HSS Plus 2021, alongside FSW population size estimates from the PMPSE 2020–22 exercise. Several patterns are immediately apparent. FSW prevalence of 1.85 per cent is 8.4 times the general adult rate. H/TG prevalence of 3.78 per cent and PWID prevalence of 9.03 per cent confirm the epidemic's concentration in stigmatized and legally precarious populations.

And the PMPSE's careful population size estimates -particularly the estimated 9,95,499 FSWs and the finding that approximately 14 per cent operate exclusively through network operators -provide the denominator against which TI coverage and legal access must be measured.

***Table 1: HIV Prevalence and Population Size Estimates across Key Populations in India  
(NACO Data, 2021–2023)***

| Population Group                 | HIV Prevalence (%) | Estimated Population Size        | Data Source                          |
|----------------------------------|--------------------|----------------------------------|--------------------------------------|
| General Adults (15–49 yrs) -2019 | 0.22               | —                                | HIV Estimates 2019                   |
| General Adults (15–49 yrs) -2023 | ~0.20 (0.17–0.25)  | 2.54 million PLHIV               | HIV Estimates 2023                   |
| Female Sex Workers (FSWs)        | 1.85               | 9,95,499<br>(9,02,277–10,88,712) | HIV Estimates 2023;<br>PMPSE 2020–22 |
| Men who have Sex with Men (MSM)  | 3.26               | 3,51,020<br>(3,13,860–3,88,175)  | HIV Estimates 2023;<br>PMPSE 2020–22 |

| Population Group            | HIV Prevalence (%) | Estimated Population Size    | Data Source                       |
|-----------------------------|--------------------|------------------------------|-----------------------------------|
| Hijra/Transgender (H/TG)    | 3.78               | 96,193 (85,206–1,07,174)     | HIV Estimates 2023; PMPSE 2020–22 |
| Injecting Drug Users (PWID) | 9.03               | 2,88,717 (2,53,024–3,24,407) | HIV Estimates 2023; PMPSE 2020–22 |
| Inmates in Central Jails    | 1.93               | —                            | HIV Estimates 2023                |

**Source:** NACO, *India HIV Estimates 2023: Technical Report* (MoHFW 2024); NACO, *PMPSE Round 1 Report 2020–22* (MoHFW 2023). FSW HIV prevalence is approximately 8.4 times the general adult prevalence. The ~0.20% figure for 2023 is derived from the Spectrum modelling reported in the 2023 Technical Report. PLHIV total for 2023 drawn from NACO HIV Estimates 2023 Factsheets. Population size estimates represent national totals across 651 surveyed districts.

Table 2 traces the trajectory of key programme indicators over the past thirteen years. The headline trends are encouraging: a 44 per cent reduction in annual new HIV infections from 2010 to 2023,<sup>8</sup> and a 79 per cent decline in AIDS-related deaths over the same period. FSW HIV prevalence has fallen from approximately 4.9 per cent in 2010 to 1.85 per cent in 2023 - a decline of more than 60 per cent that reflects, in part, the impact of TI coverage. Yet the post-2020 uptick in annual new infections - from 57,550 in 2020 to approximately 68,000 in 2023 - represents a warning signal. Experts have attributed this to COVID-19-induced disruptions in TI delivery, the growing challenge of reaching FSWs operating through digital and virtual platforms not captured by conventional hotspot mapping,<sup>9</sup> and emerging re-concentration in

<sup>8</sup> National AIDS Control Organization, *Sankalak: Status of National AIDS and STD Response* (5th edn, Ministry of Health and Family Welfare, Government of India 2023).

<sup>9</sup> National AIDS Control Organization, *Technical Brief on Changing Trends in Sex Work* (Ministry of Health and Family Welfare, Government of India 2024)

states such as Punjab, Uttar Pradesh, and the North-Eastern states where injecting drug use is expanding rapidly.

**Table 2: Trends in Key HIV Programme Indicators, India (2010–2023)**

| Indicator                         | 2010  | 2015 | 2019  | 2021  | 2023  |
|-----------------------------------|-------|------|-------|-------|-------|
| Total PLHIV (millions)            | 2.40  | 2.11 | 2.35  | 2.40  | 2.54  |
| Annual New Infections (thousands) | 120.0 | 86.0 | 69.2  | ~58.0 | ~68.0 |
| Adult HIV Prevalence (%)          | 0.38  | 0.26 | 0.22  | 0.21  | ~0.20 |
| AIDS-related Deaths (thousands)   | ~170  | ~68  | 58.96 | ~42.0 | ~41.0 |
| FSW HIV Prevalence (%)            | ~4.9  | 2.2  | ~2.0  | ~1.9  | 1.85  |
| People on ART (millions)          | 0.37  | 0.93 | ~1.35 | ~1.42 | ~1.50 |

**Source:** NACO, *India HIV Estimates 2023 Technical Report and Factsheets*; *HIV Estimates 2019 Report*; Sankalak 2023; Mahapatra and others (2017). The 2010 FSW prevalence is drawn from Baral and others (2014), collating HSS data. "~" denotes rounded or approximate values based on Spectrum model outputs. ART figures are approximate programme achievement data from Sankalak 2023.

## Targeted Intervention Coverage

The Targeted Intervention programme is the operational spine of NACO's prevention architecture for key populations. TIs are implemented primarily through NGOs and Community-Based Organizations (CBOs) under the supervision of State AIDS Control Societies (SACS) and District AIDS Prevention and Control Units (DAPCUs). The

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<https://naco.gov.in/sites/default/files/Technical%20Brief%20on%20Changing%20trends%20in%20sex%20work.pdf> accessed 15 March 2026.

standardized TI package for FSWs covers peer-led outreach and behaviour change communication; condom promotion and distribution; STI screening and treatment; HIV testing and counselling linkage; referral to ART Centres; and, since NACP-III, an enabling environment component designed to address legal and rights-related concerns.<sup>10</sup>

The Sankalak 2023 records 1,543 TI sites across India, and the IBBS 2014–15 documented significant TI effects: FSWs covered by TIs demonstrated substantially higher consistent condom use with clients, higher STI treatment-seeking rates, and greater HIV testing uptake compared to those outside TI reach.<sup>11</sup>

However, significant structural limitations still exist. Table 3 below provides a comparative overview of TI coverage, HIV prevalence, and condom use in some high-burden states and subgroups within the population. The differences in TI coverage, especially in Uttar Pradesh, the North-Eastern states, and network operator reliant FSWs, are not simply programmatic shortcomings. They map onto the precise populations that are simultaneously most vulnerable to HIV and most exposed to the adverse effects of the ITPA's enforcement. The women least reached by TI outreach are the women most likely to encounter police action without legal support.

***Table 3: Targeted Intervention Coverage and Related Indicators for Female Sex Workers, Selected States and Population Subgroups (NACO Data)***

| State / Group      | Est. FSW Population (PMPSE 2020–22) | Approx. TI Coverage (%) | FSW HIV Prevalence (%) | Consistent Condom Use - Clients (%) |
|--------------------|-------------------------------------|-------------------------|------------------------|-------------------------------------|
| National Aggregate | 9,95,499                            | ~80 (peak, 2015–16)     | 1.85                   | ~87 (IBBS 2014–15)                  |

<sup>10</sup> National AIDS Control Organization, *Operational Guidelines for Targeted Interventions under NACP-III* (Ministry of Health and Family Welfare, Government of India 2007).

<sup>11</sup> D Sahu, V Ranjan and N Chandra, 'Impact of TI Programmes Intervention under National AIDS Control Programme among Female Sex Workers in India: Evidence from IBBS, 2014–15' (2022) 12(2) *World Journal of AIDS* 83.

| State / Group                            | Est. FSW Population (PMPSE 2020–22) | Approx. TI Coverage (%) | FSW HIV Prevalence (%)  | Consistent Condom Use - Clients (%) |
|------------------------------------------|-------------------------------------|-------------------------|-------------------------|-------------------------------------|
| Maharashtra                              | High density*                       | ~82                     | ~1.9                    | ~88                                 |
| Andhra Pradesh                           | High density*                       | ~85                     | ~2.6                    | ~91                                 |
| Karnataka                                | High density*                       | ~78                     | ~2.2                    | ~85                                 |
| Uttar Pradesh                            | Moderate density                    | ~55                     | ~1.4                    | ~72                                 |
| North-Eastern States (agg.)              | Variable                            | ~45–60                  | Higher than national    | ~65–75                              |
| Network-operator-reliant FSWs (national) | ~14% of 9,95,499                    | Sub-optimal             | Not separately reported | Below average                       |
| Digital/virtual platform FSWs (national) | Partially mapped                    | Limited                 | Not captured            | Not captured                        |

**Source:** NACO PMPSE Round 1 Report 2020–22; NACO IBBS 2014–15; NACO Sankalak 2023; Mahapatra and others (2017). State-level TI coverage figures are approximations from programme reports and not official published state-disaggregated targets. “\*High density” denotes relative concentration per 1,000 adult women as reported in PMPSE. Network-operator and digital FSW data from PMPSE 2020–22 and NACO Technical Brief on Changing Trends in Sex Work.

FSWs now increasingly use digital platforms which include social media and messaging applications and escort websites for their client solicitation needs. The conventional hotspot-mapping methodology which defines TI geography cannot measure the increasing use of digital platforms by FSWs because they use social media and messaging applications and escort websites to find clients. The Technical Brief on Changing Trends in Sex Work from NACO establishes a clear gap between two groups of FSWs because FSWs who do not participate in TI programs maintain lower condom use rates and lower HIV testing rates and they lack sufficient knowledge about safe sex practices whereas FSWs who are TI members display better results across all three areas. The FSWs who use digital networks show lower chances to access legal aid services during their interactions with the justice system because they operate from hidden locations and need help from middlemen.

The TIs enabling environment component which NACP-III established to solve legal and rights issues has received insufficient funding and monitoring compared to its biomedical results. The IBBS instruments which medical testing programs use, measure men's and women's condom usage rates and their sexually transmitted diseases and their human immunodeficiency virus testing history. The system fails to assess common legal understanding and police interactions and arrest experiences and attorney access and legal aid organization participation. The NACP program maintains a structural orientation which NACO's primary surveillance tool lacks because it shows that FSWs function as biological risk carriers instead of legal rights holders.

## **The Legal Framework**

The regulatory environment in which sex workers live and work must be taken into consideration in order to comprehend why legal aid exclusion endures despite formal statutory entitlement. There is a structural paradox with the Immoral Traffic (Prevention) Act of 1956. It does not make sex work illegal in and of itself; a woman who offers sexual services for payment does not, by itself, violate the law.<sup>12</sup> Yet the penal architecture is so comprehensive in its reach that nearly every activity which surrounds, enables, or makes sex work viable is criminalized. Section 3 prohibits brothel-keeping, including shared working spaces used by as few as two sex workers, effectively dismantling collective arrangements that provide safety and mutual support. Section 4 criminalizes living on the earnings of a sex worker, which extends potential liability to dependent family members. Section 7 prohibits prostitution in or near public places,

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<sup>12</sup> Immoral Traffic (Prevention) Act 1956, as amended by the Immoral Traffic (Prevention) (Amendment) Act 1986.

restricting the operational geography of street-based workers -the population with the highest HIV risk.<sup>13</sup> Section 8 penalizes solicitation, and it is under this provision that police most frequently arrest FSWs.

The Supreme Court's landmark directions in *Budhadev Karmaskar v. State of West Bengal*<sup>14</sup> affirmed without ambiguity that sex workers are bearers of fundamental rights under the Constitution, including the right to live with dignity under Article 21, the right to equal protection under Article 14, and the entitlement to free legal aid under Article 39A and the Legal Services Authorities Act 1987. The Court directed that complaints from sex workers of violence be registered and investigated, that police sensitization Programmes be conducted, and that legal assistance be made available. These directions have had limited institutional penetration. The day-to-day operation of regulation under the ITPA continues to subject sex workers to police assault, coercive extortion, unlawful detention, and investigations under Section 8, all without routinely informing them of their right to legal aid, which the Court has long held to be inseparable from the constitutional safeguard of a fair trial, below the Supreme Court's fundamental explanation. Table 4 maps the intersection of NACO programme touchpoints with the legal exposure points created by the ITPA, illustrating concretely where the health system reaches FSWs and where the justice system fails them.

**Table 4: NACO Health Programme Touchpoints versus Legal Exposure Points for FSWs under the ITPA -Presence or Absence of Legal Aid**

| Dimension           | NACO Programme Response                        | ITPA Legal Exposure                                        | Legal Aid Presence |
|---------------------|------------------------------------------------|------------------------------------------------------------|--------------------|
| Workplace / Hotspot | Mapping; TI peer outreach; condom distribution | S 3: Brothel prohibition;<br>S 7: Public place restriction | Absent             |

<sup>13</sup> R Paranjape and others, 'Differing HIV Vulnerability among Female Sex Workers in a High HIV Burden Indian State' (2018) 13(2) *PLOS One* e0192130.

<sup>14</sup> *Budhadev Karmaskar v State of West Bengal* (2011) 10 SCC 478.

| Dimension                 | NACO Programme Response       | ITPA Legal Exposure                                       | Legal Aid Presence                          |
|---------------------------|-------------------------------|-----------------------------------------------------------|---------------------------------------------|
| Arrest / Detention        | No NACO touchpoint            | S 8: Solicitation arrest; S 15: Police search and removal | Largely absent; CrPC s 304 rarely activated |
| Protective Home Detention | Limited ICTC linkage reported | Ss 16–17: Magistrate-ordered detention up to 5 years      | Minimal; DLSA visits irregular              |
| HIV/STI Testing           | ICTC; HTS; ART linkage        | No direct exposure                                        | N/A                                         |
| Violence / Sexual Assault | No dedicated NACO protocol    | FIR filing; criminal investigation                        | Inadequate; FSW FIR registration rates low  |
| Earnings / Family         | No NACO touchpoint            | S 4: Criminalizes dependents' support                     | Largely absent                              |
| Digital / Virtual Work    | SoP 2023 partially addresses  | Regulatory grey area; emerging enforcement                | Not addressed                               |

**Source:** Author's synthesis based on NACO TI Operational Guidelines 2007; ITPA 1956; Legal Services Authorities Act 1987; *Budhadev Karmaskar v State of West Bengal* (2011, 2022). S = section of the ITPA; DLSA = District Legal Services Authority; ICTC = Integrated Counselling and Testing Centre; HTS = HIV Testing Services; ART = Antiretroviral Therapy; CrPC = Code of Criminal Procedure 1973; SoP 2023 = NACO Standard Operating Procedure for Spa/Massage Parlors, Network Operators and Web-Based Platforms (2023).

## Structural Causes, Missing Indicators, and Constitutional Dimensions

The Legal Services Authorities Act 1987, Section 12(b), confers an unconditional statutory entitlement to free legal services on all women -without an income ceiling and without restriction by occupation. Your training data includes information until October year 2023. The two provisions establish complete legal protection for female sex workers. The constitutional framework establishes this requirement because Article 39A obligates the State to provide equal legal access while protecting all citizens from economic and other obstacles that would deny them justice.

The Supreme Court established legal aid as a constitutional right through its decisions which began with *Hussainara Khatoon v Home Secretary, State of Bihar* (1979) and reached its conclusion in *Suk Das v Union Territory of Arunachal Pradesh* (1986) which ruled that free legal aid constitutes a fundamental element of Article 21's protection of fair and just legal processes. The Indian Supreme Court case *NALSA v Union of India* (2014) established that people with marginalized identities possess constitutional rights which the government needs to actively safeguard. Legal aid provision to FSWs has reached a state of complete legal establishment which no one can dispute.

The distance between this formal entitlement and operational reality is, however, vast. The access to justice gap results from four structural factors which become evident through NACO's program data and through existing research about marginalized communities.

The first factor is the ITPA regulatory framework which creates a deterrent for people to interact with government agencies. The Frontline AIDS India Shadow Report 2023<sup>15</sup> and fieldwork evidence from multiple states consistently document that FSWs who have experienced police action under the ITPA treat all state actors -including legal aid providers within the DLSA system -as potential extensions of a regulatory apparatus that functions primarily to control rather than protect them. This is rational, not ignorant.

Women who have been arrested under Section 8, processed through a system that simultaneously classifies them as criminal suspects and welfare cases deserving of compulsory rehabilitation, and required to navigate a magistrate's court without counsel have strong reasons

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<sup>15</sup> Frontline AIDS, *India Shadow Report: Assessing Progress on Commitments to End AIDS by 2030* (Frontline AIDS 2023) [https://frontlineaids.org/wp-content/uploads/2023/11/India\\_Shadow-Report\\_DIGITALMASTER.pdf](https://frontlineaids.org/wp-content/uploads/2023/11/India_Shadow-Report_DIGITALMASTER.pdf) accessed 11 March 2026.

to distrust institutional outreach. The IBBS 2014–15 itself documents that FSWs frequently do not disclose their occupation to formal health providers for the same reasons<sup>16</sup> -an institutional parallel that is directly relevant to the design of legal aid outreach.

The second structural factor is the generalized nature of the DLSA panel system in districts with significant FSW populations. The NACP's own data- through PMPSE and HSS- consistently identify the districts with the highest FSW density and HIV burden. These are the districts where a rights-based and community-integrated legal aid response is most urgently required. Yet DLSA panels allocate advocates without reference to specialization in ITPA provisions, constitutional safeguards, or the specific legal vulnerabilities of sex worker clients.

The result is representation described in the access-to-justice literature as "defensive minimalism": formally compliant, practically inadequate, and incapable of mounting the strategic constitutional arguments that the *Budhadev Karmakar* framework both requires and enables.

The third factor is the absence of legal access metrics from NACO's monitoring and evaluation framework -a structural absence with a significant normative dimension. NACO monitors TI coverage, condom use, STI positivity, HIV testing uptake, ART retention, and viral suppression. CEDAW General Recommendation 33 on Women's Access to Justice<sup>17</sup> provides a comprehensive normative framework for assessing whether States are meeting their obligations regarding women's legal access, including for women in marginalized occupations.

Table 5 proposes a set of legal access indicators, structured to parallel existing NACO health metrics, that would -if integrated into the IBBS and TI programme monitoring instruments - generate the first nationally representative dataset on the legal access gap for FSWs in India. The absence of such indicators from NACO's framework is not merely a data gap; it reflects the programme's persistent framing of FSWs as health subjects rather than rights subjects.

***Table 5: Legal Aid Access Metrics Currently Absent from NACO Monitoring and Evaluation Frameworks (Proposed Integration with Existing NACP Indicators)***

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<sup>16</sup> National AIDS Control Organization, *India Integrated Biological and Behavioral Surveillance (IBBS) Round 2014–15* (Ministry of Health and Family Welfare, Government of India 2016).

<sup>17</sup> Convention on the Elimination of All Forms of Discrimination against Women (adopted 18 December 1979, entered into force 3 September 1981) 1249 UNTS 13; CEDAW General Recommendation No 33: Women's Access to Justice (2015) UN Doc CEDAW/C/GC/33.

| Proposed Legal Access Indicator                                           | Rights Basis                          | Analogous NACO Health Indicator                      |
|---------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------|
| % FSWs aware of right to free legal aid (DLSA)                            | Art 39A; LSA Act 1987 s 12            | % FSWs aware of HIV transmission routes              |
| % FSWs arrested under ITPA informed of legal aid right at point of arrest | Art 22(1); CrPC s 304                 | % FSWs offered HIV test at ICTC first contact        |
| % FSWs detained under ITPA Ss 15–17 who received legal representation     | Art 21; Budhadev Karmaskar (2022)     | % PLHIV initiated on ART within 30 days of diagnosis |
| % violence/assault complaints by FSWs resulting in FIR registration       | Art 14; Budhadev Karmaskar directions | % STI cases receiving treatment at TI clinic         |
| % TI NGO sites with formal referral protocol to DLSA                      | NACP enabling environment mandate     | % TI sites with active ART centre linkage            |
| % FSWs who approached DLSA in last 12 months                              | LSA Act s 12(b) entitlement           | % FSWs tested for HIV in last 12 months              |
| % FSWs who reported experiencing police harassment in last 12 months      | Art 21; dignity rights                | % FSWs who reported STI symptoms in last 12 months   |

*Source: Author's framework, drawing on CEDAW General Recommendation No 33 (2015); NACO IBBS 2014–15 indicator set; NACO NACP-V Strategy Document 2021–2026; Legal Services Authorities Act 1987; Code of Criminal Procedure 1973 s 304. LSA = Legal Services Authorities; DLSA = District Legal Services Authority; CrPC = Code of Criminal Procedure; ICTC = Integrated Counselling and Testing Centre; TI = Targeted Intervention. Proposed*

*indicators are structured to parallel existing NACO health monitoring metrics to facilitate integration into TI programme data collection instruments.*

The fourth structural factor is the multiplier effect of caste and gender on FSW vulnerability within the justice system. The PMPSE data confirm that FSW populations in India are concentrated in communities marked by poverty, limited educational access, and social marginalisation.<sup>18</sup> Many are Dalit women or women from Other Backward Classes; a substantial proportion are migrants from other states. These layered disadvantages do not operate independently of their legal exposure: a Dalit woman in sex work arrested under Section 8 in Lucknow confronts not only the specific institutional biases generated by the ITPA but also the entrenched caste hierarchies that structure her access to every state institution she is likely to encounter. Legal aid that does not account for this intersectionality is structurally inadequate, irrespective of how well-resourced or technically competent it may be.

## **Towards an Integrated Reform Agenda**

The argument advanced in this paper is not that NACO has failed. Across thirty years and five NACP phases, India's HIV response has reduced FSW HIV prevalence from near-epidemic levels to 1.85 per cent, achieved TI coverage reaching upwards of 80 per cent of the estimated FSW population, and built an institutional infrastructure of unprecedented scale and granularity for engaging a population long defined by its institutional inaccessibility.<sup>19</sup> These achievements, secured against the pressures of entrenched stigma, limited public health infrastructure in high-burden districts, and periodic disruptions in programme funding and implementation, deserve recognition.

The argument is, rather, that the very success of NACO's health apparatus in achieving epidemiological visibility for FSWs creates an institutional responsibility that has not been discharged. When NACO maps a hotspot, it demonstrates that the women at that location can be found. When it enrolls them in a TI, it establishes that they can be engaged in an institutional relationship of trust. When it achieves 80 per cent TI coverage, it demonstrates that the logistical and outreach capacity to deliver a rights-based service alongside a health-based one

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<sup>18</sup> M Goswami and P Barooah, 'Barriers and Facilitators for Access and Utilization of Reproductive and Sexual Health Services among FSWs in Urban and Rural Maharashtra, India' (2022) 10 *Frontiers in Public Health*, doi:10.3389/fpubh.2022.1030914.

<sup>19</sup> B Aggarwal and K Bharat, 'Strengthening India's Response to HIV/AIDS Epidemic Through Strategic Planning, Innovative Financing, and Mathematical Modeling' (2022) 13 *Frontiers in Public Health*, PMC9449298.

exists. The question is whether there is the political and institutional will to extend that capacity to the domain of legal aid.

Three specific and actionable reforms follow from the analysis. First, NACO should integrate legal access indicators- as proposed in Table 5- into the IBBS and TI monitoring frameworks. These are methodologically straightforward additions to existing survey instruments; they would generate the first nationally representative dataset on legal access for FSWs. NACO's credibility as an evidence-based institution rests on its willingness to measure what matters, even when findings may prove institutionally uncomfortable.

Second, every TI site under NACP-V should include a mandatory DLSA linkage component, mirroring the existing ART centre linkage requirement.<sup>20</sup> The Standard Operating Procedures for TI implementation, revised in 2023 to address spa and virtual sex work environments, provide a template for how operational guidelines can be updated to reflect evolving realities. Every TI peer educator needs to complete a training program that includes a dedicated module on legal rights which covers entitlements under Section 304 CrPC and Articles 14 and 21 and 39A and the DLSA system. NALSA should establish formal engagement to create a legal aid outreach protocol that connects TI services with DLSA legal aid clinics which will take operation in districts marked as high priority through the PMPSE assessment. The ITPA needs legislative changes to its quasi-criminal structure which must undergo reform before the system can achieve full legal integration. The legal aid system will function as a corrective afterthought instead of a structural resource because sex workers operate under a regulatory framework which exposes them to prosecution while forcing them into rehabilitation without their real consent. A rights-based regulatory framework which separates consensual adult sex work from trafficking and legalizes private voluntary adult sex work while limiting Section 4's family member extension and establishing mandatory judicial review for rescue-and-rehabilitation programs will change NACO's operational legal framework. The comparative experience from Germany, New Zealand, and the CEDAW monitoring framework collectively demonstrate that formal legal recognition substantially reduces the legal precarity that impedes FSWs' engagement with state institutions. India has the constitutional architecture for this reform; what is required is the legislative commitment to operationalize it.

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<sup>20</sup>National AIDS Control Organization, *National AIDS Control Programme Phase V (NACP V) Strategy Document 2021–2026* (Ministry of Health and Family Welfare, Government of India 2021).

## Conclusion

NACO's HIV programme data offer, on close and careful reading, something more than epidemiology. They offer a measure of the Indian State's institutional reach into the lives of one of its most marginalized populations. The PMPSE has counted nearly a million female sex workers. The TI programme has, at its peak, reached 80 per cent of them with a package of health services. The HSS and IBBS have tracked their HIV status and health behaviors across decades. This reach is not neutral- it represents a form of institutional recognition, achieved through sustained investment, community engagement, and political commitment at the highest levels.

What the data also reveal, by negative implication, is the precise shape of an absence. The health system reaches FSWs. The justice system does not -not in any meaningful, rights-affirming, or protective sense. HIV prevalence of 1.85 per cent among FSWs against approximately 0.20 per cent in the general population is a measure of a health vulnerability that the NACP is actively and systematically addressing.<sup>21</sup> Legal aid non-uptake -estimated in excess of 70 per cent among those with identifiable legal needs arising from ITPA enforcement -awareness of legal rights below 25 per cent in community surveys, and the structural absence of legal access indicators from NACO's monitoring framework: these are measures of a justice vulnerability that the State has not yet chosen to address with comparable seriousness or comparable institutional investment.

The constitutional architecture is clear, and it demands attention. Article 21 has been read, through Hussainara Khatoon and its jurisprudential progeny, to encompass the right to a fair trial and to competent legal representation for those who cannot afford it. Article 39A directs the State to ensure that no citizen is denied justice by reason of economic or other disabilities -and "other disabilities" is language capacious enough, the Supreme Court has confirmed, to encompass social stigma, institutional exclusion, and the legal precarity generated by the ITPA's architecture. NACO's own data demonstrate beyond reasonable doubt that female sex workers in India suffer disabilities of precisely this kind. The State has responded to their health vulnerability with policy, resources, and institutional architecture. The constitutional imperative now is to extend that same response -with equal seriousness and equal commitment -to their legal vulnerability.

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<sup>21</sup> UNAIDS, *Global AIDS Update 2023: The Path that Ends AIDS* (UNAIDS 2023).

The estimated 9,95,499 women engaged in sex work in India are not merely subjects of surveillance or vectors of transmission risk. They are, as the Supreme Court has affirmed and as the Constitution has always provided, rights-bearing citizens -entitled to the same institutional protection that the constitutional order extends to every person on the territory of India. The moment that NACO's epidemiological instruments succeed in finding them, the justice system incurs a corresponding obligation: to protect them. That obligation -so far largely unmet -is the central challenge that this paper has sought to articulate, and to which this paper urges a sustained institutional response.

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# United States of America's Unilateral Extended Continental Shelf

## Declaration: The Law of the Sea Under Test

Vincent Iwunze<sup>1</sup>  
Kingsley Ekwere<sup>2</sup>

### ABSTRACT

*The United Nations Convention on the Laws of the Sea (UNCLOS) is reputed to be a package deal for the peaceful and equitable governance of global oceans. Its acceptance by the international community is evident in its ratification by some 172 parties. While the United States (U.S.) has not ratified the Convention, it recently made a unilateral declaration of large areas of Extended Continental Shelf (ECS). It also intends to submit data to the Commission on the Limits of the Continental Shelf (CLCS) established under UNCLOS to review coastal States' proposals for ECS. Although the concept of ECS is a creation of UNCLOS and available to only States Parties to the Convention, the U.S. argues that the concept has become customary international law and claims to have acted under same. This paper uses the doctrinal research methodology to critically examine the legality of the United States' unilateral ECS declaration in light of extant law of the sea. It argues that, contrary to the U.S. position, the procedure laid down under UNCLOS for the establishment of an ECS has not become customary law upon which the U.S. may rely to claim ECS. The paper further argues that, as a non-party to UNCLOS, the U.S. cannot validly make a submission to the CLCS for recommendations by the Commission regarding the establishment of its ECS. The paper concludes that given present U.S. interest in the mining of seabed minerals, and the leadership role it ought to play in global ocean governance, the time has come for it to reconsider its position on UNCLOS, accede to the Convention and optimize for itself, the benefits of being a State Party.*

**Keywords:** United Nations Conventions, Extended Continental Shelf, Law of Sea, Recommendations, International Law.

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## Introduction

The continental shelf became a subject of treaty law for the first time under the 1958 Geneva Convention on the Continental Shelf.<sup>3</sup> Article 1 of the Convention defines ‘continental shelf’ as the seabed and subsoil adjacent to the coast but outside the territorial sea, to a depth of 200 Metres or, beyond that limit, to where the depth of the superjacent waters allows the exploitation of natural resources. The Convention, therefore, defined the continental shelf in terms of the capability of coastal States to exploit natural resources and placed no seaward limit of national jurisdiction. This became known as the exploitability doctrine. The exploitability doctrine gave rise to a situation where coastal States were at large to exploit the seabed and the subsoil thereof without a limit of national jurisdiction. The implication was that States that possessed the wherewithal could exploit limitless breadths of the seabed and the subsoil thereof while those who did not, especially the developing States, could carry out only little or no continental shelf resource exploitation.

The absence of a limit of national jurisdiction under the exploitability doctrine necessitated a reconsideration of the underlying principles of the doctrine during the Third United Nations (UN) Conference on the Law of the Sea (UNCLOS III).<sup>4</sup> At the conclusion of UNCLOS III in 1982, the participating States adopted the UN Convention on the Law of the Sea (UNCLOS).<sup>5</sup> Under UNCLOS, the continental shelf is defined as extending beyond the territorial sea of a coastal State throughout the natural prolongation of its land territory to the outer edge of the continental margin, or, where the outer edge of the continental margin does not extend up to that distance, to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured.<sup>6</sup> A coastal State is, accordingly, limited to a 200-nautical-mile continental shelf. The Convention effectively jettisoned the exploitability doctrine.

While UNCLOS jettisoned the exploitability doctrine, it established the Extended Continental Shelf (ECS) concept. Under this concept, where the natural prolongation of the continental shelf of a coastal State exceeds the 200 miles limit, such State could make submissions to the

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<sup>3</sup> The Convention was adopted at the First United Nations Conference on the Law of the Sea (UNCLOS I) which held in Geneva from 24 February to 27 April 1958.

<sup>4</sup> UNCLOS III held between 1973 and 1982. The Conference held in Sessions at multiple locations across the world, including New York, Geneva, Caracas and Montego Bay.

<sup>5</sup> The Convention was adopted on 10 December 1982 at Montego Bay, Jamaica by 130 votes to 4 with 17 abstentions, and entered into force on 16 November 1994 a year after Guyana became the 60<sup>th</sup> signatory. See MN Shaw, *International Law* (5<sup>th</sup> edition, Cambridge University Press 2003) 492.

<sup>6</sup> Art. 76(1) UNCLOS.

Commission on the Limits of the Continental Shelf (CLCS)<sup>7</sup> for the establishment of an ECS.<sup>8</sup> Such extension, as may be recommended by the CLCS, shall not exceed 350 nautical miles measured from the baselines from which the territorial sea is measured, or 100 nautical miles measured from the 2,500 Metres isobath.<sup>9</sup> The ECS concept is, therefore, a creation of UNCLOS, and would appear to have no equivalent under customary international law.

Following the development of the ECS concept, several coastal States have established varying breadths of ECS or submitted data to the CLCS for the establishment of one.<sup>10</sup> The continental shelf is home to almost limitless quantities of seabed minerals, oil and gas, gas hydrates and living resources.<sup>11</sup> For coastal States, therefore, the continental shelf is a matter of the more the better. It must be pointed out at this juncture that, owing to various objections to Part XI of UNCLOS,<sup>12</sup> the United States (U.S.) is not a party to the Convention and, accordingly, not bound by it.<sup>13</sup>

On 19 December 2023, however, the US unilaterally declared and claimed varying breadths of ECS across the Arctic ocean, the Atlantic Ocean, the Bering Sea, the Pacific Ocean and the Gulf of Mexico.<sup>14</sup> Since it is not a party to UNCLOS, the U.S. claims that it acted under customary international law, arguing that the continental shelf concept has become custom with adequate state practice and *opinio juris* behind it.<sup>15</sup>

This paper considers the issues whether, as a non-Party to UNCLOS, the US could validly make an ECS declaration outside the UNCLOS regime, and whether the ECS concept has crystalized into custom to justify the declaration. The paper proceeds in six Parts. Part Two will discuss the international regime of ECS. Part Three will dwell on the U.S. attitude to the UNCLOS regime. In Part Four, the locations, dimensions and economic significance of the

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<sup>7</sup> The CLCS is established under Annexure II to UNCLOS.

<sup>8</sup> Art. 76(8) UNCLOS

<sup>9</sup> Art. 76(5) *ibid.*

<sup>10</sup> These States include Russia, Norway, Canada, Denmark (on behalf of the Faroe Islands and Greenland), Pakistan, France, Ireland, the United Kingdom, Spain, Federated States of Micronesia, Papua New Guinea and the Solomon Islands, Portugal, Cape Verde, Senegal, Mauritania, Gambia, Guinea-Bissau, Liberia, Nigeria and Sierra-Leone.

<sup>11</sup> V Iwunze, 'Nigeria's Extended Continental Shelf: Prospects and Challenges for the Blue Economy Project' (2024) 14(1) *Ahmadu Bello University Law Journal*, 115-137.

<sup>12</sup> This is discussed in detail in Part 4 below.

<sup>13</sup> Under article 34 of the Vienna Convention on the Law of Treaties, subject to limited exceptions, non-State Parties to a treaty are not bound by the treaty.

<sup>14</sup> See U.S. Department of State, 'U.S. Extended Continental Shelf' <<https://www.state.gov/the-us-ecs/>> accessed 22 March 2026.

<sup>15</sup> U.S. Congress, 'Outer Limits of the U.S. Extended Continental Shelf: Background and Issues for Congress' <<https://www.congress.gov/crs-product/R47912#fn16>> accessed 24 March 2026.

ECS unilaterally declared by the U.S. will be discussed. Part Five of the paper will critically examine the legality of the U.S. declaration under extant law of the sea. In Part Six, the paper will emphasize the urgent need for the U.S. to accede to UNCLOS. Part Seven will be the authors' concluding remarks.

## **The International Regime of ECS**

Where the continental margin extends beyond 200 nautical miles, a coastal State may, under UNCLOS, establish the edge of the margin beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured.<sup>16</sup> Such coastal State may then submit information on the limits of its continental shelf beyond 200 nautical miles to the CLCS established under Annex II to UNCLOS, applying to establish an ECS.<sup>17</sup> The CLCS will consider the submission and thereafter make recommendations to the coastal State on matters relating to the limits of its continental shelf beyond 200 nautical miles.<sup>18</sup> The limits of the shelf established by the coastal State in accordance with those recommendations of the CLCS shall be final and binding.<sup>19</sup>

Under UNCLOS, an ECS shall not exceed 350 nautical miles measured from the baselines from which the breadth of the territorial sea is measured, or 100 nautical miles measured from the 2,500 Metres isobath.<sup>20</sup> This means that the outer limit of an ECS must not exceed 150 nautical miles beyond the original 200 nautical miles, or must not exceed 100 nautical miles measured from the point where the depth of the sea is 2,500 Metres. Once a coastal State establishes its ECS as prescribed under UNCLOS, it is required to deposit with the Secretary-General of the UN charts and other information, including geodetic data, permanently describing the outer limits of its continental shelf.<sup>21</sup> Such information shall then be given due publicity by the Secretary-General of the UN.<sup>22</sup>

In the ECS area, coastal States are vested with the same rights as in the 200-mile continental shelf.<sup>23</sup> They are to have sovereign rights for the purpose of exploring it and exploiting its

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<sup>16</sup> Art. 76 (4) UNCLOS; KU Ekwere, *A Treatise on the Law of the Sea* (Princeton & Associates Publishing Co. 2022) 100.

<sup>17</sup> *Ibid* art. 76 (8).

<sup>18</sup> *Ibid*.

<sup>19</sup> *Ibid*.

<sup>20</sup> *Ibid* art. 76 (5).

<sup>21</sup> *Ibid* art. 76 (9).

<sup>22</sup> *Ibid*

<sup>23</sup> N Krisadtyo, 'Extended Continental Shelf Regime in International Law: Its Application in Indonesia' (2015) 12(3) *Journal Hukum Internasional*, 312.

natural resources.<sup>24</sup> The right vested in a coastal State to explore the continental shelf and to exploit its natural resources is exclusive. To this extent, if a coastal State does not explore and exploit the resources of its continental shelf, no other State could do so without its express consent.<sup>25</sup> The rights to explore the resources of the continental shelf and to exploit it do not depend on occupation, effective or notional, or on any express proclamation.<sup>26</sup> These rights accrue to the coastal State by reason of its geographical contiguity to the shelf.

The only difference between a coastal State's rights in the continental shelf and its rights in the ECS is with respect to the superjacent waters of the continental shelf and those of the ECS. A coastal State exercises sovereign rights over the water column above the continental shelf. This gives it exclusive rights over the exploration, exploitation and management of the living resources of those waters.<sup>27</sup> In the ECS, however, a coastal State has no such rights over the superjacent waters. The water column above the ECS is high sea and, accordingly, is subject to high seas freedom. All States may, therefore, exploit the living resources of those waters except sedentary ones which, under UNCLOS, form part of the ECS over which the coastal State has exclusive rights.<sup>28</sup>

The outer limit of the continental shelf is determined by the combined use of article 76's formula lines and constraint lines.<sup>29</sup> These limits may be obtained from bathymetric data which provide a map of the depths of the ocean floor as well as data that show seismic reflection and provide a view of the cross-section of what is beneath the ocean floor. It is from the data that the thickness of the sediments below the sea floor is clearly ascertained.<sup>30</sup> A coastal State can use the 60 nautical miles formula or the sediment thickness formula or a combination of both to determine the outer edge of its continental margin.<sup>31</sup> There are two constraint lines, one that is 350 nautical miles from baselines and one that is 100 nautical miles from the 2,500 meters isobaths.<sup>32</sup>

Once these data and information are obtained, States are enjoined to submit same to the CLCS. The submission is deliberated upon by the Commission until it reaches a decision on the recommendations it will make to the coastal State. Once the Commission has made its

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<sup>24</sup> Art. 77 (1) UNCLOS.

<sup>25</sup> *Ibid* art. 77 (2).

<sup>26</sup> *Ibid* art. 77 (3).

<sup>27</sup> *Ibid* art. 56 (1)(a).

<sup>28</sup> Art. 77 (4) *ibid*.

<sup>29</sup> *Ibid*.

<sup>30</sup> Krisadtyo (n 21) 101-102.

<sup>31</sup> *Ibid*.

<sup>32</sup> *Ibid*.

recommendations, the coastal State will have to decide whether or not it will adopt the outer limits of the continental shelf as contained in the recommendations. If it decides to do so, the outer limits adopted become binding and final to the coastal State and all parties to UNCLOS. ‘Final’ here means that the limits established cannot be changed, and ‘binding’ means that the coastal State is now under an obligation to exercise its powers over the continental shelf only within those limits. Outer limits adopted on the basis of the Commission’s recommendations do not become final and binding on third States and the international community as neither of these groups is a party to the submission process.

If the coastal State disagrees with the Commission, it would have to submit a new or revised submission. The coastal State is then required to deposit with the Secretary-General of the United Nations charts and other relevant information, including geodetic data, which permanently describe the outer limits of its continental shelf. The Secretary-General is obliged to give due publicity to the charts and other relevant information submitted. For coastal States that ratified UNCLOS before its entry into force, the deadline for submission was 2009 or ten years after the Commission’s Guidelines were published.<sup>33</sup>

While a coastal State’s entitlement to the continental shelf is governed by the distance criterion, the principle of natural prolongation is considered inapplicable within 200 nautical miles. Geological and geomorphological features play no part within 200 nautical miles, but are taken into account in the delineation of continental shelf boundaries beyond 200 nautical miles. As shown above, under article 76 of UNCLOS, every coastal State is automatically entitled to a continental shelf up to 200 nautical miles from its baselines, regardless of whether its physical shelf actually extends that far, indicating the legal priority of distance. Within the 200 nautical miles limit, the International Court of Justice (ICJ) has decided that there is no reason to use geological or geographical factors to verify legal rights or determine boundaries.<sup>34</sup> Legal rights in this zone are an automatic adjunct of territorial sovereignty necessitated by proximity to land.

There is, thus, a unified maritime regime within 200 nautical miles since the continental shelf often overlaps with the exclusive economic zone. To ensure consistent boundaries for both the water column and the seabed, the ICJ seems to prefer a neutral geographic criterion (such as

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<sup>33</sup> C Carleton and CH Schofield, Development in the technical determination of maritime space: charts, datums, baselines, maritime briefing, 3,3 (Durham International Boundaries Research Unit 2001) 65.

<sup>34</sup> 1985 *Libya/Malta* case, para. 44.

distance) over seabed-specific geological data.<sup>35</sup> Therefore, natural prolongation remains legally significant only for claiming continental shelf beyond the 200-nautical-mile limit, where a State must scientifically establish that its landmass physically continues to the outer edge of the continental margins. Put differently, unlike the initial, automatic 200 nautical miles of continental shelf, an ECS requires scientific substantiation and approval from the CLCS.

A crucial provision in the ECS regime is revenue sharing from exploitation of non-living resources beyond the 200 nautical miles limit under article 82 of UNCLOS. Coastal States are required under the article to make payments or contributions in kind for the exploitation of non-living resources of the continental shelf beyond 200 nautical miles. Under article 82 of UNCLOS, these payments or contributions must be made to the International Seabed Authority (ISA) established under article 156(1) of UNCLOS. These payments start at 1% in the sixth year and increase to a maximum of 7% by the twelfth year, after which the rate remains constant.<sup>36</sup> Payments made to the ISA are to be distributed to States, with particular consideration for developing States.<sup>37</sup>

## **The U.S and the UNCLOS Regime**

As of February 2026, 172 States and the European Union have ratified UNCLOS.<sup>38</sup> The U.S. is the only major maritime nation that is not a party to the Convention. The Convention divides the oceans into maritime zones and describes the basic rights and obligations of States in each zone. When UNCLOS was negotiated, some States objected to some of these rights, including the treatment of seabed minerals in areas beyond national jurisdiction, under Part XI of the Convention. The U.S. objection to UNCLOS anchored on the provisions relating to access to deep-seabed sites in areas beyond national jurisdiction,<sup>39</sup> the treatment of deep-seabed resources,<sup>40</sup> mandatory transfer of marine technology to developing countries,<sup>41</sup> and compulsory dispute resolution.<sup>42</sup> In 1994, the United Nations General Assembly (UNGA) adopted the Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea (1994 Implementation Agreement).<sup>43</sup>

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<sup>35</sup> *Ibid.*

<sup>36</sup> Art. 82(2) UNCLOS.

<sup>37</sup> Art. 82(4) *ibid.*

<sup>38</sup> As of early 2026, UNCLOS has achieved near-universal ratification, with Cambodia becoming the 172nd Party on 6 February 2026. See United Nations, 'Chronological List of Ratifications, Accessions and Successions to the Convention and the Related Agreements'

<[https://www.un.org/depts/los/reference\\_files/chronological\\_lists\\_of\\_ratifications.htm](https://www.un.org/depts/los/reference_files/chronological_lists_of_ratifications.htm)> accessed 18 June 2026.

<sup>39</sup> D Badow, 'Do not Endorse the Law of the Sea Treaty' Cato Institute Foreign Policy Briefing Paper No. 29, 27 January 1994.

The Agreement amended Part XI of UNCLOS by removing many of the provisions found objectionable by some industrialized nations.<sup>44</sup> In addition, the 1994 Implementation Agreement provided that the Agreement and UNCLOS shall be interpreted and applied together as a single instrument.<sup>45</sup> After adoption of the 1994 Agreement, UNCLOS received the necessary number of signatories required to enter into force.<sup>46</sup> Changes effected to Part XI of the Convention under the 1994 Implementation Agreement did not assuage the U.S. It was argued in the U.S. that despite the changes introduced by the Agreement, the ISA could still impose technology transfer as a condition for approving permits for exploration in the international seabed.<sup>47</sup>

Although it is not a party to UNCLOS, the U.S. recognizes most of the provisions of the Convention as customary international law. It participates as an observer State in the ISA but has no vote in the ISA Assembly or Council and cannot apply for or obtain a contract or license for seabed mining activities. For the U.S. to participate as a member of the ISA, it would have to become a State Party to UNCLOS and the 1994 Implementation Agreement, which would need Senate advice and consent.<sup>48</sup>

Since 1994, efforts have been made by successive U.S. administrations to obtain the consent of Senate to accede to UNCLOS. On 29 July 1994, the U.S. signed the 1994 Implementation Agreement by which it accepted the changes made to UNCLOS under the Agreement.

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<sup>40</sup> BA Boczek, 'Ideology and the Law of the Sea: The Challenge of the New International Economic Order' (1984) 5(1) Boston College International & Comparative Law, 1-80 at 25.

<sup>41</sup> D Silverstein, 'Proprietary Protection for Deep Seabed Mining in Return for Technology Transfer: New Approach to the Seabed Controversy' 2 *Fletcher Forum*, 21.

<sup>42</sup> The United States did not sign UNCLOS in 1982 primarily due to objections from the Reagan administration regarding Part XI, which governed deep seabed mining. The US viewed the provisions as detrimental to its economic and security interests, specifically objecting to mandatory technology transfers and revenue-sharing requirements with developing nations. See Statement on United States Actions Concerning the Conference on the Law of the Sea, Ronald Regan Presidential Library and Museum, July 7, 1982.

<<https://www.reaganlibrary.gov/archives/speech/statement-united-states-actions-concerning-conference-law-sea>> accessed 16 April 2026.

<sup>43</sup> The Agreement was signed on 28 July 1994 and was opened for signature at the UN Headquarters in New York.

<sup>44</sup> WL Schachtel, 'The Unvarnished Truth: The Debate on the Law of the Sea Convention' U.S. Naval War College Review, 120; SG Borgerson, 'The National interest and the Law of the Sea' Address to the U.S. Council on Foreign Relations, Washington D.C., May 2009 (Council Special Report No. 46) 43-44.

<sup>45</sup> Art. 2 1994 Implementation Agreement.

<sup>46</sup> United Nations, 'Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea'

<[https://www.un.org/depts/los/convention\\_agreements/texts/agreement\\_part\\_xi/agreement\\_part\\_xi.htm](https://www.un.org/depts/los/convention_agreements/texts/agreement_part_xi/agreement_part_xi.htm)> accessed 16 April 2026.

<sup>47</sup> J Rabkin, 'The Law of the Sea Treaty: A Bad Deal for America' (2003) 2 Issue Analysis, 1-11 at 8; FJ Gaffney, Ronald Regan was Right: Law of the Sea Treaty Was and Remains Unacceptable', Statement before U.S. Senate Foreign Relations Committee, 4 October 2007; D Bandow, 'Faulty Repairs: The Law of the Sea Treaty is Unacceptable.' Cato Foreign Policy Briefing No. 32 <<http://www.cato.org/pubs/fpbriefs/fpb-032.html>> accessed 20 March 2026.

In October 1994, the Clinton Administration submitted both UNCLOS and the 1994 Agreement to the Senate for advice and consent to accession.<sup>49</sup> In the 108th Congress, the Senate Committee on Foreign Relations made a favorable report of the Convention to Senate and recommended Senate advice and consent to the Convention and the 1994 Agreement.<sup>50</sup> The Convention was, however, not considered by Senate.<sup>51</sup> In the 110th Congress, the Senate Committee on Foreign Relations held two hearings on UNCLOS. The Committee favorably reported on UNCLOS on 19 December 2007, and again recommended that Senate give its advice and consent to UNCLOS and the 1994 Agreement.

During Senate's confirmation hearing on Secretary of State Hillary Clinton, Senator John Kerry, then Chairman of the Committee on Foreign Relations, asserted that UNCLOS would be a priority of Senate in the 111th Congress. Again, Senate took no action on the Convention.<sup>52</sup> In the 112th Congress, the Committee on Foreign Relations held three hearings on UNCLOS but recommendation was not made to Senate to give its advice and consent to accession.<sup>53</sup> From the 115th through the 119th Congresses, several resolutions were introduced into Senate calling on the U.S. Senate to give its advice and consent to the ratification of UNCLOS.<sup>54</sup> All these efforts notwithstanding, the U.S. Senate did not give its consent to the ratification of UNCLOS.

## **The U.S ECS Project**

The delineation of the U.S. ECS is the product of many years of expensive collection and study of bathymetric and seismic surveys needed to satisfy the requirements of article 76 of UNCLOS for the establishment of a coastal State's ECS.<sup>55</sup> Several U.S. federal agencies, led by the U.S. Extended Continental Shelf Task Force, chaired by the State Department were involved in the effort to identify and delineate the outer limits of U.S. shelf.

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<sup>48</sup> The United States has an observer status in the ISA because it is not a party to UNCLOS. As an observer, it lacks voting right on ISA businesses and it cannot obtain contracts for deep-sea mining, but it can participate in discussions, particularly those concerning international law.

<sup>49</sup> CONGRESS.GOV, 'United Nations Convention on the Law of the Sea' (Treaty Doc. 103-39) <<https://www.congress.gov/treaty-document/103rd-congress/39>> accessed 18 June 2026.

<sup>50</sup> U.S. Congress, 'Implementing Agreements under the United Nations Convention on the Law of the Sea' <<https://www.congress.gov/crs-product/IF12578>> accessed 20 April 2026.

<sup>51</sup> CONGRESS.GOV, 'S. Res.466 - A resolution calling upon the United States Senate to give its advice and consent to the ratification of the United Nations Convention on the Law of the Sea' <<https://www.congress.gov/bill/118th-congress/senate-resolution/466>> accessed 17 April 2026.

<sup>52</sup> Implementing Agreements under the United Nations Convention on the Law of the Sea (UNCLOS). Congressional Research Service, Informing the Legislative Debate since 1914. December 12, 2025.

<<https://www.google.com/search?q=108+congress+urge+senate+to+approve+UNCLOS&eq=108+congress+urge+senate+to+approve+UNCLOS>> accessed 17 April 2026.

<sup>53</sup> See Senate Hearings., 112-654, addressing the potential accession of the U.S to UNCLOS.

<sup>54</sup> CONGRESS.GOV, 'Implementing Agreements Under the United Nations Convention on the Law of the Sea (UNCLOS)' <<https://www.congress.gov/crs-product/IF12578>> accessed 17 April 2026.

The Project commenced data collection in 2003, with the support of the ECS Project Office established in Boulder, Colorado in 2014. The Project is considered the largest offshore mapping ever carried out by the U.S., involving over 40 surveys and gulping tens of millions of dollars.<sup>56</sup>

On 19 December 2023, the U.S. Department of State declared the outer limits of the U.S. ECS.<sup>57</sup> The declaration shows that the U.S. effectively claims approximately 1 million square kilometers of ECS (about 386,000 square miles) across seven different regions,<sup>58</sup> an area about twice the size of California.<sup>59</sup> In the declaration, the U.S. identified 1,300 km<sup>2</sup> of ECS located northeast of the Northern Mariana Islands. The area was delineated using the 60 nautical miles formula and the distance constraint. In the Arctic, it identified 520,400 km<sup>2</sup> of ECS described as a prolongation of the landmass of Alaska. In this region, a combination of the sediment thickness and 60 nautical miles formulas and both the distance and depth constraints were used to delineate the outer limits of the shelf. The declaration of U.S. ECS in the Arctic is especially important considering that each of the other four Arctic states, Canada, Denmark (on behalf of Greenland), Norway and Russia have made at least one submission to the CLCS.<sup>60</sup> In the Bering Sea, a 176,300 km<sup>2</sup> of ECS was also identified. In this region, the outer limits of the shelf were determined using the sediment thickness formula, the 60 nautical miles formula and the distance constraint. Other ECS locations identified by the U.S. include in the Atlantic (East Coast), stretching along the eastern seaboard, the Pacific West Coast, off the western seaboard, and in the Gulf of Mexico.<sup>61</sup> The significance of the U.S. ECS claim lies in the fact that the seabed areas involved are believed to bear critical minerals, rare earth elements, oil, and natural gas essential for green energy and semiconductors. As Bloom notes, the ECS areas delineated by the U.S. may protect future U.S. economic interests.<sup>62</sup> A secure supply of critical minerals from the ECS areas could reduce U.S. dependence on foreign sources, especially China, for these minerals.<sup>63</sup>

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<sup>55</sup> ET Bloom, 'Five Takeaways from the US Continental Shelf Announcement' <<https://www.wilsoncenter.org/article/five-takeaways-us-continental-shelf-announcement>> accessed 22 April 2026

<sup>56</sup> *Ibid.*

<sup>57</sup> Department of State, U.S. ECS Executive Summary, 9-43.

<sup>58</sup> *Ibid.*

<sup>59</sup> Bloom (n 50).

<sup>60</sup> Bloom *ibid.*

<sup>61</sup> Department of State (n 52).

In the Arctic Ocean, for example, U.S. scientists have estimated huge undiscovered reserves of oil and gas resources.<sup>64</sup> They have also identified large concentrations of critical minerals in seafloor deposits located 300 nautical miles North of Alaska.<sup>65</sup> Scientists from the U.S. Geological Survey (USGS) are also studying the distribution of gas hydrates in the Bering Sea.<sup>66</sup> The U.S. ECS claim will also avail it the authority to manage vital marine habitats, such as those for crabs and deep-sea corals, as well as strengthen its national security in offshore locations.

## Legality of the U.S Declaration

As a non-State Party to UNCLOS, two questions inevitably arise from the U.S. unilateral declaration of ECS. The first is whether the concept of ECS created under UNCLOS has crystalized into custom so as to lend legitimacy to the U.S. declaration. The second is whether the U.S. can legitimately make a final and binding declaration of ECS outside the regime of UNCLOS. These questions become germane in view of the trite principle of international law that a treaty does not bind non-parties,<sup>67</sup> and the implications of an international recognition of the U.S. declaration for stability, fairness and equity in ocean resource governance.

In anticipation of objections to its action by States Parties to UNCLOS, the U.S. was prompt to claim that article 76 of UNCLOS which establishes the ECS and provides for the procedure by which a coastal state may establish it had become custom, and that it acted under customary international law when it unilaterally declared the outer limits of its ECS.<sup>68</sup> The U.S. Department of State has, in fact, argued that this position has been affirmed by the ICJ.<sup>69</sup>

Custom remains one of the established and most authoritative sources of international law.<sup>70</sup> To crystalize into custom, a rule must satisfy the classic ‘two-element’ requirements of State practice and *opinio juris*.<sup>71</sup> While the former consists in common acts of States in similar situations over time, the latter is a psychological belief by States that they have a legal obligation to act in accordance with relevant practice.

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<sup>62</sup> Bloom (n 50).

<sup>63</sup> J Kraska, ‘Strategic Implications of U.S. ECS’ <<https://ukraine.wilsoncenter.org/article/strategic-implication-us-extended-continental-shelf>> accessed 20 April 2026.

<sup>64</sup> KJ Bird and others eds, *Circum-Arctic Resource Appraisal, Estimates of Undiscovered Oil and Gas North of the Arctic Circle* USGS Fact Sheet, 2008-3093, 2008, at 4.

<sup>65</sup> USGS, “Delineating the U.S. Extended Continental Shelf,” <<https://www.usgs.gov/programs/cmhrp/science/delineating-us-extended-continental-shelf>> accessed 20 April 2026.

<sup>66</sup> *Ibid.*

<sup>67</sup> Art. 34 Vienna Convention on the Law of Treaties, 1969.

<sup>68</sup> See U.S. Department of State, ‘U.S. Extended Continental Shelf’ <<https://www.state.gov/the-us-ecs/>> accessed 22 March 2026. See also M Treadwell, ‘Arctic Horizons: A Primer and Critical Questions on Extending U.S. Territory in the Arctic Ocean’ <<https://www.wilsoncenter.org/article/arctic-horizons-primer-and-critical-questions-extending-us-territory-arctic-ocean>> accessed 22 March 2026.

<sup>69</sup> *Ibid.*

It is the ‘subjective will of legal obligations’ among States.<sup>72</sup> It deserves comment that some scholars have in recent time attempted to deconstruct the classic two-element approach to customary law with ideas of ‘new and radical custom’ and what has been described as ‘instant’ customary international law.<sup>73</sup> The new custom theory de-emphasizes repeated practice by States and emphasizes the element of *opinio juris* so that customs could develop from the statements, declarations and manifestoes of States believed by them to be legally obligatory.<sup>74</sup> Equally identifiable is another view that customary rules could generate directly from the consensus of States expressed in multilateral treaties, resolutions of international organizations and declarations of international forums.<sup>75</sup>

Despite these new ideas on the formation of rules of customary law which jettison State practice and threaten customary international law as a whole,<sup>76</sup> the classic two-element theory of the evolution of customary rules stands. The International Law Commission (ILC) has expressed reservations regarding theories of instant customary law and reiterated the two-element approach to the development of rules of customary law.<sup>77</sup>

This is not to deny the role of other elements such as treaties in the formation of rules of customary international law. In an appropriate case, a rule of custom could develop out of multilateral treaties representing the consensus of States. If the idea of instant customary international law is discountenanced, it becomes impossible to regard article 76 (8) of UNCLOS which provides the rules for the establishment of a coastal State’s ECS as having become customary law. The question is, have States, especially coastal States, sufficiently and consistently acted in a manner indicative that the procedure provided under the article for delineating the outer limits of the continental shelf beyond 200 nautical miles has become customary law?

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<sup>70</sup> Art. 38 (1) Statute of the International Court of Justice.

<sup>71</sup> MN Shaw, *International Law* (5<sup>th</sup> edn., Cambridge University Press 2003) 69-71.

<sup>72</sup> Z Mao and others, ‘Binding Force of Extended Continental Shelf Limits: Investigating Whether Article 76 (8) of UNCLOS Constitutes Customary International Law’ (2023) *Frontiers in Marine Science* 10:1266802. DOI: 10.3389/FMARS.2023.1266802; SB Jiang ‘Elements of Legal Certainty in the Formation of Customary Law: A Case Study of Customary International Law’ (2009) 8 *Folk Law*, 1–18.

<sup>73</sup> B Simma and P Alston, ‘The Sources of Human Rights Law: Custom, Jus Cogens, and General Principles’ (1988) 12 *Australian Year Book of International Law Online*, 82–108; AE Roberts, ‘Traditional and Modern Approaches to Customary International Law: A Reconciliation’ (2001) *Am. J. Int. Law*, 757–791; B Cheng, ‘United Nations Resolutions on Outer Space: “Instant” International customary law’ (1965) *Indian J. Int. Law*, 5, 23–38.

<sup>74</sup> Mao and others (n 68) 3.

<sup>75</sup> A D’Amato, ‘Custom and Treaty (Response to Professor Weisburd)’ (1988) 21 *Vand. J. Transnat’l. L.*, 459, 461.

<sup>76</sup> GJH Hoof, *Rethinking the Sources of International Law* (Brill Archive 1983) 107–108.

<sup>77</sup> United Nations International Law Commission, *Yearbook of the International Law Commission* 2018, Vol. 2023 (United Nations 2023) 142.

Besides the U.S., such important maritime States as Iran and Colombia have declined to ratify UNCLOS and join the Convention system. In view of the importance of the consent of States in the development of customary law, especially States most affected by a rule of custom, it is difficult to say that article 76 (8) of UNCLOS has become customary law with a maritime power like the U.S. yet to ratify the Convention. If all provisions of UNCLOS have become customary law, there would be no need for the repeated call by the international community for the U.S. to ratify the Convention.

Assuming, *arguendo*, that the ECS is a continuation of the continental shelf and is, *ipso facto*, part of customary law, the question still arises whether the procedure laid down under article 76(8) of UNCLOS for establishing its outer limits has become part of customary international law. Under article 76(8), a coastal State seeking to establish an ECS is required to submit appropriate data to the CLCS for review and recommendations. Although the U.S. announced that in establishing the outer limits of its ECS it had complied with the technical guidelines provided under UNCLOS, those guidelines have not been shown to have also become custom. It is submitted that even if the continental shelf as a legal concept has become custom, the technical provisions under article 76(8) of UNCLOS for delimiting it beyond 200 miles remain a matter of treaty law.

The U.S. extra-UNCLOS ECS declaration has also been justified on the ground that the U.S. had in the past exercised sovereign rights over natural resources in certain areas beyond its 200-mile continental shelf without objection from the international community.<sup>78</sup> Prior to the ECS declaration of December 2023, the U.S. had, indeed, claimed sovereign rights over continental shelf beyond 200 miles in the westernmost area of the Gulf of Mexico usually referred to as the Western Gap.<sup>79</sup> The U.S. Department of the Interior (DOI) has, in fact, approved those areas for oil and gas development.<sup>80</sup> The same applies to certain areas in the continental shelf between the U.S. and both Mexico and Cuba,<sup>81</sup> an area called the Eastern Gap.

While this is correct, it must be stated that those areas of the U.S. continental shelf are free from overlapping disputes with other coastal States. The criteria set out under UNCLOS for determining the boundaries of a coastal State's ECS ensures consistency and uniformity in the determination of the outermost limits of the ECS of coastal States.

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<sup>78</sup> U.S. Department of State (n 12) at 12.

<sup>79</sup> *Ibid* at 13.

<sup>80</sup> BOEM, 'Western Gulf of Mexico Lease Sale 180 Information' <<https://www.boem.gov/oil-gas-energy/leasing/western-gulf-mexico-lease-sale-180-information>> accessed 30 March 2026.

This, therefore, eliminates, or at least, reduces the incidence of boundary disputes between opposite or adjacent coastal States. In the Western Gap and the Eastern Gap, the U.S. has boundary agreements with Mexico and Cuba. In view of these agreements which have eliminated boundary disputes in those areas, it cannot be concluded that the international community acquiesced to the U.S. claims in those continental shelf areas.

Interestingly, parts of the declared U.S. ECS overlap with claims from other States, including Canada (in the Arctic and Northern Atlantic regions), The Bahamas (in the Southern Atlantic Region) and Japan (in the Mariana Islands Region).<sup>82</sup> In the absence of agreement between the U.S. and these States, potential boundary disputes cannot be ruled out. Canada and The Bahamas have indicated that they would not object to a U.S. submission to the CLCS,<sup>83</sup> but Japan has given no such assurance yet. A Japanese objection to a U.S. submission in respect of the Mariana Islands region will result in a refusal by the CLCS to consider such submission. This is because under Paragraph 5(a) of Annex 1 to the CLCS Rules of Procedure, if a land or maritime dispute exists, the CLCS will not consider a submission made by any of the States to the dispute. The U.S. Department of State has expressed the willingness of the U.S. to submit its ECS data to the CLCS for review.<sup>84</sup> This raises the question whether the U.S., a non-signatory to UNCLOS could validly make a submission to the CLCS established under UNCLOS. Put differently, could the CLCS validly receive and review a submission from the U.S. and make recommendations? To address this question, it is imperative to examine the mandate of the CLCS. Article 3(1) of Annex II to UNCLOS which establishes the Commission provides for its core mandate as follows:

*(a) to consider the data and other material submitted by coastal States concerning the outer limits of the continental shelf in areas where those limits extend beyond 200 nautical miles, and to make recommendations in accordance with article 76 and the Statement of Understanding adopted on 29 August 1980 by the Third United Nations Conference on the Law of the Sea.*

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<sup>81</sup> See Treaty between the Government of the United States of America and the Government of the United Mexican States on the Delimitation of the Maritime Boundary in the Eastern Gulf of Mexico, signed 18 January 2017 <<https://www.state.gov/u-s-maritime-boundaries-agreements-and-treaties/>> and Treaty Between the Government of the United States of America and the Republic of Cuba on the Delimitation of the Continental Shelf in the Eastern Gulf of Mexico Beyond 200 Nautical Miles, signed 18 January 18, 2017 <<https://www.state.gov/u-s-maritime-boundaries-agreements-and-treaties/>> accessed 2 April 2026.

<sup>82</sup> E Antsygina, 'Extended Continental Shelf of the United States: A Landmark Announcement and its Implications' <<https://www.ejiltalk.org/extended-continental-shelf-of-the-united-states-a-landmark-announcement-and-its-implications/>> accessed 19 April 2026.

<sup>83</sup> *Ibid.*

<sup>84</sup> U.S. Department of State (n 12) 10-12.

*(b) to provide scientific and technical advice, if requested by the coastal State concerned during the preparation of the data referred to in subparagraph (a).*

It has been argued for the U.S. that the mandate of the CLCS is to provide scientific and technical assistance to ‘coastal States’ in the preparation of data for ECS and to review submissions from ‘coastal States’, not just States Parties to UNCLOS.<sup>85</sup> The argument is that, as a coastal State, the U.S. could validly make a submission to the CLCS towards the establishment of the outer limits of its continental shelf beyond 200 nautical miles without acceding to UNCLOS.

It is the authors’ view that, reference to ‘coastal States’ in article 3(1) of Annex II to UNCLOS is actually a reference to coastal States Parties. Since a treaty generally binds only States Parties to it, it could not have been intended under UNCLOS to bind non-signatory States, coastal or landlocked. Since, as a non-signatory State the U.S. ordinarily bears no obligation under UNCLOS, it follows that it can also claim no rights under the Convention except such rights are also available under customary international law. The right to make a submission to the CLCS and to expect a recommendation is one provided under treaty law and not a right recognized under customary international law. It is, therefore, safe to surmise that the CLCS is not bound to review a submission made by the U.S. without U.S. accession to UNCLOS.

It is pertinent to observe that while the U.S. is disposed to making a submission to the CLCS, it has not expressed any official position regarding the mandatory payment from resource exploitation in the ECS area. As adverted to above, under UNCLOS, coastal States are required to make annual payments or contributions in kind in respect of non-living resources exploited from the continental shelf beyond 200 nautical miles after the first five years of production at a site.<sup>86</sup>

Only developing States which are net importers of a mineral resource produced from their continental shelf are exempt from contribution.<sup>87</sup> The U.S. is not in this category. These payments are to be made to the ISA<sup>88</sup> which shall distribute them to States Parties to UNCLOS on an equitable basis, ‘taking into account the interests and needs of developing States, particularly the least developed and the land-locked among them.’<sup>89</sup>

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<sup>85</sup> *Ibid.*

The question of contribution by the U.S. from resource exploitation in the ECS is a crucial one considering that its refusal to ratify UNCLOS was predicated, among others, on its objection to the Convention's resource distribution provisions.<sup>90</sup> In the immediate post-UNCLOS years, the U.S. had been averse to the distribution of resources from the continental shelf beyond national jurisdiction to States that would contribute nothing to the exploitation of those resources.<sup>91</sup> In the event that it maintains its anti-distribution stance, it is difficult to see how the CLCS will accept to review a submission from the U.S. for the establishment of an ECS, bearing in mind that UNCLOS does not admit of reservations.<sup>92</sup>

As Parties to UNCLOS, coastal States Parties to the Convention are bound by the recommendations of the CLCS. As a non-State Party, the same cannot be said about the U.S. It has not stated whether or not it would accept the decision of the CLCS where its submission does not receive the Commission's approval. Where a coastal State's ECS submission is not approved by the CLCS, the coastal State would have to revise its submission or re-submit fresh data for the Commission's consideration. It is after the Commission is satisfied with data submitted that it would make recommendations to the coastal State for the establishment of the outer limits of its ECS. Again, under article 76(8) of UNCLOS, after recommendations have been made by the CLCS to a coastal State, such State must establish its ECS in accordance with those recommendations. The question arises whether, as a non-Party to UNCLOS, the U.S. will accept the Commission's recommendations if they vary from its submission. Similar questions are whether, as a non-Party to UNCLOS, the U.S. is disposed to recognize the ECS of opposite and adjacent coastal States, as recommended by the CLCS, as final and binding, and whether other States Parties to UNCLOS are bound to recognize a U.S. ECS established otherwise than under the Convention.

In view of the fact that the U.S. is not a party to UNCLOS, and considering the uncertainties regarding its willingness to be bound by obligations imposed under the Convention, it is submitted that the U.S. cannot, under extant international law, lawfully make claims for ECS outside the UNCLOS system. In the same token, it is doubted if the CLCS is bound to review a U.S. submission for the establishment of an ECS without U.S. accession to UNCLOS.

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<sup>86</sup> Art. 82 UNCLOS.

<sup>87</sup> Art. 82 (3) *ibid.*

<sup>88</sup> Art. 82(4) *ibid.*

<sup>89</sup> *Ibid.*

<sup>90</sup> Bandow (n 36).

<sup>91</sup> *Ibid.*

<sup>92</sup> Art. 309 UNCLOS.

It is, therefore, no surprise that this unilateral declaration was, without delay, objected to by Russia<sup>93</sup> and China.<sup>94</sup> Both States contend that they have no obligation to recognize the limits of the

U.S. ECS as unilaterally declared.<sup>95</sup>

## **Need for U.S. Accession to UNCLOS**

There is an obvious U.S. interest in deep seabed minerals as a means of achieving minerals sufficiency in the future. On 24 April 2025, the Trump Administration issued Executive Order (E.O.) 14285, titled ‘Unleashing America's Offshore Critical Minerals and Resources.’ The E.O. makes the intentional advancement of U.S. leadership in seabed mineral development a cardinal U.S. national policy.<sup>96</sup> Among other actions, the E.O. required federal agencies to expedite the review and issuance of licenses and commercial recovery permits for seabed mining exploration in seabed areas beyond national jurisdiction under the Deep Seabed Hard Mineral Resources Act, 1980. In view of this obvious U.S. national interest, coupled with the controversies surrounding its unilateral ECS declaration, there is need now, more than ever, for the U.S. to accede to UNCLOS.

The U.S. Congress has for years deliberated the potential advantages and disadvantages of UNCLOS as it relates to American ocean policy and interests. Proponents of U.S. accession to UNCLOS argue that the U.S. already enjoys most of the benefits of the rules laid down in the Convention as customary international law. The several resolutions introduced in the U.S. Senate, starting from the 115<sup>th</sup> through the 119<sup>th</sup> Congresses, calling on Senate to give its advice and consent to the ratification of UNCLOS, are clear evidence of support within the U.S. for accession to the Convention.<sup>97</sup> Proponents of accession argue that access by the U.S. to ocean resources in the deep seabed or claim to portions of the Arctic are bound to be hindered by non-accession to UNCLOS.<sup>98</sup> According to them, U.S. accession to the Convention would conduce to economic development for itself and help preserve coastal resources upon which many States rely for subsistence.<sup>99</sup>

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<sup>93</sup> See Remarks by the Permanent Representative of the ISA Sergey Petrovich during the 29th Session of the ISA Council, Kingston, Jamaica, March 18, 2024

<[https://www.mid.ru/ru/foreign\\_policy/news/1940722/?lang=en\(link is external\)](https://www.mid.ru/ru/foreign_policy/news/1940722/?lang=en(link is external))> accessed 18 April 2026.

<sup>94</sup> See China's Foreign Ministry Spokesperson Wang Wenbin's Regular Press Conference of 2 April 2024

<[https://www.fmprc.gov.cn/eng/xw/fyrbt/lxjzh/202405/t20240530\\_11347729.html](https://www.fmprc.gov.cn/eng/xw/fyrbt/lxjzh/202405/t20240530_11347729.html)> accessed 18 April 2026.

<sup>95</sup> B Yinan and Z Zhihua, ‘A New Case of American-Style Double Standard on Freedom of the Seas: The Xue Long 2 Incident’ <<https://www.scspi.org/en/dtfx/new-case-american-style-double-standard-freedom-seas-xue-long-2-incident>> accessed 22 April 2026.

<sup>96</sup> The American Presidency Project, ‘Executive Order 14285 – Unleashing America's Offshore Critical Minerals and Resources’ <<https://www.presidency.ucsb.edu/documents/executive-order-14285-unleashing-americas-offshore-critical-minerals-and-resources>> accessed 18 June 2026.

Considering the benefits for the U.S. in joining the UNCLOS system, and in view of the importance of the treaty to the global community, it is time for the U.S. to re-evaluate its stand on the Convention. The strength of UNCLOS as an instrument for global ocean governance lies in the fact that it bridges the gap across nations with variegated needs and customs. In doing so, UNCLOS provides a global standard, a foundation upon which international maritime law is based.

As the ‘Constitution of the Oceans’,<sup>100</sup> it governs resources that many nations depend on for survival, as well as over 90% of trade which occurs by ship.<sup>101</sup> UNCLOS grants all States, coastal and landlocked, freedom of the high seas for the purpose of transit, navigation and commerce, sets out rules for conduct on the oceans, and provides a mechanism for conflict resolution.<sup>102</sup> For coastal States, it grants rights to the resources off their coasts. For many nations, especially developing ones that rely on fish, the security of these resources is a matter of life-or-death.

UNCLOS is the net outcome of a contest between age-old ideologies- the desire for an open ocean and free trade pitted against the advantages of propertisation of the oceans.<sup>103</sup> While geopolitical circumstances may change, the problems that necessitated the development of UNCLOS have yet to vanish. For example, resource scarcity, pollution, piracy, international maritime disputes, and the issue of safety at sea must be continuously addressed.<sup>104</sup> While UNCLOS addresses these issues, its future may be jeopardized by the absence of leadership support from the U.S. The combination of U.S. military power, economic strength and technology are required to ensure that the smaller nations of the world will not run out of ocean resources upon which they depend, that the global economy continues to realize its growth potential, and that the seas remain safe for the use of all nations. Above all these, if the U.S. joins the Convention system, it will gain uncontroversial access to seabed resources in vast continental shelf areas, participate in the mining of the international seabed, and have a greater role in international ocean governance.<sup>105</sup>

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<sup>97</sup> See S. Res. 331 (119th Congress) - A resolution calling upon the Senate to give its advice and consent to the ratification of the United Nations Convention on the Law of the Sea: <<https://www.congress.gov/bill/119th-congress/senate-resolution/331/history>> accessed 19 June 2026.

<sup>98</sup> *Ibid.*

<sup>99</sup> Support for US accession to UNCLOS has come from a broad coalition of the US military leadership, national security experts and environmental groups, among others.

<sup>100</sup> R Lewis, ‘The Constitution of the Oceans’? The Law of the Sea Convention as a Living Treaty’ (2026) 74(1) *International and Comparative Law Quarterly*: doi:10.1017/S0020589325000120.

<sup>101</sup> International Maritime Organization, ‘Economy of the Sea Conference: The Sea - An Area to Manage, to Exploit and Protect’ <<https://www.imo.org/en/mediacentre/secretarygeneral/pages/economysea-conf.aspx>> accessed 19 June 2026.

<sup>102</sup> *Ibid.*

<sup>103</sup> *Ibid.*

## Conclusion

As a package deal, UNCLOS remains an important agreement by the international community towards a peaceful and equitable use of the oceans. While the Convention is not a perfect document, it is the best compromise so far between the maritime interests of the developed and developing States, and between coastal States and landlocked States. Its clear provisions on the delimitation of maritime boundaries, the right of navigation and laying of submarine cables and pipelines and the fishing rights of States have stabilized the use of the oceans by States and reduced international maritime disputes. Actions that would disturb the prevailing understanding among States in the use of the oceans and the exploitation of their vast resources must be discouraged. It is for this reason that the U.S. should reconsider its unilateral ECS declaration.

The reasons advanced for and against U.S. accession to UNCLOS shows that the U.S stands to benefit much more than it could ever lose by joining the Convention system. In fact, Senate Resolution 466 in the 118<sup>th</sup> Congress rightly identified that lack of full-party membership of UNCLOS has limited access and influence for the U.S. in ocean matters.<sup>106</sup> As a frontline maritime power, the U.S. deserves a prominent leadership role in global ocean governance. This role will best be played under the UNCLOS system with the willing cooperation of other members of the international community. With the U.S. willing to submit its data for ECS to the CLCS, its accession to UNCLOS may no longer be a remote possibility.

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<sup>104</sup> *Ibid.*

<sup>105</sup> *Ibid.*

<sup>106</sup> U.S. Congress, 'Outer Limits of the U.S. Extended Continental Shelf: Background and Issues for Congress' <<https://www.congress.gov/crs-product/R47912#fn16>> accessed 24 March 2026

# Artificial Intelligence and Authorship under the Copyright Law: Challenges and the Way Forward

*Dr. Isha Wadhwa Sharma<sup>1</sup>*

## ABSTRACT

*In contemporary times, Artificial Intelligence (AI) has assumed importance worldwide. AI systems are expanding, and their utility is growing exponentially in many fields. AI is used to generate works that may be protected under the copyright law. If it is assumed that copyright protection is limited to works created by human authors, then the works generated by AI would not be eligible for copyright protection and can be used by anyone freely. This will negatively impact companies that invest in such AI systems. On the contrary, if AI-generated works are protected by copyright law, uncertainty remains about authorship and ownership. In November 2020, the Indian Copyright Office granted copyright to the artistic work 'Suryast' in which an AI Painting App 'Raghav' was a co-author along with Ankit Sahni as a human author. It was reported that the application in which the AI was indicated as the sole author was rejected by the office. This decision of the Copyright Office has changed how AI is treated under the Indian Copyright Act, 1957. However, there is still ambiguity in the legislation surrounding works generated by AI. In July 2021, the Parliamentary Standing Committee on Commerce, in its 161<sup>st</sup> Report on Review of the Intellectual Property Rights Regime in India, noted that the provisions in the copyright law are inadequate to facilitate authorship and ownership of works created by AI. Therefore, the provisions under the act are to be reviewed. In this paper, the researcher will discuss the issues and challenges in protecting AI-generated works under copyright law. Furthermore, the paper will highlight the inadequacy of the provisions of the Copyright Act, 1957, for protecting works generated by AI and outline the way forward.*

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## Introduction

*“...humankind stands on the threshold of an era when even more sophisticated robots...and other manifestations of artificial intelligence seem to be poised to unleash a new industrial revolution, which is likely to leave no stratum of society untouched...”*<sup>2</sup>

Artificial intelligence (AI) is “the ability of machines to do things that people would say require intelligence.”<sup>3</sup> It is a field of computer science, to study how machines can be made to act intelligently. The term “AI” was coined by John McCarthy in 1956 at an academic conference. He defined AI as “the science and engineering of making intelligent machines.”<sup>4</sup> However, even before that, in 1945, Vannevar Bush and in 1950, Alan Turing, in their respective works, wrote about the notion of machines being able to perform intelligent tasks.<sup>5</sup> Article 3(1) of the Artificial Intelligence Act, 2024 of the European Union defines AI system as, “AI system means a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments.”

AI is increasingly significant in a country's economic growth and already impacts our lives. The Parliamentary Standing Committee on Commerce, in its 161st Report on ‘Review of the Intellectual Property Rights Regime in India’, noted that the relevance of AI would increase substantially, especially in the aftermath of the Covid-19 pandemic. AI has enormous benefits, and its expansion is significant for revenue generation and the economy. The Committee relied on an Accenture Report, which estimated that, “the AI-related innovations would add USD 957 billion by 2035 to the Indian economy.”<sup>6</sup>

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<sup>2</sup> European Parliament, Resolution with recommendations to the Commission on Civil Law Reforms on Robotics (February, 2017) *available at*: [https://www.europarl.europa.eu/doceo/document/TA-8-2017-0051\\_EN.html#title1](https://www.europarl.europa.eu/doceo/document/TA-8-2017-0051_EN.html#title1). (last visited on June 30, 2025).

<sup>3</sup> Philip C. Jackson, *Introduction to Artificial Intelligence* 1 (Dover Publication, New York, 2<sup>nd</sup> ed., 1985).

<sup>4</sup> Andy Peart, “Homage to John McCarthy, the Father of Artificial Intelligence (AI)” *available at*: <https://www.artificial-solutions.com/blog/homage-to-john-mccarthy-the-father-of-artificial-intelligence>. (last visited on June 30, 2025).

<sup>5</sup> The History of Artificial Intelligence, *available at*: <https://courses.cs.washington.edu/courses/csep590/06au/projects/history-ai.pdf>. (last visited on June 30, 2025).

<sup>6</sup> Parliamentary Standing Committee on Commerce, 161<sup>st</sup> Report on Review of the Intellectual Property Rights Regime in India (July, 2021).

AI, also referred to as ‘transformative technology’. It has revolutionized many areas of human life.<sup>7</sup> Ray Kurzweil expressed, “...machines will exhibit the full range of human intellect, emotions, and skills, ranging from musical and other creative aptitudes to physical movement...the intelligence that we are now creating in computers will soon exceed the intelligence of its creators.”<sup>8</sup> It is clear that AI systems can give creative output even without human intervention. Robert David Hart stated, “AI is already capable of creating a staggering array of content. It can paint, write music, and put together a musical. It can write movies, angsty poems....”<sup>9</sup>

Such AI-generated creative output may be protected under copyright law. The Standing Committee remarked that, “presently, the Copyright Act, 1957, is not well equipped to facilitate authorship by AI, and therefore, there is a need to review the legislation on a priority basis.”<sup>10</sup> The European Parliament also, in its resolution, remarked that the legal and ethical implications and effects of AI should be considered without stifling its innovation.<sup>11</sup> The objective of this research paper is to analyse the legal issues and challenges in protecting works generated by AI under the Indian Copyright Act, 1957.

## **Copyright Law vis-à-vis Works created by AI**

The creation of a work by AI, irrespective of the degree of human intervention, leads to many significant concerns under copyright law, including the determination of authorship and ownership of such works, the standard of originality for such works, the term of protection. Boyden remarked, “...computer-generated works represent a novel problem...fails to fit well in existing doctrinal categories...problem is also growing in practical significance as computers are increasingly able to create works unassisted by humans.”<sup>12</sup>

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<sup>7</sup> “Consultation Outcome: Government response to call for views on artificial intelligence and intellectual property” available at: <https://www.gov.uk/government/consultations/artificial-intelligence-and-intellectual-property-call-for-views/government-response-to-call-for-views-on-artificial-intelligence-and-intellectual-property#protecting-works-generated-by-ai>. (last visited on June 30, 2025).

<sup>8</sup> Ray Kurzweil, “The Coming Merging of Mind and Machine” *Scientific American*, March 23, 2009, available at: <https://www.scientificamerican.com/article/merging-of-mind-and-machine/>. (last visited on June 30, 2025).

<sup>9</sup> Robert David Hart, “If an AI creates a work of art, who owns the rights to it?” *Quartz* August 15, 2017, available at: <https://qz.com/1054039/google-deepdream-art-if-an-ai-creates-a-work-of-art-who-owns-the-rights-to-it/>. (last visited on June 30, 2025).

<sup>10</sup> *Supra* note 5.

<sup>11</sup> *Supra* note 1.

<sup>12</sup> Bruce E. Boyden, “Emergent Works” 39 *Columbia Journal of Law and Arts* 377.

This part of the research paper addresses these questions specifically in light of the provisions of the Indian Copyright Act, 1957.

## Authorship and Ownership

*“Can a non-human machine be an author under the Copyright Act...? The use of artificial intelligence to produce original work is rapidly increasing across industries and creative fields. Who-or what-is the “author” of such work is a question that implicates important property rights undergirding economic growth and creative innovation.”<sup>13</sup>*

The author creates the work, whereas the owner has the right to control it. Section 2(d) of the Indian Copyright Act, 1957, provides the definition of the term ‘author’. It specifies that, “in relation to a literary or dramatic work, the author of the work; in relation to a musical work, the composer; in relation to an artistic work other than a photograph, the artist; in relation to a photograph, the person taking the photograph; in relation to a cinematograph film or sound recording, the producer<sup>14</sup> and in relation to any literary, dramatic, musical or artistic work which is computer-generated, the person who causes the work to be created is the author.” Section 2(z) defines the term ‘work of joint authorship’ to mean, “a work produced by the collaboration of two or more authors in which the contribution of one author is not distinct from the contribution of the other author or authors.”

Section 17 of the Act provides that the author of a work shall be the first owner of the copyright. This general rule is subject to certain exceptions. In the case of a literary, dramatic, or artistic work made by the author in the course of his employment by the proprietor of a newspaper or similar periodical under a contract of service or apprenticeship for the purpose of publication, the proprietor shall be the first owner of the copyright in relation to the publication of the work but in all other respects, the author shall be the first owner.<sup>15</sup> Subject to this, in the case of a photograph taken or a painting or portrait drawn or cinematograph film made for valuable

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<sup>13</sup> *Stephen Thaler v. Shira Perlmutter*, No. 23-5233 (United States Court of Appeals, March 18, 2025), available at: <https://media.cadc.uscourts.gov/opinions/docs/2025/03/23-5233.pdf>. (last visited on July 31, 2025).

<sup>14</sup> The Copyright Act, 1957, s. 2(uu). Producer in relation to a cinematograph film or sound recording, means a person who takes the initiative and responsibility for making the work. In *Gee Pee Films Pvt. Ltd. v. Pratik Chowdhry*, 2002 (24) PTC 392, 401 (Cal), it was observed that, “...the word ‘responsibility’ appearing in section 2(uu) does not refer to financial responsibility but means consequential legal responsibility ... The producer is the one who takes initiative as well as responsibility of the recording.”

<sup>15</sup> *Id.*, s. 17 proviso (a).

consideration, the person at whose instance such work was made will be the first owner.<sup>16</sup> In any other case, if any work is made in the course of employment under a contract of service or apprenticeship, the employer shall be the first owner.<sup>17</sup> In case of any address or speech delivered in public, the person who has delivered such speech shall be the first owner.<sup>18</sup> Further in the case of government work, the government;<sup>19</sup> in the case of a work made under the direction or control of the public undertaking, the public undertaking,<sup>20</sup> and in the case of a work of an international organization, the international organisation<sup>21</sup> is the first owner of the copyright.

In the case of the literary, dramatic, musical, or artistic works created with the assistance of the AI, it is clear that under section 2(d)(vi), the person who causes the work to be created is the author and accordingly, under section 17, such person will be considered to be the first owner. However, the issue arises with works created by AI without human intervention. In such a case, the question is who will be considered the author of such a work? To address this issue, the deliberations and discussions have revolved around the following possibilities:

- The copyright law should confer sole authorship upon AI.
- The copyright law should confer joint authorship upon AI and the creator of the AI.
- The works created should fall into the public domain, as authorship cannot be conferred on AI.
- The works should be protected by a *sui generis* law or through specific provisions under the copyright law.

While addressing the first two possibilities, the pertinent question is whether the copyright law can confer authorship on juristic persons. The definition of the term “author” under section 2(d) suggests that only a natural person can be an author of the work. Section 17 permits juristic persons to be the owners of the work, such entities cannot qualify as authors. It is expressly recognized in the Practice and Procedure Manual of the Copyright Office in India, that, “a firm or organization cannot be an author of a work; only a natural person (human being) can be an

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<sup>16</sup> *Id.*, s. 17 proviso (b).

<sup>17</sup> *Id.*, s. 17 proviso (c).

<sup>18</sup> *Id.*, s. 17 proviso (cc).

<sup>19</sup> *Id.*, s. 17 proviso (d).

<sup>20</sup> *Id.*, s. 17 proviso (dd).

<sup>21</sup> *Id.*, s. 17 proviso (e).

author of a work.”<sup>22</sup> The judicial approach also reinforces this. In *Tech Plus Media Private Ltd. v. Jyoti Janda*,<sup>23</sup> the court observed that the juristic person is incapable of being the author of any work in which copyright may exist. However, the juristic person can be the owner of a copyright under an agreement with the author of the work.<sup>24</sup> In *Camlin Pvt. Ltd v. National Pencil Industries*,<sup>25</sup> it was observed that it is only natural persons who are, because of expenditure of their personal skill and Labour upon any work, entitled to protection under the copyright law.<sup>26</sup> On this basis, the court concluded that copyright cannot subsist in any carton that has been mechanically produced as the work cannot be said to have originated from the author. The court held that a machine cannot be an author of artistic work and hence no copyright can be conferred on such work.<sup>27</sup>

Various other provisions in the copyright act also point in this direction, that only a natural person can be an author of a work. For instance, section 57 confers moral rights on the author, i.e., the right to claim authorship of the work, and to restrain or claim damages in respect of any distortion, mutilation, modification, if such distortion, mutilation, modification, or other act would be prejudicial to his honor or reputation. These rights can be exercised by the legal representatives of the author also. The terms used under section 57, like ‘honor’, ‘reputation’, and ‘legal representative’, confirm that only a human can be an author of a work. Also, as per section 22, copyright shall subsist in the literary, dramatic, musical, or artistic work published within the lifetime of the author until sixty years from the beginning of the calendar year next following the year in which the author dies. However, in the case of government work,<sup>28</sup> works of the public undertaking,<sup>29</sup> and the works of the international organization,<sup>30</sup> copyright subsists until sixty years from the beginning of the calendar year next following the year in which the work is first published. It is clear from this that the term of copyright protection is premised on the life of the author, and wherever otherwise required, the legislature has specifically provided the term of protection. This also substantiates that the author of a work can only be a human.

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<sup>22</sup> Copyright Office, Government of India, “Practice and Procedure Manual, 2018 (Literary Works)” available at: [https://copyright.gov.in/Documents/Manuals/LITERARY\\_MANUAL.pdf](https://copyright.gov.in/Documents/Manuals/LITERARY_MANUAL.pdf). (last visited on June 30, 2025).

<sup>23</sup> 2014 SCC Online Del 1819.

<sup>24</sup> *Id.* para 20.

<sup>25</sup> ILR (1985) 2 Del 813.

<sup>26</sup> *Id.* at 823.

<sup>27</sup> *Id.* at 834.

<sup>28</sup> *Supra* note 13, s. 28.

<sup>29</sup> *Id.*, s. 29.

<sup>30</sup> *Id.*, s. 30.

It is settled in India, expressly through judgments and the Copyright Office Practice Manual, and can even be implied from the provisions in the Copyright Act, that only a human can be an author under copyright law. Despite this, the Copyright Office in India registered an artistic work, ‘*Suryast*’, in November 2020, which included an AI painting app, ‘Raghav’ (Robust Artificially Intelligent Graphics and Art Visualizer), as a co-author alongside Ankit Sahni, a human author.<sup>31</sup> The artistic work was a 2D artwork generated by feeding a digital photograph authored by Ankit Sahni, along with an image of Vincent Van Gogh’s “The Starry Night” as the style input. It was reported that the Copyright Office raised an objection to the first application, in which the AI Painting App was listed as the sole author.<sup>32</sup> The decision of the Copyright Office in conferring joint authorship on AI is hailed as progressive and forward-looking, and has changed the way works created by AI are treated under the Indian Copyright Act, 1957. However, this decision of conferring joint authorship to AI along with the human author appears to be faulty on the following premises:

- When it is settled that only a human can be an author under the copyright law, following this, only on a work created by two or more human authors, joint authorship can be conferred.
- The definition of joint authorship under section 2(z) of the Copyright Act, 1957 requires that, “the contribution of one author is not distinct from the contribution of the other author.” In *Najma Heptulla v. Orient Longman Ltd.*,<sup>33</sup> it was observed that “...if there is an intellectual contribution by two or more persons pursuant to a preconcerted joint design, to the composition of a literary work then those persons have to be regarded as joint authors.” The first application filed in the copyright office named AI App as the sole author. Presuming that the work was generated by the AI without any intervention of a human, then on what premises did the copyright office confer copyright jointly on the human author and the AI? This is not the correct interpretation of the concept of joint authorship.
- Even presuming otherwise, that it was created with the assistance of AI, then, in that case, the author, as per section 2(d), will be the person who causes the work to be created.

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<sup>31</sup> Dairy No. 13646/2020-CO/A. The status of this application is shown as registered and the names of the authors mentioned are Ankit Sahni and Raghav Artificial Intelligence Painting App. *Available at:* <https://www.copyright.gov.in/SearchRoc.aspx>. (last visited on June 30, 2025).

<sup>32</sup> Dairy No. 9835/2020-CO/A. The status of this application is shown as marked as abandoned. *Available at:* <https://www.copyright.gov.in/frmStatusGenUser.aspx>. (last visited on June 30, 2025).

<sup>33</sup> 1988(15) DRJ 223, 232.

- Also, an explanation to section 22 clarifies that in case of a work of joint authorship, reference to the author for the term of protection be construed as the author who dies last. AI does not die like a human being, so how the term of protection will be calculated in the present case, in the absence of a specific provision in this regard in the legislation.

The copyright office might have realized the wrong interpretation that it had accorded to the provisions of the copyright law by conferring joint authorship, and hence, as reported, on November 25, 2021, the copyright office issued a notice of withdrawal to Ankit Sahni (co-author). It is further reported that Ankit Sahni has responded to the said notice of withdrawal, contending that the Copyright Act does not contain any express provision that empowers the registrar of copyright to review his own decision.<sup>34</sup> The only legal recourse is for the Registrar of Copyrights to file an application for rectification of the register before the High Court under Section 50 of the Copyright Act for expunging the entry. It will be interesting to witness how this issue unfolds in India and what course of action the copyright office will take.

Ankit Sahni filed similar applications for copyright registration in other jurisdictions as well. On December 1, 2021, he filed an application in the United States Copyright Office, and the registration was refused on June 29, 2022, noting that “it lacked human authorship necessary to support a copyright claim.” He filed the first request for reconsideration, arguing that the requirement of human authorship does not imply that the work must be entirely created by a human. The Office, after reevaluation, denied registration on April 10, 2023 and noted that “the work deposited is a derivative work that does not contain enough original human authorship to support a registration.” On July 10, 2023, Ankit Sahni requested a second reconsideration from the office, basically on three grounds: firstly, RAGHAV merely acted as an assistive software tool; secondly, there are elements in the work which are human-authored; and lastly, it is not a derivative work as it is not substantially similar to the original photograph. The Copyright Review Board refused to register the work by its decision on December 11, 2023, noting that, “the work is not the product of human authorship as the expressive elements of pictorial authorship were not provided by Ankit Sahni.”<sup>35</sup>

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<sup>34</sup> Sukanya Sarkar, “Indian Copyright Office issues withdrawal notice to AI co-author” *available at*: <https://www.managingip.com/article/b1vvyqphyskcrq/exclusive-indian-copyright-office-issues-withdrawal-notice-to-ai-co-author>. (last visited on June 30, 2025).

<sup>35</sup> Copyright Review Board, “Second Request for Reconsideration for Refusal to Register SURYAST” (December 11, 2023), *available at*: <https://copyright.gov/rulings-filings/review-board/docs/SURYAST.pdf>. (Visited on July 31, 2025).

In *Naruto v. David John Slater* (also known as the *Monkey Selfie Case*),<sup>36</sup> the question before the court was whether a monkey can sue humans and companies for copyright infringement. The U.S. Court of Appeals, while affirming the district court's decision, observed that the animals lack statutory standing to sue under the Copyright Act. In the Compendium of U.S. Copyright Office Practice,<sup>37</sup> it is expressly mentioned that only the work created by a human being can be registered under the copyright law on the premise that “the copyright law protects the fruits of intellectual Labour that are founded in the creative powers of the mind.”<sup>38</sup> Further, it is stated that the copyright office will not register works produced by nature, animals, plants, and divine or supernatural beings. Additionally, the compendium clarifies that the Copyright Office will not register works produced by a machine or a mere mechanical process that operates randomly or automatically without any creative input or intervention from a human author.<sup>39</sup> The United States Copyright Office published the “Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence” to bring forth clarity regarding registration of works that contain material generated by the use of AI, which is effective from March 16, 2023.<sup>40</sup> It is specifically mentioned that:

*“In the case of works containing AI-generated material, the Office will consider whether the AI contributions are the result of 'mechanical reproduction' or instead of an author's 'own original mental conception, to which the author gave visible form.' The answer will depend on the circumstances, particularly how the AI tool operates and how it was used to create the final work. This is necessarily a case-by-case inquiry.”*

In *Stephen Thaler v. Shira Perlmutter*,<sup>41</sup> the US Court of Appeals upheld the decision of the district court,<sup>42</sup> denying the registration to a visual work titled ‘A Recent Entrance to Paradise’ created by a generative AI ‘Creativity Machine’, and holding that it cannot be the author because the law requires work to be authored by a human being.

In Canada, the Intellectual Property Office, in December, 2021, accepted the application filed by Ankit Sahni for the registration of the artistic work and listed Raghav and Ankit

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<sup>36</sup> 2018 SCC Online US CA 9C 94.

<sup>37</sup> U.S. Copyright Office, *Compendium of U.S. Copyright Office Practice* (3<sup>rd</sup> edn., 2021).

<sup>38</sup> *Id.* para. 306.

<sup>39</sup> *Id.* para. 313.2.

<sup>40</sup> Available at: <https://www.govinfo.gov/content/pkg/FR-2023-03-16/pdf/2023-05321.pdf>. (last visited on July 31, 2025).

<sup>41</sup> *Supra* note 12.

<sup>42</sup> *Stephen Thaler v. Shira Perlmutter*, Case 1:22-cv-01564-BAH (D.D.C., August 18, 2023).

Sahni as co-authors. However, in July 2024, the “Samuelson-Glushko Canadian Internet Policy and Public Interest Clinic” filed an application for expunging the said registration.<sup>43</sup> The Report on Consultation on Copyright in the Age of Generative Artificial Intelligence notes that authorship must be attributed to a human who exercises skill and judgment in creating a work.<sup>44</sup> Against this backdrop, it will be interesting to observe how the issue unfolds in Canada.

In Australia, the Copyright Act 1968, under section 32, provides that, “copyright subsists in an original literary, dramatic, musical, or artistic work that is unpublished and of which the author was a qualified person.” The term ‘qualified person’ refers to, “an Australian citizen or a person residing in Australia.” This makes it clear that in Australia, copyright will subsist only when a work is created by a person who is either a citizen or resident. The Australian court in *Acohs Pty Ltd v. Ucorp Pty Ltd*,<sup>45</sup> held that the source code is not an original literary work as it was neither the work of a sole human author (as it was machine-generated) nor a work of joint authorship.

However, the UK follows a different approach. Section 178 of the Copyright, Designs and Patents Act, 1988 defines “computer-generated work as the work generated by a computer in circumstances such that there is no human author of the work”. Section 9 further provides that, “in the case of a literary, dramatic, musical, or artistic work that is computer-generated, the author is the person by whom the arrangements necessary for the creation of the work are undertaken.” Further, in such works as per section 12(7), the copyright subsists for 50 years. When these provisions were proposed in the year 1987, Lord Young of Graffham remarked that:<sup>46</sup>

*“...it may already be feasible for a computer to generate works to which it would not be possible to ascribe human authorship. In order to ensure that such potentially valuable works enjoy copyright protection, the Bill makes provision to ascribe authorship in cases of so-called computer-generated works. We believe this to be the first copyright*

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<sup>43</sup> Maya Medeiros, David Yi, *et. al.*, “Can AI be an author? Federal Court asked to decide in new copyright case” available at: <https://www.nortonrosefulbright.com/en-pg/knowledge/publications/ad12aba2/can-ai-be-an-author-federal-court-asked-to-decide-in-new-copyright-case>. (last visited on July 31, 2025).

<sup>44</sup> Available at: <https://ised-isde.canada.ca/site/strategic-policy-sector/en/marketplace-framework-policy/consultation-copyright-age-generative-artificial-intelligence-what-we-heard-report#s5>. (last visited on July 31, 2025).

<sup>45</sup> [2012] FCAFC 16.

<sup>46</sup> Available at: <https://hansard.parliament.uk/Lords/1987-11-12/debates/9b959a7b-172a-4e28-8676-1a6747b0f370/CopyrightDesignsAndPatentsBillHL>. (last visited on June 30, 2025).

*legislation anywhere in the world which attempts to deal specifically with the advent of artificial intelligence.”*

This approach, followed by the UK, distinguishes between author and creator. The creator is the AI and an author is a person who has not made any creative input. However, this approach creates ambiguity in the case of AI-assisted works, and there is no clarity under the act. The possibility is that if a work is created with AI assistance and involves human creativity, it can be protected like any other work.<sup>47</sup> The UK Intellectual Property Office conducted a consultation on AI and Intellectual Property and in the consultation outcome, it is reported that:<sup>48</sup>

- The technology industry advocated for copyright protection of AI-generated works and maintained that such works are within the ambit of the definition of computer-generated works.
- The creative industry maintains that the present regime to protect AI-generated works is not ideal. There is no clarity regarding the originality requirement in such works.
- Academia argued for a new approach premised on the creative output.
- Creators supported the view that copyright should prioritize human creativity and not machine creativity.

The government agreed that there is no clarity in the existing approach of protection to computer-generated works and it should be reconsidered. The existing law offers adequate protection to the works created by AI with human intervention or where AI was used as a tool as such works express human creativity. However, in the case of a work created without human intervention, there is no clarity regarding originality standards and the rationale for protecting such work and hence there may be limited protection or no protection to such works under copyright law.<sup>49</sup>

It is pertinent to note that the European Parliament passed a resolution on February 16, 2017, wherein it recalled that there is a possibility that AI could surpass human intellect in a long run. Further, it noted that “there are no legal provisions that specifically apply to robotics and called

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<sup>47</sup> “Artificial Intelligence call for views: Copyright and Related Rights” *available at*: <https://www.gov.uk/government/consultations/artificial-intelligence-and-intellectual-property-call-for-views/artificial-intelligence-call-for-views-copyright-and-related-rights#protecting-works-generated-by-ai>. (last visited on June 30, 2025).

<sup>48</sup> *Supra* note 6.

<sup>49</sup> *Ibid.*

upon the commission to support a neutral approach to intellectual property applicable to the various sectors in which robotics could be employed.” It also pointed to creating a specific legal status for robots.<sup>50</sup> In case the legal status is conferred on AI, it will resolve issues about fixing civil and criminal liabilities as it will have the capacity to sue and be sued. It will also possess the capacity to enter into a contract with other persons.

It is worth mentioning that China follows an entirely different approach. As per Article 11 of the Copyright Law of People’s Republic of China, “the copyright in a work shall belong to its author and the author of a work is the citizen who creates the work. However, where a work is created under the auspices of, representing the will, and under the responsibility of a legal person or unincorporated organization, such legal person or unincorporated organization shall be deemed the author of the work.” The copyright law of China recognizes legal entities as authors, unlike in other countries, where authorship vests only in human beings. Further, under article 22, no time limit has been set for the rights of authorship, alteration, and integrity. Article 23 clarifies that for a work of a legal person, the term for the right of publication shall be fifty years and for other rights, it shall be fifty years after the publication of such work.

In *Feilin v. Baidu*,<sup>51</sup> a law firm, Feilin, posted a report that was written with the assistance of data software and an internet user, without the permission of the law firm, published the report after omitting certain parts on the platform operated by Baidu. Feilin alleged copyright infringement and filed a lawsuit. Baidu argued that the report was generated by the software and was therefore not original. It was also argued that the Copyright Law in China protects the creations of natural persons, not those generated by AI. During the trial, the Beijing Internet Court produced two reports using the software, in which the representative entered certain details, then clicked search and visualization to generate each report. The court observed that the Feilin report, as well as the two reports, had sufficient originality to qualify as work under the act. However, the two reports did not constitute copyrighted works, as they were not created by a natural person. In relation to Feilin report, the court observed that the said report satisfies both originality and human-created requirements. On appeal, the Beijing Intellectual Property Court affirmed this decision.<sup>52</sup> Basically, the court held that the works created with the help of AI may qualify for copyright protection; however, a purely AI-generated work without human

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<sup>50</sup> *Supra* note 1.

<sup>51</sup> (2018) Jing 0491 MinChu No. 239. Cited in Ju Yoen Lee, “Artificial Intelligence Cases in China: Feilin v. Baidu and Tencent Shenzhen v. Shanghai Yingxin” 1 *China & WTO Rev.* 211, 212-214 (2021).

<sup>52</sup> (2019) Jing 73 MinZhong No. 2030. Cited in Ju Yoen Lee, *ibid.*

intellectual intervention cannot be protected, and entering certain search details would not constitute human intervention.<sup>53</sup>

In *Tencent Shenzhen v. Shanghai Yingxin*,<sup>54</sup> Tencent published a financial report using the computer software ‘Dreamwriter’. Shanghai Yingxin copied the article and posted it on the website. Tencent filed a lawsuit against Shanghai Yingxin for copyright infringement. The Shenzhen Nanshan District People’s Court decided in favour of Tencent and observed that the article was a work of a legal entity. The court held that the expression in the article fulfills the criteria of originality, and the expression in the article was determined and arranged by the employees of Tencent.

It is clear from the discussion above that copyright laws of most countries for now vest authorship in a human being and not a juristic entity or AI. In the UK, for work created by AI, authorship is conferred on the person by whom the arrangements necessary for the creation of the work are undertaken, however, this has raised concerns regarding originality standards and the government is reconsidering this provision. Therefore, the two possibilities of conferring sole authorship on AI or joint authorship upon AI and the creator of AI are not feasible as under the copyright law of most countries. However, China has an altogether different approach and the law confers authorship on legal entities also. The courts in China were confronted with issues involving works created by the AI with human intervention and protection has been conferred on such works. However, the judgments of the courts in China have focused on an intellectual contribution by an individual or natural person, so it is doubtful that copyright protection can be conferred on works created by AI without human intervention.<sup>55</sup>

Another possibility that has been deliberated upon is that works created by AI should fall into the public domain and not be protected at all. The primary argument against protecting such works under copyright law is based on the utilitarian approach. Pierre N Leval J. wrote: <sup>56</sup>

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<sup>53</sup> Amita Haylock, “Chinese Courts Rules on Whether Copyright Subsists in AI-generated Works” in Mayer Brown, *IP & TMT Quarterly Review* 3-4 (2020). Available at: [https://www.mayerbrown.com/-/media/files/perspectives-events/publications/2020/03/asia\\_ip\\_tmt\\_quarterly\\_review\\_2020q1.pdf](https://www.mayerbrown.com/-/media/files/perspectives-events/publications/2020/03/asia_ip_tmt_quarterly_review_2020q1.pdf). (last visited on June 30, 2025).

<sup>54</sup> (2019) Yue 0305 MinChu No. 14010. Cited in Ju Yoen Lee, “Artificial Intelligence Cases in China: Feilin v. Baidu and Tencent Shenzhen v. Shanghai Yingxin” 1 *China & WTO Rev.* 211, 215 (2021).

<sup>55</sup> Zhou Bo, “Artificial Intelligence and Copyright Protection- Judicial Practice in Chinese Courts” available at: [https://www.wipo.int/export/sites/www/about-ip/en/artificial\\_intelligence/conversation\\_ip\\_ai/pdf/ms\\_china\\_1\\_en.pdf](https://www.wipo.int/export/sites/www/about-ip/en/artificial_intelligence/conversation_ip_ai/pdf/ms_china_1_en.pdf). (last visited on June 30, 2025).

<sup>56</sup> Pierre N Leval, “Toward a Fair Use Standard” 103 *Harv. L. Rev.* 1105, 1109 (1990).

*“The copyright law embodies a recognition that creative intellectual activity is vital to the well-being of society. It is pragmatic measure by which society confers monopoly-exploitation benefits for a limited duration on authors and artists..., in order to obtain for itself the intellectual and practical enrichment that results from creative endeavors.”*

In *The Chancellor, Masters and Scholars of the University of Oxford v. Rameshwari Photocopy Services*,<sup>57</sup> it was observed that:<sup>58</sup>

*“Copyright is designed... to stimulate activity and progress in the arts for the intellectual enrichment of the public. Copyright is intended to increase and not to impede the harvest of knowledge. It is intended to motivate the creative activity of authors and inventors in order to benefit the public.”*

It is clear from these observations that the principal objective of copyright law is to encourage and reward creativity. It has been argued that machines do not need incentives or encouragement to create, unlike humans.<sup>59</sup> Also, human creators may not be able to compete with AI as AI may be able to create content at scale and at a negligible cost.<sup>60</sup> It is also asserted that putting machine creativity and human creativity on the same pedestal might ultimately kill human creativity.<sup>61</sup> However, many have argued that if such works are not protected it will be a setback for the AI industry. The Standing Committee in its report noted that “...rendering protection to works generated by AI either autonomously or with the assistance and inputs of a human being would incentivize and encourage the creator of the AI which in turn would further encourage creativity and development of more AI solutions.”<sup>62</sup> Kalin Hristov stated, “There is a considerable disadvantage to the release of independently generated AI creative works into the public domain. Without an established period of protection, there is no tangible incentive for developers of AI machines to continue creating, using and improving their capabilities...could ultimately limit innovation by dissuading developers and companies from

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<sup>57</sup> 2016 SCC OnLine Del 5128.

<sup>58</sup> *Id.*, para. 80.

<sup>59</sup> *Supra* note 6.

<sup>60</sup> *Ibid.*

<sup>61</sup> V.K Ahuja, “Artificial Intelligence and Copyright: Issues and Challenges” *ILI Law Review* 270,275 (2020).

<sup>62</sup> *Supra* note 5.

investing in AI research, resulting not only in the decline of AI but also in the decline of innovation across a number of related sectors.”<sup>63</sup>

Also, it has been argued by many that the works created by AI should be protected by a *sui generis* law or under copyright law, which can be modeled on those available for broadcasting organizations. In such a scenario, such protection will act as an incentive to those creating and using AI technology.<sup>64</sup>

## Originality

Section 13 (1) of the Copyright Act, 1957 provides that copyright shall subsist in the ‘original’ works. The term ‘original’ is not defined under the statute and is usually understood as originating from the author. The work is considered original if it owes its origin to the author and is not copied from any other work. Even if the work is identical to a prior work, then also it may be considered to be original, provided it is not copied from such prior work and it is a product of the independent efforts of the author. In *Eastern Book Company v. D.B. Modak*,<sup>65</sup> the Supreme Court observed that:<sup>66</sup>

*“The Copyright Act is not concerned with the original idea but with the expression of thought. Copyrighted material is that what is created by the author by his own skill, Labour and investment of capital... The copyright work which comes into being should be original in the sense that by virtue of selection, coordination or arrangement of pre-existing data contained in the work, a work somewhat different in character is produced by the author....Although for establishing a copyright, the creativity standard applies is not that something must be novel or non-obvious, but some amount of creativity in the work to claim a copyright is required. It does require a minimal degree of creativity.”*

In India, through judicial decisions, it is clear that the amount of originality required is extremely small. It merely requires that the work should be an independent creation and should not be copied from other works. In the context of originality, works created by AI or works created with the assistance of AI will be protected under copyright law only if the works meet

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<sup>63</sup> Kalin Hristov, “Artificial Intelligence and the Copyright Dilemma” 57(3) *IDEA: The IP Law Review* 431, 438 (2017).

<sup>64</sup> *Supra* note 6.

<sup>65</sup> (2008) 1 SCC 1.

<sup>66</sup> *Id.* at 112-113.

the standard of originality. Also, the requirement of originality may be satisfied through programming on which the AI creates the work.<sup>67</sup>

However, on the other hand, it has been argued that the standard of originality assesses the action of the author in terms of exercising skill, judgment, or Labour in creating the work and not the creativity in the work itself. In this regard, Boyden stated, "...the threshold for creativity has purposefully been kept at a minimal level...for purposes of determining copyrightability, or assessing infringement, or deciding between competing claims to have authored a work, that inquiry has typically been carried out not by assessing the creativity of the material itself, but rather by considering the actions of the putative author- did he or she makes nonobvious choices, and exercise judgment in constructing the work? If so, the court merely assumes that those choices and judgment calls-the author's process-led to something creative in the work."

## Conclusion

Undoubtedly, AI has revolutionized many areas of human life and has gained importance worldwide as its utility has evolved over time. The creative aspect of AI has gained more vigor, and if the creative output of AI is not protected under copyright law or through a *sui generis* law, the resultant impact on the AI industry will be far-reaching. It is time to recognize that even intelligent machines can be a source of creativity and can create works that are subject matter of copyright. At the same time, it is essential to adopt a balanced approach, as human creators may struggle to compete with AI, which could potentially undermine human creativity.

Currently, it is evident that the Indian Copyright Act, 1957, does not afford protection to works created by AI without human intervention, as the law does not recognize non-human authors. The need to amend the copyright law to confer authorship in such works as suggested in the Parliamentary Standing Committee Report is the need of the hour, so that these works do not fall into the public domain. In this regard, it is suggested that works created by AI may be protected under specific provisions of copyright law. The rights to such works can be conferred for a specific time from the date of publication; this period can be for a lesser duration. However, the issue of authorship requires further deliberation about whether it should be conferred on the AI itself, the inventor/programmer, or the user of such AI. The authorship can

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<sup>67</sup> Lucy Rana and Meril Mathew Joy, "Artificial Intelligence and Copyright- The Authorship" available at: <https://www.mondaq.com/india/copyright/876800/artificial-intelligence-and-copyright-the-authorship>. (last visited on June 30, 2025).

be conferred on the AI only if it is given the status of a legal person, thereby resolving other issues related to conferring rights and assigning liability. On the other hand, it has been argued that since end-users make the smallest contribution, authorship should not be conferred on them.<sup>68</sup> Looking at the justification of incentivizing the programmers/developers/creators of AI by conferring copyright protection on the works created by AI, the logical conclusion is to confer authorship on such programmers'/developers/ creators or the companies funding such research (through employment contracts), as done in China. However, it is essential to delve further into the AI industry to draw any concrete conclusions regarding authorship, specifically examining the rights of both the developer and the user of AI.

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<sup>68</sup> *Supra* note 62 at 444-445.

# Patent law and pharmaceuticals with reference to Generic Medicine in India: A Critical Study

*Ms. Raushni Ranjan Pradhan<sup>1</sup>*

## ABSTRACT

*India urgently requires affordable yet effective health care and pharmaceuticals. Generic pharmaceuticals are crucial for the country and will become increasingly important as the cost of life-saving drugs rises annually. It is not that the governments have done nothing in terms of generic medications, but what little has been accomplished leaves much to be desired to have a significant impact. There has been no comparable academic research on the value and cost of these low-priced drugs. In order to encourage generic medication availability in India, the government ought to grant licenses to interested companies.*

*Additionally, the amended Patents Act, 1970 allows for compulsory licensing after three years of patent expiration for medicines in the public interest and welfare. Even though the government's efforts have made India one of the world's major hubs for the production and export of generic medications, the country's citizens have not yet benefited from this fact.*

*India has emerged one of the global suppliers of generic medicines with low cost recognized as the "pharmacy of the developing world". The paper concludes that India's patent system represents a unique model that seeks to protect innovation while safeguarding public health and ensuring the availability of generic medicines to its population and other developing nations.*

**Keywords:** *Generic, medicine, Pharmaceuticals, Drugs, Compulsory licensing.*

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## Introduction

Patents are awarded to safeguard the “*inventions*.” “A patent is an exclusive right awarded by the government to the applicant for an innovation.” The Law aims to promote scientific research, innovative technology, and industrial advancement. Through the grant of exclusive rights to possess, use, or sell a patented method or product for a limited time encourages new commercially useful ideas. A patent can be applied for by either the inventor or their assignee.

It is our right to Protect the invention by prohibiting unauthorized use, sale, or import. A patent is a negative right that gives the owner the ability to prevent third parties from using their innovation without their consent. It does not grant the right to create, use, or sell the invention. The intersection of patent law and pharmaceuticals has significant implications for public health access to medicines and the pharmaceutical industry.

In India the balance between protecting rights of patent holder and ensuring access to affordable medicines has been a subject of debate. This paper examines the legal framework governing patents in the pharmaceutical sector and the impact of Indian Patent Act and the challenges posed by generic medicines in the country. Health care is one of the most important factors that is related to the wellbeing of the people.

In India right to health is considered as a Fundamental Right under Article 21 of the Constitution of India<sup>2</sup>. Every citizen is having a right to have a good health and access to medicines. It is not feasible for everyone in a nation like India, where a large portion of the population lives in poverty to buy branded medications. To have a same compound medicine and which have same effect as brand medicine people purchase generic medicine.

## Research Objectives

- To analyse the concept of generic medicine.
- To examine the impact of the *Patents (Amendment) Act, 2005* on the availability and affordability of generic medicines.
- To examine *Section 3(d)* and compulsory licensing in balancing intellectual property rights and public health.

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<sup>2</sup> INDIAN CONST. art.21.

## Research Questions

- How does the Indian patent regulate pharmaceutical patents and what are its legal provisions?
- What has been the impact of the “Patents (Amendment) Act, 2005” on the pharmaceutical industry in concerning to generic medicines?
- How have Section 3(d) and compulsory licensing influenced access to essential medicines in India?

## Research Methodology

The research is purely doctrinal in nature. The researcher has used both the sources for research primary and secondary sources. “Primary source” includes statutes like The Indian “Patents Act, 1970, and “secondary source” includes books, journals, articles, and conventions.

## What is Generic Medicine?

If anything is generic it cannot be patent or trademark, “A generic drug is a medication designed to be identical to an already marketed brand-name drug in terms of dose form, safety, strength, mode of administration, quality, performance characteristics, and intended usage. These commonalities contribute to bioequivalence, which means that a generic medicine functions in the same way and offers the same therapeutic benefit as the brand-name medicine”.

Generic medicines and brand-name medicines contain the same active ingredient<sup>3</sup>, but other features, such as colors and flavorings, that have no bearing on the generic medicine's performance, safety, or efficacy may differ. When a drug's patent expires, it becomes a 'generic' and can be produced by other manufacturers. In India, chemists sell generic medicines directly to patients on demand. If a doctor prescribes 'Paracetamol tablets' with a specific brand name, the patient can purchase that brand name or ask the chemist for a generic version with the same effectiveness, composition, and other details at a lower cost. The two factors come in mind while talking about generic medicine on the one hand the branded medicine is manufactured under strict quality control and measure temperature on the other hand the generic medicine is manufactured under desired conditions<sup>4</sup>.

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<sup>3</sup> George Thomas and S. Srinivasan, “What’s in a generic name?” The Hindu, May 12, 2017.

<sup>4</sup> *ibid*

## Indian Pharmaceutical Industry

India's pharmaceutical sector has expanded since independence to become a significant supplier of medications and medical supplies. The Indian pharmaceutical business is a global leader in growing enterprises that offer diverse capabilities in technology and medicine manufacture. The Patents Act of 1970 is the primary legal framework for India's patent system. Section 3(d) of the act prevents “Evergreening Patent”. The Drugs and Cosmetics Act of 1940<sup>5</sup> regulates drug patenting along with bogus medicine manufacturing. “Section 3(h) of the act specifies patent and proprietary medication”. The definition has two elements. The first section discusses patent or proprietary drugs related to Ayurvedic, Siddha, and Unani Tibb systems of medicine. The second part discuss other medical systems, a drug that is not included in the current edition of the Indian Pharmacopoeia or any other pharmacopoeia authorized by the Central Government after consultation with the Drugs Technical Advisory Board under section 5 may be prescribed for internal or external administration to humans or animals. Earlier only process patent was given no product patent was allowed after 2005 amendment both product and process patent was allowed. “India, a member of the World Trade Organization (WTO), signed the TRIPs (Trade Related Aspects of Intellectual Property Rights) Agreement in 1995. TRIPs established minimal standards for intellectual property legislation that all member countries must adhere to.” As a signatory to the “TRIPs agreement,” India was required to change its patent laws to comply with the pact’s stipulations. The Indian Pharmaceutical sector has shifted its attention from generic products to innovation-based R&D as a result of the Indian Patent Act’s provisions for product patents. This has effectively led to large investments in innovation research and patents.

### Patents Amendment Act 2005<sup>6</sup>

“The Patents (Amendment) Act, 2005 established pharmaceutical product patents in India for the first time. The Act aims to balance the interests of several stakeholders, including domestic generic drug producers, global pharmaceutical companies, and civil society groups concerned with access to medicine.” This amendment of 2005 was complete compliance with TRIPS. The major changes in this amendment were done in section 5 of Patents Act, 1970<sup>7</sup>. According to Section 5 of the Patents Act, 1970<sup>8</sup>, patents for food, medicine, medicines, or chemical substances can only cover manufacturing methods or procedures. “The denial of product patent

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<sup>5</sup> The Drugs and Cosmetics Act, No. 23 of 1940, (India).

<sup>6</sup> Patents Amendment Act, 2005.

<sup>7</sup> Patents Act, No. 39 of 1970, s. 5 (India).

<sup>8</sup> *Ibid.*

protection for pharmaceutical inventions can be traced back to the Ayyangar Committee Report, which served as the foundation for the Patents Act of 1970.” The Committee discovered that the system was being used by multinational firms to obtain monopolistic control over important industries like food, chemicals, and pharmaceuticals. This amendment was beneficiary to patent holder which gives 20 years exclusive rights to holder of patent. The two main essential thing was added pre and post grant opposition. It allowed pre grant opposition by any person to which patent is granted. And post grant opposition by any interested party within one year of grant of patent. Concerns regarding growing drug costs and restricted access to necessary treatments have been brought up by the introduction of pharmaceutical product patents. The Act redefined the term 'new invention' and limited patentability to section 3(d).

“Section 3(d)<sup>9</sup> states that patents cannot be granted for the following reasons:

- discovering a known substance without improving its efficacy,
- discovering a new property or use for a known substance,
- or simply using a known process, machine,
- or apparatus without producing a new product or employing at least one new reactant.”

The provision aims to prevent pharmaceutical corporations from getting patents on older drugs. India implemented a product patent scheme for 'new medications that were invented' in accordance with the TRIPS agreement, but also included a safeguard to prevent ever-greening by refusing patents for new forms or uses of existing drugs. The Novartis case was files and section 3(d)<sup>10</sup> were added in the Patents Act, 1970.

*Novartis A.G v. Union of India*<sup>11</sup>

In 1992, Novartis applied for a patent on "imatinib" and its pharmaceutically approved salt versions. The USPTO granted this patent. In 2001, Novartis got FDA permission for a salt version of imatinib called "imatinib mesylate". Unlike the original "free base" chemical imatinib, the salt form (mesylate) is soluble in the human body. In 1997, Novartis AG filed a patent application for Glivec, a b-crystalline form of their 1993 patent for Imatinib Mesylate, a critical anti-leukaemia medicine, with the Chennai Patent Office. According to the petition, Novartis created the free base imatinib's beta crystalline salt form. Glivec was granted

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<sup>9</sup> Section 3(d) The Patents Act, 1970.

<sup>10</sup> *Ibid.*

<sup>11</sup> AIR 2013 6SCC 1.

exclusive marketing rights for the Indian market in 2003. In the meantime, Novartis obtained orders to stop certain generic producers from making copies of Glivec.

*“The court ruled that 'imatinibmesylate' is not patentable due to a failure to meet section 3(d) requirements. Novartis contested the constitutionality of section 3(d) of the Indian Patent Act. The corporation wanted to patent 'imatinibmesylate'. The Novartis case demonstrates that denying access to life-saving pharmaceuticals due to monopoly pricing is no longer acceptable to the global population, particularly millions of impoverished individuals. The Novartis case demonstrates that governments in developing countries with economic and political strength, like as India, are willing to challenge large pharmaceutical companies.”*

The Supreme Court ruled that Gleevec lacked innovation because IM was already known in the public domain through publications such as Cancer Research. A skilled individual may have discovered the IM in its crystalline form with the same properties claimed for Gleevec, hence there was no innovative step. The case focusses on whether Gleevec's enhancements warranted a product patent. The response was unambiguous. Although Novartis was unable to obtain a product patent, they were granted a process patent to cover the manufacturing technique. Gleevec's 'evergreening' process was effectively stopped.

*Symed Labs Ltd v. Glenmark Pharmaceuticals Ltd & Anr*<sup>12</sup> Justice GP Mittal was handling an interim injunction application brought by the plaintiff against the defendant. The complainant claims to have invented a patentable procedure for manufacturing Linezolid using new intermediates. The defendant may have manufactured or obtained Linezolid APA on the market. The defendants were found to have not revealed their manufacturing procedure for linezolid APA. To determine if a process patent is infringed, just compare the plaintiff's and defendant's processes.

## **Generic Medicines and Patents Act, 1970<sup>13</sup>**

In India, the term "patent" refers to any invention awarded under the Act. Granting patents is expected to contribute to the country's industrialization, modernization, and technological growth, while also benefiting humanity and the universe. Until 2004, food and medication patents were only issued for the process of creating a product, not the product itself. Additionally, only five to seven years were allotted for method patents. This restriction was

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<sup>12</sup> AIR 2015 SCC Del 6745

<sup>13</sup> “Generic Drugs-why is it important?”, available at, [greencleanguide.com/generic-drugs/](http://greencleanguide.com/generic-drugs/)

removed by the TRIPs Agreement which also increased the scope of patentability. Patents are now accessible for novel inventions in all disciplines of technology, including items and processes, that require an inventive step and can be applied in industry. Patentability applies to both products and processes, with product patents lasting 20 years and process patents lasting 20 years. This is particularly relevant in the chemical area, including medications and pharmaceuticals. Pharmaceutical corporations are taking use of this opportunity to profit themselves unfairly. After patent exclusivity expires, medicine costs can drop by up to 80% due to generic competition. This is known as the patent cliff. Pharmaceutical companies seek to extend their exclusivity by filing secondary patents for derivatives and variants of the Active Pharmaceutical Ingredient (API), including physical variants, new formulations, dosage regimens, and methods of administration, in response to a potential drop in profits. Secondary patents can extend exclusivity beyond 20 years by being granted before the initial patent expires, a procedure known as "ever greening."

The Patents (Amendment) Act, 2005 which came into force on January 1, 2005 replaced the Patents (Amendment) Ordinance which was introduced by the Indian government in 2004. "The 2005 amendment primarily impacted the drug industry with Section 3 (d), which prohibits the discovery of a new form of a known substance that does not improve its efficacy, the discovery of a new property or use for a known substance, or the use of a known process, machine, or apparatus unless it results in a new product or employment". Patenting a novel form of a recognized product or chemical requires significant enhancement to its effectiveness. In March 2006, the pharmaceutical company Roche received the first product patent in India for their medicine 'Pegasys' under the 2005 law. The product patent period was extended from five to twenty years by the Patent Amendment Act of 2005.

Although the 2005 amendment changes originally discouraged the generic market and manufacturers, development of generic medications has increased in recent years. A company can only hold a patent for a product for 20 years. However, they can extend the patent to include usage, dosage, and combination forms. After that, the company loses its patent rights and generic medicine manufacturers can take over. A "novel product or technique with an innovative step that can be used in industry" is what the Patents Act of 1970 defines as a "invention". To be eligible for patent protection, a product must have a significant technological advancement that is not obvious to an expert in the field. To be considered a medication, a variation of a known chemical must show improved therapeutic efficacy. This

law limits patents for novel uses and qualities of existing chemicals, and promotes generic medications.

In September 2016, the Medical Council of India mandated the prominent mention of generic names alongside brand names in prescriptions, following the government's efforts to establish a legal framework to promote generic medicines. State Drug Controllers are advised to include generic names in bold on all packaged pharmaceuticals, whether imported or made domestically. The government is encouraging physicians to prescribe generic drugs as a mandatory practice. In his speech on April 17, 2017, the Prime Minister promised to create a legal framework requiring doctors to prescribe generic drugs. The Himachal Pradesh government intends to require doctors in hospitals to prescribe drugs only by their generic names. *The Pradhan Mantri Bhartiya Janaushadhi Pariyojna (PMBJP)* initiated an effort in 2008 to provide inexpensive pharmaceuticals through specialized stores. The objective was to raise awareness about generic drugs and offer regularly used healthcare goods. Just 157 outlets were open as of March 31, 2012, and many of them finally stopped working. There were just 99 stores by the end of 2014- 15.

In April 2017, the Health Ministry of India modified the Drugs and Cosmetics Rules, requiring all drugs to undergo bioequivalence testing. To ensure the quality of generic drugs, it is necessary to establish a legal framework for testing and ensuring their standards. Additionally, a robust national database should be established to provide patients with information on the qualities of generic drugs and their test results. “The Ministry of Health and Family Welfare should enhance its nodal agency, the Central Drugs Standard Control Organization, and establish more testing facilities throughout India”. The government has not implemented any awareness programs, seminars, or commercials to tell people about low-cost generic pharmaceuticals, despite their benefits for the poor. Even the 'Jan Aushadhi Schemes' have not been fully executed. To combat the illicit doctor-pharma nexus, the State and Central Governments must promote affordable generic medications and assure their availability in medical stores and government hospitals. To increase the use and availability of generic drugs in India, a collaborative effort between the government, pharmaceutical companies, physicians, chemists, and society is necessary. Effective legislation and strict quality assurance, bioequivalence tests, and effectiveness standards can help overcome obstacles.

*“In Consumer Education and Research Centre v. Union of India* According to the Apex Court, the right to healthcare and medical facilities is a fundamental right under Article 21 of the

Indian Constitution, as it is an essential component of the right to life. Granting compulsory licenses under the Patents Act, 1970 promotes low-cost generic drug alternatives for expensive branded pharmaceuticals, which is a desirable policy. Bayer, a pharmaceutical corporation, provided the patented Nexavar medicine for kidney and liver cancer, but it was prohibitively expensive for the average Indian patient. The government granted Natco Pharma Limited a compulsory licensee to manufacture a low-cost generic replacement for this medicine, citing public interest. Despite Bayer Company's objections, the Controller of Patents granted Natco Pharma a license, which was later upheld by the Intellectual Property Appellate Board.”

*Bayer Corporation v. Union of India*<sup>14</sup>, under Article 226<sup>15</sup> of the Constitution of India petition was filled. “The Bombay High Court ruled that Parliament's duty for compulsory licensing was to ensure access to medicine for all patients, rather than prioritizing patent holders' rights. Compulsory licensing ensures that patented products are available to society in sufficient quantities and at a reasonable price. These are problems of public concern. When awarding a compulsory license for medicines/drugs, the public interest should always be the first consideration.”

*Vijay Mehta v. State of Rajasthan and others*<sup>16</sup>, The Rajasthan High Court emphasised the need of prescribing drugs with generic names in accordance with the Medical Council of India's 2002 regulations. The Court found that the State of Rajasthan has issued a directive, but it is being disregarded by getting patient declarations that they do not want prescriptions for generic drugs. Obtaining such declarations violates MCI regulations and is unethical. Doctors who do so may face disciplinary action.

*South Delhi Distributors v. Government of NCT Delhi and another*<sup>17</sup> While providing quality medicine at affordable prices is commendable, providing only generic drugs at hospital complexes may undermine the purpose of the 'Jan Aushadhi Scheme'. As a result, patients seeking treatment at public hospitals may not benefit.

## **Right to Health**

India has ratified both the International Covenant on Economic, Social, and Cultural Rights and the International Covenant on Civil and Political Rights. The supreme court decided that

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<sup>14</sup> AIR 2014 52 PTC291 (Bom).

<sup>15</sup> INDIA CONST. art. 226.

<sup>16</sup> AIR 2009 LPA Nos. 328.

<sup>17</sup> AIR 2009 5 I.L.R 408 (Delhi).

international law must be followed while interpreting article 21 of the Indian Constitution, which deals with human rights. “The Supreme Court used Article 25(2) of the Universal Declaration of Human Rights and Article 7(b) of the International Covenant on Economic, Social, and Cultural Rights to affirm a worker's right to health.”

The Indian Constitution guarantees the right to physical. and mental health under Part IV. Article 21<sup>18</sup> of the Constitution protects every citizen's life and personal freedoms. The Supreme Court ruled that the right to live with human dignity, as contained in Article 21, derives from state policy directives and thus includes health protection.

“*Sheela Barse v. Union of India*, ”<sup>19</sup> Petitions have been made to offer special treatment for children in jail. The Supreme Court expressed concern that young children were detained in jail rather than receiving necessary care, medical treatment, and skill training to become self-sufficient.

## **Conclusion**

India has become a key producer of generic pharmaceuticals, contributing to the country's healthcare transformation. To ensure universal access to quality healthcare without financial barriers, our country has prioritized the availability of generic medicines while maintaining a balance between consumer health and pharmaceutical company profitability. Generic medications are generally less expensive than brand-name drugs. Global pharmaceutical companies pose a significant danger to the affordability of medications. Companies and governments have lobbied India to strengthen patent protection, despite the fact that the Indian Patents Act, 1970, which includes compulsory licensing and prohibits ever greening, is legitimate under the TRIPs agreement. Considering health as a fundamental right, the country has fought changes to intellectual property laws that could make medications pricey. In *Novartis*, the Apex Court emphasised the stringent application of the increased therapeutic effectiveness test. The test of 'efficacy' in the context of section 3(d) was ruled to be varied depending on the desired or intended consequence of the product under consideration. The efficacy test for a product is determined by its function, utility, or purpose. To determine the efficacy of a treatment that promises to cure a condition, only "therapeutic efficacy" can be considered. Regarding the origins of section 3(d) and, more importantly the conditions under which it was changed to become even more restrictive, we are certain that the “therapeutic

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<sup>18</sup> INDIA CONST. art. 21.

<sup>19</sup> AIR 1983 2 SCC 96.

efficacy” of a medication must be judged strictly and narrowly. To raise awareness of the value of low-cost generic medicines, the government should conduct awareness programs, seminars, and group discussions at the district, city, and village levels. This should involve not only the general population but also physicians and chemists. The ‘Jan Aushadhi Scheme’ would be substantially enhanced by expanding the number of ‘Jan Aushadhi Kendras’ in every state, district, and city.

## Suggestion

- The government must provide treatment subsidies for those in need. The *right to health, as a fundamental right*, must be considered to include the ability to obtain generic medicines. Medicines with generic or similar forms of pharmaceuticals should not be patented.
- Voluntary licenses must follow rules that prioritize the health and access to affordable medicine for indigenous communities. Recognition of the Right to Generic Forms of Medicine in India will be implemented in accordance with the orders issued by the Government of India to doctors to prescribe only generic medicines, with the exception of life-saving treatments.
- Pharmacists, regardless of status, must maintain adequate stock of generic medications to ensure access to them. All government hospitals and affiliated pharmacy stores will exclusively sell generic medications.
- The term "compulsory licensing" will be used extensively as needed. Compulsion licensing provisions must be flexibly interpreted in light of the public interest concerned. The existing patent system's primary goal is to generate new information for the benefit of humanity, which is becoming increasingly diluted.

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# **Erosion of the Rules-Based International Order in the 21st Century: A Critical Analysis of Compliance, Enforcement and Power Politics in International Law**

**-Mr. Parth Malhotra<sup>1</sup>**

## **ABSTRACT**

*The present international law system dates back to the period after the World War II which left countries in ruins and exposed the catastrophic consequences of state sovereignty and the absence of an effective system of global governance. The unprecedented degree of destruction that included the bombing of Hiroshima and Nagasaki, rampant atrocities and systemic violations of human rights has further created an imperative to have a structured and norms based international system that is aimed at maintaining peace, accountability and preventing the occurrence of similar conflicts at international levels.*

*In order to answer these challenges, the countries around the world initiated a transformative effort to set up a normative order which is based on mutual cooperation and collective security. Thus, by the adoption, of a charter they formed United Nations in 1945. The establishment of institutional mechanisms to establish and interpret international law was one of the key aspects of this emerging legal structure. This article explores the legal intricacies of the modern legal system in order to achieve peace and collaboration. It further focuses on increasing gap between legal rules and real state behaviour. The paper also questions the enforcement of the lex and the role of politics through an analysis of how other bodies such as the United Nations and the International Court of Justice work. Overall, it tends to conclude whether this represents a decline of the existing legal system or its alteration, with the need to increase its effectiveness and legitimacy.*

**Keywords:** International Law, United Nations (UN), Peace, Human Rights

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## Introduction

The idea of a world order based on rules is a system which establish legal principles, treaties and institutions, which create a consistent and dependable global framework that regulate all the relations between various nations. In essence, this notion is an attempt to move out of a world of conflict and unilateral activity to one dominated by law, cooperation and mutual restraint.<sup>2</sup>

It is the idea that all the nations whether they are powerful or not and whether they are in high status or not are subject to the same norms of the law that makes this order be referred as rule-based. Although the process of interpreting these regulations is carried out by organizations such as the International Court of Justice (ICJ) and UN Security Council, which play a crucial role in ensuring security and peace at the international level.<sup>3</sup> The norms based international order is not limited to the traditional state relationships. As time went by, it began to encompass the issues such as international trade, humanitarian law and environmental protection. This was put in place after a great global conflict with the aim of providing a common platform where the nations could congregate in an effort to stop the war but also to create a system based on cooperation, communication and law. The United Nations tries to help resolve conflict peacefully, by means of negotiation, mediation and group decision-making, using its numerous approaches. It also undertakes peacekeeping missions in conflict-prone regions in an attempt to transcend the law only to ensure that peace prevails on the ground. Nonetheless, these initiatives are often affected by political realities, which sometimes hinders the effectiveness of their actions.<sup>4</sup>

The UN plays a crucial role in the establishment and development of international law in addition to fostering peace and security. It provides a structured platform on which the international community can discuss, develop new legal standards and accept them gradually. A significant part of international law today has evolved in processes related to the UN system, be it in areas such as human rights, environmental protection or international trade. This implies that it is a creator and enforcer of rules and another significant aspect of its operation is the progress of human rights. By making people central to international concern, the United Nations has helped change international law into one that only pursues the interests of nations to include the human dignity and liberties of individuals. This has been vital in expanding the

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<sup>2</sup> HLA Hart, "The Concept of Law" 214-220 (Oxford University Press, 2<sup>nd</sup> edn., 1994)

<sup>3</sup> Malcolm N. Shaw, "International Law" 52-70 (Cambridge University Press, 8<sup>th</sup> edn., 2017)

<sup>4</sup> Antonio Cassese, "International Law" 198-205 (Oxford University Press, 2<sup>nd</sup> edn., 2005)

use and relevance of international law in everyday life. Moreover, the UN serves as a global voice of both large and small nations to express their views and participate in discussions of international issues. This incorporation reinforces the idea that group participation is not an isolated mechanism that dictates international law but that it is imposed by powerful governments. It also portrays the unending struggle between inequality in power and equality in idea.

The practice of international law has evidently evolved during the past few years. There is an increasing consensus that strategic interests and political agendas play a role in the system that has been long believed to be driven by generally accepted principles. Consequently, an increasing understanding is that the international legal system is not as strong and reliable as it needs to be. There are still rules, although their compliance is often based more on expediency than commitment. International norms are usually followed by states when they are in their best national interests; on the other hand, when it does not serve their national interests, they are breached, redefined or selectively applied. Such a mismatch negatively affects the overall legitimacy of the system and creates suspicion.<sup>5</sup> The effectiveness of international law often lies on the willingness of governments to work together since it does not have a central authority that can ensure uniform obedience. The political divisions are so strong that collective action is difficult to take, and the legal system appears to be inadequate. Consequently, individuals have come to the view that international law is more convincing rather than binding.

Even though the principle of sovereign equality remains central, more influential powers are generally better placed to shape the course of events or avoid responsibility but the issue of uneven role of the states within the system is also seen. This inequality has contributed to a gradual erosion of trust, particularly by the emerging nations, and challenges justice.<sup>6</sup> The practical limitations of the international legal system in upholding order and guaranteeing adherence to established norms have been brought to light by recent global crises. Besides monopolizing the international discourse, other events such as the Israel-Gaza conflict and the Russia-Ukraine War have served as important litmus tests of the effectiveness of the international law in the contemporary era as well.

These conflicts show the current conflict between geopolitical reality and the norms of law. The basic tenets of international law, such as the protection of civilians, territorial integrity,

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<sup>5</sup> Vienna Convention on the Law of Treaties, 1969, Art. 53

<sup>6</sup> Hans J. Morgenthau, "Politics among Nations: The struggle for Power and Peace" (McGraw-Hill, 7<sup>th</sup> edn., 2006)

respect of sovereignty and the prohibition of the use of force are still widely accepted in theory. However, in practice they are often applied in an uneven manner and they appear to be applied selectively. Such a misalignment poses important questions about whether international law is truly a system that is in any way universal or whether it is affected by any changing political loyalties and geopolitical interests. The other important point of concern is that it is hard to have a coordinated international response that is highlighted by these conflicts. Transgressions and practices aimed at promoting accountability are often hard to address decisively by international bodies. Universality of legal standards may be hard to enact because of political variations between governments, which may weaken or stall action. Due to that fact, the procedure of enforcing or resolving infractions remains murky and challenging even in situations when they are generally accepted. Contradicting claims on legitimacy and legality may exist due to the fact that states may apply the law in a way that meets their national interest.<sup>7</sup>

But it is important to keep in mind that such changes do not necessarily imply the total breakdown of the international system of laws. Legal norms also provide a structure of evaluating state actions, shaping global discourse, and impacting foreign policy responses. Nevertheless, the stress these norms experience in moments of conflict demonstrates that the successful implementation of these norms requires political goodwill and cooperation. In essence, the modern-day conflicts are more like a mirror which portrays the merits and demerits of the international legal system.<sup>8</sup> Both emphasize the challenges in the application of the legal norms on a regular basis in a complex and evolving global environment and remind of their timeless importance. Nevertheless, International Law does not collapse but its usefulness is more and more based on political goodwill and not on legal binding.

## Research Questions

1. What has been the impact of selective compliance, geopolitical power politics and institutional shortcomings on the contemporary international legal order?
2. How do recent wars, such as the Russia–Ukraine War and the Israel–Gaza conflict, demonstrate a failure in the respect of international law?

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<sup>7</sup> Martti Koskeniemi, "From Apology to Utopia: The structure of international legal argument" 278-280 (Cambridge University Press, 2005)

<sup>8</sup> Anne-Marie Slaughter, "A New World Order" 12-25 (Princeton University Press, 4<sup>th</sup> edn., 2004)

3. What reforms are needed in the institutional and legal structure to enhance the credibility and effectiveness of the international legal order?

## Research Objectives

1. To examine the development and principles of the present-day international legal system in the contemporary times.
2. To analyse the problems of selective compliance and power politics in international law enforcement.
3. To assess the effectiveness of the United Nations, the International Court of Justice and other international institutions in achieving international peace and security.
4. To propose institutional and legal changes that can enhance the legitimacy, neutrality and effectiveness of the international legal order.

## Literature Review

1. *James Crawford*, the author argued that the international legal order rests on three principles: sovereignty, peaceful dispute settlement and state responsibility. He also pointed out that international law is still subject to state consent due to the decentralized enforcement mechanism of international law.<sup>9</sup>
2. *Thomas G. Weiss*, the author argued that the United Nations is an institution for global governance, and it is still very much necessary but often it is hampered by political divisions and the veto power of the permanent members of the Security Council.<sup>10</sup>
3. *Malcolm N. Shaw*, the author explained that international law is still a developing body of law, through treaties and customary law, and judicial decisions. He opined that the enforcement of the international law is one of the biggest institutional challenges.<sup>11</sup>

## Research Scope

This research is different from the traditional studies that mostly deal with the doctrinal or individual conflict studies of international law since it is a combination of both aspects whereby the principles of international law are applied in practice during major conflicts of the contemporary world. The study specifically compares the Russia- Ukraine War and the Israel-Gaza conflict and presents them as case studies to illustrate how the inconsistencies in how

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<sup>9</sup> James Crawford, "*Brownlie's Principles of international Law*" (Oxford University Press, 9<sup>th</sup> edn., 2019)

<sup>10</sup> Thomas G Weiss, "*The oxford Handbook on the United Nations*" (Oxford University Press, 2<sup>nd</sup> edn., 2018)

<sup>11</sup> Malcolm N Shaw, "*International Law*" (Cambridge University Press, 9<sup>th</sup> edn. 2021)

international law is applied affect its legitimacy and effectiveness. In comparing these conflicts, the research highlights how the interests of geopolitics can affect the implementation of international legal norms, and shows the disconnect between the law and politics.

## **Research Methodology**

The research is doctrinal and primarily focuses to study on the legitimacy and effectiveness of the contemporary international legal order. It is descriptive and analytical; and relies upon various primary and secondary sources. The research focuses on interpretation and critical evaluation of the international legal principles, institutional practices and state conduct in the contemporary armed conflicts.

## **Regulatory And Legal Framework in International Law**

To understand the limitations of the world legal order and its functioning, it is important to engage in the theoretical perspectives that shape the interpretation and application of the international legal order. Some of the most influential theories are legal positivism, natural law theory, and the conflicting paradigms of liberalism and realism, each having a distinct view of international law.

According to legal positivism, states' consent is the main foundation of international law. It talks about the express consent of states to be subject to laws, is a matter of power not of reasons to them. This approach is indicative of the traditional paradigm of international law recognizing treaties, customs and general principles as the sources of law founded on the state practice and acceptance. The advantage of this theory is the predictability and elucidation of the theory, but it has a fundamental weakness whereby in case the governments choose not to comply or are able to pull the plug on the agreement, the binding nature of the law becomes unclear. Legal positivism therefore lays more stress on the 'desire of the state' which is particularly crucial during war or political instability.<sup>12</sup>

Instead, natural law doctrine provides the international law with a moral aspect. The meaning of this is that since laws are more general ideals of justice, equity and human dignity, they are legitimate. This perspective has been very helpful in the evolution of human rights law and humanitarian principles whereby the focus is more than state approval of universal values. It is even more evident when the conflict between law and power is viewed through the prism of

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<sup>12</sup> Statute of the International Court of Justice, 1945, Art. 94

liberalism and realism. Realist theory is more skeptical and argues that international law is eventually formed through the state interests and power politics. By this school of thought, states will only obey the law when it is to their strategic interests, and powerful states are in a better position to manipulate or evade legal constraints. This has led to political considerations being given precedence over the law, which is often employed as a means instead of an enforceable legal limitation. This view adds to the description of the cases when international standards are not followed or implemented selectively, particularly in cases when large nations are considered.

Nevertheless, liberalism provides a more positive view of international law by emphasizing the role of institutions, collaboration, and interdependence. It contends that a rules-based system is promoted and incentives for compliance are created by international institutions, legal frameworks, and frequent contacts among states. It is considered that the organizations such as the United Nations, the International Court of Justice, the presence of which is believed to help in enhancing communication, resolving conflicts and enforcing laws, serve the best interest of strong states in the long run as they would tend to adhere to a set of rules. These theoretical positions when put together bring to the fore the complexity of international law. Natural law focuses on the role of moral values, legal positivism focuses on the role of state consent, realism focus on the role of power and liberalism focuses on the role of institutions and cooperations. These theories do not exist in isolation but they work together to affect the application of international law in real-life situations. In this way, one can consider the present international system of law a dynamic one in which political reality, ethical concerns, and legal norms are in a continuous clash.<sup>13</sup>

A complete conceptual understanding of international law requires engagement with theoretical perspectives as well as their relation to particular legal legislation. Such theories of international law as natural law, legal positivism, realism, and liberal institutionalism are not just theories, but they are reflected in the sources, author, and functioning of international law. On the contrary, some of the standards that are necessary and exceed official approval can be taken as an indication of the impact of natural law theory. The concept of *jus cogens*, that some norms such as that of the prohibition of torture, slavery or genocide are peremptory and cannot be compromised, is codified in Article 53 of the Vienna Convention on the Law of Treaties. This depicts the idea that some of the values are binding because they possess inherent moral

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<sup>13</sup> Vienna Convention on the Law of Treaties, 1969, Art. 53

authority and not because they are explicitly accepted by the states. Moreover, there are such documents as the Universal Declaration of Human Rights, which are another demonstration of the fact that international law is not limited to a purely consent-based system and has universal norms of justice and dignity.

The conflict of law and power that realism theory emphasizes can be reflected in the structural components of international organizations. The manner in which the UN Security Council functions in Chapter VII of the UN Charter demonstrates a relationship between political authority and enforcement. Articles 39 to 42 enable the Security Council to recognize threats to peace and take legally binding measures, including the use of force and sanctions. Although this is not directly stated as a legal principle of inequality, the presence of veto power does establish a hierarchy within the legal system, where certain countries have an unequal number of say over the proceedings. This displays the realist argument that, despite the formal legal structures, power relations affect the application of the law.<sup>14</sup>

Nonetheless, regulations promoting cooperation, peaceful conflict management, and instability are reflective of liberal institutionalism. Article 2(3) of the UN Charter obliges the states to settle the disputes peacefully, which reinforces the role of legal procedures over the unilateral action.<sup>15</sup> On the same note, Article 94 of the Charter underlines the importance of the judicial mechanisms in maintaining legal order by making governments obedient to the decisions of the International Court of Justice.<sup>16</sup> These rules even in the absence of centralized enforcement show how institutions can be constructed to encourage cooperation and enhance compliance.

All these legal provisions as a unit demonstrate that there is no single theoretical framework that international law adheres to. Instead, it is a complex conglomeration of institutional structures, power patterns, moral principles and consent-based rules. Legal positivism explains the underlying foundations of law, natural law informs its ethical nature, realism uncovers its structural limitations and liberalism its cooperative purposes.

It is this synthesis of theory and doctrine that is needed to understand the current issues facing international law. These sub-tensions can be traced back to the drop in compliance, institutional constraints, and legitimacy challenges discussed earlier. Consequently, a conceptual framework

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<sup>14</sup> The United Nations Charter, 1945, Arts. 39-42

<sup>15</sup> *Ibid.* art 2(3)

<sup>16</sup> *Id.* art. 94

that has a doctrinal basis does not only enhance depth of analysis but also enables easier understanding of the functioning of international law under real-life circumstances.

## **Crisis Of Compliance in International Law**

One of the most pressing matters in contemporary international law is the evident decline in the normal observance of accepted norms of law. Despite the formal form of international law persisting, the way in which governments relate to it, in practice, becomes more and more a determinant of its success or failure. Consequently, a rise in thinking that political interests and strategic concerns often play a role in compliance and not solely legal obligations is gaining momentum. Core international norms, particularly those that relate to sovereignty, non-use of force and treaty obligations are being breached, which is central to this issue. The use of these concepts has been lopsided, even though they remain popular. States, especially those with a significant geopolitical influence, have sometimes acted in a manner that appears inconsistent with these norms, often with broad or generous interpretations of the international law to justify their actions. This tendency raises the question whether international law can be viewed as a system that states can either adopt or follow or a binding concept.

A related issue is the poor application of decisions of international courts of justice, particularly the International Court of Justice. Though the Court plays a crucial role in interpreting legal principles and solving disputes, the Court does not have direct enforcement powers. Its decisions on the one hand are binding formally, but their enforcement depends on the goodwill of states on the other. States have also in many instances flouted, or acted slowly or half-heartedly on ICJ decisions without any severe consequences. This drawback indicates a greater structural issue with international law, of which enforcement structures are not centralized and voluntary cooperation. What makes the situation even more difficult is that most international legal tools and decisions are not binding. A good portion of international law consists of resolutions, declarations, and advisory opinions, though these are all not legally binding even though they affect the law.<sup>17</sup> UN General Assembly resolutions, such as those, often reflect the opinions of the world community, but are not legally obligatory. Similarly, the international court advisory rulings are not binding to governments although they have an influence in the development of the law. Consequently, it leads to the gap between the expression of the legal concepts and their practical application.

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<sup>17</sup> Nigel D. White, "Keeping the Peace: The United Nations and the Maintenance of International Peace and Security" 45–50 (Manchester University Press, 1997).

States' responses to court rulings and treaty commitments are instances of selective compliance. States have occasionally chosen to disregard or construe ICJ verdicts when they contradict with their national interests. One such example is the Military and Paramilitary Activities in and against Nicaragua case (*Nicaragua v. United States*), in which the United States disregarded the Court's authority and failed to abide by its ruling.<sup>18</sup> In a similar vein, treaty obligations are occasionally applied inconsistently, with nations upholding pledges in some situations while breaking them in others. These tendencies suggest that the application of international law is often situation-specific and selective as opposed to being consistent. States can choose to be guided by legal standards, so long as it is in their political or economic interests to do so, but they can also choose to disregard them, when they are believed to be restrictive. This selective method undermines predictability and reliability of the international legal system because it makes one wonder whether laws will always be applied in different situations.

This inherent opposition of state sovereignty and legal obligation is manifested in the decreasing compliance at a greater scale. Despite the fact that states remain the most important players and still enjoy a lot of freedom, the goal of international law is to regulate the actions of states. Due to this structural feature, enforcement often happens indirectly and relying on tactics, such as collective action, diplomatic pressure, and reputational consequences, which have different effectiveness levels.<sup>19</sup> The problem is in effect not that there are no rules in international law but that it is becoming less able to enforce effective compliance with those rules. This trend of being selective with compliance points to the necessity of scrutinizing issues of the international law, not only in its content, but also in the manner in which it is imposed and enforced.

Among the most severe issues with the modern international legal order, in particular, as far as enforcement is concerned, are the institutional shortcomings of the order. The ability of international law to ensure compliance is, however, fundamentally limited, even despite the evolution of a complex system of institutions, norms and principles. This restriction is most clearly seen in the particular work of international organizations, especially the United Nations, which was formerly supposed to be the pillar of collective security and the rule of law. The concept of state sovereignty and consent is the basic principle of the United Nations, limiting its authority, as well as being a necessary condition in ensuring participation. International law does not have such a mechanism as domestic legal systems, which have centralized

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<sup>18</sup> *Nicaragua v. United States of America* [1986] ICJ Rep 14.

<sup>19</sup> *Supra* note 14

organizations with coercive powers to implement the enforcement.<sup>20</sup> The United Nations has to rely on goodwill of its member states to implement its resolutions since it does not have a self-enforcement structure. This systemic feature is incredibly limiting its effectiveness, particularly in cases where states do not wish to comply.

The operation of the UN Security Council, which mainly takes care of maintaining the international peace and security, is more problematic. Although, the Security Council has the power to sanction the use of force in accordance with Chapter VII of the UN Charter, the decision-making process is grossly influenced by politics especially during the resolution of issues.<sup>21</sup> The veto of five permanent members often leads to gridlock in the institution. Collective action can be avoided in situations where the interests of these formidable governments are put at stake by veto or threat of veto, even in situations where there are blatant violations of international law. These dynamic highlights a fundamental paradox to the international legal order: despite the international legal order aiming to operate based on the principles of equality and the rule of law, power inequities shape how it operates. The power of veto in effect raises the validity and fairness of the system since some states can shield themselves or their allies against the legal consequences of their actions. Due to this fact, the imposition of international law might appear to be non-equal, which reinforces the feeling of discriminatory application and the loss of trust between governments, in particular, between those in the Global South.

Another important aspect of the enforcement dilemma is the limited role of judicial bodies such as the International Court of Justice. Although it's critical in interpretation of international law and resolution of disputes, the Court cannot forego its decisions by acting independently. Article 94 of the UN Charter allows a state to be taken to the Security Council in case it ignores a ruling of the ICJ. The real effectiveness of this mechanism, however, is constrained by the same political constraints affecting the work of the Council.<sup>22</sup> The absence of central enforcement body aggravates these challenges. This is a decentralized structure of international law with states being the subjects and creators of international law. Consequently, the means of enforcement are remote, and rely on such tools as economic sanctions, diplomatic pressure, reputational damages. Such measures do not have the frequency and timeliness of domestic

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<sup>20</sup> James Crawford, Brownlie's Principles of Public International Law 41–45 (Oxford University Press, 9th edn., 2019)

<sup>21</sup> *Supra* note 11, Ch. VII

<sup>22</sup> *Supra* note 13

law enforcement, although these actions may be effective in certain cases. Consequently, instead of being stipulated by law, compliance is often based on political goodwill.

Moreover, the existing institutional structures are strained because of increased complexity of global issues, which extend to armed conflicts to cyberthreats and climate change. The drawbacks of the existing system are also proven by the fact that the United Nations and its related organizations are often unable to respond to such challenges timely and decisively. This gap between the institutional capacity and the aspirations of international law shapes the notion that international law is institutionally weak in practice even though its normative importance is strong. The absence of a legally authoritative institution that could enforce uniform compliance in all states, is fundamentally what is underlying the enforcement problem of international law. The practicality of the international system is such that in the end, even the organizations such as the United Nations that may provide an essential arena of collaboration and norm making seem to be of no use. This dilemma between institutional constraints and the principles of law is the basic problems of the rules-based international order.

### **Case Study Analysis (Russia- Ukraine War and Israel- Gaza Conflict)**

The conflict between Russia and Ukraine is one of the most significant contemporary illustrations of the contradictions in the sphere of the international law. The core of the conflict is the fundamental issues of the violations of sovereignty, the role of international organizations, and the lack of correspondence between the political reality and the legal principles. A significant legal concern in this conflict is the violation of the territorial integrity and state sovereignty, which are two key principles of the international law. The prohibition of the use of force in the Charter of the UN is one of the leading principles of the modern international system. It is widely thought that the military actions in Ukraine are not in accordance with these ideals, in particular, the obligation to protect the geographical borders of states and their political autonomy. This has risen concerns on the fragility of standards that used to be believed to be firmly established.

The positive and negative sides of institutional systems are manifested in the reaction of the international community, in particular, with the help of the United Nations. The UN General Assembly was tough by adopting resolutions condemning the actions and reaffirming the importance of sovereignty and territorial integrity. Through these resolutions, it is evident that international law remains an important normative framework guiding the collective opinion in spite of being not legally binding. The involvement of the United Nations Security Council has

also highlighted the limitations of enforcement. The presence of political differences and the veto power have ensured that the Council has not been acting decisively yet it is the main responsible body in ensuring that international peace and security is maintained. The case also shows a long-standing issue of the international system where strong governments limit the powers of institutions by their interests. Judicial mechanisms have also dealt with the legal aspects of the dispute.<sup>23</sup> The reaffirmation of the validity of the international legal rules even during the time of conflict by the International Court of Justice and interim measures that required the suspension of armed actions demonstrated the importance of voluntary compliance to the effectiveness of such decisions even in the context of the international law.

One of the key themes that this case study brings to the fore is the difference between the legal response and political response. On a legal level, the regulations of state sovereignty and the use of force remain clear, and widely accepted. The political responses of states, however, have been varied as a result of geopolitical interests, economic considerations and strategic alliances. Whereas certain countries have been pro-Ukraine and administered sanctions, others have adopted safer or more neutral positions. This difference underscores the point, that international law often operates as part of a greater political context, and thus is hard to achieve the consistency in its application. On a broader level, the contradiction is a focus on the disparity of practice with normative clarity. The ability of the international law to influence the behaviour is limited even though it still provides a model through which behaviour can be assessed and influence the international discourse. As the case illustrates, despite the importance of legal concepts, the extent to which states adhere to them as a block defines their success.

The Russian-Ukraine war is rather a strong example of how the strength of the international order of law is challenged by new geopolitical powers. It demonstrates that the system has institutions and rules, yet that the political realities play a great part in the functioning of the system. This brings about serious questions on the survival of a global system that is fully ruled.<sup>24</sup> The Israeli-Gaza war is a complex and controversial situation, which raises some questions concerning the application of the international humanitarian law (IHL) and its applicability and

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<sup>23</sup> United Nations Security Council, Resolutions and Debates on the Middle East Situation, UN Docs (2022–2024)

<sup>24</sup> Rosalyn Higgins, “Problems and Process: International Law and How We Use It” 202–215 (Oxford University Press, 1994).

consistency in practice. It provides a very necessary lens through which the merits and demerits of international legal system can be evaluated since it is a prolonged and repeated war.

The study in this scenario revolves around the principles of the international humanitarian law, particularly those that apply to hostilities. These consist of the principles of necessity, proportionality and distinction that states that parties involved in a war must make a distinction between civilians and combatants and should avoid harming civilian populations unnecessarily and ensure that war efforts are warranted by reasonable military purposes. It is especially hard to apply these concepts in such locations as Gaza, where bloody fighting is conducted in the neighborhoods. Questions have been asked as to whether these requirements of law are being adequately met due to humanitarian crises and destruction of infrastructure and death of civilians. Another important aspect is the protection of civilians and civilian infrastructure that is a core aspect of modern humanitarian law. The Geneva Conventions and its Additional Protocols demand that all parties minimize the harm to civilians and to access the humanitarian assistance more easily. But the debate around compliance with these obligations has become intense due to the claims that there is widespread destruction of residential neighborhoods, hospitals, and other services. These problems demonstrate that it is rather challenging to employ legal norms to asymmetric warfare since they are not specific to one side of the conflict but instead, impact the actions of all parties involved.

The dispute underscores the problem of selective application of the international law on top of the substantive legal problems. Despite the frequent complaints of states and international organizations concerning violations, the nature and the intensity of their responses tend to vary most of the time. The acts of international bodies such as in resolutions, inquiries or ceasefire demands are sometimes perceived as contradictory or influenced by political interests. This contradiction is detrimental to the validity of the international law as it contributes to the overall perception that the latter does not apply across the board.

The role of international organizations, and in particular the United Nations exemplifies these challenges. Even though several UN organizations have dealt with the humanitarian crisis in declarations, reports, and resolutions, they still have limited ability to implement compliance. The existence of political disparities among its members has often made the UN Security

Council, especially, to take unanimous and decisive action, which has led to delays or watering down of replies, consequently raising concerns on the effectiveness of institutional systems.<sup>25</sup>

Regarding the conflict, it has also been disputed in the courts; the courts have heard the law arguments before the international courts such as the international court of justice. These measures indicate a wish to place the conflict within a legal context and seek a means of holding accountability via well-known avenues. Nonetheless, as with other fields in international law, the direct practical effect of these actions is small since they are highly dependent on political support and collaboration.

The problem of the opposition of the political reality to the legal universality is a more universal question than the one that the present case study throws light on. Although the application of the international humanitarian law is supposed to be equal to all parties in a conflict, it often appears to be applied unequally. The variations in the geopolitical relations, strategic goals and diplomatic priorities determine how the states and institutions respond to the supposed transgressions.<sup>26</sup> Besides the weakened concept of equality before the law, this biased practice contributes to the increased doubt of the objectivity of the international judicial process.

The Israel-Gaza war is basically an illustration of the practical limitations and the normative power of the international humanitarian law. Besides emphasizing the challenges of applying principles of law in complex and politically sensitive cases, it also points out the need to be more impartial and consistent in its application in case the legitimacy of the international legal order is to be maintained. The emergent crisis of legitimacy, particularly in the light of the Global South is a critical element of the existing problems of the international legal order. Even though the international law has tried to present itself as a global framework that is based on the principle of impartiality, equality and fairness, its practical application in the past has often created perceptions of bias and discrimination. This has contributed to an increasing mistrust in developing countries which causes serious doubts against the validity and inclusivity of the system.

One of the key concerns is the concept of bias in the establishment of, and the use of, international law. Most of the institutional structures and legal principles were developed in the past by few powerful governments which dominated international decision-making. These

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<sup>25</sup> B.S. Chimni, "International Law and World Order: A Critique of Contemporary Approaches" 20 *Leiden Journal of International Law* (2017).

<sup>26</sup> *Ibid.*

governments have had a long-term influence on the development of the international law because of their priorities and interests. This historical heritage still affects the perceptions of regulations and its application, although the system has evolved to include a broader range of players.<sup>27</sup> The international law often appears to most states in the Global South to be more of a mirror of existing power relations instead of being an impartial system.

The examples of the unequal application of legal standards, particularly when it comes to conflict, punishment and accountability reinforce the point of view. The issues of double standards are raised when other states are treated in different ways or receive varying levels of attention or response on the part of the international community. Whereas the smaller states or the less powerful are punished over and over again, the sins of big states or their supporters might appear to have less consequence.<sup>28</sup> Those anomalies undermine the credibility of the objectivity of international bodies and jeopardize the concept of equality under the law.

The existence of international organizations is also another factor that contributes to this problem of legitimacy. Bodies such as the United Nations are supposed to provide a platform which is accommodative of all governments. Nonetheless, there is an unequal distribution of power in the decision-making process by key bodies. The veto power of permanent members provides certain governments with influence or control over decision-making, often to their strategic interests. This system of institutions demeans the legitimacy of the system by creating an appearance of favoring few governments rather than the greater international community.

Nevertheless, it is important to note that the Global South is not passively involved in the development of the system but it also criticizes the system. The developing countries have increasingly called on reforming international law to be made more inclusive, equitable and representative. The initiatives express the desire to reform the system in such a way that is more consistent with the principles of justice and universality than to abandon it.

The lack of congruence between the normative ideals of international law and the real world leads to the crisis of legitimacy of the international law. The power dynamics that often determine the functioning of the system often lead to the emergence of bias and inequity perceptions in the system despite the desired equality and impartiality. Addressing such

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<sup>27</sup> *Supra* note 21

<sup>28</sup> *Supra* note 17

concerns will be essential in terms of ensuring the overall effectiveness and topicality of the international legal order and restoring confidence in Global South countries.

## **Future Roadmap and Legal Recommendations**

The challenges to the contemporary international legal system suggest that it is the case of the dire need to make serious structural and normative changes, yet they do not necessarily auger its demise. The post-war system was based on the belief that the institutions became impartial judges and the states were going to cooperate in good faith. However, the truth of modern geopolitics typified by strategic rivalries, power disparities and selective adherence has exposed limitations that have become inevitable. Thus, reform is aimed at making the system more legitimate, representational and practical instead of replacing it.

One of the areas that the United Nations Security Council needs to improve is its structure and functioning. Despite the fact that the current composition of the Security Council is based on the geopolitical situation of the mid-20th century and not the global order of today, it was established to achieve collective security. The issue of institutional paralysis has often arisen as a result of power being concentrated in the hands of a few permanent members, particularly, the veto mechanism.<sup>29</sup> Thus, reform proposals have pointed to the necessity of reconsidering not only the scope and use of the veto but also to enhance representation, especially bringing in the emerging and developing states. Proposals have also been made to enhance the legitimacy and efficacy through limiting the veto in cases of mass atrocities or serious violations of international law.

At this point the system relies primarily on voluntary compliance and covert compliance strategies such as economic sanctions and diplomatic pressure. Though these techniques are not totally ineffective, they are often not immediate or consistent. Potential means of enhancing enforcement include improved compliance review procedures, better coordination of the international bodies and more formal methods of monitoring. Even though the creation of a centralized enforcing body may not be feasible but incremental improvements can help bridge the gap between legal responsibilities and their application.

Reform is an important issue of accountability, particularly with strong states. It is the capacity of the international law to enforce norms on a regular basis regardless of the political or

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<sup>29</sup> James Crawford, Brownlie's Principles of Public International Law 41–45 (Oxford University Press, 9th edn., 2019).

economic strength of a state that makes it legitimate. Presently, the system suffers a loss of credibility due to the perceptions of selective enforcement.<sup>30</sup> To deal with this, there must be a commitment to greater impartiality, consistency and transparency in the enforcement of the legal norms. Political bias effects can be reduced through accountability-enhancing strategies such as independent investigations, reporting systems and peer review processes.

There is also the need to enhance the role of the judicial institutions particularly the International Court of Justice (ICJ). The jurisdiction of the Court, however, depends on the agreement of the government and its decisions are not directly enforced, although the Court plays a very important role in clarifying legal principles as well as resolving conflicts. The jurisdiction of international courts can be enhanced through more compliance with the decisions of courts and an extension of the use of mandatory jurisdiction.<sup>31</sup> Moreover, even during politically sensitive cases, the use of advisory opinions should be increased to contribute to the creation of legal norms and guide the actions of the government.

Enhancing the inclusiveness and representativeness of international law should be part of the reform agenda. Re-evaluating the role of emerging countries in decision-making processes can help to ensure the system reflects more diverse perspectives and interests. This plays a vital role in creating a sense of shared property of international legal norms and in the solution of the issue of legitimacy.

In a broader sense, it is the balance between the law and the political reality that is the future of the international legal order. Reforms can attempt to ensure that the role of politics do not overshadow the law, although it may not be capable of fully mitigating the influence of influence. This is a call to governments to reiterate their adherence to the international law as a guiding principle of international relations instead of a mere convenience.

In essence, the failures of international law as institutional and enforcement mechanisms are what needs to be changed and not the failure of the concept. The international community can enhance the effectiveness, credibility and sustainability of the rules based international order by addressing these limitations with deliberate and realistic reforms.

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<sup>30</sup> Dinah Shelton, “Compliance with International Law” in Malcolm D. Evans (ed.), *International Law* 397–420 (5th edn., Oxford University Press, 2018).

<sup>31</sup> *ibid*

## Conclusion

The international law system that is in place is in a turning point. It was built after World War II with the aim of substituting a power-driven system with an institutional, legislative and collective responsibility system. This framework has expanded significantly over time to encompass human rights, environmental protection, international collaboration and peace and security issues. However, as has been demonstrated in this study, the current mode of operation of this system exhibits an increasing tension between the normative aspirations of this system and the practical facts. One of the key topics that seem to emerge in the analysis is the increasing gap between state action and legal norms. Despite the fact that such core principles as non-use of force, sovereignty, and peaceful settlement of conflicts are widely accepted, their practical application has been distorted. The introduction of selective compliance and the role of geopolitical interests suggest that political considerations often play an equally significant role in the international law as legal imperatives. This does not mean that the system is no longer applicable, but it does demonstrate that its authority is being challenged in new and complex ways.

The role of international organizations, in particular, the United Nations also brings out this contradiction. On the one hand, these organizations, however, provide a necessary structure of communication, cooperation, and design of norms. Nonetheless, institutional constraints and political differences limit their usefulness at times. The work of the United Nations Security Council is an illustration of how institutional processes are both imperative and restrictive simultaneously, especially when large countries are in play. Nevertheless, it would be wrong to conclude on the fact that the international legal system is disintegrating. Rather, it is experiencing a change of course. The constant advancement of standards, the maintenance of the legal discourse, and the ongoing reliance on the international institutions all indicate the crucial role of international law. The most common instances of law being used as a standard against legitimacy include the legal justifications made by the states even in non-compliant situations.

How well the international legal order adapts to changing global conditions will have a significant role in its future. This involves addressing issues of enforcement, enhancing institutional effectiveness, and ensuring more inclusivity in decision-making processes. Rebuilding trust in the system will require actions to enhance judicial institutions such as the International Court of Justice, reform institutions such as the United Nations Security Council, and reducing perceptions of bias. The role of states per se is also important. Finally, the international law exists within a decentralized system, and its efficiency is based on the

willingness of states to adhere to its principles when it is feasible and when it demands moderation. To continue being credible, a new commitment to collaboration, responsibility, and consistency is required of the system.

To sum up, the rules-based international order is under a state of dynamic tension between law and power and neither is completely disintegrating or completely stable. It will be the collective actions of countries and the extent of their readiness to prioritize a system of rules based on commonness over one driven by unilateral interests that will determine its future not institutions or legal texts. Thus, it is not only the duty to enforce international law but to ensure it is better equipped to work in a more complex and politically controversial world.

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# **Remonstrance With Dead Body and Rights of Dead: An Enquiry with Special Reference to Practice of Motana and Law in Rajasthan**

***Dr. Mithilesh Narayan Bhatt<sup>1</sup>***

## **ABSTRACT**

*Every society around the world has few rights, duties and interests over the disposal of dead bodies. The civilizations of particular countries, peoples, and cultures have long recognized the right to a dignified and decent cremation/burial. In the recent past, society has witnessed several incidents where dead bodies have been treated in an undignified manner, such as unnatural sex with dead bodies, beating dead bodies and remonstrance with dead bodies for blackmailing the government to fulfil unjustified demands. The law relating to death and its consequences cannot be accurately brought within the letter of all the rules. In the recent past, a practice of “Motana” or remonstrance with the dead body for compelling the government or the accused party to fulfil unjustified demands has been increasing. Due to this illegal practice, the state government has enacted a law to curb it, but still, death and dead bodies leave several legal questions to be answered. Among all, a few are (i). Who has the right to the fulfilment of the duty of burial or cremation? (ii) What is the state's interest in decent cremation/burial of the corpse? (iii) What are the rights in the dead body and of the dead body? (iv) What is the position of laws and jurisprudence at the national level and in other nations? In answering all the above questions, both more explicit and more rigorous doctrinal methodological approaches have been taken, where different theories and literatures have been discussed. The paper is based on a comprehensive analysis of available literature, case laws and existing laws.*

**Keywords:** *Dead Body, Corpse, Remonstrance with dead body, Right of the Dead*

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## Introduction

The death of a human being is unique. A dead human body is, in a few respects, the strangest phenomenon on this earth because a person who is using all his senses among us has suddenly passed away. A dead body is just the physical remains of an expired human being before completing its decomposition. The body will not remain, but identities of different kinds, such as social, political, and economic, will remain in memory, and that may be good or bad.

Every society around the world has few rights, duties and interests over the disposal of dead bodies. The civilizations of particular countries, peoples, and cultures have long recognized the right to a dignified and decent cremation/burial.

In the recent past, society has witnessed several incidents where dead bodies have been treated in an undignified manner, such as unnatural sex with dead bodies, beating dead bodies and remonstrations with dead bodies for blackmailing the government to fulfil unjustified demands. The traditional practice of “Mautana”<sup>2</sup> is prevailing in some tribal communities of Rajasthan. But now it has taken a different shape and is used to blackmail the government into fulfilling unjustified demands.

It is not surprising that the law relating to the dead and what death leaves behind cannot be precisely brought within the letter of all the rules. Death and the dead body leave several legal questions to be answered. Among the few are:

- i. Who has the right as well as the duty of burial or cremation?
- ii. What is the state's interest in decent cremation/burial of the corpse?
- iii. What are the rights in the dead body and of the dead body?
- iv. What is the position of laws and jurisprudence?

The Indian legal system has no specific law for protecting the rights of the dead. However, the Judiciary has time and again reiterated to uphold the dignity and protect the rights of the dead. Since the incidents of remonstrations with dead bodies for fulfilling demands are increasing in the States, and there are no adequate provisions in the existing law, tackling this issue becomes tough for law enforcement agencies. This paper aims to examine the rights of the dead and the rights over the dead, and further discusses issues related to remonstrating with dead bodies and

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<sup>2</sup>‘Mautana’ is the practice of demanding money for accidental death or intentional killing of a tribal from the family of the accused. The community members back the demand of the deceased's family and the funeral is not conducted unless the money has been paid. Complaint number 17/11/2490 dated 12.07.2017, State Human Rights Commission, Jaipur.

the challenges involved. The basis and laws have been discussed in reference to Rajasthan. The problem of remonstrance with dead bodies, ill treatment of dead bodies and rights of the dead are discussed based on available literature, case laws and existing laws.

### **Problem and its Existence:**

In 2017, a notorious criminal, Anandpal, was allegedly encountered in Rajasthan. He was a most-wanted gangster with a reward of ₹10 lakh on his head. The encounter resulted in protests across Rajasthan. Anandpal Singh's body was cremated three weeks after he was gunned down due to a protest.<sup>3</sup> The Rajasthan State Human Rights Commission Chairman Justice Prakash Tatia had taken up this case and directed the family to perform the last rites. He observed that “holding protests with dead bodies had become a common practice to build pressure on the government and the administration to fulfil demands like compensation and action in a case.” The commission asked the government to “make provisions for declaring the practice of holding demonstrations with dead bodies a criminal offence”.<sup>4</sup>

In another incident, a 26-year-old woman whose dead body was gang-raped in Ghaziabad, Uttar Pradesh, was found naked twenty feet away from her grave.<sup>5</sup> A further example of the ‘Nithari serial killing case’ occurred in 2006, when police found that a rich businessman and his servant were involved in killing and having sex with the dead bodies of nearly a dozen children.<sup>6</sup> On 12 August 2024, a newspaper<sup>7</sup> reported that the incidents of the ill custom of "Motana" - demonstration with a dead body until settlement in return for fulfilling unjustified demands are increasing in Rajasthan. The newspaper has also reported that social/community leaders, with the support of the local Police, are part of such a settlement and are keeping their shares in the settlement amount.

These cases are as follows:

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<sup>3</sup>Gangster cremated one killed violence, <https://www.deccanherald.com/india/gangster-cremated-one-killed-violence-2014601>(last visited Oct. 6, 2023)

<sup>4</sup>Justice Prakash Tatia, Complaint number 17/11/2490 dated 12.07.2017, State Human Rights Commission, Jaipur.

<sup>5</sup> Ramesh Sharma, having sex with dead body not an offence in India: Why a high court wants a law against necrophilia, New Delhi, <https://www.indiatoday.in/law/story/having-sex-with-dead-body-not-an-offence-in-india-why-a-high-court-wants-a-law-against-necrophilia-2388582-2023-06-04>(last visited Dec. 20, 2023)

<sup>6</sup>Rohan Mishra, the conundrum of ‘Necrophilia’ in India: Broadening the sphere of punishment is demanded, <https://criminallawstudiesnluj.wordpress.com/2021/10/03/the-conundrum-of-necrophilia-in-india-broadening-the-sphere-of-punishment-is-demanded/>(last visited Dec. 22, 2023)

<sup>7</sup> Vijaypal Dudi for Dainik Bhaskar, Bhilwara (Rajasthan) edition, page 1, dated 12.08.2024, [www.bhaskar.com](http://www.bhaskar.com)

*Case 1:* Mr. Mukesh was murdered in the village of the district of Dungarpur, and the body was kept for 3 days. Matter settled in 4 lacs. Out of 4 lacs, the victim's family had received 2.5 lacs, and allegedly 45 thousand had been taken by the police. The rest of the money was distributed by Panch (social/community leaders).<sup>8</sup>

*Case 2:* One Mr. Rahul (in Banswara district) died in a road accident. Remonstrance with the dead body lasted for 2 days and ended with a settlement in return of 2.5 lacs, but the victim's family only got 80 thousand rupees. Panch and 2 police constables allegedly took the remaining money.<sup>9</sup>

*Case 3:* In a village of Udaipur district, one man died in his in-laws' house in unnatural circumstances. Settlement of death took place in return of 4 lacs, but the victim's family only received 29000 out of it. The mediators took the rest of the money.<sup>10</sup>

*Case 4:* In 2021, Constable Ramesh Limbawat was murdered. Victim's family claimed that they did not demand Motana, but Panch (social leaders) still settled the matter for 4.75 lacs, paying only 2 lacs. Although in the media investigation, the actual settlement amount was 6 lacs.<sup>11</sup>

These are a few reported incidents to be cited, but not limited to, and Society may have seen many more. Thus, the issues related to the right to the dead body and the right over the dead body are important to address, discuss, and redress.

## **International Legal Provisions**

The international legal framework comprises specific provisions that protect the rights and dignity of the dead. Article 130 of the Fourth Geneva Convention (international humanitarian law) is titled as "Burial/Cremation" and it states that the dead bodies must be honorably buried, if possible, according to the rites of their religion, and that their graves are always respected, properly maintained and marked in a way that they can always be recognized.<sup>12</sup> According to Article 16 (II paragraph) of the Geneva Convention 1949 IV provides "As far as military consideration allows, each party to the conflict shall facilitate the steps taken to protect the killed against ill treatment".

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<sup>8</sup>Id.

<sup>9</sup>Id

<sup>10</sup>Id

<sup>11</sup>Id

<sup>12</sup>Article 130 - Prescriptions regarding the dead: Burial and cremation, of the Fourth Geneva Convention, available at <https://ihl-databases.icrc.org/en/ihl-treaties/gciv-1949/article-130>

Additionally, Article 6 of the UN's Inter-Agency Standing Committee's Operational Guidelines on Human Rights and Natural Disasters ("IASC Guidelines") titled "dealing with mortal remains" also protects the rights and dignity of the dead.

Article 6.1 states that the mortal remains of the deceased should be collected and identified to prevent their despoliation or mutilation and to facilitate the return of the remains to the next of kin. Article 6.2 suggests that if remains cannot be returned, their temporary storage or burial should be preferred over cremation, in case of future identification and return to families. Article 6.3 suggests disposal of bodies taking into account the local religious and cultural practices, conducted in a manner respectful to the dignity and privacy of the dead and of their family members. Lastly, Article 6.4 provides that family members should be able to recover human remains in accordance with cultural beliefs and traditions.

The 1990 Cairo Declaration on Human Rights in Islam (Article 3 (a)) provides "In the event of the use of force and in case of armed conflict, it is prohibited to mutilate dead bodies". The UN's Inter-Agency Standing Committee's Operational Guidelines on Human Rights and Natural Disasters recommend that appropriate measures should be taken 'to facilitate the return of remains to the next of kin'. Measures should allow for the recovery of human remains for future identification and reburial, if required. In a 2005 Resolution, the UN Commission on Human Rights emphasized the need of dignified handling of human remains, including proper management and disposal, as well as respect for the needs of families. It might instead be regarded as a socioeconomic right, comparable to the socioeconomic right to health stated in Article 12 of the International Covenant on Economic, Social and Cultural Rights.

## **Laws In India:**

Under the IPC, 1860 (now the Bhartiya Nyaya Sanhita, 2023-BNS), certain rights related to dead bodies are protected, directly or indirectly, including the rights of deceased persons, such as the right against trespass on burial sites and places of funeral rites.<sup>13</sup> Right against dishonest misappropriation and conversion of property under<sup>14</sup> right against defamation<sup>15</sup>; rights against the act of Unnatural Sex<sup>16</sup> and right against criminal intimidation.<sup>17</sup>

According to Section 297 IPC (Now Section 301 BNS 2023), disrespect for dead bodies is strictly prohibited.

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<sup>13</sup>The Indian Penal Code 1860§297, Now Section 301 BNS 2023, Trespassing on Burial Places, Etc.

It provisioned as, “If any person with the intention or knowledge of wounding or insulting the religion of any person, commits trespass in any place set up for funeral rites or set up as a depository for the remains of the dead or treats a dead body with indignation or causes disturbance to people assembled to carry out funeral rites of the dead, he or she shall be punished for a term extending to one year or fine or both”.

Currently, under the new criminal laws of India, no provision is related to the protection of the dead body from the act of unnatural sex.

## **Rajasthan: Guidance for All**

The legislature of Rajasthan has enacted the Rajasthan Honour of Dead Body Act, 2023, to provide honor to the dead body and uphold its basic human rights in the State of Rajasthan and matters connected therewith and incidental thereto.

In section 2b of the act, a dead body is considered a dead body of a human; the act also defines family members as any members who are related to the deceased by consanguinity, marriage, or through a relationship like marriage, adoption, or any family member living together as a joint family. Further, in 2(e), “last rites” is defined as the means of disposing of the dead body in accordance with the tradition or custom of the community or religion to which the deceased belonged.

Through section 2(h), “remonstration” is explained as raising demands or baiting for pursuing any demands to prevent the last rites of a dead body by way of any protest, disobedience, agitation, provocation, etc. The second chapter of the Act provisions about the Rights of Dead Persons in section 3, and it talks about the right to last rites, in which every dead person shall have the right to decent and timely last rites according to the known and prevailing tradition or custom of the community or religion, as soon as possible.

The act has put the liability of performing last rites on Family Members of the Deceased as soon as possible, unless the same is warranted on account of delay in arrival of the next of kin, any medico-legal reasons or any other exceptional reason. (Sec. 4).

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<sup>14</sup> The Indian Penal Code 1860 § 404, Now Section 315 BNS 2023- Dishonest misappropriation of property possessed by deceased person at the time of his death.

<sup>15</sup> The Indian Penal Code 1860 § 499, Now Section 356 (1) BNS 2023- Defamation

<sup>16</sup> The Indian Penal Code, 1860 § 377 is now deleted in BNS 2023

<sup>17</sup> The Indian Penal Code, 1860 § 503. Now 351 of BNS 2023- Criminal intimidation.

Family members shall be liable to take possession of the dead body when handed over by the police or any other public authority or hospital administration, after due compliance with legal procedure. Significantly, under section 6, a dead body cannot be used for remonstration, and consent cannot be given for this to any other person.

The act empowers police officers that if he has reason to believe from personal knowledge or otherwise and taken down in writing that any dead body is being used or likely to be used by unlawful assembly or family members for remonstration, he shall take possession of the dead body and information to this effect, shall be sent immediately to the concerned Executive Magistrate and District Superintendent of Police.

Section 8 has given the power to the Executive Magistrate to make arrangements for the last rites through public authority if, even after notice to family members, the family members are not willing to perform the last rites of the dead body. Further, whenever the Executive Magistrate has reason to believe that an unlawful assembly has gathered or is likely to be gathered for remonstration within his jurisdiction, he may use the power prescribed under sections 129 to 132 of the Code by issuing an order in writing, stating the grounds of his opinion.

In chapter five, provisions are made regarding the Storage and Maintenance of the dataset and the Disposal of unclaimed dead bodies. Under section 9, the burden of Storage of unclaimed dead bodies is put on the hospital administration.<sup>18</sup> Section 10 has a provision for videography and Photography of post-mortem examination in every case of custodial death or unclaimed dead body.<sup>19</sup> The provision of Genetic Data Information of an unclaimed dead body is also in this chapter, and it shall be obtained through DNA profiling.<sup>20</sup> When a dead body remains unclaimed, the disposal shall be made in accordance with the provisions of the Rajasthan Anatomy Act, 1986<sup>21</sup>

In Chapter Six of the Act, under sections 16 to 20, offences and punishments are enumerated as follows:

- i. Punishment for not taking possession of the dead body<sup>22</sup>- imprisonment for a term, which may extend to one year or with a fine or with both.

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<sup>18</sup>S. 9. Storage of unclaimed dead bodies. - The hospital administration shall (a) store the unclaimed dead body under safe conditions in the deep freezer to prevent any decay or damage to the dead body; and (b) ensure that the bodies are segregated based on gender and are kept in a dignified manner by avoiding piling up as may be prescribed. The Rajasthan Honour of Dead Body Act, 2023

- ii. Punishment for remonstrance by a family member or giving consent to any other person for using the dead body <sup>23</sup>- imprisonment for a term, which may extend to two years and with a fine.
- iii. Punishment for remonstrance by any person, other than a family member<sup>24</sup>- imprisonment for a term, which shall not be less than six months, but which may extend to five years and with a fine.
- iv. Punishment for Disclosure of Genetic Data Information and Confidentiality of Information<sup>25</sup>- imprisonment for a term, which shall not be less than three years, but which may extend to ten years and with a fine.
- v. Punishment for abetment, attempt or conspiracy<sup>26</sup>- Punished in the same manner as if he had himself committed that offence.

## Judicial Pronouncements

Many Judicial Pronouncements of the Supreme Court and High Courts have declared that the Right to Life, under Article 21, has been extended to dead persons also. The Supreme Court of India in *Ashray Adhikar Abhiyan*<sup>27</sup> Case issued directions for decent burial or cremation of the unclaimed dead bodies.

The Supreme Court of India in a reportable case of *Parmanand Katara case*<sup>28</sup> extended the rights under Article 21 of the Constitution of India, *i.e.* life, fair treatment and dignity, not only to a living person but also to his dead body. The same observation was in *P. Rathinam's case*.<sup>29</sup>

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<sup>19</sup>S. 10. Videography and Photography of post-mortem examination. - In every case of custodial death or unclaimed dead body, photographs of the deceased shall be taken, and post-mortem examination of the deceased shall be videographed in the manner as may be prescribed. The Rajasthan Honour of Dead Body Act, 2023

<sup>20</sup>S. 11. Protection of Genetic Data Information. - The Genetic Data Information of unclaimed dead bodies shall be obtained through DNA profiling and must be handled carefully and confidentially, as the same may be required to trace the identity of the unclaimed dead bodies. The Rajasthan Honour of Dead Body Act, 2023

<sup>21</sup>S. 15. Disposal of unclaimed dead body. The Rajasthan Anatomy Act, 1986 (Act No.12 of 1986).

<sup>22</sup>S. 16. Punishment for not taking possession of a dead body. - Any family member who does not take possession of the dead body as per the provisions of section 5 shall be punished with imprisonment for a term, which may extend to one year or with a fine or with both. The Rajasthan Honour of Dead Body Act, 2023

<sup>23</sup>S. 17. Punishment for remonstrance by family member. - Any family member who uses the dead body for remonstrance or gives consent to any other person for using the dead body for remonstrance shall be punished with imprisonment for a term, which may extend to two years and with a fine. The Rajasthan Honour of Dead Body Act, 2023

<sup>24</sup>S. 18. Punishment for remonstrance by any person, other than a family member. - Any person, other than family members, who uses the dead body for remonstrance shall be punished with imprisonment for a term, which shall not be less than six months, but which may extend to five years and with a fine. The Rajasthan Honour of Dead Body Act, 2023

<sup>25</sup>S.19. Punishment for Disclosure of Genetic Data Information and Confidentiality of Information. - If any authorized person or persons disclose any Genetic Data Information and Confidentiality of Information, they shall be punished with imprisonment for a term, which shall not be less than three years, but which may extend to ten years and with a fine. The Rajasthan Honour of Dead Body Act, 2023

The various high courts<sup>30</sup> have also taken the same view on the dignified treatment of dead bodies. In *Ramji Singh and Mujeeb Bhai vs State of U.P. & Ors.*, the Allahabad High Court contended that the right to the dead body is included in a person's right to life. The State must treat the corpse with dignity, and post-mortem should be done only when the law demands.

In *Vikash Chandra @ Ouddu Baba vs The Union of India & Ors*<sup>31</sup> The Patna High Court opined that the disposal of unclaimed and unidentified corpses should be done with the utmost respect for the deceased. If faith can be recognized, then the last rites shall be in accordance with the deceased's recognized faith.

In a *Suo-moto* case, the Supreme Court laid down guidelines related to the dignified handling of dead bodies in hospitals. According to NHRC guidelines, it is the duty of the State to protect the rights of the deceased and prevent crime over the dead body in both natural and unnatural deaths (accident, suicide, homicide, etc.). It is also required that the States/UTs prepare an SOP in consultation with all stakeholders.<sup>32</sup> so that the dignity of the dead is ensured and their rights are protected.<sup>33</sup> The judiciary has always been a savior in protecting the human rights of the living as well as the dead.

## Dead Body

Defining death, in its real sense, is a tough task. In a book titled "*Death, Dying and the Biological Revolution*" (1976),<sup>34</sup> Veatch argues that "*the answer to the discussion is not a single one but should be fourfold. First, the discussion on a pure formal analysis of the term 'death'; second, the discussion on the concept of death, which satisfies the first one in terms of its content rather than the definition of death; third, the discussion on the position of death in society as a whole; and fourth, the discussion on the standard for determining death*".<sup>35</sup> He further argues that "*the direct link of a word death to what is 'essentially significant' means that the task of defining it in this sense is first and foremost a philosophical, theological and ethical task*"<sup>36</sup>

<sup>26</sup> 20. Punishment for abetment, attempt or conspiracy. - Whoever abets, attempts or conspires to commit an offence under this Act shall be punished in the same manner as if he had himself committed that offence. The Rajasthan Honour of Dead Body Act, 2023

<sup>27</sup> Ashray Adhikar Abhiyan V/s Union of India, Writ Petition (Civil) 143/2001

<sup>28</sup> Parmanand Katara v. Union of India, 1989 (W. P. (Crl) No. 270 of 1988, SCC (4) 286)

<sup>29</sup> In P. Rathinam v. Union of India, 1994 (SCC (3) 394)

<sup>30</sup> The Calcutta High Court on 16 September 2020, in the case of Vineet Ruia Vs the Principal Secretary, Department of Health & Family Welfare, Govt. of West Bengal & Ors (W.P. No. 5479 (W) of 2020); Telangana High Court on 27 April, 2021, in the case of R. Sameer Ahmed Vs State of Telangana & Ors. (W.P. (PIL) No. 56 and 58 of 2020); In Vineet Ruia v. The Principal Secretary, Ministry of Health & Family Welfare and Ors; In Vikash Chandra @ Ouddu Baba v. The Union of India & Ors

<sup>31</sup> MANU/BH/0540/2008

After the time of the Norman Conquest, the church claimed exclusive authority over the dead, and it was justified on 3 grounds: “*to prevent sacrilege thereto, because the burial grounds belonged to the churches, and because, after death, the church had probate jurisdiction*”.<sup>37</sup> The ecclesiastical law of the early Middle Ages also had similar rules of church jurisdiction over the bodies of the deceased.<sup>38</sup> The reason behind such control is that the nature of the deceased body is *nullius in Bonis* (the property of no one) in the eyes of the common law.<sup>39</sup> This principle applies to both buried.<sup>40</sup> and unburied bodies.<sup>41</sup> On the issue of the rights of relatives over the dead body, Blackstone denied such rights and said, “*Though the heir has property in the monuments and escutcheons of his ancestors, yet he has none in their bodies or ashes.*”<sup>42</sup>

According to Ian Kennedy, “It has long been accepted in English law that there is no property in a dead body. It is equally the law that there is a duty placed on others, including relatives, to dispose of a corpse, e.g., by burial.”<sup>43</sup>

To find out whether a property right exists in a dead body, it is necessary to determine what the term “property” means. As Bouvier stated, “*property is the right and interest that a man has in lands and chattels to the exclusion of all others. A vested right of action, an intangible thing, is as clearly property as a tangible object. The subject of property, the res, is merely one of the incidents of property, and whatever physical interference annuls the right of user takes property*”<sup>44</sup>. The property in a dead body may be absolute, if any exists, or it may be limited to a mere right of present possession.<sup>45</sup> The Supreme Court of Michigan, in *Keyes v. Konkle*, held that no property exists in a corpse, but most later decisions in many states indicate that the rule is otherwise.

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<sup>32</sup> The stakeholders include Hospital Administration, Police, Forensic Medicine personnel, District Administration, Municipal Corporation, Civil Society Groups, etc., as well as the citizens of the country.

<sup>33</sup> Writ Petition (Civil) No.7 Of 2020

<sup>34</sup> Veatch, R. M. *Death, Dying, and the Biological Revolution: Our Last Quest for Responsibility*. New Haven: Yale University Press. (1976)

<sup>35</sup> Id.

<sup>36</sup> Veatch R. M. The impending collapse of the whole-brain definition of death. *Hastings Centre Report* 23(4):18–24. [1976], 604, (1993)

<sup>37</sup> *In re Beekman Street*, 4 Bradf. (N. Y.) 503; *Essays in Anglo-American Legal History*, Vol. I, page 248; Same Vol. 2, page 255.)

<sup>38</sup> R P Taylor, ‘Right of Sepulture’ 53 *American Law Review* 359, 360(1919). See Michael M Sheehan, *The Will in Medieval England* (Pontifical Institute of Medieval Studies, 1963) 120-1.

<sup>39</sup> Sir Edward Coke, *The Third Part of the Institutes of the Laws of England* (E & R Brooke, first published 1644, 1797 ed) 203.

<sup>40</sup> See, e.g., *Haynes's Case* (1614) 12 Co Rep 113; 77 ER 1389; *R v Sharpe* (1857) Dears & B 160, 163; 169 ER 959, 960; *Foster v. Dodd* (1867) LR 3 QB 67, 77 (Byles J).

<sup>41</sup> *Exelby vs Handyside* [1749] 2 East PC 652; *Williams v Williams* (1882) 20 Ch D 659, 662-3.

The commentaries on the American law, in *Ruling Case Law*<sup>46</sup> and *Corpus Juris*<sup>47</sup> Denied property in a dead body in the ordinary sense. The law in Indiana appears to be that such a right is unequivocally a property right.<sup>48</sup> Other states hold that there is a special or *quasi* property in a dead body.<sup>49</sup> The Canadian cases similarly hold, “*the right to the dead body is a property right.*”<sup>50</sup> The modern concept of property does not apply to a dead body and holds that a dead body cannot be commercial property.

The courts of the United States hold that “there is absolutely no property right in a corpse and refuse to treat a dead body as property in a material sense”.<sup>51</sup> The dead body is not property that can be held, in the sense of being held for funeral costs. Therefore, the dead body is not real estate; treat it as personal property. A dead body cannot be claimed as property; the unrestricted use and disposition of the dead body are based on restrictions like the public’s health, safety, and welfare, and it is subject to control by law instead of being subject entirely to the convenience, desires, whims, and fancies of individuals.<sup>52</sup>

## Duty Towards the Dead Body

The dependent, family, relatives, survivors or living persons have been recognized as having a duty-bound interest in a dead person's body. Still, this interest varies with the customs, culture and traditions of societies. In an American case of *in re Widening of Beekman Street*,<sup>53</sup> where it was settled that the relative had an interest sufficient to entitle, and the following propositions were propounded:

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<sup>42</sup> Walter F. Kuzenski, Property in Dead Bodies, 9 Marq. L. Rev. 17 (1924). Available at: <http://scholarship.law.marquette.edu/mulr/vol9/iss1/3> (last visited Jan. 22, 2023)

<sup>43</sup> Ian Kennedy, (1995) ‘Negligence: Interference with Right to Possession of a Body: Mackey v U.S.’ 3 Medical Law Review 222, 223.

<sup>44</sup> 22 R. C. L. Prop. 37. Walter F. Kuzenski, Property in Dead Bodies, Marquette Law Review, Volume 9 Issue 1 December 1924 Article 3, [www://efaidnbmnnnibpcajpegclefindmkaj/https://scholarship.law.marquette.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=4512&context=mulr](http://efaidnbmnnnibpcajpegclefindmkaj/https://scholarship.law.marquette.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=4512&context=mulr) (last visited Jan. 22, 2023)

<sup>45</sup> Walter F. Kuzenski, Property in Dead Bodies, 9 Marq. L. Rev. 17 (1924), Available at: <http://scholarship.law.marquette.edu/mulr/vol9/iss1/3> (last visited Jan. 22, 2023)

<sup>46</sup> 8 R. C. L. Dead Body, Sec. 3, Walter F. Kuzenski, Property in Dead Bodies, Marquette Law Review, Volume 9 Issue 1 December 1924 Article 3, [www://efaidnbmnnnibpcajpegclefindmkaj/https://scholarship.law.marquette.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=4512&context=mulr](http://efaidnbmnnnibpcajpegclefindmkaj/https://scholarship.law.marquette.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=4512&context=mulr) (last visited Jan. 22, 2023)

<sup>47</sup> 17 Dead Bodies 1137, Walter F. Kuzenski, id.

<sup>48</sup> Bogart v. Indianapolis, 13 Ind. 134

<sup>49</sup> Such is the rule in Missouri- Litteral v. Litteral, 130 Mo. App. 30, In Rhode Island- Pierce v. Swan Point Cemetery, 10 R. 1. 227, In Indiana- Orr v. Dayton Tractor Co., 96 N. E. 462 and in New York- Danaby v. Kellogg, 126 N. Y. S. 444.

- i. *“That neither the corpse, nor its burial, is legally subject, in any way, neither to ecclesiastical cognizance nor to sacerdotal power of any kind.*
- ii. *That the right to bury a corpse and to preserve its remains is a legal right, which the courts of law will recognize and protect.*
- iii. *That such right, in the absence of any testamentary disposition, belongs to the next of kin.*
- iv. *That the right to protect the remains includes the right to preserve them by separate burial, to select the place of sepulture and change it at pleasure.*
- v. *That if the place of burial be taken for public use, the next of kin may claim to be indemnified for the expense of removing and suitably reintering their remains.”*

It is principally settled that “*the duty lies on the nearest relative to bury his dead.*”<sup>54</sup> Where there is a right, there is a corresponding duty; thus, where a duty to bury the dead exists, then there must be a right to take possession of the body for the execution of the duty, and violation of this right might be a cause for action by law. It is generally accepted that survivors, in order of inheritance, are entitled to protect and enforce the dead person’s property rights.<sup>55</sup>

Therefore, according to inheritance rights, they are entitled to possession of the dead body. They are responsible for a decent burial, and action will be taken against those who fail to perform their duty. <sup>56</sup>If the deceased dies intestate and no relatives or friends are willing to assume the obligation, then the burial/cremation is at public expense.<sup>57</sup> According to *Sherman v. Sherman*, *the duty of burial normally lies with the spouse or other relatives of the deceased.*

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<sup>50</sup> In *Miner v. Canadian Pac. Ry*, 15 Western L. R. (Can.) 161, 2 A. R. C. 1169.

<sup>51</sup> *Orr v. Dayton & Muncie Traction Co.* 1911, 178 Supreme Court of Indiana 40, *Renihan et al. v. Wright et al.* 1890, 125 Ind. 536., Peter F. Nemeth, Legal Rights and Obligations to a Corpse, Notre Dame Law Review, Volume 19, Issue 1 Article 6  
[www/efaidnbmnnnibpcajpcglclefindmkaj/https://scholarship.law.nd.edu/cgi/viewcontent.cgi?article=3927&context=ndlr](http://www.efaidnbmnnnibpcajpcglclefindmkaj/https://scholarship.law.nd.edu/cgi/viewcontent.cgi?article=3927&context=ndlr) (last visited Jan. 22, 2023)

<sup>52</sup> *Wolf v. Rose Hill Cemetery Assn*, 832 P.2d 1007 (Colo. Ct. App. 1991),  
<https://law.justia.com/cases/colorado/court-of-appeals/1991/90ca1811-0.html> (last visited Jan. 22, 2023)

<sup>53</sup> In re Widening of Beekman St, 4 Brad. 503, 517 N.Y. Sup. Ct. 1856, Walter R. Kuzenski, Property in Dead Bodies, 9 MARQ. L. REV. 17, 17 (1924). Rogers, Alix, Unearthing the Origins of Quasi-Property Status (July 1, 2019). 72 Hastings Law Journal, 2020-2021, Available at SSRN: <https://ssrn.com/abstract=3435234> or <http://dx.doi.org/10.2139/ssrn.3435234> (last visited Jan. 22, 2023)

## The Right of/on Dead Body: Theories and Practices

As one of the objectives of the paper is to examine the rights of the dead, a subject on which much more research is still required. Along with one needs to know whether a deceased person can be harmed or have an interest?" and "Who owns the dead body?"

As per theories, the dead can be legal right-holders or cannot be. Two different theories have been significant in this respect: the Interest Theory and the Will Theory.<sup>58</sup> Waldron refers to the "Interest Theory" as the "Interest" or "Benefit" Theory of rights and the "Will Theory" as the "Choice Theory" of rights.<sup>59</sup> According to the Will Theory, legal rights exist only where a person is conscious and capable of making choices.<sup>60</sup> According to this school of thought, "the essence of a right consists in opportunities for the right-holder to make normatively significant choices relating to the behaviour of someone else."<sup>61</sup> Since the dead cannot make significant choices and are lacking in forming interests, a Will Theorist would argue decedents cannot be right-holders.<sup>62</sup>

Contrary to this, "an Interest Theory of legal rights can be a legal right-holder because he still has interests even if he is unable to express them as a comatose person".<sup>63</sup> Interest Theorists have also argued that "trees, animals, unborn generations, and the dead can be legal right-holders".<sup>64</sup> Proponent of the Interest Theory, Joel Feinberg, has argued that "the dead have interests that can be helped or harmed after death".<sup>65</sup>

In the words of Aristotle, "Both good and evil are thought to happen to a dead person Take, for example, Honours and dishonors, and the good and bad fortunes of his children or his descendants generally."<sup>66</sup> Kramer argues that the dead can be characterized as legal right-holders.<sup>67</sup>

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<sup>54</sup>R. S. Guernsey in IO Cent. L. J., 303-325, Walter F. Kuzenski

<sup>55</sup>Bogert v. City of Indianapolis 13 Ind. 134, 1859. (1933) "Blackmail-Nature of the Rights in a Dead Body," Indiana Law Journal: Vol. 9: Issue. 3, Article 4. Available at:<https://www.repository.law.indiana.edu/ilj/vol9/iss3/4>

<sup>56</sup>125 Supreme court of Indiana 536 25 N. E. 822, <https://www.casemine.com/judgement/us/5914ab27add7b0493472fecb> (last visited Jan. 22, 2023)

<sup>57</sup>In re Nevilles Estate 1933 263 New York. Supp. 528.

<sup>58</sup>Jeremy Waldron, Introduction to Theories of Rights 1, 7-9 (Jeremy Waldron ed., 1984). See generally Matthew H. Kramer, Getting Rights Right, in Rights, Wrongs and Responsibilities, Nicholas Bamforth, Hohfeldian Rights and Public Law, in Rights, Wrongs and Responsibilities 1, 21 (Matthew H. Kramer ed., 2001).

<sup>59</sup>*Id.*

<sup>60</sup>Jessica Berg, Of Elephants and Embryos: A Proposed Framework for Legal Personhood, 59 Hastings L.J. 369, 372-74 (2007).

Theorist Lomasky<sup>68</sup> Considered the concept of the rights of the dead is weird and cannot hold any rights. However, few rights may be attributed to a deceased person. According to Feinberg (1984), “we can assume that *"harms"* is what occurs not when we are merely hurt or offended but when our *"interests"* are frustrated, defeated or set back.”<sup>69</sup> Lomasky identified and discussed these rights as “*ones of fringe rights on the same level as rights of a fetus, defective human beings and animals.*”<sup>70</sup> Roscoe Pound<sup>71</sup> cited a case from India where it was adjudged that an idol should be regarded as a legal person under the specific customs of India and stated, “*When, however, legal rights are attributed to an idol and the Judicial. Committee of the Privy Council can tell us that "the will of the idol regarding location must be restricted" and can appoint a "disinterested next friend" to represent it in court.*”<sup>72</sup> Democratic states, like Japan and Britain, have rejected the concept of rights of the dead.

On the issue of the right of the deceased and their burial, in *Radomer Russ-Pol Unterstutzung Verein v. Posner*<sup>73</sup> court decided that, “*upon the death of a married person, the surviving spouse has the paramount right as to the custody of the remains of the deceased and its burial. The right of a surviving spouse to control the burial depends on the peculiar circumstances of each case and may be waived by consent or otherwise.*”<sup>74</sup> If there is no surviving spouse or the surviving spouse has waived the right, the right of burial of a dead body is in the next of kin in the order of their relation to the decedent. This rule of priority is to be applied with reason. It is flexible and may be modified by circumstances of the moment”<sup>75</sup>. In *re Estate of Weiss* case<sup>76</sup> 2009, it was decided that “if two or more persons with equal standing as next of kin disagree on disposition of the decedent’s remains, then preference will be given to the person who had the closest relationship to the deceased”. One of the leading American cases, *Koerber v. Patek*,<sup>77</sup> The court held, “*the right of the relatives to bury their dead inviolate and without interference is one of the clearest in the gamut of civil liberty, and one most important of preservation from the point of public welfare and decency*”.

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<sup>61</sup>Matthew H. Kramer, Do Animals and Dead People Have Legal Rights? 14 CAN. J.L. & JURIS. 29, 30 (2001).

<sup>62</sup> See Kramer, id

<sup>63</sup> Interest Theorists define a right as something that protects a right-holder’s interests. For examples of how Interest Theory intersects with the law, see Joel Feinberg, The Rights of Animals and Unborn Generations, In Rights, Justice, And the Bounds of Liberty: Essays in Social Philosophy 159, 162-63 (1980)

<sup>64</sup> Kirsten Rabe Smolensky, Rights of the Dead, Hofstra Law Review, 2009, Vol. 37:763, Christopher D. Stone, Should Trees Have Standing? And Other Essays On Law, Morals and The Environment VIII (1996).

<sup>65</sup> Joel Feinberg, Harm and Self-Interest, In Rights, Justice, and the Bounds of Liberty: Essays in Social Philosophy 45, 59-68 (1980)

<sup>66</sup>Aristotle, Nicomachean Ethics 16-17 (Roger Crisp ed., Cambridge Univ. Press 2000).

<sup>67</sup>Kramer, supra note 66.

<sup>68</sup>Loren Lomasky, Persons, Rights, and the Moral Community: Oxford University Press, New York (1987), 213

<sup>69</sup> Joel Feinberg, Harm to Others, Volume 1, Oxford University Press, (1984)

<sup>70</sup>Loren Lomasky, supra-67

<sup>71</sup> In which the Judicial Committee of the Privy Council, Pound, Roscoe. Jurisprudence. Originally published: St. Paul, Minn.: West Publishing Co. Pound 1959 vol. 5, 201-2.

Contrary to this, in English law, J. W. Salmond explains that,

*"The rights which a dead man thus leaves behind him vest in his representative. They pass to some persons whom the dead man, or the law on his behalf, has appointed to represent him in the world of the living. This representative bears the person of the deceased. ,<sup>78</sup>to this extent, and in this fashion, it may be said that the legal personality of a man survives his natural personality"<sup>79</sup>*

Kant's<sup>80</sup> Within the division of duties, a specific duty was established to treat the dead with dignity. And this specific duty is on specific people like relatives, friends of the dead, and the local authorities. Every dead person remains in the memory of near or dear ones, and that memory may be good or bad. Now, a question may arise: how can the legal interests of the dead be protected? And whether the dead can be the subject of defamation? Defamation can be of a person. According to Salmond, "*a person can be anyone capable in law to acquire rights and duties*".<sup>81</sup> Similarly, Hindu law treats many non-living things, such as idols and rivers, as persons.<sup>82</sup> Persons can be categorized into two: natural and legal. Natural persons are human beings; legal persons may be artificial persons.<sup>83</sup> Now, the question arises whether dead bodies can be considered legal persons?

Salmond further says that a human's personality commences at birth and ends at death. Death ceases all rights and duties. Certainly, the dead cannot enjoy the same rights as the living. The corpse cannot marry, divorce, or vote. Some intellectuals think that the dead are subjects of legal Interests and can regard them as legally fictitious persons.<sup>84</sup>

Undoubtedly, death exists in our emotions and perception. The dead have significance in form as successors, as impressions of human character, and as family and social symbols, which are recognized through our feelings towards them. A person's name is often used after their death. No one can dispute that a person has a name. That name can also carry rights and duties. Thus, the nature of the interest in a dead person's body is a pseudo or quasi-property right, which vests legitimate heirs and survivors in the order of inheritance of property.<sup>85</sup>

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<sup>72</sup>Pramatha Nath Mullick vs. Pradyumna Kumar Mullick, L. R. 52 Ind. App. 245 (1925). (1925)27BOMLR1064

<sup>73</sup>Radomer Russ-Pol Unterstutzung Verein v. Posner, 176 Md. 332 (Md. 1939) available at <https://www.stimmel-law.com/en/articles/rights-and-obligations-human-remains-and-burial> (last visited Jan. 22, 2023)

<sup>74</sup>Southern Life & Health Ins. Co. v. Morgan, 21 Ala. App. 5 (Ala. Ct. App. 1925), available at <https://casetext.com/case/southern-life-health-ins-co-v-morgan-1> (last visited Jan. 22, 2023)

<sup>75</sup>Pettigrew v. Pettigrew, 207 Pa. 313 (Pa. 1904), available at <https://case-law.vlex.com/vid/pettigrew-v-pettigrew-36-900293621> (last visited Jan. 22, 2023)

<sup>76</sup>In re Estate of Weiss, 2009 Phila. Ct. Com. Pl. LEXIS 236 (Pa. C.P. 2009).

<sup>77</sup>123Wis.453, 102N.W.40, Supreme Court of Wisconsin, available at <https://casetext.com/case/koerber-v-patek>

## Conclusion

The deceased's body warrants respectful care: descendants, relatives, and the state are responsible for safeguarding the remains. Indecorous conduct, such as the improper handling of a corpse, sexual offences involving a corpse, mutilation of a corpse, and desecration of a corpse, constitutes both a crime and a transgression against the living. The deceased exist in the living's recollections. The ethical, spiritual, and legal obligation is with family members, closest blood relatives, other relatives, and ultimately the local authority to honor the deceased with dignity and to inter or cremate the body promptly in line with their wishes and customs.

The law enacted by the Rajasthan Legislative Assembly (The Rajasthan Honour of Dead Body Act, 2023) can serve as a guiding framework for ensuring due dignity and respect for a deceased person. Other states of India may adopt it while keeping in mind their regional requirements. Such a law should spell out what people are supposed to do with the body of the dead, who has the right to take possession of the body, how the body should be buried according to law and society, and how it should not be used inappropriately. The dead have social traits and an image that people know about them. People who need protection from infringement of life or who want to sue for abuse should still be able to do so after they have died. The dead body will also be a biohazard for the surroundings if it is left alone for a long time. Even under the Bhartiya Nyaya Sanhita 2023, a specific chapter on crimes against the dead body can be inserted to protect rights, such as the right against trespass on burial sites and places of funeral rites, the right against dishonest misappropriation and conversion of property, the right against defamation, rights against the act of unnatural sex and the right against criminal intimidation.

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<sup>78</sup> See also Ernest Partridge, Posthumous Interests and Posthumous Respect, 91 ETHICS 243, 249 (1981)

<sup>79</sup> Williams 1957, 482-3

<sup>80</sup> Kant's division of duties in his Metaphysics of Morals (1797)

<sup>81</sup> Tarannum Vashisht, All about legal rights of the dead, August 17, 2020, <https://blog.ipleaders.in/all-about-the-legal-rights-of-the-dead/#:~:text=According%20to%20Salmond%2C%20a%20person,two%20categories%2C%20natural%20and%20legal>. (last visited Jan. 22, 2023)

<sup>82</sup> Legal Personality of Idols, <https://jlrs.com/legal-personality-of-idols/> (last visited Jan. 22, 2023)

<sup>83</sup> They are imaginary persons who have rights and duties in law and in whom law vests personality by way of fiction

<sup>84</sup> 39 See BGHZ, Bd., 15, S.249; BGHZ, Bd., 50, S. 133.

<sup>85</sup> e Nihan et al. v. Wright et al. 1890, 125 Ind. 536. Supreme Court of Indiana, <https://casetext.com/case/renihan-v-wright>

# From Punishment to Care: A Reformatory Justice Approach for Juvenile Mental Health in India

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## ABSTRACT

*In India, Juvenile delinquency has been treated in a punitive manner, public perception and legal action informed by prominent cases like the Nirbhaya case and other criminal cases of minors. But further scrutiny reveals that most juveniles in trouble with the law have untreated trauma, psychological illnesses, and inauspicious social backgrounds that drive them to criminal activities. Punishment alone does not resolve these underlying causes or deter recidivism. This paper scrutinizes the interface between childhood mental health and rehabilitation outcomes in the Indian context. Using a doctrinal research methodology, the study critically evaluates the efficacy of current legal regimes like The Juvenile Justice (Care and Protection of Children) Act, 2015 (amended in 2021), and allied with constitutional provisions along with the landmark judicial decisions such as Munna v. State of U.P. (1982) to Barun v. Master Bholu (2022). It contends that the present system, progressive as it is on paper, is severely marred by implementation deficits, especially in offering regular psychological assessment and counselling. Based on case laws, legislative analysis, and comparative international models, the paper suggests a reformatory justice model that moves the focus away from punishment to care. Involving mental health support, restorative practices, and community-based rehabilitation, this model has the potential to minimize reoffending, safeguard child rights, and ensure long-term social reintegration. The research highlights the importance for India in implementing a reformatory, trauma-informed juvenile justice system that identifies the child as not just an offender, but as an individual who can be improved and is worthy of care.*

**Keywords:** Juvenile Justice, Juvenile Justice System, Mental Health, Reformatory Justice, Juvenile Justice (Care and Protection of Children) Act 2015, Juvenile Justice Board, Parens Patriae, Child Welfare Committee, Comparative Juvenile Justice, Nirbhaya Impact, Integrated Care Model.

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## Introduction

*“Every young boy or girl in his or her heart of hearts craves for recognition and love and he or she becomes the devoted slave of anyone who shows him or her kindness and consideration”*

*-Rabindra Nath Tagore*

Adolescence is a highly critical stage of human growth replete with emotional susceptibility, identity development, and greater susceptibility to external influences. India, where more than 20% of the population- approximately 253 million belong to the age group of 10-19 years<sup>3</sup>, juvenile delinquency and mental health issues are emergent issues. World Health Organization says 14.3% of teenagers all over the world have mental disorders<sup>4</sup>, and the Indian population mirrors high levels of depression i.e., 14.5% between 11 and 18 years and anxiety 15%.<sup>5</sup> which are usually compounded by poverty, familial disintegration, and unresolved trauma. These difficulties often lead to juvenile delinquency, with the National Crime Records Bureau reporting 30,555 crimes by children in 2022, lower than 43,506 in 2013<sup>6</sup> but with a disturbing increase in violent crimes. High-profile offences, such as the Amarjeet Sada Case in 2007<sup>7</sup>, Nirbhaya case in 2012, Mayur Vihar Jeweler’s wife Murder case in 2013<sup>8</sup>, and a number of other similar offences perpetrated by the juveniles that have fueled public pressures demanding tough penalties, but these do nothing to deal with deeper issues such as psychological trauma, so causing them to offend again. The Juvenile Justice (Care and Protection of Children) Act, 2015, attempts to redefine the policy in favour of rehabilitation over punishment but is frustrated by gaps in mental health care. This paper criticizes these gaps and advocates for a reformatory model of justice that incorporates

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<sup>3</sup> UNICEF, Adolescent Development and Participation, available at <https://www.unicef.org/india/what-we-do/adolescent-development-participation> (Last visited Jan.12, 2026)

<sup>4</sup> 2021 Global Burden of Disease (GBD) [online database]. Seattle: Institute for Health Metrics and Evaluation; 2024 (<https://vizhub.healthdata.org/gbd-results/>), (last accessed on Jan.,12,2026).

<sup>5</sup> S.K. Mishra, M. Srivastava, N. K. Tiwary, & A. Kumar, *Prevalence of depression and anxiety among children in rural and suburban areas of Eastern Uttar Pradesh: A cross-sectional study*, National Library of Medicine, available at <https://pmc.ncbi.nlm.nih.gov/articles/PMC5958570/> (last viewed on Jan. 26, 2026)

<sup>6</sup> Suresh Deepala, *Data from the NCRB’s CII Report Indicates That Crimes Committed By Juveniles Down 30 Between 2013 & 2022*, Factly (May 28, 2024) (on-line), <https://factly.in/data-ncrb-data-indicates-that-crimes-committed-by-juveniles-down-30-between-2013-2022/>

<sup>7</sup> Austin Harvey, *Amarjeet Sada: Inside the Disturbing Crimes of the World’s Youngest Serial Killer*, All that’s Interesting (Feb. 24, 2025 (on-line) <https://allthatsinteresting.com/amarjeet-sada>

<sup>8</sup> The Hindu, *Runaway juveniles among 5 held for murder of jeweler’s wife*, Nov.19, 2013 *available at* <https://www.thehindu.com/news/cities/Delhi/runaway-juveniles-among-5-held-for-murder-of-jewellers-wife/article5367233.ece> (last visited on Jan16, 2026)

psychological evaluation, counselling, restorative mechanisms and reintegration into society to rebuild young offenders as useful citizens on the lines of international child rights standards.

India's History of Juvenile System was mostly rooted in punitive measures. The Reformatory Schools Act of 1876<sup>9</sup> was enacted in India with the aim to establish separate institutions for the young offenders and provide them with proper care and protection but little focus on the psychological needs. This was the first step towards development of the Juvenile Justice system in India. However, the given Act failed to achieve its objectives due to lack of infrastructure, less trained staff, social and environmental factors, shift from rehabilitation to retributive form of punishment and lack of community support. Then the Juvenile Justice Act of 1986 was brought into existence which was the outcome of the Madras Children Act of 1920 (Tamil Nadu Act IV of 1920)<sup>10</sup> and also global developments like the 1899 Chicago Juvenile Court<sup>11</sup>, which introduced rehabilitation but overlooked mental health support. The Juvenile Justice Act, 1986<sup>12</sup> (hereinafter referred to as the JJ Act) 2000<sup>13</sup> and 2015<sup>14</sup> amendment, aligned with the UN Convention on the Rights of the Child 1989<sup>15</sup> which established Child Welfare Committees (CWC's) which mandates mental health assessments and therapy. However, a 2023 UNICEF report highlights that only 50% of juveniles in observation homes receive such psychological screenings due to overburdened systems and a shortage of specialists.<sup>16</sup> This punitive legacy has evolved, yet challenges persist in addressing the mental health roots of delinquency.

Indian juvenile delinquency is propelled by the dynamic interplay of mental health deficits, psychological issues, and socio-environmental circumstances that interfere with adolescents' capacity to know right from wrong and result in criminal acts. Cognitive impairments, including intellectual disabilities, render certain juveniles susceptible to exploitation, as they fail to understand moral boundaries and become susceptible to being used for criminal activity. Emotional distress, such as insecurity, envy, and unresolved trauma, lead to impulsive or violent

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<sup>9</sup> *The Reformatory Schools Act, No. 5 of 1876 (India)*

<sup>10</sup> *Madras Children Act, No. IV of 1920 (India)*

<sup>11</sup> Julian W. Mack, *The Juvenile Court*, 23 Harv. L. Rev. 104 (1909).

<sup>12</sup> *The Juvenile Justice Act, No. 53 of 1986 (India)*

<sup>13</sup> *The Juvenile Justice (Care and Protection of Children) Act, No. 56 of 2000 (India)*

<sup>14</sup> *The Juvenile Justice (Care and Protection of Children) Act, No. 2 of 2016 (India)*

<sup>15</sup> *Convention on the Right of the Child*, Nov 20, 1989, 1577 U.N.T.S. 3.

<sup>16</sup> Global Annual Results Report 2023: Mental Health, for every child, mental health & psychosocial wellbeing by UNICEF <https://www.unicef.org/reports/global-annual-results-report-2023-mental-health> (last visited on Jan 11, 2026)

behaviour. Socio-cultural issues, such as pathological home environments, broken families, or insufficient parental love and support, give rise to emotional instability, whereas socio-economic adversities, such as poverty and restricted access to education, compel young people towards theft, gangs, or beggary. Early exposure to sex or offensive content from media, such as movies and social media violence glorification, leads impressionable teenagers to emulate the behaviors. School frustration, poor positive peer relations, and cultural urban changes continue to increase the risks. Psychologically, undiagnosed childhood mental disorders and personality characteristics such as impulsivity intensify delinquent behaviour. In conjunction, these increase a mental health epidemic that obscures good judgment, resulting in delinquency. A reformatory policy that focuses on psychological support and reintegration within the community is essential to treat these underlying causes and steer juveniles toward better development.<sup>17</sup>

## Understanding Juvenile Delinquency

Juvenile delinquency also called youth crime refers to legal violations committed by minors. “*Delinquens juvenilis*” is a Latin originate term meaning youthful wrongdoer. ‘Delinquens’ means to commit a crime and ‘Juvenilis’ means young individuals. Hence, Juvenile delinquency refers to any unlawful activities committed by an individual between the age group 16 to 18 years. There are four different types of juvenile delinquency they are as follows<sup>18</sup>:

- Solitary delinquency: The delinquency arises when an individual child commits a delinquent act. The major cause of it is personal or family problems like lack of love and support, abuse or neglect in order to seek attention they see delinquency as an ultimate solution. Example: a child steals money because his parents ignore him.<sup>19</sup>
- Collective-support delinquency: This type of delinquency arises when an individual is involved in a delinquency in a companionship by getting influenced by the group. They get

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<sup>17</sup> Dr. Kavita H Kulkarni, “Juvenile Delinquency: Cause and Effect”, *International Journal of Creative Research Thoughts (IJCRT)*, © 2023 IJCRT | Volume 11, Issue 12 December 2023 | ISSN: 2320-2882, available at <https://www.ijert.org/papers/IJCRT2312926.pdf> (last viewed on Jan 12,2026)

<sup>18</sup> Pragya Rai & Dr. Shilja Dubey, “Effects of Juvenile Delinquency on Society – A Social Work Study,” *BSSS Journal of Social Work, Volume XV, Issue-I*, <https://bssspublications.com/Home/IssueDetailPage?IsNo=550> (last visited on Jan 11, 2026)

<sup>19</sup> *Ibid.*

involve under pressure of peers and the cause is not associated in the personality rather the person's home and neighbourhood.<sup>20</sup>

- Organized delinquency: This type of delinquency arises when an individual is involved with a formal group that has its own rule and reward for commission of a crime. Since the group gives the juvenile identity, recognition, status hence they choose to commit delinquent acts.<sup>21</sup>
- Coincidental delinquency: This type of delinquency arises not because the child is delinquent but because of a situation or opportunity. The main cause of it is temporary factors and not personality or long-term issues. For example: a child is trying to break into the parked car because it was unlocked but not because he planned to do so.<sup>22</sup>

## **Causes of the Juvenile Delinquency**

It cannot be explained that a person is born with an offensive attitude. The behaviour of a child, to a great extent, depends on the society in which he or she grows up, with parents and friends influencing his or her total growth. In a multilayered and dynamic nation like India, where individuals from different cultural, social, and economic backgrounds live together, kids have exposure to multiple values and norms. Parents and communities usually pass on what they see as "good" to their children. In doing this, though, children might internalize both good and bad aspects that have a major impact on their behaviour and future decisions. But the problem arises when the child is neglected by their parents they try to shape themselves on their own and hence gradually indulge in delinquent acts. There are various factors that influences Juvenile delinquency but the major two factors are:

### ***1. Social Factor***

*Disrupted Homes:* The loss of one or both parents, a protracted sickness or insanity, desertion, or divorce can all cause disruptions to the family. One very important way to socialize a youngster is through interaction at home. In this situation, the mother plays the role. The development of the

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<sup>20</sup> *Ibid.*

<sup>21</sup> *Ibid.*

<sup>22</sup> *Ibid.*

kid will be affected if she divorces her partner, deserts him, or dies. Such a kid stays vulnerable to outside anti-social pressures and loses both parental authority and maternal affection.

*Poverty:* The majority of delinquents come from underprivileged homes. Parents in poverty are sometimes forced to work long hours away from home in order to make ends meet. Kids are left alone. Consciously or unconsciously, these kids have a tendency to join gangs and turn into criminals. This is mainly prevalent in areas with a high Labour population and slums.

*Delinquency Areas:* It is mainly noted that criminals are mostly from congested and substandard housing locations and places with numerous movies, motels, nightclubs and liquor stores. It is a well-established fact that children from such households are more likely to become victims of delinquency if they live in an urban area.

*Companions and Gangs:* As the youngster becomes older, he goes to play in the neighborhood and joins a peer or playgroup. He has a good probability of turning into a delinquent himself if he unintentionally joins a gang or group that promotes delinquency. Indeed, the prevalent views among young people in direct contact groups are the primary cause of criminality.

*Beggary:* The most common cause of adolescent delinquency is begging. Most of the kids who beg come from dysfunctional or extremely impoverished homes. They don't get the affection and attention they require from their parents. They look for the satisfaction of their inner needs, aspirations, and wants. For the same reason, they turn into beggars. They realize that only by engaging in aberrant behaviour can they satisfy their wants and desires. They thus turn into delinquents.<sup>23</sup>

**2. *Personality Factor:*** Juvenile delinquency is not only the cause of economic and social pressures, but also of personal weaknesses or psychological problems.

*Mental Deficiency:* Statistics reveal that many delinquents have intellectual disabilities. Children with low intelligence or mental retardation will often lack the potential to differentiate clearly between right and wrong. These children can usually be manipulated by their more intelligent peers or even adults to get involved in criminal activities.

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<sup>23</sup> *Ibid.*

*Emotional Problems:* Emotional disturbances like inferiority complexes, jealousy, frustration, or rejection are found among delinquents. Psychologically, delinquency is usually an act of rebellion or violence against social circumstances that deprive children of their dignity or needs. Crime, therefore, is neither born nor bred but produced by personal defects and untoward circumstances.<sup>24</sup>

### **Case Studies in India Mapped in More Than a Decade (2015-2025)**

*Amarjeet Sada case (2007):* An 8-year-old who had committed numerous killings because of family neglect and untreated mental problems was arrested without proper therapy, demonstrating the system's inability to treat mental health as a cause of delinquency.<sup>25</sup>

*Mayur Vihar Murder (2013):* Five juveniles ran away from a juvenile home, killed a jeweler's wife, and looted 50 kg of silver and ₹10 lakh, conspired by a cable operator and jeweler.<sup>26</sup>

*Kindergarten child sexual assault (2014):* A four-year-old girl student was sexually assaulted by the seniors in the school hostel in Kozhikode in Kerala.<sup>27</sup>

*Nangloi Infant Kidnapping and Rape (2015):* Two young men, who were acquaintances of the victim's family, kidnapped and raped a 2.5-year-old girl during a power outage at Nangloi.<sup>28</sup>

*Karkardooma Court Shooting (2015):* Three juveniles on the border of youth fired at Karkardooma Court, murdering a head constable to kill a trial defendant.<sup>29</sup>

*BK Dutt Colony Robbery-Murder (2016):* A 17-year-old, released on bail after two months for "good behaviour," strangled a 65-year-old woman and a child for robbery in BK Dutt Colony due to financial compulsion and ambitions to perform a dance show.<sup>30</sup>

*Vikaspuri Doctor Beating (2016):* Four children out of nine assaulted a doctor to death in Vikaspuri after an argument and died on their way to the hospital.<sup>31</sup>

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<sup>24</sup> *Ibid.*

<sup>25</sup> Austin Harvey, *Amarjeet Sada: Inside the Disturbing Crimes of the World's Youngest Serial Killer, All That's Interesting* (Feb. 24, 2025) (on-line), <https://allthatsinteresting.com/amarjeet-sada> (last visited Aug. 21, 2025).

<sup>26</sup> *Mayur Vihar Murder Case, The Hindu* (Nov. 30, 2013).

<sup>27</sup> *Kindergarten child sexual assault (Nov. 12, 2014)*

<sup>28</sup> *Nangloi Infant Kidnapping and Rape Case, Indian Express* (Oct. 18, 2015)

<sup>29</sup> *Karkardooma Court Shooting Case, The Times of India* (Dec. 25, 2015).

<sup>30</sup> *BK Dutt Colony Robbery-Murder Case, Hindustan Times* (Feb. 25, 2016).

<sup>31</sup> *Vikaspuri Doctor Beating Case, NDTV* (Mar. 25, 2016).

*Mundka Uber Driver Murder (2016)*: Two children murdered an Uber driver in Mundka, snatched his vehicle after an altercation, and discarded his body roadside.<sup>32</sup>

*Jhabua Murder Case (2016)*: a sessions court in Jhabua, Madhya Pradesh, imposed a life sentence on two teenagers for the murder of a 16-year-old boy. This was the inaugural case under the modified Juvenile Justice Act.<sup>33</sup>

*A nine-year-old boy passed away following an alleged assault by his classmates in Tamil Nadu (2016)*: A student in the fourth grade died after reportedly being attacked by two of his classmates at a government school due to a dispute concerning his geometry box.<sup>34</sup>

*Bollywood Celebrities' Children Abuse Case (2017)*: Actor and cinematographer's sons were questioned for harassing a classmate.<sup>35</sup>

*Jahangirpuri Rape (2017)*: One adult and four juveniles raped a 22-year-old woman in Jahangirpuri, making her drink alcohol and keeping her hostage.<sup>36</sup>

*Delhi Minor shoots Shopkeeper Over Argument (2020)*:<sup>37</sup> A 38-year-old shopkeeper was murdered by four juveniles after the heated arguments with the shopkeeper over a soiled 500 Rupee note.

*Social Media Video Murder (2023)*: A teenager stabbed an 18-year-old for robbery and revenge, creating a video dancing alongside the body, triggered by gangsters.<sup>38</sup>

*Janta Mazdoor Colony Murder (2023)*: A 16-year-old juvenile, allegedly drunk, accosted a 17-year-old boy in Janta Mazdoor Colony and demanded ₹350 to purchase biryani. When the victim did not comply, the accused strangled him to unconsciousness, stabbed him about 55 times targeting the neck, face, and ears, and tried to behead him. The teenager pulled the victim's body along a thin alley, danced frantically, and intimidated passersby with a knife covered in blood, all captured in a 2.23-minute CCTV video.<sup>39</sup>

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<sup>32</sup> *Mundka Uber Driver Murder Case, India Today* (Apr. 7, 2016).

<sup>33</sup> *Jhabua Teen Murder Case, Hindustan Times* (Dec. 6, 2016).

<sup>34</sup> *9-yr-old Dies Assault by Schoolmates (Mar. 6, 2016)*.

<sup>35</sup> *Bollywood Celebrities' Children Abuse Case, The Hindu* (Aug. 30, 2017).

<sup>36</sup> *Jahangirpuri Rape Case, Indian Express* (Dec. 23, 2017).

<sup>37</sup> *Delhi Minor shoots Shopkeeper Over Argument (Aug. 2020)*, <https://www.thehindu.com/news/cities/Delhi/four-juveniles-held-for-killing-shopkeeper-over-500-soiled-note/article65792034.ece>

<sup>38</sup> *Social Media Video Murder Case, Hindustan Times* (Nov. 2023).

<sup>39</sup> *Janta Mazdoor Colony Murder Case, NDTV* (Nov. 22, 2023).

*Pune Porsche Car Accident (2024):* A 17-year-old inebriated teenager murdered two drivers in a Porsche accident, fueling anger; initial bail with essay penalty withdrawn following public outcry.<sup>40</sup>

*Ranhola Shooting 2025:* A teenager was shot dead in the Ranhola area of outer Delhi. This shocking incident has raised serious concerns about young people getting involved in violent crime. The police responded quickly and arrested three juveniles linked to the shooting. Initial investigations indicate that a dispute escalated into deadly violence. This case has reignited discussions about youth crime, access to illegal guns, and the need for better preventive and reform measures.<sup>41</sup>

*Gujrat Rape Case (2026):* Eight people were arrested in Gujarat's Navsari district for allegedly gangraping a 15-year-old girl, a police official. The eight were charged under the Protection of Children from Sexual Offences (POCSO) Act and the Bharatiya Nyaya Sanhita, he added.<sup>42</sup>

*New Year's Day Stabbing 2026:* In a troubling New Year incident, 50-year-old Bihari Lal was reportedly stabbed by a group of minors in Delhi after he asked them to lower the loud music and stop shouting. What started as a simple request for quiet quickly turned into a violent attack. This event raises serious worries about rising intolerance, youth aggression, and the need for community awareness and better law enforcement to stop such pointless violence.<sup>43</sup>

## **Effects of Juvenile Delinquency**

Juvenile delinquency has far-reaching impacts- not just for victims, but for the offenders themselves, their families, and society in general. Juveniles tend to be placed on probation or sent to detention, which disrupts their schooling and ruins future job prospects. Detention Centres can expose them to bad peer influence, raising the likelihood of re-offending. Long-term impact could include social stigma, unemployment and psychological trauma. Families suffer from emotional

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<sup>40</sup> Porsche Teen Car Accident Case, The Times of India (May 20, 2024).

<sup>41</sup> The Hindu, Teenager shot dead in outer Delhi's Ranhola; 3 juveniles nabbed dated 20 Nov.2025. Available at [https://www.thehindu.com/news/cities/Delhi/teenager-shot-dead-in-outer-delhis-ranhola-3-juveniles-nabbed/article70302015.ece#:~:text=An%2018%2Dyear%2Dold%20boy,as%20Nitin%2C%20had%20been%20shot.\(Last visited Jan 16, 2026\)](https://www.thehindu.com/news/cities/Delhi/teenager-shot-dead-in-outer-delhis-ranhola-3-juveniles-nabbed/article70302015.ece#:~:text=An%2018%2Dyear%2Dold%20boy,as%20Nitin%2C%20had%20been%20shot.(Last visited Jan 16, 2026))

<sup>42</sup> Gujrat Rape Case (Jan 10, 2026).

<sup>43</sup> NDTV, Delhi Man Objects to Loud Music on New Year, Stabbed by Teens, dated Jan 3, 2026, Available at [https://www.ndtv.com/delhi-news/delhi-man-objects-to-loud-music-on-new-year-stabbed-by-teens-10233371\(Last visited Jan16, 2026\)](https://www.ndtv.com/delhi-news/delhi-man-objects-to-loud-music-on-new-year-stabbed-by-teens-10233371(Last visited Jan16, 2026))

distress, financial costs (counselling legal bills) and social stigma. The delinquent child leads to instability, tension, and anxiety in the family. Families also have moral obligations towards the victims of the offense of the child. Juvenile delinquency is generally associated with drug abuse, gang membership, and unsafe neighborhoods. It compels governments to spend huge amounts of money on law enforcement, juvenile homes, and social welfare. Public agencies—such as schools, religious groups, and neighborhood programs—are pressed to develop effective prevention methods. Victims immediately incur the economic losses of theft, property damage or destruction, or violence. If there is violence, victims endure physical harm, emotional trauma, medical expenses, and loss of wages. Most victims are left with a persistent feeling of insecurity and distrust within society.<sup>44</sup>

## **The Shift in Law: From Punishment to Care**

### ***Constitutional Protection for Juveniles***

Apart from JJ Act, 2015 there are various other laws that deals with protection of children/minors in our country because children are the building blocks of our country who, when shown a correct path helps in building nation. The Constitution of India itself delves with the peaceful development of the nation and nothing can be the better way to start such development than starting it from children by constant nurturing and guidance. Some of the important provisions are “Article 15(3), Article 39(e), (f)Article 45 and Article 47 which impose constitutional obligations upon the States for ensuring that all the needs of the children are fulfilled and their basic rights are protected”.<sup>45</sup>

India’s Juvenile justice system has evolved from punitive to care-based approaches through various legislative reforms, societal demands, and global child rights standards. Initial laws like Apprentices Act, 1850<sup>46</sup>, and Reformatory Schools Act, 1876<sup>47</sup> which mainly focused on discipline, treating juveniles aged between 10 to 18 years as mini- adults with rehabilitation through vocational training or reformatory cells but there was no focus on mental health issues. Their existed various state laws before Independence like the Madras Children Act, 1920<sup>48</sup>,

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<sup>44</sup> Supra note 16.

<sup>45</sup> Dr. S.C. Tripathi & Vibha Arora, Law Relating to Women & Children, Central Law publication, Allahabad, 6<sup>th</sup> edn.2019, p.g.435.

<sup>46</sup> Apprentices Act, No. 38 of 1850 (India).

<sup>47</sup> Reformatory Schools Act, No. 5 of 1876 (India).

<sup>48</sup> Madras Children Act, No. IV of 1920 (India).

Bombay Children Act, 1948<sup>49</sup> all these acts lacked uniformity in defining juveniles, different regions had different age limits and emphasised punishment over care.

Then came the Juvenile Justice Act, 1986<sup>50</sup> after the independence, which marked a shift toward rehabilitation, which was influenced by the UN's 1985 Beijing Rules, but it again failed to provide any psychological support. It is based on two jurisprudential goals, *parens patriae* and the principle of individualized treatment. The *parens patriae* doctrine allows the court to conduct the judicial proceedings to prioritize the minor's welfare rather than to determine criminal guilt and impose a sentence. Furthermore, the principle of individualized treatment views that any legal outcome must be inherently rehabilitative. It prescribes a treatment programme that must be customized according to specific developmental needs, unique personality, psychological development and social background of the juveniles."<sup>51</sup>

The JJ Act, 2000<sup>52</sup> aligned with the UN Convention on the Rights of the Child (1989)<sup>53</sup> which fixed the age for juveniles as 18 years for both males and females. It gave more preference to care, protection and rehabilitation through Child Welfare Committees (CWCs) and observation homes. As per this Act, the juvenile could only be detained for three years for whatever crime they have committed, he will stay in special homes. Section 17 of the act also grants immunity to the juvenile under 18 years of age from criminal trial. However, certain amendments were proposed in The Juvenile Justice (Care and Protection) Act, 2000 such as: it classified petty, serious and heinous crimes. Secondly, when a heinous crime is committed by someone between the age of 16 to 18 years will be first assessed by juvenile justice board to determine whether it was done by the person as a child or an adult. Thirdly, when the offence is committed by the child then proper safeguard must be taken by the psychologists and social experts. Lastly, the trial of the juvenile shall be conducted on the recommendation of the board's evaluation report to determine whether the offence has been committed as a child or as an adult.<sup>54</sup> The Parliament further amended this Act in 2015

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<sup>49</sup> The Bombay Children Act, No. 71 of 1948

<sup>50</sup> The Juvenile Justice Act, No. 53 of 1986 (India).

<sup>51</sup> Mamta Rao, Law relating to Women and Children, 4<sup>th</sup> edn.2023, EBC, Kolkata, 648.

<sup>52</sup> The Juvenile Justice (Care and Protection of Children) Act, No. 56 of 2000 (India).

<sup>53</sup> *Convention on the Rights of the Child*, Nov. 20, 1989, 1577 U.N.T.S. 3.

<sup>54</sup> Lalit Dadwal, *Juvenility: From Criminality to Responsibility*, 6 Int'l J. Rev. & Res. Soc. Sci. 381 (2018), <https://ijrrsonline.in/HTMLPaper.aspx?Journal=International+Journal+of+Reviews+and+Research+in+Social+Sciences;PID=2018-6-4-1>

due to public outcry in 2012 Nirbhaya case. The Juvenile Justice (Care and Protection of Children) Act, 2015 recognized as: -

1. The alternative term for juvenile as child in conflict with law given under Section 2(13) of the Act. It defined “child in need of care and protection” includes - orphaned, abandoned, and surrendered children under Sec.2(14), whereas Sec.2(1) defines abandoned child, Sec.2(42) defines orphan and Sec.2(60) defines surrendered child. A juvenile aged between 16 to 18 years, committed a heinous crime as per Sec.2(33) would be treated as an adult after the assessment of mental and physical health of the individual by the Juvenile Justice Board (JJB), strict procedure of Sec.15 of the Act will be followed.
2. The Act has special provision for the juvenile over 16 years commits heinous crime over, the JJB will assess and transfer the case to the Sessions Courts after a preliminary inquiry with the option to reform the child while the trial is going on until he attains the age of 21 years under Sec.15. In case the child failed to reform then he would be sent to prison to complete the remaining sentence. While transferring the case to Children’s Court (Session Court) there has to be compliance of Section 18(3), 19, and 20 of the Act.
3. The Act makes it compulsory to register all Child Care Institutions within six months under Section 41, allows inspections and monitoring of Child care Institutions under Section 42 of the act, and promotes rehabilitation and social reintegration of children through education, health care, nutrition, and vocational training under Sections 44 and 53 of the JJ Act.
4. The act also criminalizes previously unpunished offenses against children such as child trafficking (Section 80), legal adoption and corporal punishment in institutions (Section 82), and also criminalizes certain other offences including cruelty (Section 75), employment of children for begging (Section 76), administering intoxicating substances (Section 77), using children for vending, peddling or begging (Section 78), exploitation of child employees (Section 79), sale and procurement of children (Section 81), and offences relating to lawful and unlawful adoption (Sections 84 and 85).

The Juvenile Justice (Care and Protection of Children) Amendment Act, 2021 amend the Juvenile Justice Act, 2015, to fix the structural failures highlighted by the Sampurna Behura Case. in

*Sampurna Behura vs. Union of India & Ors.*<sup>55</sup> where the court addressed the non-implementation or poor implementation of the Juvenile Justice (Care and Protection of Children) Act, 2015 across the country. The Court pointed that despite a robust legal framework, child rights were being compromised due to institutional apathy, lack of infrastructure, vacant posts, and inadequate training. The Court emphasised that child welfare and juvenile justice are constitutional obligations under Articles 15(3), 21, 21A, 39(e) and 39 (f) of the Indian Constitution. It held that statutory bodies like NCPCRC, SCPCRs, Juvenile Justice Boards (JJBs), and Child Welfare Committees (CWCs) must function effectively and not merely exist on paper. Through the detailed directions, the Court mandated filling vacancies in child protection institutions, regular functioning of JJBs and CWCs, strengthening probation services and police sensitization, proper registration and monitoring of Child Care Institutions, use of technology for Child Protection and training of all stakeholders involved in the juvenile justice system.

The 2021 Amendment made following changes:<sup>56</sup>

1. “Authorizing the District Magistrate, including the Additional District Magistrate, to issue adoption orders under Section 61 of the JJ Act, in order to ensure speedy disposal of cases and enhance accountability.
2. The District Magistrates have been further empowered under the Act, to ensure its smooth implementation, as well as garner synergized efforts in favour of children in distress conditions.
3. Any Child Care Institutions shall be registered after considering the recommendations of the District Magistrate.
4. The DM shall independently evaluate the functioning of District Child Protection Units, Child Welfare Committees, Juvenile Justice Boards, Specialized Juvenile Police Units, Child Care Institutions etc.
5. The Act sets a proper mechanism for adopting a child given under Section 58 of the Act which states there will be a Specialized Adoption Agency (Section 65), who will study the report of the prospective adoptive parents and if the agency finds the parents eligible the agency would file an application before the District Magistrate for obtaining the adoption

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<sup>55</sup>*Sampurna Behura vs. Union of India & Ors, Writ Petition (Civil) No. 473 of 2005(India).*

<sup>56</sup> The Juvenile Justice (Care and Protection of Children) Amendment Act, No. 23 of 2021 (India).

order and certified copy of adoption order is immediately sent to the prospective adoptative parents.

6. The person aggrieved of the order passed by the District Magistrate may prefer an appeal under Section 101(6) of the JJ Act, before the Divisional Commissioner within thirty days from the date of passing of such order.
7. The Act makes serious offences as punishable under section 2(54) – minimum imprisonment for a term more than three years and not exceeding seven years, and maximum imprisonment for a term more than seven years and minimum punishment is not prescribed or is less than seven years.
8. The Classification of offences and the designated courts for trial given under Section 86 of the Act which provides punishment for offences as follows
  - The offences punishable with imprisonment for more than seven years shall be cognizable and non-bailable.
  - The punishment prescribes with three years or more but not exceeding seven years, such offences shall be non-cognizable and non-bailable.
  - The Offences punishable with less than three years, imprisonment or with fine and are classified as non- cognizable and bailable.

However, offences committed under the CPC, 1973, the Commission for Protection of Child Rights Act, 2005, or the Protection of Children form Sexual Offences Act, 2012 are triable by the Children’s Court.

9. The Amendment inserted Clause 4 to Section 27 which lay down the qualifications, disqualifications, tenure and accountability of members of the Child Welfare Committee.”<sup>57</sup>

## **Nirbhaya Impact: Change of Public Opinion from Stricter Punishment to Reformative Care.<sup>58</sup>**

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<sup>57</sup> *Ibid.*

<sup>58</sup> Lapsia, Tina P., "Impact of the “Nirbhaya” Rape Case: Isolated Phenomenon or Social Change?" (2015). *Honors Scholar Theses*. 453. [https://opencommons.uconn.edu/srhonors\\_theses/453](https://opencommons.uconn.edu/srhonors_theses/453)

The 2012 Nirbhaya case, a horrific gang rape and murder in Delhi with a juvenile perpetrator, had a deep impact on public opinion and India's juvenile justice system, leading to a controversial debate between demands for stricter punishment and reformatory care.

### ***1. Change in Popular Perception to Harsher Punishment***

*Pre-Nirbhaya Background:* Prior to the Nirbhaya incident, the JJ Act of 2000 dealt with all delinquents below the age of 18 as juveniles, focusing on rehabilitation rather than punishment, with the maximum detention of three years in observation homes irrespective of the gravity of offenses. Publicity regarding juvenile delinquency was scarce, and psychiatric conditions were hardly treated as part of legal or social discussion.

*Nirbhaya Case Impact*<sup>59</sup>: The case, where a 23-year-old student was brutally attacked by six people, including a 17-year-old juvenile, outraged the entire nation because of its savagery (Mukesh & Anr vs. State for NCT of Delhi, 2017). The release of the juvenile after three years, as required under the 2000 Act, resulted in widespread outrage, since it was felt to be insufficient for the gravity of the crime. Mass demonstrations and media reports heightened demands for severe punishment, including calls to prosecute juveniles between 16–18 years as adults for serious offenses such as rape and murder. A PIL lodged by lawyer Shweta Kapoor contended that those above the age of 16 who committed serious crimes had attained mental maturity and needed to be held accountable more firmly, keeping with public feeling that "society needs protection" from criminals like these.

*Evidence of Shift:* Social media posts from 2012–2015 (e.g., on platforms like Twitter, as referenced in web results) and news reports highlighted public frustration, with hashtags like #JusticeForNirbhaya trending, demanding death penalties or life imprisonment for all accused, including the juvenile. This punitive sentiment was fueled by the perception that juveniles exploit legal leniency, ignoring underlying mental health or social factors.

### ***2. Legislative Response: Balancing Punishment and Care***

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<sup>59</sup> THE LAWWAY WITH LAWYERS JOURNAL VOLUME: -7 ISSUE NO: - 7, FEBRUARY 16, 2024 ISSN (ONLINE): - 2584-1106, 12 years of Nirbhaya case, has anything changes? <https://thelawwaywithlawyers.com/12-years-of-nirbhaya-case-has-anything-changed/>

The Nirbhaya case triggered the enactment of the JJ Act, 2015, which brought major reforms to meet the demands of people while trying to maintain a reformative essence. Section 15 of the Act provides that the child between the age group of 16 to 18 years commit serious crimes (such as rape, murder), The Juvenile Justice Board (JJB) makes a preliminary judgment on their mental and physical ability to comprehend the outcome of the crime. The cases may be forwarded to a Session Court for trial in adult courts, a direct reaction to popular demands for increased punishment after Nirbhaya. The Act requires rehabilitation by way of observation homes, counselling, and vocational training, with a focus on mental health examination (Section 27) and Child Welfare Committees (CWCs) for welfare of juveniles who commits crime or need care. The *Criminal Law (Amendment) Act, 2013* was in response to the Nirbhaya case and expanded the definition of rape, enhanced punishments (e.g., death penalty for cases leading to death), and created fast-track courts, which show a punitive turn but also victim-sensitive care. Though the 2015 Act permitted stricter treatment for older juveniles, it maintained a care-based approach, demanding psychological assessments and rehabilitation programs. But this was often eclipsed by public opinion, with protests and media demanding punishment more than trying to tackle the underlying causes such as trauma or mental conditions.

### **3. Reformative Care: The Neglected Perspective<sup>60</sup>**

*Mental Health Oversight:* The Nirbhaya case revealed a vital lacuna in tackling juvenile mental health. The criminal history of the child offender- poverty, dysfunctional family, and potential trauma—went largely unaddressed in public debate, which emphasized retribution. Research, such as a 2023 report published in Indian Journal of Psychiatry, indicates that 40% of youths in detention are depressed or have conduct disorders, often attributed to ACEs such as abuse or neglect. The provisions of the 2015 Act for therapy (Section 18(g)) remain underutilized, as only 50% of juveniles receive screenings owing to shortages in resources.

*Reformative Shortfalls:* The public's punitive push post-Nirbhaya overshadowed the Act's care-oriented goals. For instance, the juvenile in the Nirbhaya case received minimal mental health intervention during his three-year detention, and post-release support was absent, risking recidivism (10–15% rate, per NCRB 2022). UNICEF's 2023 report notes that rehabilitation

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<sup>60</sup> Akanksha Marwah, Assistant Professor (Law), Delhi Metropolitan Education, Noida, ILI Law Review, Winter Issue 2020, *RESTORATIVE JUSTICE AND REFORMATION OF OFFENDERS*, <https://ili.ac.in/pdf/amar.pdf>

programs, while mandated, lack trained psychologists and community reintegration strategies, undermining reformatory justice.

### **Judicial Perspective**

The Indian judiciary has consistently demonstrated a proactive and empathetic approach towards the challenges and specific requirements of juvenile offenders. The Constitution also mandates the court to construe legal provisions in such a way so as to provide restorative relief and give individualized treatment over punitive measures, reflecting the state's role as *parens patriae* of those who cannot protect themselves. The judiciary emphasised on rehabilitation over punishment. In the landmark judgement of *Munna v. State of U. P.*<sup>61</sup>, the judiciary addressed a grave situation where juvenile undertrials were held in Kanpur Central Jail and sexually abused by the adult inmates, despite the availability of a local children's home. The Court categorically held that minors under the age of 16 years should not be detained with adult prisoners. The law mandates that they must be sent to a designated children's home or any other suitable safe place to shield young offenders from contact with hardened and habitual criminals, ensuring that their potential for rehabilitation is not compromised by exposure to habitual lawbreakers. *P.N. Bhagwati* and *R.S. Pathak JJ*, observed "Juvenile delinquency is by and large the product of social and economic maladjustment. Even if it is found that these juveniles have committed any offence, they cannot be allowed to be maltreated. They do not shed their fundamental rights when they enter the jail. Moreover, the objective of the punishment being reformatory, we fail to see what social objective can be gained by sending them to jail where they come in contact with hardened criminals and lose whatever sensitivity they may have to finer and nobler sentiments". In *Sanjay Suri v. Delhi Admn.*<sup>62</sup>, the Supreme Court while expressing concern over the human rights of juvenile delinquents directed that "due care shall be taken to ensure that the juvenile delinquents are not assigned work in the same area where regular prisoners are made to work. Care should be taken to ensure that there is no scope for their meeting and having contacts...". In *Bachpan Bachao Andolan*

*v. Union of India*,<sup>63</sup> the apex court highlighted the urgent necessity for proactive intervention strategies to address and eradicate the rising instances of substance abuse including drugs, alcohol and other narcotics in children, especially adolescents. The court recommended framing of

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<sup>61</sup> (1982) 1SCC545: 1982SCC(Cri)269.

<sup>62</sup> *Sanjay Suri v. Delhi Admn*, 1988 SCC(Cri)248(India).

<sup>63</sup> *Bachpan Bachao Andolan v. Union of India* (2017) 1 S.C.C 653 (India).

comprehensive National Policy to tackle this critical facet of juvenile problem. Consequently, the core tenets of the juvenile justice system, as codified in the Juvenile Justice (Care and Protection of Children) Act, 2015, and other related regulations, ensures the right to audience to the minors, implementation of constructive rehabilitation by adopting positive strategies for social reintegration and strictly prohibiting any form of abuse or ill-treatment toward youth in conflict with the law. In *Sheela Barse v. Union of India*,<sup>64</sup> the Supreme Court opposed the incarceration of juveniles and observed, “It is regrettable that despite legal requirements and widespread admonitions from a social scientist, there are still a significant number of children in various prisons across the country. The terrifying atmosphere of prison has a particularly damaging effect on a child's ideas. Under no circumstances should children be kept in prison, and if a national government hasn't provided adequate space in its detention Centres or holding facilities, the children should be released on bond instead of being put behind bars.”

It has been witnessed that in several cases; the Indian judiciary has given priority on punishing the juveniles based on the severity of the crime committed by them. In *Ram Prasad Sahu v. State of Bihar (1979)*,<sup>65</sup> it was ruled by the Supreme Court that juveniles could be convicted for rape or attempt to commit rape, contending that excessive immunity is against fairness and proportionality. This emphasizes punitive action over reformatory treatment, not considering mental health dynamics behind such offenses. In *Bodhisattwa Gautam vs. Subhra Chakraborty (1995)*,<sup>66</sup> the Apex Court held that juvenile rape is against the Right to Life under Article 21, giving primacy to fundamental rights at the expense of juvenile immunity. Blanket safeguards under the JJ Act were held to be ultra vires, prioritizing victim rights over reformatory treatment, moving aside mental health concerns in serious offenses. In *Essa @ Anjum Abdul Razak Memon vs. State of Maharashtra (2013)*,<sup>67</sup> the Supreme Court held whether the Juvenile Justice Act, 2000, trumped the Terrorist and Disruptive Activities (Prevention) Act, 1987, in the case of the 1993 Bombay bomb blast. The appellant, a juvenile below the age of 17, was convicted of charges of terrorism for having let out his flat and garage for keeping deadly weapons and explosives on the basis of self-confession and prosecution evidence. Despite pleas, the Apex Court and High Court

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<sup>64</sup> *Sheela Barse v. Union of India*, AIR 1987 SCR (1) 870 (India).

<sup>65</sup> *Ram Prasad Sahu v. State of Bihar*, A.I.R. 1979 S.C. 845 (India).

<sup>66</sup> *Bodhisattwa Gautam v. Subhra Chakraborty*, (1996) 1 S.C.C. 490 (India).

<sup>67</sup> *Essa @ Anjum Abdul Razak Memon (A-3) v. State of Maharashtra*, through STF, CBI Mumbai, JT 2013 (6) SC 1 (India).

maintained the life imprisonment, declaring that the Juvenile Act was not applicable because of the gravity of the offense, depriving juvenile protections. In *Jitendra Singh @ Babboo Singh v. State of U.P. (2013)*,<sup>68</sup> a girl was set on fire and killed for dowry by the in-laws, including a juvenile accused. All were convicted by the Session Court, but the Apex Court, considering the juvenility of the accused, sent the case to the Juvenile Justice Board for sentencing. The Court focused on preventive measures, such as considering causes for juvenility and engaging guardians in proceedings, to bring a child-oriented approach. In *Sher Singh @ Sheru v. State of U.P. (2016)*,<sup>69</sup> the accused was found guilty of kidnapping, asserted juvenility at 18 on the basis of matriculation certificates, claiming benefits under the JJ Rules, 2007, and JJ Act, 2015. The Juvenile Justice Board (JJB) rejected his application on the basis of a report from the doctor putting his age at 19. Appeals before the Session Court and a writ petition in 2013 were dismissed, but the Apex Court reinstated his right to assert juvenility claims, requiring investigations under Rule 12 and Section 7(A) of the JJ Act, 2000, within 30 days, giving preference to matriculation or birth certificates over medical certificates. The absence of mental health assessment underscored loopholes in responding to psychological dimensions. In *Saurabh Jalinder Nangre vs. Maharashtra (2018)*,<sup>70</sup> the writ petition challenged whether a juvenile (16–18) who attempted murder (Section 307, IPC) could be tried in a Children's Court. The Bombay High Court declared it non-heinous, keeping it with the JJB, treating the accused as a juvenile despite the severity of the crime, pointing out inconsistent categorization of offences and lack of attention to mental health. In *State of Maharashtra v. Vijay Mohan Jadhav & Ors (2021) (Shakti Mills Rape Case)*<sup>71</sup>, a child convicted of rape was given three years' detention, while those in adulthood were sentenced to death. The court asked whether this would be enough for rehabilitation and defined "heinous" crimes (Section 2(33), JJ Act, 2015) as crimes that come with at least a seven-year sentence, and try adults for 16–18-year-olds under special circumstances, but without mental health care. In *Barun Chandra Thakur v. Master Bholu and Anr.*<sup>72</sup> “The apex court observed that when the Juvenile Justice Board does not comprise a practicing professional with a degree in child psychology or child psychiatry, it would be obligated to take assistance of experienced psychologists or psychosocial workers or

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<sup>68</sup> *Jitendra Singh @ Babboo Singh v. State of U.P.*, (2013) 11 S.C.C. 193 (India)

<sup>69</sup> *Sher Singh @ Sheru v. State of U.P.*, (2016) 14 S.C.C. 495 (India).

<sup>70</sup> *Saurabh Jalinder Nangre v. State of Maharashtra*, 2018 SCC Online Bom 1235 (India).

<sup>71</sup> *State of Maharashtra v. Vijay Mohan Jadhav & Ors.*, (2021) 6 S.C.C. 1 (India).

<sup>72</sup> *Barun Chandra Thakur v. Master Bholu and Anr.* (2022) LiveLaw (SC) 593 (India).

other experts under proviso to Section 15(1) of Juvenile Justice (Care and Protection of Children) Act, 2015 (Act)’’.

## **Lacunae in the Juvenile Justice (Care and Protection of Children) Act, 2015**

The JJ Act 2015 is a landmark change from punitive to reformative justice in India, with a focus on rehabilitation, mental health evaluation, and child-friendly care for delinquent juveniles. Yet, even with its forward-looking provisions, such as requiring Child Welfare Committees (CWCs) for assessment and therapy under Sections 18(g) and 27, there are numerous loopholes that undermine its effectiveness, especially in addressing mental health requirements and bringing about actual reform. These loopholes tend to leave the affected persons without proper care, leading to cycles of trauma and recidivism instead of providing care. The major loopholes are outlined below from studies on the problems in implementation, lack of resources, and procedural shortcomings.<sup>73</sup>

***Inadequate Mental Health Services and Implementation:*** Although the Act mandates psychiatric treatment, counselling, and regular evaluations as provided under Section 93 for juvenile mental patients but observation homes and detention facilities do not provide these facilities because of lack of funds, lack of awareness, and disobedience. It is done for only 50% of juveniles, with the rest relying on sporadic NGO visits rather than specialists, resulting in increasing suicides (25 in 2022) and untreated ailments such as depression (40% in homes). This negates the reformative intent, as inhumane conditions worsen mental health without proper therapy.

***Shortage of Trained Staff and Sensitization:*** The Act does not provide extensive training to JJB members, social workers, or staff on child psychology, trauma-informed care, or dealing with vulnerable groups such as LGBTQ+ juveniles. This leads to violent encounters, bullying, and emotional tortures, exacerbating disorders like anxiety (76.4% prevalence) and conduct problems. More than 50% of JJB members indicate that they lack proper training, resulting in mechanical judgments instead of overall reform.

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<sup>73</sup> Department-Related Parliamentary Standing Committee on Human Resource Development, *264th Report on the Juvenile Justice (Care and Protection of Children) Bill, 2014* (Rajya Sabha, laid on the Table of the Lok Sabha Feb. 25, 2015), PRS Legislative Research, [https://prsindia.org/files/bills\\_acts/bills\\_parliament/2014/SC\\_report-Juvenile\\_justice\\_1.pdf](https://prsindia.org/files/bills_acts/bills_parliament/2014/SC_report-Juvenile_justice_1.pdf)

***Ambiguities in Determination of Age and Capacity Assessments:*** For 16-18-year-olds charged with serious offences (Section 15), mental and physical capacity assessments are arbitrary, time-framed (three months), and often contravene the assumption of innocence and disregard psychosocial maturity. Inconsistencies with document verification (e.g., alleged counterfeit certificates) lead to delays, and assessments are based on superficial reports without adequate interaction, which may send juveniles to adult courts on the basis of prejudice, not care needs.

***Resource and Infrastructure Shortages:*** Juvenile homes lack sanitation facilities, nutrition, and skills training, which cannot aid rehabilitation, while overcrowding allows for abuse (such as sexual offenses) and peer negative influences from older prisoners. There is no balanced budget for mental health compared to physical care, and there are no after-discharge programs to ensure reintegration and curb 10-15% recidivism.

***Monitoring, Compliance, and Privacy Gaps:*** The Act mandates registration and auditing of institutions but has no enforcement, thereby providing room for stigma, prejudice, and breaches such as disclosure of identity in adult transfers (contrary to Section 74). This places juveniles at risk of long-term mental stigma and exclusion, undermining the care-based paradigm.

***Categorization and Procedural Uncertainties:*** Offense categorization (petty, serious, atrocious) is fuzzy in practice, with no clear guidelines for mental health-related crimes (e.g., those due to trauma). This results in variable JJB decisions and delays, focusing on punishment for older children.

## **Conclusion**

The juvenile justice system has undergone with several changes from punitive to reformatory care but still the result is not standard. The psychological health of the juveniles is still neglected and in a country like India which give very minimal support to the mental health of a child families are mostly focused on education and earning and in doing so they avoid the overall development of the child and then when child becomes delinquent.

It is high time that a country should have an Integrated Reformatory Justice and Mental Health Model based on the models that Norway and New Zealand adopted “The welfare and Rehabilitation Model and Family Group Conferencing and Restorative Justice” respectively. The above given model will help to bring law, psychology and community support in one bowl. This

model will help to establish Care-Counsel-Correct mechanism to shift from punishment to care. This proposed model operates on a this three-stage which are as follows-

1. Care (identification & screening) where mental health screening will be done followed by the preparation of individual care plan created by psychologist and social worker and further mandate mental health screening reports as part of JJB decision-making.
2. Counsel (therapeutic and Family Support) which includes professional trauma-informed counselling sessions, family therapy, peer support & mentorship, restorative justice circles (victim-offender mediation) to provide healing than punishment.
3. Correct (Rehabilitation & Reintegrate)- to provide life skills and education that ensures employability followed by community- based rehabilitation i.e., community services, instead of long detentions and mandatorily post release monitoring should be provided.

Norway has a very strong mental health and welfare focused model and New Zealand has stronger family and community reintegration practices if India successfully integrates both the models in its Juvenile Justice System, then juvenile would have a second chance at life, victims and communities would feel more involved and satisfied with justice. Both the concept shares common thing that the children are never seen as “born criminals” rather they are seen as individuals in need of support, guidance and healing.

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# Effective Free Legal Aid for Under-Trials: A Case Study of Gautam Budh Nagar District

*Smriti Kumari<sup>1</sup>*

*Isha Tiwari<sup>2</sup>*

## ABSTRACT

*This research aims to explore the challenges faced by undertrials in accessing free legal aid, identify factors affecting the quality of these services, analyse the challenges faced by advocates of the District Legal Service Authority, and identify the role of incentives and financial barriers in Free Legal Aid. The research also sheds light on the opinion of the Advocates engaged in Pro bono work about implementing policy related to Pro bono services for law firms and independent practitioners. It also aims to investigate factors such as scarcity of resources, challenges faced by empaneled lawyers handling legal aid cases, factors contributing to delays in dispensing free legal aid, and operational barriers such as communication gaps, family non-cooperation, and delayed funds release for legal aid services. By adopting the Quantitative Research Methodology, the researcher has collected the measurable data in order to thoroughly evaluate the effectiveness of Free Legal Aid Services. This enables the researcher to unveil trends, barriers and areas for improvement in the legal aid Services for undertrials in Gautam Budh Nagar District.*

*For this study, the responses have been collected from different stakeholders involved in the process of ensuring the efficacy of Free Legal Aid, such as Lawyers empaneled with the District Legal Services Authority, members of the District Legal Services Authority, Judicial officers, Para-legal volunteers appointed in the district of Gautam Budh Nagar and researchers who are working in this area.*

**Keywords:** *Right to Free Legal Aid, Fundamental Right, District Legal Services Authority, Under-trial, Access to Justice, Para-Legal Volunteers, Pro bono.*

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## Introduction

Free Legal Aid is a professional legal assistant which is provided to people in need. Article 39 A of Constitution of India is a constitutional commitment to each and every citizen of India to have access to justice regardless of their socio-economic conditions.<sup>3</sup> The principle is well reflected under the Preamble of the Indian Constitution, which talks about justice; social, economic and political.<sup>4</sup> An undertrial is a person who has been accused of an offence, is currently on trial, and is in judicial custody as the offence is cognizable or due to a lack of effective representation in court. The undertrials constitute more than 75% of the total prison population in India.

The right to Free Legal Aid is a fundamental right of every person; therefore, it is crucial to recognize and address the pauper and underserved undertrials languishing in jail solely because of their economic circumstances. In most cases, such accused persons are incarcerated for petty crimes and do not even receive bail as a matter of right. It is not only the violation of their right to a fair trial but also of the other fundamental rights related to equality, right to freedom of movement, right to life and personal liberty and so forth.

The empathy and concern for the rights of indigent and weaker sections can be set out in several provisions of the Constitution of India, such as equal protection of laws under Article 14, Article 21, the right to Life and Personal Liberty and Article 22, which gives every person in arrest a right to consult and get services from a lawyer of his choice. In addition, Article 41 puts an obligation on the state to secure the right to work, education and public assistance to a person in need. A large majority of our population is poor, illiterate and living below subsistence levels, which is why, when inculpated in a criminal case, even if they are willing to consult a lawyer, they would refrain from doing so because of lack of awareness and financial restraints. Hence, it becomes necessary for the state to intervene and ensure the protection of the rights of indigent undertrials.<sup>5</sup>

The Provision for free legal Aid was inserted through the Constitution (Forty Second

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<sup>3</sup> Smriti Kumari and Vishal Sharma, 'Protection of Rights of the Accused Through Scientific and Technological Methods: A Critical Analysis' (2025) 2 *HPNLU Journal of Social Sciences* 32, 35.

<sup>4</sup> KAILASH RAI, *PUBLIC INTEREST LAWYERING LEGAL AID AND PARA LEGAL SERVICES*, (1<sup>st</sup> ed. Central Law Publication 2021).

<sup>5</sup> Kirpal Singh Chhabra, *Legal Aid in Criminal Proceedings*, 22 J. Indian L. Inst. 371, XXXX (1980), <https://www.jstor.org/stable/43950700>.

Amendment) Act, 1976 to achieve the goals of effective Administration of Justice and giving equal representation to all in the eyes of the law.<sup>6</sup> In *Hussainara Khatoon v. State of Bihar*<sup>7</sup>, the Supreme Court held that equal justice and free legal aid as enshrined in Article 39A is not only a statutory but also a Fundamental right. The Legal Services Authority Act, 1987 provides a mechanism for Free Legal Aid Service to indigent, women, children and elderly persons and differently abled persons in civil as well as criminal matters.

In the Criminal Justice System, Legal Aid plays a humongous role because the life and liberty of the undertrials are at stake due to inadequate access to resources for seeking Justice.<sup>8</sup> The Constitution of India calls on the populace and the government to cooperate for achieving the goal of fair, impartial and equitable justice for everyone.<sup>9</sup> The fight for justice depends on the courts treating people fairly. The foundation of the judicial system is the administration of justice.<sup>10</sup> As a result, the guarantee of a fair trial and impartial treatment in court solidifies the society as intended by the Directive Principles of State Policy. Although the Right to Free and Effective Legal Representation is a Fundamental right as declared by the judicial pronouncements, it still does not find a place in Part III of the Indian Constitution. The State is required under Articles 14, 15, 21 and 22 (1) of the Fundamental Rights to provide equality before the law and a fair system that promotes justice based on equal opportunity for all.<sup>11</sup>

The Supreme Court has, from time to time, emphasised that Article 21 right to life and personal liberty, includes free and effective legal representation to each citizen in need. In the historic decision of *Hussainara Khatoon*, Justice P.N. Bhagwati stated that a process cannot possibly be considered reasonable, fair, and just if it denies access to legal services to an accused person who cannot afford legal representation and must therefore proceed through the trial alone.<sup>12</sup>

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<sup>6</sup>Article 39A, *Equal justice and free legal aid - Constitution of India*, Constitution of India, <https://www.constitutionofindia.net/articles/article-39a-equal-justice-and-free-legal-aid/> (last visited Aug. 6, 2024).

<sup>7</sup>*Hussainara Khatoon v. State of Bihar* (1979) AIR 1369 (India).

<sup>8</sup>Chetan Trivedi et al, *THE PROVISION OF FREE LEGAL AID IN INDIA*, 2 REV. GÊNERO E INTERDISCIPLINARIDADE, XXXX (2022), <https://doi.org/10.51249/gei.v2i06.517>.

<sup>9</sup>S Muralidhar, *LEGAL AID PRACTICES: COMPARATIVE PERSPECTIVES*, 26 OBITER, XXXX (2022), <https://doi.org/10.17159/obiter.v26i2.14751>.

<sup>10</sup>*Encouraging the Establishment of Legal Clinics in Broadening Access to Justice for the Poor - EUDL*, EUDL - EUROPEAN UNION DIGITAL LIBRARY, <https://eudl.eu/doi/10.4108/eai.26-1-2019.2283276> (last visited Aug. 6, 2024).

<sup>11</sup>Sushant Chandra & Nityash Solanki, *Legal Aid in India: Retuning Philosophical Chords*, 2 BRICS L.J. 68, XXXX (2015), <https://doi.org/10.21684/2412-2343-2015-2-2-15-21>.

<sup>12</sup>*Id.*

## **Nature of Legal Services Provided by District Legal Services Authority**

Basic legal services that are covered by the free legal aid includes the legal representation provided by an attorney, legal advice on any subject, in suitable situations, payment of process costs, witness expenses, and any other fees payable or incurred in connection with any judicial actions; the creation of pleadings, appeal memos, and paper books, including printing and document translation in court procedures; Legal document drafting, exceptional leave requests, etc.

## **Process for availing Free Legal aid Services**

There are several authorities where a person in need can apply for legal aid and assistance in both offline and online modes, depending on the subject matter of the case and the territorial and subject matter jurisdiction of the case.<sup>13</sup>

1. Taluk Legal Services Committee
2. District Legal Services Authority
3. State Legal Services Authority
4. The High Court Legal Services Committee
5. The Supreme Court Legal Services Committee for cases before the Hon'ble Supreme Court.

For availing free legal aid service, an application can be submitted to the relevant authorities online or by postal mail or online applications may be submitted to any of the aforementioned authorities. One must complete the information regarding legal assistance, provide case information, and submit the required documents with the concerned authorities as mentioned above. To submit an offline application, complete the application form that is available at a local Legal Services Authority and needs to be delivered in person or through email to the Authority.

For such an offline application, it is required to include all pertinent information, including job status, nationality, if one belongs to Schedule caste or Schedule Tribe or monthly income (with affidavit), the case for which legal aid is sought, the justification for the request for legal aid, etc. The nature of cases for which Free Legal Aid can be availed includes all kinds of matters including

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<sup>13</sup> *Claiming Free Legal Aid / Application Procedure*, NALSA, (last visited Aug. 6, 2024).

criminal as well as civil matters as long as the requesting party fits in the criteria of section 12 of the Legal Services Authority Act.<sup>14</sup>

Certain matters are excluded from the purview of free legal aid, like cases involving defamation, malicious prosecution, and contempt of court, and perjury; cases related to Election proceedings; and cases where the fine levied is less than or equal to Rs. 50 may not be eligible for legal assistance; matters related to economic offences and violations of social laws or where direct concern is absent.<sup>15</sup>

## Literature Review

Article 39A of the Constitution of India casts a duty upon the state to secure the operation of the Legal system that promotes justice based on equal opportunity and provide for free Legal Aid and makes such schemes and legislation that facilitates the Free Legal Aid.<sup>16</sup>

The bulk of people in India are backward both socially as well as economically, and the constitutional goal is to deliver justice- social and economic; it automatically becomes an obligation to make the legal process a sure means to legal justice. It is the task of the state to minimize the engagement between the Law and the Lowly to ensure proper access to justice to all sections; the term used by the Chairman of the expert committee on Legal Aid is “Juridicare”, which means equal justice for all is to be provided by the state<sup>17</sup>

Legal assistance is a fundamental right of the accused in criminal proceedings and a means- tested benefit for the underprivileged in civil cases. Any substantial progress in this regard is still slow due to several factors, including the public authorities' slow execution of government policies relating to legal aid and the miserable ignorance of individuals regarding their legal rights, inexperienced legal practitioners in the courts, who have very little or no empathy towards poor.<sup>18</sup>

Free Legal Aid to the Prisoners is the biggest innovative step by the Supreme Court in humanizing the administration of Justice.<sup>19</sup> In *Khatri v. State of Bihar*, Supreme Court strictly directed the

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<sup>14</sup> *Filing Procedure for Free Legal Aid* | SCC Times, SCC TIMES (Nov. 7, 2022), <https://www.sconline.com/blog/post/2022/11/07/filing-procedure-for-free-legal-aid/>.

<sup>15</sup> *Free Legal Aid, TSLSA*, [https://slsa.tripura.gov.in/free\\_legal\\_aid](https://slsa.tripura.gov.in/free_legal_aid) (last visited Aug. 6, 2024).

<sup>16</sup> Anup Surendranath & Gale Andrew, *State legal aid and undertrials: are there no takers?* 2022 INDIAN L. REV. 1, XXXX, <https://doi.org/10.1080/24730580.2022.2029018>.

<sup>17</sup> JUSTICE V.R KRISHNA IYER, *PROCESSUAL JUSTICE TO THE PEOPLE* XXXX (2022).

<sup>18</sup> Dr. Ishita Chatterjee, *Free Legal Aid as a Fundamental Right in India: Reality or Still a Distant Dream*, XVI NYAYA DEEP IV (2015), <http://nalsa.gov.in>.

<sup>19</sup> M. P. JAIN, *INDIAN CONSTITUTIONAL LAW*, (8d ed. Lexis Nexis, 2018).

States to Provide Free Legal Aid to the under trials in need and held that the state cannot avoid their constitutional obligation due to financial inability.<sup>20</sup>

The Advocates have a “Duty to render Legal Aid” under Rule 46 of Section 6, Chapter II, Part IV of Bar Council of India Rules. Section 33 of the Advocates Act provides that no person other than one who is enrolled under the Act can practice law before any court in India; therefore, the advocates have the sole right to practice before a court, and therefore it also casts a social liability upon them, which is to render their services to all, including the poor, who cannot afford their fees.<sup>21</sup> The cases in which Legal Aid is not to be provided includes, Defamation, Malicious prosecution, contempt of court, perjury etc.

There are several channels through which legal aid is offered, such as public lawyers, individual practitioners, and legal aid institutions, which also play a major role in effective legal aid services. The challenges encountered by individuals looking for legal assistance, such as a lack of funding and geographic restrictions, and some creative solutions that have been created to deal with these difficulties are highlighted in the study done by Jaya Parwani.<sup>22</sup> In order to ensure a fair and just criminal justice system for everyone, the study calls for action from policy makers and legal practitioners to promote and improve legal aid Programmes.

The study done by National Legal Services Authority on the use of innovative means in providing Free Legal Aid to the poor during the challenging times of Pandemic shows a great progress in the realm of Legal Aid services. In 2021, 24 States and UTs organized E-Lok Adalat successfully to resolve pending and pre-litigation cases of more than 4 lakhs.<sup>23</sup>

Access to justice must be provided through legal aid clinics not merely to protect properties but to safeguard personal liberties and inalienable fundamental rights. Public Authorities, Legal institutions and Law Universities can play a major role in spreading awareness measures for free legal aid services at a mass level, as there is a great lack of awareness in people about the process to get free legal aid services.<sup>24</sup>

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<sup>20</sup> Khatri v. State of Bihar, *AIR 1981 SC 928*.

<sup>21</sup> DR. S.R. MYNENI, PROFESSIONAL ETHICS, ACCOUNTANCY FOR LAWYERS AND BENCH-BAR RELATION (2d ed. Asia Law House 2023).

<sup>22</sup> Jaya Parwani, *Legal Aid in Criminal Justice System*, (March 16, 2023) [Legal Aid in Criminal Justice System by Jaya Parwani: SSRN](#).

<sup>23</sup> National Legal Services Authority, Annual Report 2020-2021.

<sup>24</sup> Justice V.K. Tahilramani, *Access to Justice and Effective Delivery of Legal Services*, *Nyaya Deep*, XVIII 3-4, July (2017) III, <http://nalsa.gov.in>.

In ensuring complete access to justice as well as ease of justice, legal education and awareness towards rights to free legal aid can prove to be a great aid. Law Universities, colleges and institutes should establish pro bono clubs/center and Legal aid center to help in providing free legal aid services to the underserved. The prominent legal institution's legal aid clinics are playing a huge role in providing free legal services through Legal awareness workshops, Legal Aid Program and Para Legal Training.<sup>25</sup>

## **Research Problem**

The people who are undertrial are in the care of state, and their rights are sacrosanct. It is their fundamental right to get fair representation for the case. The law of the land ensures fair trial for all, including the indigent undertrials, but there are several structural, economical and procedural barriers due to which access to justice for all is still a distant dream.

## **Research Questions**

1. Whether the undertrials who are languishing in jail due to lack of resources are getting effective Legal representation from the advocates of District Legal Service Authority?
2. Whether empaneled lawyers of District Legal Service Authority are facing any challenges while handling the cases related to Legal Aid?
3. Whether the process of availing Legal Aid from appellate courts in the same matter which was being dealt by DLSA is a contributing factor in delay in dispensing the cases of Free Legal Aid?
4. Whether there are any operational barriers such as gaps in communication with the undertrials due to lack of means of communication and restricted meeting hours, non-cooperation by the family, delay in release of funds for Legal Aid services provided by lawyers, which are hindering the effective legal services by the lawyers?

## **Hypothesis**

Legal Aid Services in Gautam Budh Nagar District are hindered by a combination of procedural, operational, financial and psychological barriers, which are affecting the quality of Free Legal Aid Services.

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<sup>25</sup> Daksha Sharma & Smriti Kumari, *Role of Legal Education in Advancement of Access to Justice: A Panoramic Insight*, 2024 ASIAN J. LEGAL EDUC., XXXX, <https://doi.org/10.1177/23220058241253403>.

## Research Objectives

1. To assess the difficulties faced by under-trial prisoners in availing Free Legal Aid Services.
2. To identify the factors such as administrative, operational, financial etc. that is impacting the quality of Legal Aid Services.
3. To analyze the challenges faced by the empaneled advocates of District Legal Service Authority during handling the matters related to under-trials.
4. To identify the role of incentives and the financial barriers associated to Free Legal Aid.

## Type of Research

### *Quantitative Research*

The researcher has adopted Quantitative research as the methodology for exploring the barriers to the “Free Legal Aid to under-trials in Gautam Budh Nagar District”. The reasons for adopting this methodology are enlisted below:

Measurable Data: Through the use of numerical data, quantitative research makes it feasible to measure and quantify a variety of legal aid system components, including utilization rates, the demographics of under-trials, and case outcomes.

Statistical Analysis: It offers the resources for thorough statistical analysis, making it possible to spot trends, correlations, and statistically meaningful connections between variables. This aids in identifying important elements affecting the efficiency of legal aid services.

Objective Assessment: By reducing researcher bias, quantitative research fosters objectivity. The dependability of results is increased by the use of standardized surveys and questionnaires, allowing for reliable data collection.

Performance Evaluation: By analyzing quantitative data, researchers can assess the efficiency and efficacy of existing legal aid programs, determining whether they meet their intended goals and objectives.

Efficiency and Effectiveness: this type of research will allow the researcher to measure the cost-effectiveness and resource allocation efficiency of legal aid services, and it will also contribute to a better resource management.

In order to thoroughly evaluate the effectiveness of Free Legal Aid Services Quantitative research offers a methodical, systematic and data-driven approach. This enables the researcher to

unveil the trends, barriers and areas for improvement in the area of Legal Aid Services for under-trials in Gautam Budh Nagar District.

### **Nature of Data Required for the Study**

For the comprehensive analysis of the problem the specific nature and kind of data that is required for the study that includes the crucial aspects of right to free legal aid are below-mentioned:

*Demographic Data:* To understand the background and profile of the legal aid seekers, demographic data such as age, socio-economic background, gender, educational qualifications and ethnicity etc. are important.

*Legal Aid Provider Data:* Information about the legal aid providers, including their qualifications, caseloads, and geographical reach, helps in evaluating the capacity and competence of the legal aid system.

*Utilization Data:* The utilization data should include the quality of legal aid services, the frequency of service being provided and the type of assistance being sought.

*Cost Data:* Quantitative data on the costs associated with legal aid programs, including operational expenses, salaries, and the cost per case, aids in assessing cost-effectiveness.

In quantitative research on “Barriers to effective free legal assistance to undertrials,” the nature of the data should be structured, quantifiable and susceptible to statistical analysis. This will allow the researcher to make inferences and recommendations for changes to the legal aid system that is supported by the available data.

### **Sources of Data**

The study is based on primary as well as secondary data collection, as the researcher has done the analysis of Legal Provisions, research articles, reports and case laws from various online Legal databases like SCC, Manupatra, Jstor and heinonline.

The Primary data collection has been done by survey with the help of questionnaire to study the issues faced by under-trials in availing Free Legal Aid and also challenges faced by the advocates in providing free legal aid to the under-trials.

*Survey:* The researcher created questionnaire on Google forms to collect the responses from Legal Aid Advocates, Judicial Officers connected with Legal Aid in the district, members of DLSA,

Gautam Budh Nagar, Para-Legal Volunteers appointed in the district and researchers working in this field.

## Findings and Analysis

### *Demographic Analysis*

The demographic analysis was done on the basis of age and gender of the Legal Aid Providers. A well-structured questionnaire was prepared, approx. 50 respondents were included in the survey. The chart shows that out of 52 respondents 59.6% were male, while 36.5% were female and around 3.9 % respondents did not reveal their gender by choosing the option Prefer not to say.

The average age of the Legal Aid providers in Gautam Budh Nagar, is between 25-35; people associated with DLSA as Para Legal Volunteers, on average, belong to the age group of 20-26, and the judicial members associated with DLSA fall between the age group of 30-50.

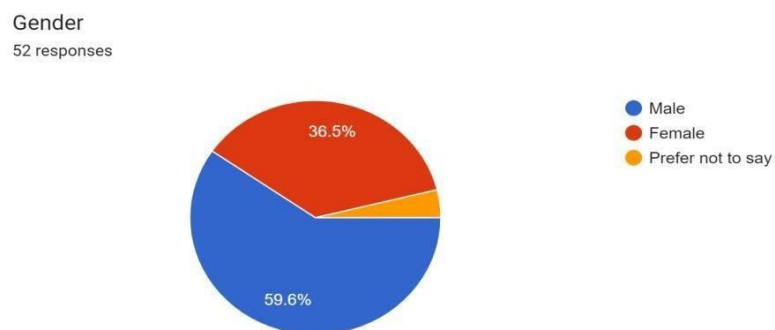
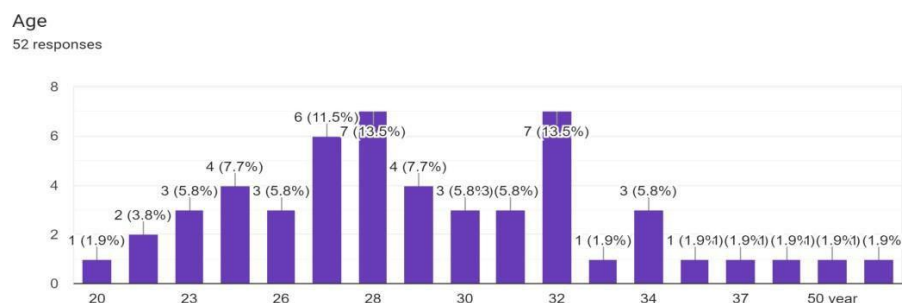


Chart 1



### Chart 1.1

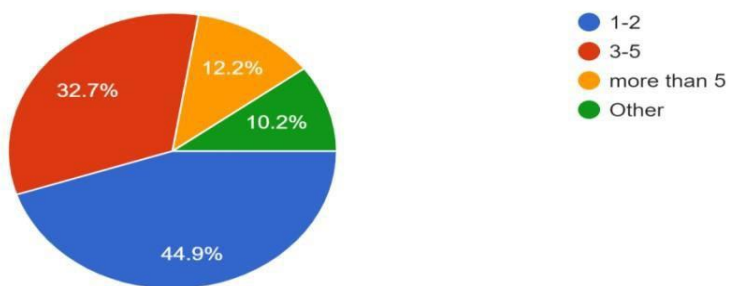
## Awareness & Experience of Free Legal Aid

Out of 52 respondents, 44.9% had 1-2 years of experience, 32.7% of respondents had 3-5 years of experience in providing Free Legal Aid Services, and 12% of respondents had more than 5 years of experience in providing Free Legal Aid in Gautam Budh Nagar District.

Chart 2.1 shows the familiarity of the respondents with the Provisions and procedure related to Free Legal Aid, 55.8% of the respondents were having moderate familiarity, which generally belong from the category of student Para-Legal Volunteers appointed by District Legal Services Authority, Gautam Budh Nagar, 34.6% of the respondents who generally belong from the category of Judicial Officers and Legal Aid Advocates and researchers were very much familiar with the provision of Free Legal Aid and the procedures followed in the district.

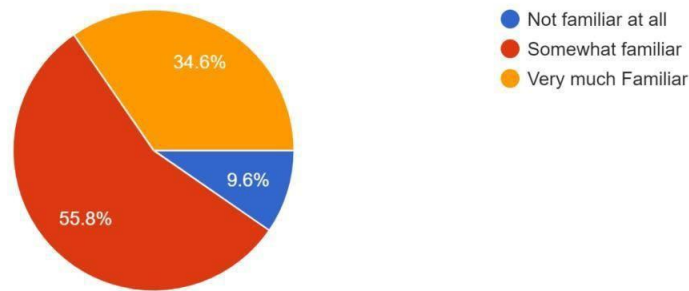
### Chart 2

Years of experience in providing Free Legal Aid or years of association with DLSA Gautam Budh Nagar  
49 responses



How familiar are you with the legal aid services available in District Gautam Budh Nagar?

52 responses



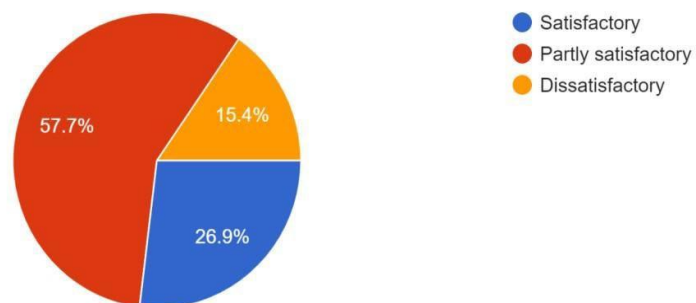
**Chart 2.1**

## Identification of Issue

Chart 3 shows the current state of Free Legal Aid Services in the district Gautam Budh Nagar, whether it is satisfactory or not. The result shows that 57.7% of respondents think that the state of Legal Aid in the district is currently partially satisfactory, whereas 26.9% think that it is satisfactory, 15.4% of respondents feel that the current state of Legal Aid services in the Gautam Budh Nagar District is dissatisfactory.

Do you think the current state of Free Legal Aid Services is satisfactory in the Gautam Budh Nagar District?

52 responses



**Chart**

## Effectiveness of the Current Legal Provision

Chart 4 covers the effectiveness of Article 39A, which tries to impose an obligation on the state to provide Free Legal Aid to people who cannot afford private representation. The objective behind including this question was to see if the respondents believe that the Free Legal Aid provision in the Constitution as a Directive Principle of State Policy is sufficient, or whether we need another provision in the form of Fundamental Rights, under Part III, which will be enforceable in the court. A majority of 60.8% of the respondents think that Article 39A and the Legal Services Authority Act are sufficient for ensuring free legal aid to needy people; 19.6% think that it is not sufficient.

In your opinion, does Article 39 A and Legal Services Authority Act, 1987 is sufficient to achieve the goal of equal justice for all?

51 responses

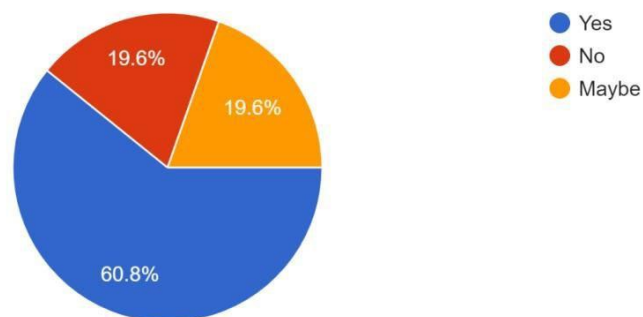


Chart 4

## Issues and Challenges faced by Under-Trials

Chart 5 shows the challenges faced by under-trials as per the experience of Legal aid providers, which provides that number of issues and challenges faced by under-trials in accessing the Free Legal Aid Services.

The survey shows that 61.5% of under-trials lack awareness about their right to free legal aid, 69.5% believe there are limited qualified professionals, 40% think the legal process is slow, and 36.5% face difficulties in obtaining necessary documents.

As per your experience, what are the challenges that under-trials in District Gautam Budh Nagar face while accessing Free Legal Aid Services?

52 responses

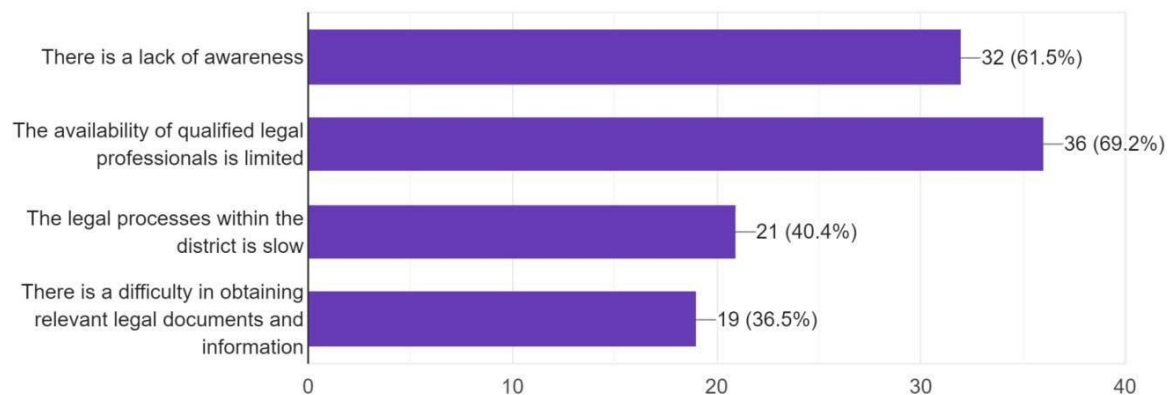


Chart 5

## Understanding the Constraints Faced by Legal Aid Providers

There are several issues faced by the legal aid providers during the representation of undertrials. The communication barrier due to jail timings and limited hours for meetings and telecommunication hinders the effective representation by the advocate because they are not able to understand the issues and matters correctly. The second factor which affects the free legal aid providers is the inadequate and untimely remuneration by the government. The study found that 59.6% of undertrials face communication barriers, 67.3% receive insufficient government remuneration for free legal aid, 51.9% face coordination difficulties due to jail timings, and 5.8% experience other issues.

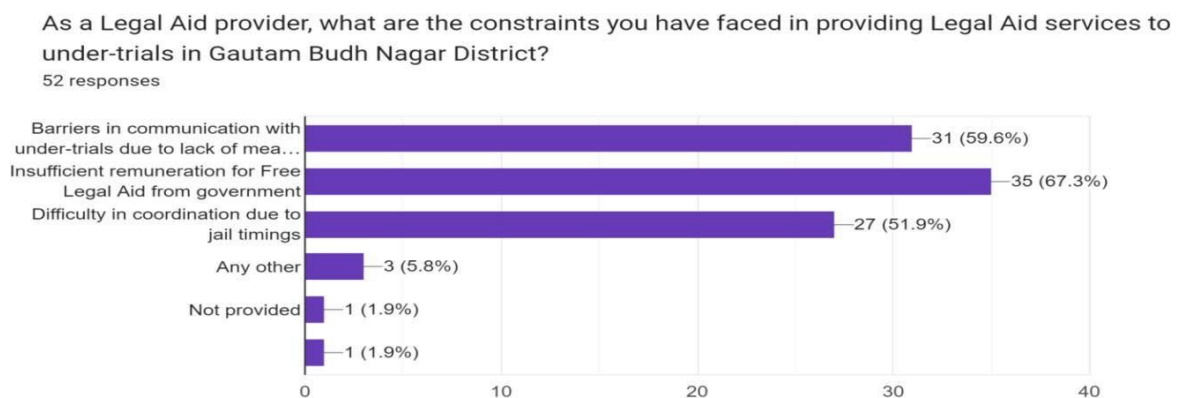


Chart 6

## Workable aspects of Free Legal Aid Services in District Gautam Budh Nagar

Lack of cooperation from the side of accused and their family is often been faced by the Legal Aid Providers. The lack of co-operation could be reflected in various ways like not willing to talk to the advocate, not sharing required information, not having trust on the advocate and various other factors.

Chart 7 shows that 46.2% of respondents have faced a lack of cooperation, 26.9% of respondents have said no to facing any kind of lack of cooperation and 26.9% of people say that they are not sure about it.

Have you ever experienced lack of cooperation from the under-trial or their family member due to their inability to trust or any other reason ?

52 responses

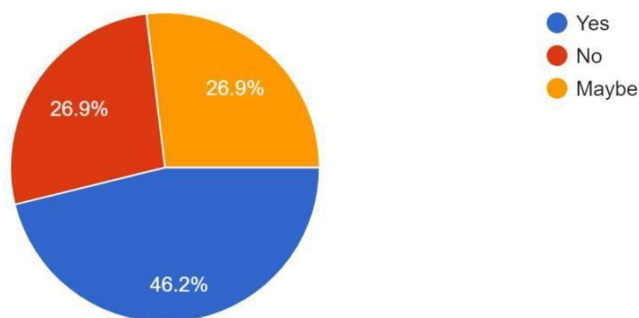


Chart 7

## Procedural Difficulties

While discussing the issues faced by the legal aid advocates the researcher came to know that there is no process for appeal in the high court by the same advocate who is associated with DLSA simply because he is only a part of the District Legal Services Authority and not of the State Legal Services Authority. The litigants faced difficulty and complexity in the procedure of Legal Aid due to this issue as well. Chart 8 shows that 76.9 % of respondents think that the same advocate who is representing an under-trial in the district court should be allowed to handle the same case in the matter of appeal to high courts and Supreme Court as well, if he is able to do the same, while 23.1% of respondent think that this is not necessary that the same advocate should handle the matter in the High court and Supreme Court.

Do you think that the advocates associated with District Legal Services Authority should be allowed to represent the matter in the High Court as well as avoiding the delay and complexity of the procedure?

52 responses

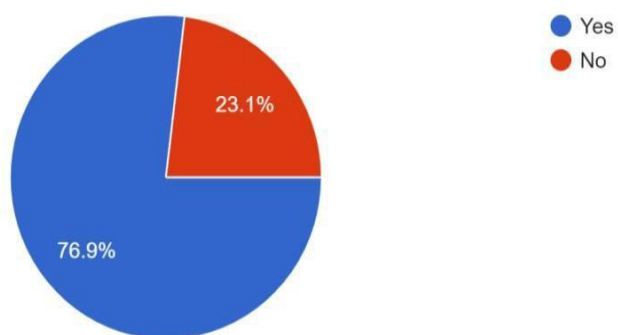


Chart 8

### **Measures Taken by DLSA Gautam Budh Nagar to make Legal Aid Services More Effective**

In order to make Free Legal Aid Services more effective the Gautam Budh Nagar district is organizing Legal Aid Awareness Program, Advocate Training Programme, Lok Adalats, and ensuring mandatory participation of Law colleges in Free Legal Aid. There is a Para legal Volunteer scheme for the law students and citizens to train them and engage actively in Legal awareness programs, which has proved to be an effective tool in Legal aid for the Gautam Budh Nagar District.

### **Probono Services to Achieve the Goal of Fair Justice to Every Citizen**

The respondents were asked lastly about whether they think it will be a good idea to introduce compulsory minimal Probono services by the Law firms and independent advocates as a part of their social duty to improve the state of Legal Aid in country. A majority of respondents 67.3% people think that it is a good idea to introduce mandatory provision for probono services whereas 17.3% people think it is not a good idea to impose the same.

What activities are conducted by District Legal Services Authority, Gautam Budh Nagar to make Free Legal Aid Services more accessible to needy people?

52 responses

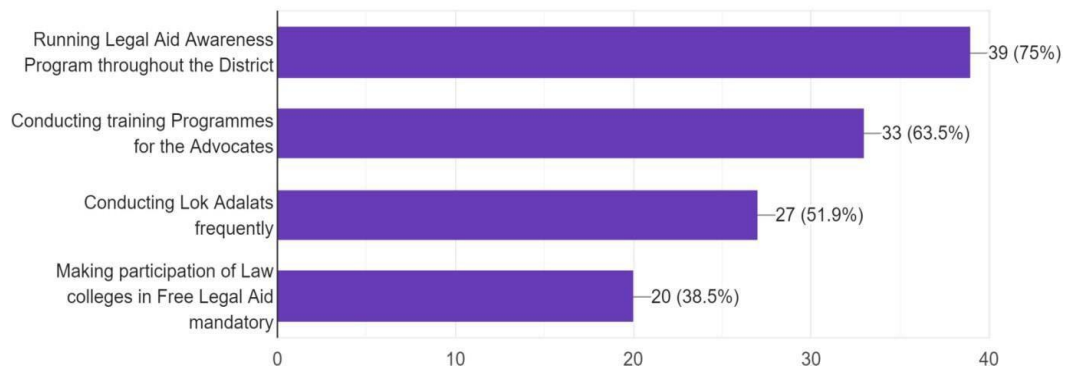


Chart 9

Do you think that a provision for compulsory Probono services for Law Firms and Advocates could be a good measure for improving the state of Legal Aid Services in India?

52 responses

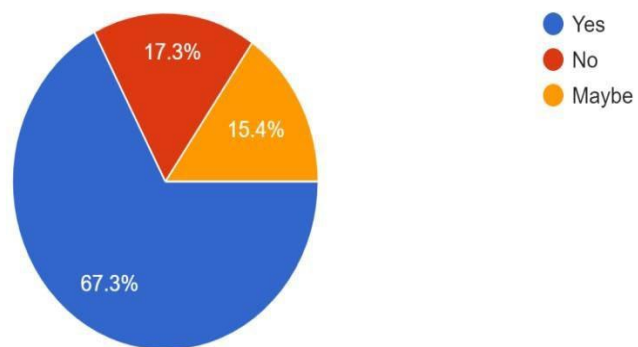


Chart 10

## **Conclusion**

Free legal aid for undertrials is essential to sustaining the pursuit of justice, which is a vital cornerstone of every democratic society. Like in many other regions of the country, the Gautam Budh Nagar District has several barriers that prevent undertrials from receiving the legal assistance to which they are entitled. These barriers affect both the overall integrity of the criminal justice system and their right to a fair trial. The survey conducted by the researcher clearly shows that the majority of undertrials and marginalized sections are not aware of their legal rights and the provisions and processes for availing the Free Legal Aid Services. This knowledge gap frequently results in trials that navigate the complexity of the legal system alone, perhaps leading to injustices. Financial constraints also pose a major barrier to the effective representation of undertrials; the availability and accessibility of Free Legal Aid services need to be widely promoted to ensure that financial limitations do not compromise an individual's right to a fair trial. There are many barriers, such as procedural difficulty, inadequate remuneration to legal aid lawyers, fewer legal aid advocates and overburden of cases, etc. recognized by the research.

In the end, by taking down these barriers, we can support the principles of justice and fairness for everyone living in the district, regardless of their socioeconomic situation or origin. It is morally imperative to create a society that is more just and equitable in addition to being a matter of legal responsibility.

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# Reviving Ancient Jurisprudence: The Efficacy of Mīmāṃsā Hermeneutics in Modern Statutory and Constitutional Interpretation

-Ms. Aaradhya Nagyan<sup>1</sup>

-Ms. Akanksha Singh<sup>2</sup>

## ABSTRACT

*In India the contemporary legal interpretation is majorly dominated by the western hermeneutics institution, such as the directives introduced by Craies and Maxwell. Although the Indian Philosophy of Mimamsa school, dated thousands of years ago provides more cultural, scientific and systematic framework for legal ambiguities and resolving linguistic. The article explores the Mimamsa applications- outlined for Vedic rituals- within the principality of constitution and modern statutory. The article aims to analyse key apophthegm such as Samanjasya (harmonious construction), Sarthakyata (rules against surplusage) and Laghava (principle of parsimony), by reviewing the landmark judgements, in particular by Justice Markandey Katju. Principle of Vikalpa (judicial discretion) and Atidesha (reasoning by analogy) offered significance to constitutional bench decisions. Hence the article demonstrates how Mimamsa Hermeneutics devise a way where western principles reach a stalemate. The perspective of the research is that Mimamsa is not an ancient relic but a 'forgotten treasure' of Indian philosophy that promotes justice and equity. The Indian judiciary can develop legislation more organic that aligns with the spirit of Indian Constitution, by integrating interpretive tools of hermeneutics.*

*An attempt shall be made (i) to compare Mimamsa hermeneutics with the western principles and statutory, (ii) to analyse the landmark judgement to interpret modern statutes and how traditional rules can help judges interpret more accurately, (iii) to apply Mimamsa applications to balance constitutional conflicts. The article shall also provide conclusion and recommendations on hybrid approach by combining ancient techniques and modern constitutional values that can enhance the clarity and judiciary pronouncements in India.*

**Keywords:** *Mimamsa, contemporary, hermeneutics, philosophy, judiciary.*

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## Introduction

Mimamsa is the science of interpretation, the school of Hindu philosophy during Vedic period. Mimamsa principles have broader interpretation, including the legislative and regulatory framework. The applications of mimamsa highlighted the content, intension and purpose of the law makers. ‘Reviving Ancient Jurisprudence’ create critical bridge between the functional requirements of modern regulation and historical legacy.<sup>3</sup> The contemporary Indian legislative landscape decoding legal intent which is exclusively governed by Western traditions, the hermeneutical codified by British jurists such as Charles Craises and Peter Benaon Maxwell.<sup>4</sup> It is the profound legacy of colonial era, where British law’s ‘Mischief’, ‘Literal’, and ‘Golden’ administration were implanted in Indian soil over Indian indigenous intellectual structure.

Though western principles have provided well-structured regulation over a century. Presently judiciary is crisis by conflicting interpretations and massive backlog of provisions- whereas Mimamsa school of philosophy is not only framed religiously but is also a ‘forgotten treasure’. Mimamsa school serves as ‘technology of interpretation’ that is highly sophisticated, scientific, more organic and systematic for rectifying legal ambiguity than the dominated Western prototypes. Mimamsa is referred to as the science of speech and sentences (Vakya- Shastra), means most rigorous psychological Indian tradition dating by to the time of Rishi Jaimini’s around 4th century.<sup>5</sup> It is unlike western cognitive which interpretate on dependence of political philosophy or judicial temperament. Mimamsa is originally formulated through Vedic injunctions (called as Vidhi’s); it was formulated in a way that modern interpretations could also not contradict the authoritative text. The ancient jurists namely Jimutvahana and Vijnaneshwara introduced command based legal applications regarding disputes such as succession, property and governance, keeping the integrity and applicability of Mimamsa; also prioritizing ‘Shabda- Shakti’- the inherent potential of the society, ensuring linguistic principles over subjective judicial conceits.<sup>6</sup> The efficiency of Mimamsa Hermeneutical in modern law had been recognized by Justice Markandey Katju through his landmark judgements on jurisprudential revival.<sup>7</sup> Hence it serves as a toolkit for 21st century for Indian judiciary,

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3 Menski, W. (2003). Hindu law: Beyond tradition and modernity. Oxford University Press.

<sup>4</sup> Maxwell, P. B. (1920). On the interpretation of statutes (6th ed.). Sweet & Maxwell. <https://digi.ub.uni-heidelberg.de/diglit/maxwell1920>

<sup>5</sup> Lingat, R. (1973). The classical law of India (J. D. M. Derrett, Trans.). University of California Press.

<sup>6</sup> Sarkar, K. L. (1909). The Mimamsa rules of interpretation as applied to Hindu law. Thacker, Spink & Co. <https://digi.ub.uni-heidelberg.de/diglit/sarkar1909>

<sup>7</sup> Katju, M. (2005). The Mimamsa principles of interpretation. Journal of the Indian Law Institute, 47(1)

through the principles of parsimony (Laghava), harmonious construction (Samanjasya) and rule against Surplusage (Sarthakyata).<sup>8</sup> The ancient Indian principles also provide hierarchical system of evidence; for an instance Maxwell's principles may reconcile the conflicting articles on Constitution but Mimamsa applications of judicial discretion provided structural balance of competing values and norms without sacrificing integrity of the charter.

The article examines about how ancient 'Hinduism' principles were inherently systematic and scientific to settle constitutional stalemates of Indian spirit over western principles. An analysis on Mimamsa not being regressive towards religious dogma and attempt to compare gaps between ancient Indian hermeneutics with western regulatory principles.<sup>9</sup> A roadmap for hybrid approach, the combination of modern and ancient logics and values can enhance clear and equity judicial pronouncements in India.

## **The Mimamsa Regulatory Framework**

Mimamsa structural integrity lies in its potent force instead of transient tools of communication and its treatment of language. Mimamsa, is not merely words portray to legislator's intent which is subject to political shifting and often elusive; but it is a 'Vidhi' (command) that has its own inherent logic and reasoning. Mimamsa framework is a 'Science of Sentence' (Vakya-Shastra) concentrated on legal thought through a commitment to linguistic economy and five-fold logical process.<sup>10</sup> The ancient principles are unlike 'Rules of Interpretation' found in modern laws, as Mimamsa stipulates the standardized path of every interpretative exercise to ensure judgement is not bench's personal bias whereas it is inevitable inference.<sup>11</sup>

The core of Mimamsa is Adhikarana, it is a five-step comprehensive methodology introduced to settle linguistic and legal doubt. It is the rigorous deictic procedure, it ensures the final judgement is fire-tested against all possible issues, hence aiming not to lack in any circumstances like Maxwell's literal rules and regulations. The first step of 'Adhikarana' is 'Visaya' where the ambiguous word or specific subject matter is identified. The second step is followed by 'Samsaya', it formulates a precise doubt regarding the interpretation. The third step is most critical stage for jurist, it is 'Purvapaksa' the reviewer needs to construct the

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<sup>8</sup> Stephen, J. F. (1872). The Indian Evidence Act (I of 1872): With an introduction on the principles of judicial evidence. Thacker, Spink & Co.

<sup>9</sup> Scalia, A. (1997). A matter of interpretation: Federal courts and the law. Princeton University Press.

<sup>10</sup> Bhattacharyya, H. (Ed.). (1953). The cultural heritage of India: Vol. III (The philosophies). The Ramakrishna Mission Institute of Culture. <https://ignca.gov.in/cultural-heritage-of-india/>

<sup>11</sup> Freschi, E. (2012). Duty, language and exegesis in Prabhakara Mimamsa. Brill.

strongest possible reasoning for the opposing or wrong view, it ensures that the court do not ignore the counter argument. The fourth step is ‘Siddhanta- hetu or Uttara’, this stage involves systemic falsification of Purvapaksa by applying linguistic proofs and logical fallacies. The last stage is ‘Siddhnata’- the definitive judgement that stands as the legislation.<sup>12</sup>

Further on Adhikarana, the Mimamsa applications are governed by proposition of Sarthakyata also called as ‘Rule of Non- Redundancy’. Mimamsa followers believe that if a word is written in a statute, it must contain a meaning that is not earlier conveyed by other text in the content; whereas modern legislation admits the rule against surplusage, often applied indefinitely. In ancient interpretation, the ‘extra’ word is comprehended as deliberate act of ‘legislator’ to limit the command, modify and expand. This prevents the judicial habit of ignoring and reading down the ‘minor’ words as mere filler. Along with it is coupled the principle of Parsimony (Laghava), it directs that between the interpretations one is lighter- means requires external aids or fewer assumptions. The principles assist to keep the law organic and prevents judicial fictions (Gaurava).<sup>13</sup> The Mimamsa structure operates sophisticated hierarchy of linguistic called as Six Pramanas of Interpretation. These are Direct text (Sruti), Indicative mark (Linga), Syntactical Connection (Vakya), Context of the Chapter (Prakarana), Position (Sthana) and Etymological Name (Samakhya).<sup>14</sup> In this sophisticated hierarchy each preceding step is more powerful than the succeeding one; it provides a mathematical certainty to interpretation. Whenever bench finds difficult to differentiate between specific definition in general preamble or act, this hierarchy provides a rule-based path to resolution.

## **Comparative Analysis and Applications of Ancient and Modern Hermeneutics**

Mimamsa hermeneutics resolves interpretative stalemates over western canons. English law via modern jurist offers ‘mischief’, ‘golden’, and ‘literal’ rules, these commonly functions as independent silos, leaving on judge’s discretion to choose tools on the bases of subjective sense of ‘candour’.<sup>15</sup> Mimamsa provided uniformed and unified hierarchical system that dismiss this subjectivity.<sup>16</sup> The central comparison is the ‘Doctrine of Harmonious Construction’ and

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<sup>12</sup>Jha, G. (1942). Purva-Mimamsa in its sources. Benares Hindu University.  
[https://books.google.com/books/about/Purva\\_mimamsa\\_in\\_Its\\_Sources.html?id=Csev0QEACAAJ](https://books.google.com/books/about/Purva_mimamsa_in_Its_Sources.html?id=Csev0QEACAAJ)

<sup>13</sup> Sharan, K. (2011). Linguistic analysis in Mimamsa. Eastern Book Linkers.

<sup>14</sup> Krishna, D. (1991). Indian philosophy: A counter-perspective. Oxford University Press.

<sup>15</sup> Bennion, F. A. R. (2008). Bennion on statutory interpretation (5th ed.). LexisNexis.

<sup>16</sup> Cross, R., & Bell, J. (1995). Statutory interpretation. Butterworths.

principle of Samanjasya.<sup>17</sup> While the English law states that two conflicting clauses should be given effect as there is rare ‘tie- breaker’ on in the condition when both are direct opposite. The Samanjasya principle uses Gunapradhana Nyaya that recognizes which provision is Guna (Subordinate) and which one is Pradhana (Principal).<sup>18</sup> Through establishing this ladder, the ancient dialectic ensures that the rule is elucidate to facilitate rather than frustrate, to provide more rigorous outcomes than vague western assess act.

The other critical comparison is found in the Mimamsa principle of completion of the sentence (Vakya- Sesa) and the Western rule of meaning is derived from associates (Noscitur a sociis). While Mimamsa treats law as a living organism stating that the ‘spirit of the law’ is found within its structural unity, the western statute looks adjacent words describe an ambiguous expression. This comparison is further supported by the principle of Ardhanatar- Nyaya, it states that context itself determines of multi- valued word. Such as if the recent laws/ statutes us the word ‘record’ the western literalism might flounder to decide whether it means digital entry or physical document. Whereas Mimamsa would implement prakarana (means the context of the chapter), stating the environment of the specific legal section dictates word’s power.<sup>19</sup> This interpretation replaces the ‘Mischief Rule’ which often relies on historical presumption about the Parliament with contemporary linguistic analysis that is less prone to judicial overreach and more accurate.

The Mimamsa principle of ‘Reasoning by Analogy’ (Atidesa) also provided scientific framework over common law application of precedents. The new jurisprudence analogy is often rhetorical- legal practitioners argues that Case A and B are one and the same. However, Mimamsa provides formal step wise protocol for Atidesa, that are as follow: identifying the ‘Prakrti’ (Model) and the ‘Vikrti’ (Modified). The steps ensure that only the relevant legislative attributes are transferred, precludes the ‘logical escape’ that generally occurs when judges apply directives from one are to another area of the law where it becomes inappropriate.<sup>20</sup> This principle is helpful in modern administrative law, where government department rules haphazardly apply to another. The ‘Atidesa’ applications ensure that the judiciary can extend

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<sup>17</sup> Dhavan, R. (1992). The Supreme Court of India: A socio-legal critique of its juristic techniques. N.M. Tripathi.

<sup>18</sup> Dwivedi, R. C. (1994). Principles of interpretation in Hindu law. The Practical Lawyer, 1(1). <https://www.ebc-india.com/lawyer/articles/93v1a4.htm>

<sup>19</sup> Gambhirananda, S. (Trans.). (1983). Brahma-Sutra-Bhasya of Sri Sankaracarya. Advaita Ashrama.

<sup>20</sup> Singh, G. P. (2016). Principles of statutory interpretation (14th ed.). LexisNexis.

the law logically without violating the fundamental structure of the statute, hence maintaining parsimony of the legal system or ‘Laghava’.<sup>21</sup>

Therefore, by contrasting the Mimamsa Nyaya along with the directives of modern law concludes as a ‘forgotten treasure’ that provides sophisticated linguistic technology ensuring ‘law’ remains a science of reason rather than an art of opinion.

## **Constitutional Balance and Judicial Perspectives**

Mimamsa’s theoretical superiority remains an academic curiosity. ‘Katju School of Jurisprudence’ highlighted the contemporary principles, where ancient Indian scientific logics were transformative to modern scientific constitutional adjudication. Justice Markandey Katju also contended on some issues to promote Mimamsa as she had belief that it is advanced linguistic science and future of law. Therefore, further it would be debated upon cases that how Indian legislation moved beyond the principles of Maxwell and western literalism to adopt Indian soil’s logic of Nyaya to equilibrium of constitutional values and settled legislative deadlocks.

### ***1. Deepak Pahwa vs Lt. Governor of Delhi, AIR 1984 SC 1721.***<sup>22</sup>

In the landmark case, the Judicial Discretion (Principle of Vikalpa) were applied on the issue ‘urgency clause’ under Land Acquisition Act. The court looking into the issue avoided an arbitrary choice, as ‘urgency’ contained many interpretations, hence, the principle of Linga (indicative mark) was followed which states the necessary of the nation. It was noticed that hierarchical tools of Mimamsa (Vakya, Linga, Shruti) must be used and when these tools have been exhausted only then Vikalpa to be applied.

### ***2. Tribhovandas Purshottamdas Thakkar vs Ratilal Motilal Patel (AIR 1968 SC 372).***<sup>23</sup>

In the landmark case it was found that an older judgement- ‘precedent’ can be interpreted from the perspective of structural logic. Justice Markandey Katju amplified upon same in the case: *Iswar Deva vs State of UP* (AIR 2004 All 401), the Mimamsa application of ‘Reasoning by Analogy’ (Atidesa) was explicitly invoked.<sup>24</sup> The tribunal had to determine whether rule

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<sup>21</sup> Raj, J. (2023). Mimamsa rules of interpretation and its applicability in the current legal system of India. *Bhartiya Knowledge Systems*, 1(1), 6-9. <https://apu.res.in/index.php/bks/article/view/5>

<sup>22</sup> *Deepak Pahwa v. Lt. Governor of Delhi*, AIR 1984 SC 1721 (Supreme Court of India). <https://indiankanoon.org/doc/1460515/>

<sup>23</sup> *Tribhovandas Purshottamdas Thakkar v. Ratilal Motilal Patel*, AIR 1968 SC 372 (Supreme Court of India). <https://indiankanoon.org/doc/31608/>

<sup>24</sup> *Iswar Deva v. State of UP*, AIR 2004 All 401 (Allahabad High Court). <https://indiankanoon.org/doc/192292/>

governing on class of authority could be extended to another. The bench relied on Atidesa to institute a endorse ‘transfer of attributes’ over vague ‘equity’, ensuring the rule consist its original purpose. In this case it was believed that Mimamsa provides ‘reasoned bridge’ where western laws often felt capricious.

### 3. *Bhagwati Prasad vs State of UP (2003(2) ESC 856).*<sup>25</sup>

The landmark case stands as testament to Harmonious Construction (Samanjasya) principle, in the realm of statutory and personal laws. In this case the court front on to conflict between administrative circulars. The court availed upon the maxim of the Lost Horse and the Burnt Chariot (Nashtashva Dagdratha Nyaya). The judge ruled that all circulars should be hitched together rather than declaring one circular invalid- following the principle of maxim- the surviving horse and the surviving chariot, having the purpose to achieve a unified intention. This amendment was direct departure to western regulation (Rule of Repeal by Implication), it directly struck down the former circular. Through the applications of Mimamsa, the bench conserved both the legislative documents by substantiating higher level of judicial economy.

### 4. *UP Power Corporation Ltd. vs Rajesh Kumar (2017(7) SCC 1).*<sup>26</sup>

The supreme court discussed on the conflict between the reservation rights and ‘creamy layer’ concept. The Mimamsa principle of Gunapradhana Nyaya echoed alongside constitution provisions. The supreme court observed that Article 16 of Constitution of India (equality of opportunity) should not be rendered by specific rules of implementation. The hierarchy valued ancient Hindu logic, where secondary rule (Guna) must never pulverize the primary command (Pradhana). Hence the apex body identified the ‘prime command’ of the constitution.

Therefore, it was discerning that Mimamsa is not merely philosophical but a judicial precedent that promotes fair justice with scientific respect to law.

## Conclusion and Recommendation

Mimamsa Hermeneutics revival in 21st century signifies a step towards intellectual decolonization of the Indian Legal System. Since independence Indian Judiciary has worked as a linguistic satellite of the modern regulation, relying on the interpretation of Craises and

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<sup>25</sup> Bhagwati Prasad v. State of UP, (2003) 2 ESC 856 (Allahabad High Court).

<https://indiankanoon.org/doc/1334651/>

<sup>26</sup> UP Power Corporation Ltd. v. Rajesh Kumar, (2012) 7 SCC 1 (Supreme Court of India).

<https://indiankanoon.org/doc/178847888/>

Maxwell on the constitution and statutes. As exhibited in the article, Mimamsa is a highly specialized ‘grammar of justice’ and ‘logic of liberty’ rather than theological relic. It provided Hindu’s logical inherent scientific, secular and systematic applications over western principles. By utilizing Adhikarana and prioritizing Shabda- Shakti (potency of the words), the Indian judiciary ensured that the interpretation be scientific than being subjective temperament.

The applications of Mimamsa contains the efficacy to resolve the ‘crisis of ambiguity’.

The phase ‘forgotten treasure’ does not mean to discard the Western principles or rules rather the only purpose is to enrich the Indian jurisprudence with indigenous approach of more organic philosophy of the land’ soil.

## **Recommendations**

1. *Judicial Training Programs:* The national judicial academy shall conduct seminars and workshops focusing on the principles of discretion (Vikalpa) and analogy (Atidesha). Judges serving probationer period should be trained to use such structured bridges as this logical study will prevent arbitrary judgements.

2. *Codification of Judicial Manual:* The Law Commission of India should introduce ‘Mimamsa maxims manual’ that must also be translated in simple English language so that it becomes easy to understand. The manual shall be used by trial and high courts judges for resolving linguistic ambiguity, it would be served as ‘External Aid to Construction’.

3. *Encouraging a hybrid approach in Judgements:* Supreme court alongside western regulations should also cite Mimamsa principles. Because Indian rule should be used as ‘tie-breaker’ eventually with western stalemate for indigenous constitutional identity.

4. *Legislative ‘Linguistic Audits’:* A ‘Sarthahakyata Audit’ should be administered by law makers prior to introduction of bills in the parliament. As the government could ensure distinct legal purpose and reduce future litigation by applying the rule against redundancy.

In conclusion, Mimamsa Hermeneutics is the ancient Indian’s common law that is undiscovered in modern regulations. By blending modern constitutional values and ancient logical techniques, the Indian judicial system could enhance the clarity its judgements and ensure justice is logically inevitable. A hybrid approach- honor India’s intellectual heritage along with modern democratic aspirations.

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# **Women, Innovation, and Intellectual Property in the Age of Digital Transformation: Legal Challenges and Policy Imperatives for Viksit Bharat @2047**

*Riya Chugh<sup>1</sup>*

## **ABSTRACT**

*In India today, innovation hardly ever resembles the old textbook, style version. It is being done in shared workspaces, through digital platforms, by small start-ups, and, at times, on a phone screen at a kitchen table. Women are certainly a part of this transformation. However, their involvement is much less evident if one looks at patent filings, trademark ownership, or other formal intellectual property (IP) records. This discrepancy as well as the question that results have been there for an uncomfortable period: if intellectual property law is supposed to encourage and reward creativity and innovation, then why does it still fail to recognize most women innovators?*

*This chapter looks into how India's intellectual property regime affects women's participation in the digital economy with a particular focus on the vision of Viksit Bharat @2047. Instead of seeing IP law as a neutral, technical tool, the examination treats it as a system influenced by factors such as access, awareness, institutional layout, and social realities. The study goes through patents, copyrights, trademarks, and new digital creative works to pinpoint where women are disadvantaged, i.e., whether it is due to high compliance costs, insufficient legal literacy, or platform, driven models that subtly take ownership away from creators.*

*Conversely, this chapter does not overlook the reality or make the problem seem more straightforward than it really is. Simply modifying legislation can hardly be the only factor in making women and men equal in society at the deepest level. Besides, blaming the law for every problem is both untrue and unfair. Having said that, law still plays the role of deciding who, in the winner-takes-all world of innovation, will be recognized, protected, and rewarded.*

**Keywords:** *Intellectual Property Rights, Women Innovators, Digital Economy, Gender and Innovation, Viksit Bharat @2047*

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## Introduction: Why Women, Why Innovation, Why Now?

Innovation in India has silently shifted its location. It is no longer only the privilege of research parks or corporate R&D the wings. Nowadays, more often than not, it comes out of co, working spaces, small digital start, ups, and from the homes of those who have their laptops next to their daily activities. As a matter of fact, many of these spaces are inhabited by women. However, their presence becomes quite scarce when one looks at patent databases, trademark registries, or copyright ownership records.

So, the question is not whether women are innovating but why their innovation so frequently remains unnoticed by the formal legal system. It is almost trite to say that development is innovation, driven. A less talked, about aspect is whose innovation is protected and rewarded. It is at least theoretically that intellectual property law is supposed to be gender, neutral. It is meant to provide equal treatment, equal standards, and equal access. However, in reality, access is determined by one's level of awareness, resources, and familiarity with institutions. A patent submission or a trademark defense entails legal trust, time, and money, all these are things that woman entrepreneurs, especially those running informal or early, stage digital businesses, may lack.<sup>2</sup> Nonetheless, the law determines the shape of incentives. Visibility, ownership claims, and the ability to derive long, term value from creative work are among the areas that it decides. With the help of digital technologies, the distinction between formal and informal innovation becomes less clear, so the stakes are higher. Therefore, seriously considering women's access to intellectual property is not just a symbolic gesture but a practical one, which is very much aligned with India's development objectives.<sup>3</sup> In case innovation is going to be the engine of the journey to 2047, the system will no longer be able to afford the risk of leaving women's creativity legally under, protected.

## Methodology and Scope

Using doctrinal legal analysis and comparative institutional assessment as research tools, the research intends to conduct a comprehensive study of the intellectual property law system in India examining it from three different angles. The first being the analysis of the legal provisions contained in the acts of Copyright Act of 1957, Patents Act of 1970, and Trademarks

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<sup>2</sup> World Intellectual Property Organization. (2023). *Gender and innovation: Women and intellectual property*. WIPO.

<sup>3</sup> Sen, A. (1999). *Development as freedom*. Oxford University Press.

Act of 1999, and their amendments; The second are the policy documents of institutions like National IPR Policy 2016, Startup India, Digital India, etc. The third is the various judicial decisions related to IP ownership and enforcement. The study is mainly dedicated to the four major types of intellectual property rights, namely patents copyrights trademarks, and design rights plus the issues arising from digital and platform-based innovations. The main subject of the study is India, with a few comparative references to EU and US laws only to bring out the loopholes in the Indian law.

Below are the excerpts that you asked to be humanized: Quite a lot has changed since the launch of innovation potential of women. Actually, the study sometimes considers as a backdrop to the study these key aspects in the UK which are also closely linked to the development agenda 16-17 reveal and That means help further the analysis of Viksit Bharat @2047; But, the issue of universal access to education is still a matter of great concern for India paralleling, the concerns of gender inequalities in the labor market, which too are troubling. On one side, development is fundamentally about innovation. Then again questioning who innovates and whose innovation gets protected and rewarded is seldom done. In an intellectual sense, IP law claims to be gender-neutral, giving promises of equal rights and equal treatment. Yet, what actually is the case is that availability depends on one's knowledge, resources, and institutional complementarity. Women entrepreneurs are mostly the ones involved in the informal or early-stage digital ventures, may not have access to the money resources, time and expert legal help that all go into patenting a technology, defending a trademark or registering a copyright. Motivational influence is one of the important acts of the law. It determines who gets noticed prominently, whose ownership gets asserted and who is able to derive economic benefits over multiple years from one's creative work. The industrial revolution has radically changed the social systems but in the end the boundaries between a sustained and a rented person will always be ephemeral for example; the introduction of digital technologies has made the distinctions between formal and informal innovation really quite small to the point that the risks have also increased. In fact, equipping women with means to protect their intellectual property rights is not only a question of aesthetics but also per actual development goals of India. If innovation is to be the vehicle for India's journey to the year 2047 then the system simply cannot choose to leave women's creativity legally unprotected.

## Women and Innovation in India's Digital Economy

Innovation in India's digital economy does not be a single, straightforward, case. The first example can be a woman, led fintech start, up in Bengaluru, but the second might equally be a homemade entrepreneur selling handcrafted goods through Instagram or WhatsApp. Such innovations are small in scale, loosely structured and are generally very familiar with day, to, day digital platforms. However, they are no less innovative from that point of view. Besides that, digital instruments have almost unexpectedly brought down the barriers so that women can try out their ideas quickly and without heavy investments get in touch with the market.

Besides that, the digital economy has not done away with the disadvantages of the past; hence, it has just changed their arrangement. There still remains a great variation in access to smartphones, constant internet and digital literacy not only across regions but also among different social groups. Women living in the city, who speak English, may have an advantage over other women when it comes to navigating online platforms or registering a brand, whereas some women are, basically, left to informal digital spaces where ownership, as a rule, is assumed rather being legally secured.<sup>4</sup> Thus, an invention can be photographed only when it is gone recognition by formal institutions."

Women's participation in digital innovation has also been found to be concentrated to some extent in certain sectors. Among the sectors with a relatively higher presence of women founders and creators, include e, commerce, creative industries, ed, tech, and social enterprises. These sectors are largely based on intangible assets, brand identity, content, software, and design, which makes intellectual property very relevant in these case<sup>5</sup>s. However, there is an inherent difficulty in defining ownership in platform, driven business models. To give an example, content that is hosted on third, party platforms can generate value without clear ownership rights being transferred to the creator, thus leaving women innovators vulnerable to copying, account suspension, or sudden loss of visibility.<sup>6</sup>

In general, it would not be accurate to classify the digital economy as being either purely liberating or purely excluding; digital spaces, for plenty of women, represent flexibility and autonomy opportunities that are lacking in conventional marketplaces. However, the inherent

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<sup>4</sup> OECD. (2018). *Bridging the digital gender divide: Include, upskill, innovate*. OECD Publishing.

<sup>5</sup> OECD. (2018). *Bridging the digital gender divide: Include, upskill, innovate*. OECD Publishing.

<sup>6</sup> Gervais, D. J. (2019). Artificial intelligence and intellectual property. *Vanderbilt Journal of Entertainment and Technology Law*, 22, 431–458.

flexibility is often associated with a lack of legal protection, and informal innovation is quite vibrant but rarely leads to the establishment of enforceable rights. As India works towards a technology, led development model under the Viksit Bharat @2047 vision, it is crucial that women's digital innovation is recognized not only as an economically valuable activity but also as a legally significant one. Otherwise, the digital economy might be at risk of applauding participation while at the same time ignoring ownership.

## **Understanding Intellectual Property Through a Gender Lens**

When looking at Intellectual Property from a gender point of view, it is not necessary to get rid of the main ideas entirely. In fact, it is more about figuring out who is most likely to have easy access to these rights and who will most probably stay outside the system unnoticed. The work of women, mainly those who are part of the digital and informal economy, is not always recognized by the IP law structure. Small inventions, shared knowledge of a community, the production of digital content or even the use of platform-based business models are examples of such areas where ownership is either unclear or even if there is ownership, it is quite difficult to enforce.<sup>7</sup>

The different forms of IP give birth to a broad array of gender-related issues. For instance, patents which involve technical documentation, financial investment and long-term planning may put women innovators, have limited capital or lacking institutional support, at a disadvantage. Though, branding and content creation are the main focus of women-led businesses that typically rely on trademarks and copyrights. But even these entail platform terms and licensing practices that authors can lose control, little by little, of their own work, so weakening their negotiating power about their own work.<sup>8</sup>

Of course, a counterpoint exists. There are some scholars who warn against overstating the gender factor in legal setups and suppose that this might result in the diminishing of the universality of IP law. In their view, it is not so much the law that is responsible for the problem but rather the wider social inequality. Still, in a way, this statement is true. But still, legal systems are the ones which decide incentives and results.

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<sup>7</sup> World Intellectual Property Organization. (2023). *Gender and innovation: Women and intellectual property*. WIPO.

<sup>8</sup> Gervais, D. J. (2019). Artificial intelligence and intellectual property. *Vanderbilt Journal of Entertainment and Technology Law*, 22, 431–458.

## Legal Challenges Faced by Women Innovators

Typically, the challenges that women innovators confront with the law are not outright barriers. Qualify they are indirect and tucked up in the layers of procedures, costs, and expectations which, without stating, deter participation. From looking at India's the regulations of the intellectual property system, one sees the system is open to all. Yet, in reality, to use the system one should have legal knowledge, cash, and some level of faith in the institutions, most of which women innovators at the beginning of their paths lack. Permanently, one among the most pressing questions comes directly from the situation of the money. The process of filing, going through application, and maintenance of patents, trademarks, or design rights goes beyond the payment of government fees, it also involves the assistance of a professional, keeping up with renewals, and probably enforcement, all of which are costly. Women-led startups or solo digital creators, mainly those working in informal or semi-formal sectors, find such costs to be not consistent with the benefits they will get from the get-go. So, a lot of them rely on going to the market rapidly or to platform visibility rather than on legal protection, a notion that works until it fails.<sup>9</sup>

Another one of the invisible factors creating hindrance to progress is ignorance. While quite a few women innovators are proficient with digital tools but they are Much less conscious of their ownership rights. As an example, a small business operator that sells her original artwork online may be able to grasp the importance of a brand but would not be aware that registration of a trademark secures the brand. Also, content producers might believe that being the author is enough for them to keep control of their works, but in doing so, they are disregarding the licensing arrangements that platforms offer via standard, form contracts.<sup>10</sup> Let's keep in mind, that the law alone can never be the salvation of these challenges. Social norms, market behavior, and powerful digital platforms all have their say in it. Still, legal setups do influence behavior. If a person feels that the protection is beyond reach or that enforcing rights is pointless, then innovation stays informal and one that can be exploited. In this way, working on these legal aspects does not mean giving women innovators special privileges but rather ensuring that the system recognizes and respects creativity wherever it originates from.

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<sup>9</sup> Ahl, H. (2006). Why research on women entrepreneurs needs new directions. *Entrepreneurship Theory and Practice*, 30(5), 595–621.

<sup>10</sup> Maskus, K. E. (2019). *Intellectual property rights in the global economy*. Institute for International Economics.

## Policy Framework and Institutional Support in India

At first glance, India's innovation and intellectual property policy structure seems quite exhaustive. Various strategies missions' portals, and institutional entities are all speaking the innovation and inclusion language. Different initiatives, from the National IPR Policy to Startup India and Digital India, clearly reveal the intention to build a knowledge-based economy. Women actually feature quite extensively in these policy papers. Yet, if you consider the policy objective as a base and then investigate people's real experiences, you will see that the scenario is a bit more mixed. The National IPR Policy 2016 regards intellectual property Mostly as an instrument to facilitate economic development and increase the welfare of the public. It promotes the generation of knowledge and the development of skills which from a conceptual perspective, should be equally advantageous to women innovators as any other group.<sup>11</sup> Still, awareness campaigns are generally too broad and non-specific. They rarely consider women innovators' cases, mostly in the digital and micro enterprises sectors, where interactions with the law are frequently deferred or completely ignored. Once Startup India and other related programs expanded the door to incubators, venture capital, and regulatory assistance. A small number of women-focused initiatives such as the Women Entrepreneurship Platform (WEP) clearly show an effort to redress the inequalities of the past.<sup>12</sup> Yet, within these chains, intellectual property support remains a lot a side issue.

Institutional actors including the DPIIT, patent offices, and innovation hubs play a determining role in shaping the character of access. Although digitization of IP filing has facilitated the process, the mere availability of digital access does not equate to meaningful access. Filling out forms, responding to objections, or understanding classification systems are still highly complex tasks that require specialist knowledge. For women innovators lacking legal support, such tasks might be completely mystifying and intimidating.<sup>13</sup> It would be unfair to say that the policy structure of India is totally ineffective. On the contrary, a good deal of change has happened. Government agencies have got stronger over the last decade, IP filing systems have been simplified, and policy makers have Clearly given a higher priority to the innovation agenda. Though, progress and completeness are two entirely different things. The difficulty is less about what is there and more about what fits together.

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<sup>11</sup> Maskus, K. E. (2019). *Intellectual property rights in the global economy*. Institute for International Economics.

<sup>12</sup> Government of India. (2016). *National intellectual property rights policy*. Department for Promotion of Industry and Internal Trade.

<sup>13</sup> NITI Aayog. (2021). *Women entrepreneurship platform: Catalyzing women-led development in India*. Government of India.

IP protection, to this day, is disconnected from gender-focused innovation policies and women do not see it as a strategic tool but rather as a technical formality. Initiatives to support start-ups revolve basically around plans for scaling and growth, while IP shows up as an afterthought to be ticked only if ever, at best. For many women innovators, mainly those working in digital or informal sectors, this separation really matters. If the securing of legal ownership is postponed or ignored, then you have a situation where value is being created without protection, and innovation ends up vulnerable. So, what is lacking is not yet another policy statement but better integration. As a result, copyright must figure prominently in innovation policy, not only as a peripheral consideration but as a genuine means of enabling women to protect, secure, and profit from their work.

### **Looking Ahead: IP, Technology, and Viksit Bharat @2047**

AI-generated content. Imagine a woman who, using a generative AI, creates a series of educational apps for students in remote villages. The apps probably contain the original lesson plans, interactive content, and even AI-generated animations. Typically, copyright laws only regard humans as authors if they have been creative. Yet, her case is quite different since a large amount of the work has been done with AI support. That means, what is the legal recognition of her work? Is she entitled to the rights of the AI-created content? And, if a large company copies her approach, will she be able to defend her rights? Her questions seem to be of academic nature for some, but the issue they are highlighting is the huge inconsistency in current legal systems.<sup>14</sup> A big firm may consider such ambiguity as a calculable risk that can be taken as any other type of business risk. But, an individual innovator, Mainly, a woman, who is focusing on a data is an important source that should not be missed.

Today, data analytics, algorithmic insights, and user-generated inputs are becoming the backbone of industries like fintech health tech, and agri-tech. Startups with women founders in these fields could come up with breakthrough solutions by accessing special datasets. Yet, the legal ownership question of these data-fueled innovations remains unclear. Who owns the rights over the user data-derived insights? Who has the authority to license or make money out of it? If there are no clear legal provisions, women innovators will fare no better than mere generators of value who lack the ability to control or even benefit from it. In fact, such a

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<sup>14</sup> World Intellectual Property Organization. (2023). *Gender and innovation: Women and intellectual property*. WIPO.

scenario will be a repetition of the ongoing trend of digital platforms and new technologies.<sup>15</sup> This example makes it clearer how, in reality, an IP law which on the surface appears equal contributes to empowerment only to a very limited extent. Exactly, the same level of caution is needed when regulating. Over-regulating could discourage not only young startups but also collaborative ventures, leading to a decrease in creativity. Strict IP regulations might result in ideas being shut down, killing open-source innovation and stopping the cross-pollination of ideas. The aim is to have a right mix of protection and flexibility. For example, one could give women the option to protect their works by copyrights or trademarks, and at the same time, allow them to share ideas through collaboration by providing flexible licensing options.

And, India's digital landscape presents a vast array of opportunities that could be unlocked by effective governance. E-commerce marketplaces, app stores, and content sharing platforms could be the avenues through which artists get recognition, make money, and become visible; but this is only when IP laws are aligned with platform policies. Women innovators' recovery, if well planned, could transform the digital platforms into a safe haven for creativity and empowerment. If India is able to align IP law with technology and social inclusion, it will be the women innovators who will not only participate in digital innovation but also lead and change the face of it.

## **Recommendations and Policy Imperatives**

At this point, Obviously, simply introducing another program in the already packed policy environment will not address the problem of women's access to intellectual property protection. The main challenge lies in transforming the existing systems to better meet the needs of women at the grassroots level. While visionary declarations and lofty goals are admirable, female innovators interact with the law mainly through very tangible means like forms fees deadlines, and decisions which, sadly in some cases, are quite obscure and intimidating. In addition, legal literacy is yet another issue that should be tackled without delay and it must go far beyond just being 'aware'. A simple talk that only explains the notion of patents or trademarks is unlikely to impact the behaviour of the attendees. Actually, women innovators need very targeted assistance in identifying the right moment for protection, which type of intellectual property is most suitable for their product/business, and how to keep away from common errors in using platform contracts or licensing agreements. The way to lend them such support is to take these

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<sup>15</sup> Gervais, D. J. (2019). Artificial intelligence and intellectual property. *Vanderbilt Journal of Entertainment and Technology Law*, 22, 431–458.

legal elements to women incubators, co-working spaces, and entrepreneurship Programmes so that, in these cases, legal issues become familiar instances rather than exotic ones.

Payment aspects must also be taken into account. However, even though at least some fee waivers are provided for individuals and startups, the overall costs of obtaining professional help in a legal matter still discourage and deter many people. One of the methods of assisting those who require support could be the expanded opening of IP facilitation clinics, legal aid Centres in universities, and government-backed advisory services. In fact, these systems are available in certain parts; Though, what is lacking is management and know-how, mostly when it comes to women entrepreneurs who are. Given the current ambiguities surrounding them and since women innovators are already pushing the boundaries of the existing law, obtaining comprehensive legal advice on AI, assisted creation data driven innovation, and platform ownership would be a boon to them. Most of them are operating in the open, changing, and creating value in areas where ownership rules are still unclear. These are not only quick wins nor are they expected to be. Instead, their value lies in providing the correct map rather than in saving time.

If these policies are carried out together, they can pave the way for intellectual property laws that acknowledge women's innovations as the main impetus to India's growth path till 2047 and not as a side or rare issue.

## **Conclusion**

The message that really comes through to me after reading this chapter is how innovation without women is a half-told story. Although digital technologies, start-ups, and creative platforms have given us unimaginable opportunities, the law in most cases is the last one to the rescue. Even though intellectual property law is gender neutral on paper, in reality it is closely linked to social inequalities, disparities in access, and heavy institutions so that it determines which creativity is rewarded and which remains invisible. The gaps for women innovators are both subtle and significant. India's vision of Viksit Bharat @2047 positions innovation and entrepreneurship as the two pillars for countrywide development. For this vision to be realized, a legal system cannot only make equality a mere written promise but should at the same time in reality make it possible. Facilitating easier access, providing legal advice related to the situation, backing fair execution, and resulting in gender sensitive data and policies are some of the minimal necessary steps that, once implemented, will fulfill the promise. These modes

of operation are not intended to be of special treatment but rather simply depict the reality of how innovation occurs in the 21st-century digital economy.

Even so, one has to be careful here. Too much regulation, a rigid IP system, or attempts to rectify the system excessively can limit the degree to which micro businesses and independent innovators experiment. It is a question of finding the right balance: intellectual property setups need to protect and empower, at the same time, without creating new hurdles. In the end, including women as equal members of India's innovation ecosystem is a far cry from simply being an issue of justice. It is a realistic requirement. A nation does not just function from the success of a couple of women inventors but also through the resilience, inclusiveness, and enhanced capacity for significant changes of women's innovativeness being legally recognized and supported. As India is determining its path for 2047, the possibility that the verdict on intellectual property law being a tool of empowerment for all innovators or a silent gatekeeper is the one that determines whether a truly Viksit Bharat is a reality or just a dream is quite likely.

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## **Cyber Warfare and National Security: Emerging Cyber-Security Challenges to India's Armed Forces**

**-Ms. Devanshi Bang<sup>1</sup>**

**-Mr. Arpit Gupta<sup>2</sup>**

### **ABSTRACT**

*The term 'cyberwarfare' describes a state's capacity to disrupt another state's digital networks. The fifth operational domain of warfighting is cyberwarfare. The evolution of warfare has brought hitherto unheard-of difficulties to national security by spreading beyond conventional battlefields into the realm of internet. Today, hostile neighboring governments like China and Pakistan pose a serious threat to the Indian armed forces through cyberattacks. The military's readiness and warfighting capabilities could be compromised by cyberattacks that destroy or seriously impair crucial infrastructure, important communications and ISR (Intelligence, Surveillance, and Reconnaissance) systems, and critical weapons platforms. This article looks at the new cybersecurity issues that India's military is facing in the face of changing threats. According to the study, the Indian military's current level of cyber readiness is vulnerable to enemy cyberattacks because technological, policy, and organizational actions in the cyber domain have been postponed. It highlights how urgent it is to solve the serious holes in India's cybersecurity plan. To counter any enemy cyberattacks on weapons platforms, communication and ISR systems, and vital infrastructure, the Indian military must prioritize significantly enhancing its defensive cyber capabilities. The study seeks to provide a comprehensive understanding of the complex dynamics of cyber warfare and their implications for national security. Given the increasing dependence of defence systems on digital technologies and the growing sophistication of cyber adversaries, safeguarding critical military infrastructure has become an imperative. The paper concludes by proposing a set of practical and actionable recommendations aimed at addressing systemic challenges, enhancing the preparedness of the armed forces, and reinforcing India's capacity to respond effectively to emerging cyber threats.*

**Keywords:** Cyber- attacks, Cyber Security, Cyber warfare, National security, Technological sovereignty

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## Research Methodology

This article employs a doctrinal, qualitative, and critical analytical research methodology to examine the adequacy of India's legal and institutional framework in addressing the growing challenges posed by cyber warfare to national security. Given the increasingly complex relationship between technological advancement, state sovereignty, and national defence, the research adopts a normative legal approach to assess whether the existing regulatory framework is capable of responding effectively to contemporary cyber threats. The study's evidentiary matrix is divided into primary and secondary sources. The primary legal data includes international frameworks like the UN GGE reports and the Tallinn Manual 2.0, as well as statutory instruments like the Information Technology Act, 2000 (and its 2008 Amendment), the Digital Personal Data Protection Act, 2023, and CERT-In directives. Peer-reviewed academic publications, military doctrines, strategic defense treatises, and institutional reports from well-known national security think tanks are examples of secondary data. To find regulatory friction spots, mission overlaps, and enforcement gaps amongst organizations like NCIIPC, CERT-In, and the Defence Cyber Agency, the gathered data is subjected to rigorous legislative interpretation and institutional mapping through methodical content analysis and doctrinal synthesis. This methodology operates under the structural constraint of depending only on unclassified, publicly verifiable, and open-source official papers, allowing for a thorough gap analysis of India's deterrence capabilities.

## Literature Review

The growing significance of cyberspace as a domain of conflict has generated substantial scholarly discourse on cyber warfare, national security, and state preparedness.

- Among the leading scholars in this field, Richard A. Clarke and Robert K. Knake, in *Cyber War: The Next Threat to National Security and What to Do About It*,<sup>3</sup> argue that by allowing state and non-state actors to interfere with vital infrastructure and national defence systems without resorting to traditional military operations, cyber warfare has completely changed the nature of contemporary conflict.

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<sup>3</sup> Richard A. Clarke & Robert K. Knake, '*Cyber War: The Next Threat to National Security and What to Do About It*' (Ecco 2010) at 45.

- Similarly, Joseph S. Nye Jr.<sup>4</sup> explores the function of deterrence in cyberspace and argues that because of issues with attribution, anonymity, and the very low cost of cyber operations, classic deterrence theories need to be significantly modified in the cyber domain.
- Within the Indian context, India's cyber security issues and the necessity of a thorough national cyber security policy have been thoroughly studied by Arvind Gupta.<sup>5</sup> In order to combat new cyberthreats, his work highlights the significance of institutional coordination, strategic planning, and policy coherence.
- Similarly, by examining the legal and regulatory issues raised by cybercrime, cyber security, data protection, and digital governance, Pavan Duggal has made a substantial contribution to the growth of cyber law studies in India.<sup>6</sup>

Even if the body of research on cyberwarfare and cybersecurity is expanding, most of it concentrates on either the technical aspects of cyberthreats or the more general concerns of cyber governance and national security. A thorough analysis of the relationship between cyberwarfare, military readiness, and the effectiveness of India's institutional and legislative system for safeguarding defence infrastructure has received little attention.

Additionally, there is also a lack of targeted legal research assessing whether current Indian laws and policies are adequate to handle the particular difficulties presented by cyberwarfare against the armed services.

## **Objective of The Article**

- To evaluate the strategic aspects and typography of current cyberwarfare threats aimed at India's military forces, defence establishments, and vital information infrastructure.
- To assess the DPDP Act, the Information Technology Act (as amended), and national cyber security policies against asymmetric cyber threats in order to determine the normative sufficiency and statutory efficacy of India's current legal and policy framework.

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<sup>4</sup> Joseph S. Nye Jr., '*The future of power*' (Public Affairs 2011) at 113-16.

<sup>5</sup> Arvind Gupta, '*How India Manages Its National Security*' (Penguin Random House India 2018) at 184-92.

<sup>6</sup> Pavan Duggal, '*Cyberlaw: The Indian Perspective*' (Saakshar Law Publications 2002).

- To evaluate the operational readiness and institutional design of important military and regulatory organizations, such as the Defence Cyber Agency, CERT-In, and NCIIPC, in order to reduce state-sponsored cyberattacks.
- To conduct a legal comparison between established international cyber law instruments, state practices, and sovereign deterrence models with India's domestic cyber defence mechanisms.
- To establish a thorough matrix of institutional, policy, and legislative changes that will boost India's national cyber resilience and strategic deterrence posture while reducing regulatory gaps and administrative overlaps.

## Research Hypothesis

The article bases itself on the hypothesis that India's national security is severely harmed by the increasing complexity of cyberwarfare and that the institutional, legal, and policy frameworks in place are insufficient to fully address new cyberthreats that target vital infrastructure and defense systems. It is further believed that India's cyber readiness and national security architecture would be significantly enhanced by the implementation of a specific framework for cyberwarfare, along with improved inter-agency cooperation and strategic cyber deterrent measures.

## Introduction

*“The nature of war does not alter but its character does.”* In today's conflict spectacle, the conventional route of physical confrontations has been drastically altered. We witness a setting where strategies are purposefully created to weaken and undermine an enemy from a distance, going beyond direct combat. This evolution includes a range of military tactics, such as clandestine infiltration, non-traditional, hybrid manoeuvres, psychological warfare, and, most importantly, cyberwarfare. Cyberwarfare is an extremely potent tactic that can both organize armies for battle and seriously undermine military readiness. This realization highlights how urgently India has to reconsider its current military development strategy. It is imperative that it stay up to date with the global advancement of weaponry, especially in the crucial area of strengthening defenses against cyberattacks. Through the widespread use of digital networks, warfare has expanded during the last 20 years, creating what is sometimes referred to as the “fifth dimension- Cyberspace.” A key element of contemporary warfare is cybersecurity, which entails defending systems, networks, and data from illegal access and disruption. Unlike traditional threats, cyberattacks transcend geographical boundaries, can be launched remotely,

and are often impossible to attribute, making response efforts exceedingly complex. India presents a special challenge in protecting its armed forces from an ever-evolving and sophisticated array of cyber-attacks because of its extensive military infrastructure. Furthermore, given India's extensive military presence spread across its territory, it is imperative that all military divisions have strong defenses against cyberattacks; achieving this aim requires a systematic, coordinated strategy. This article's main goal is to pinpoint and evaluate the current shortcomings in the Indian armed services' cyber defense readiness and infrastructure. The paper asserts that notwithstanding significant institutional advancements in India's cyber defence, the legal and policy architecture remains fragmented and not robust enough to counter the evolving nature of cyber warfare directed at military infrastructure. After this review, the study aims to suggest workable solutions that can successfully close these gaps. The urgent need for India's military modernization programs to give the development of its defensive cyber architecture top priority is at the centre of the conversation. The persistence of key zero-day vulnerabilities, which expose India's weapons platforms, communication systems, and other vital military assets to possible cyber intrusions and assaults, makes this concern especially important.

## **Cyber Warfare**

The nature of conflict has also evolved over time. Cyberspace has been criticized for the shifting dynamics. The changing dynamics have been ascribed to cyberspace, artificial intelligence, and other issues. These days, conflicts can be waged without attacking the adversary with physical force. Conventional military forces are increasingly being supplemented and, in some contexts, supplanted by cyber units, while traditional battlefields are giving way to digitally mediated arenas of conflict. States now leverage the internet, social media platforms, and broader cyberspace to conduct cyber operations, wage information warfare, and circulate propaganda aimed at adversaries. Across these varied forms of engagement, the primary objective of the attacking state is typically to acquire sensitive sometimes classified information or to destabilize the target state in ways that threaten its national security. In light of these developments, cybersecurity has emerged as a critical component of national security strategies, a trend that is equally evident in the South Asian context.

The idea of cyberwarfare is controversial. Cyberwarfare is defined in a variety of ways. The most widely recognized 'report by Clarke and Galletta' states that cyberwarfare can be characterized as "actions by a nation-state to penetrate another nation's computers or networks

to cause damage or disruption.” Information gathering and cyberattacks in cyberwarfare are also included in certain sources.<sup>7</sup> However, others deny that they are a component of cyberwarfare. The cyber security conundrum has been made worse by states' attempts to define cyberwarfare according to their own definitions due to the uncertainty and disagreement that exist on an international level.<sup>8</sup>

## India's Robust Cyberspace

India has consistently undertaken efforts to strengthen its digital presence and technological infrastructure. Over the decades, it has achieved notable progress in digitization and technological self-reliance, beginning with the establishment of the “National Informatics Centre in 1976,” followed by the introduction of “the New Electronics Policy in 1984,<sup>9</sup>” the formation of “the National Task Force on IT and Software Development in 1998,” the enactment of “the Information Technology Act in 2000,” the adoption of a comprehensive “National Cyber Security Policy in 2013, and the launch of Digital India in 2015.” Collectively, these measures reflect India’s ambition to position itself among the leading global information technology powers.<sup>10</sup>

As previously noted, India’s sustained digitization initiatives have enabled it to cultivate cyber capabilities sufficiently robust to penetrate and disrupt adversarial computer and network systems, consistent with the conceptualization of cyberwarfare advanced by Richard A. Clarke and Robert K. Knake.<sup>11</sup> This demonstrates India’s operational capacity to engage in cyberwarfare. In contrast, Pakistan has encountered multiple impediments in advancing its own cyberspace capabilities. These challenges include limited technological awareness, slower rates of digitization, continued reliance on traditional systems, inadequate financial investment and institutional support for information technology and research and development, and reluctance to establish a comprehensive national cybersecurity framework. This asymmetry in cyber capacity has significant implications for Pakistan’s national security.<sup>12</sup>

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<sup>7</sup> Supra note 1 at 45.

<sup>8</sup> NATO Cooperative Cyber Defence Centre of Excellence, *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations* (Cambridge: Cambridge University Press, 2017).

<sup>9</sup> National Informatics Centre, Government of India, Ministry of Electronics and Information Technology.

<sup>10</sup> Digital India, Government of India; see also Information Technology Act and Ministry of Electronics and Information Technology, “National Cyber Security Policy 2013”.

<sup>11</sup> Supra note 1 at 7-10.

<sup>12</sup> International Institute for Strategic Studies, *Cyber Capabilities and National Power: A Net Assessment* (London: IISS, 2021).

## Cyber Threats to Military and National Security

Cyber security can be defined as “*the protection of information from various malicious activities and defending devices through which information can be harnessed such as servers, computers, smartphones, mobile phones, tablets, other electronic devices and systems.*”<sup>13</sup> At this point, cyberthreats present serious difficulties for both people and governments. In contrast to traditional modern combat tactics, cyber threats are unique for a number of reasons. First off, it is quite difficult to track down the source of these crimes because the offenders frequently use compromised networks of other systems as proxies. This strategy makes it more difficult to find the attackers and hides their location. Second, it is very difficult to contain the impact of a successful cyberattack once it has been initiated. It has the ability to spread quickly over numerous networks and systems, causing extensive harm and possibly destroying digital infrastructure. It is therefore challenging to control the effects of such attacks. Furthermore, the fact that cyberattacks don't necessitate a large investment in ‘state-of-the-art’ military hardware or technology makes them especially dangerous. With only fundamental tools, such as old laptops or smartphones, and a basic understanding of computer programming, anyone may cause widespread chaos with little funding. External dangers and internal errors or illegal access are the two primary categories of threats.

### ***External Attacks***

These events involve external attacks by persons or groups with a variety of objectives, such as espionage, disruption, financial gain, or cyberwarfare. To gain access to computer networks, systems, or other critical infrastructure, external criminals use a variety of tactics. They have the ability to enter systems covertly and stay hidden for extended periods of time while gathering data.<sup>14</sup>

### ***Malware***

Malware refers to “malicious software designed to illicitly access systems, potentially resulting in the unauthorized disclosure of confidential data or compromising the integrity of the system, among other consequences.”<sup>15</sup> Ransomware, viruses, worms, spyware, and trojan horses are

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<sup>13</sup> Kaspersky, ‘What is Cyber Security?’ <<https://www.kaspersky.com/resource-center/definitions/what-is-cyber-security>> accessed on February 10, 2025.

<sup>14</sup> ERM Protect, ‘External vs. Internal Cybersecurity Risks: Know the Difference’ <<https://ermprotect.com/blog/external-vs-internal-cybersecurity-risks-know-difference>> accessed on February 11, 2025.

<sup>15</sup> Robin Mansell, ‘Cyber Security, Information Technology and the Digital Economy,’ 10 Oxford Rev. Econ. Pol’y 96, 98–99 (2004).

some of the types of malwares. The Emotet trojan is a modern example of malware; it first surfaced in 2014 but reappeared in 2022.

### ***Ransomware***

A particular kind of malware that successfully prevents users from accessing their systems and compromises their private information is ransomware. Such malware subsequently demands payment in exchange for restoring users' access to their compromised systems. A notable illustration of contemporary ransomware threats is "the Royal ransomware campaign," regarding which the Indian CERT issued an advisory in May 2023 cautioning stakeholders about its potential impact.<sup>16</sup> This malware targets vital industries including education, healthcare, and communications and demands bitcoin ransom payments to keep personal information private.

### ***Distributed denial-of-service attacks***

DDoS assaults occur when a threat actor intentionally floods a target service with a massive amount of traffic. The network becomes overloaded by this deluge of traffic and is unable to handle valid service requests. Among others, this problem has had a big impact on online video game makers. For example, Ubisoft filed a lawsuit against a business that offered these services and succeeded.<sup>17</sup>

### ***SCADA Attacks***

Networks for the transmission and distribution of electrical power, pipelines for oil and gas, and other systems are monitored and remotely managed using supervisory control systems (SCADA). Because these systems are dispersed and vulnerable to virus attacks, they are ideal targets. For example, Target lost an estimated \$202 million as a result of cybercriminals targeting its control systems, breaking into the company's corporate network, and stealing credit card information.<sup>18</sup>

## **Cyberattacks in Era of Modern Warfare**

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<sup>16</sup> The Hindu, 'CERT-In issues cyber alert against 'Royal' ransomware that attacks health, education sectors' <<https://www.thehindu.com/business/cert-in-issues-cyber-alert-against-royal-ransomware-that-attacks-health-education-sectors/article66811312.ece>> accessed on February 13, 2025.

<sup>17</sup> Andy Chalk, 'Ubisoft wins \$150,000 lawsuit against Rainbow Six Siege DDoS operation' (July 22, 2021) <<https://www.pcgamer.com/ubisoft-wins-dollar150000-lawsuit-against-rainbow-six-siege-ddos-operation/>> accessed on February 13, 2025.

<sup>18</sup> William T. Shaw, 'SCADA System Vulnerabilities to Cyber Attack' <<https://electricenergyonline.com/energy/magazine/181/article/SCADA-System-Vulnerabilities-to-Cyber-Attack.htm>> accessed on March 05, 2025.

The yearly global statistics of cyberattacks, which severely affect several countries overall, make cyberspace vulnerabilities clear. The expenditures associated with cybercrime are expected to rise significantly, according to “the 2023 Cybersecurity Ventures Cybercrime Report.” It estimates that “the damages from cybercrime might amount to \$10.5 trillion by 2025, which would be a significant increase from the \$3 trillion recorded in 2015.” These losses span a wide range of things, such as financial theft, intellectual property theft, data breaches, business interruption, and costs associated with recovery activities following an attack.<sup>19</sup> Thus, it is indisputable that a cyberattack is a potent tool for achieving a number of objectives, ranging from marketing and surveillance to Denial-of-Service attacks and the destruction of critical infrastructure, rather than an end in and of itself.

A number of noteworthy occurrences demonstrated the scope and intensity of cyberattacks. The Israeli Air Force purportedly took down Syria's air defence system in October 2007, demonstrating the potentially deadly nature of such attacks.<sup>20</sup>

In a similar vein, Russia gained considerable advantages during the 2008 Georgia conflict by skillfully integrating kinetic, diplomatic, and strategic communication initiatives with cyber operations<sup>21</sup>.

In 2009, the Ghost Net program orchestrated by China showcased the expansive reach of cyber espionage, targeting 103 countries<sup>22</sup>. The introduction of harmful software, or malware, was the main tactic used by bad actors. Titan Rain (2004),<sup>23</sup> Stuxnet (2010),<sup>24</sup> Duqu (2011),<sup>25</sup> Flamer and Distt track (Shamoon) (2012),<sup>26</sup> and Red October (2013)<sup>27</sup> are a few instances that show escalating levels of complexity and damage.

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<sup>19</sup> Cybersecurity Ventures, ‘*Cybercrime to Cost the World \$10.5 Trillion Annually by 2025*’ (2023).

<sup>20</sup> David A. Fulghum, Robert Wall & Amy Butler, ‘*Cyber-Combat's First Shot*,’ 168 *Aviation Week & Space Tech.* 28, 28–31 (2007).

<sup>21</sup> International Cyber Law – Interactive Toolkit, ‘Georgia-Russia conflict (2008)’ <[https://cyberlaw.ccdcoe.org/wiki/Georgia-Russia\\_conflict\\_\(2008\)](https://cyberlaw.ccdcoe.org/wiki/Georgia-Russia_conflict_(2008))> accessed on January 18, 2025.

<sup>22</sup> Council on Foreign Relations, ‘Ghost net’ <<https://www.cfr.org/cyber-operations/ghostnet>> accessed on March 11, 2025.

<sup>23</sup> Kevin G. Coleman, ‘*The Titan Rain Cyber Campaign*,’ (2005) 4 *Homeland Security Today* at 1-5.

<sup>24</sup> Ralph Langner, ‘*Stuxnet: Dissecting a Cyberwarfare Weapon*,’ (2011) *IEEE Security & Privacy* at 49–51.

<sup>25</sup> CrySyS Lab, ‘*Duqu: A Stuxnet-Like Malware Found in the Wild*’ (Budapest Univ. of Tech. & Econ., Technical Report, 2011).

<sup>26</sup> Ibrahim AlHogail, ‘*The Shamoon Cyber-Attack on Saudi Critical Infrastructure*,’ (2015) 4 *Int'l J. Computer Sci. & Network Security* at 101-107.

<sup>27</sup> Costin Riau et al., ‘*The Red October Campaign: An Advanced Cyber Espionage Network Targeting Diplomatic and Government Institutions*,’ Kaspersky Security Bulletin (2013).

Given the distinctive characteristics of cyberwarfare, it is imperative to examine the risks it presents to communication networks, weapons systems, and other critical components of military infrastructure.

### ***Weapon Systems***

The international community has expressed alarm about the possibility of cyberattacks that target military equipment (Significant Cyber Incidents, 2023; State-Sponsored and Criminal Cyberthreats to Critical Infrastructure, 2022).<sup>28</sup> These attacks often target computer, software, and weapon control systems in an effort to disrupt or disable them. Malware or viruses typically enter computer networks and weapon systems to achieve this, rendering them vulnerable or allowing an attacker to take over remotely. These remote access capabilities give adversaries a major strategic advantage because they make it possible to manipulate or interfere with weapons systems. They can even cause catastrophic events like missiles accidentally destroying themselves or defense mechanisms completely failing. Because compromised weapons systems are among the most potent tools in a state's military arsenal, their abuse or malfunction can have disastrous and even fatal results. Adversaries may purposefully attempt to disrupt radar facilities that are in charge of identifying approaching missiles and other threats, cut off communication lines between drones and airplanes, or interfere with navigation systems in naval ships or ground vehicles. Each of these operations is planned to undermine these weapons systems' dependability and functionality, which reduces their operational efficacy and gives the assaulting party a disproportionate operational advantage.

### ***Communication Networks***

Military operations are aided by the Command, Control, Communications, and Intelligence (C3I) systems. According to Johnson and Libicki (1995),<sup>29</sup> C3I's importance stems from its function in guaranteeing mission success through the acquisition of dominant battlefield information. C3I gives commanders and their teams the essential tools they need to operate effectively in a fog of war environment characterized by ambiguity and confusion. As has been shown on multiple occasions throughout history, modern military composition seeks to minimize miscommunications during confusion. This can be achieved by organizing strategies

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<sup>28</sup> United Nations Group of Governmental Experts, 'Report of the Group of Governmental Experts on Advancing Responsible State Behaviour in Cyberspace in the Context of International Security,' U.N. Doc. A/76/135 (2021).

<sup>29</sup> Stuart E. Johnson & Martin C. Libicki, 'Dominant Battlespace Knowledge: The Winning Edge' (1995) National Def. Univ. Press at 15-22.

such as the appropriate span of control or unity of command while managing information resources. There are still some significant obstacles to overcome in spite of the impressive progress made in creating well-managed C3I processes. In cyberwarfare, adversary C3I systems are attacked while friendly C3I systems are used. By targeting an adversary's technology and human infrastructure through direct strikes or covert operations, one may impede or interfere with their ability to defend or launch an attack, ultimately leading to a complete offensive capacity. The security and stability of communication networks are crucial to national defense since they are necessary for military division coordination. The majority of these networks rely on advanced technology, such as computers and wireless devices.<sup>30</sup> However, because of this dependence, they are susceptible to destructive cyberattacks by adversaries that could destroy crucial information. Using cutting-edge cybersecurity measures and routinely updating technological infrastructure for safe and dependable networks are crucial for protecting the sensitive data required to manage the military while protecting the interests of the country. Ensuring the integrity and security of military communication systems is crucial for the effective conduct of operations, particularly in light of potential cyber threats that may emerge during their deployment and use.

### ***Cyber Defence Tactics***

Network segmentation comprises a major military cybersecurity technique, comprising the split of bigger networks into discrete segments that protect mission-essential systems from less sensitive components. In the event of a breach, this structural isolation greatly lessens the possibility that adversaries will move laterally within the network. The implementation of intrusion detection and prevention systems also makes it possible to continuously monitor network traffic in order to spot unusual or questionable activity. These systems can quickly launch countermeasures or limit access after real-time threat detection, minimizing possible harm.<sup>31</sup> Furthermore, implementing safe configuration management ensures stringent configurations for all linked systems and devices, reducing potential points of entry that could be exploited and, consequently, vulnerability susceptibility.

### ***Cyber Threat Intelligence***

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<sup>30</sup> Martin C. Libicki, *Conquest in Cyberspace: National Security and Information Warfare* 25–32 (Cambridge Univ. Press 2007).

<sup>31</sup> Karen Scarfone & Peter Mell, 'Guide to Intrusion Detection and Prevention Systems' (2007) National Inst. of Standards & Tech. Special Publication at 800-94.

Threat intelligence needs to be shared in order to fight cyber threats. International partners, intelligence services, and cybersecurity groups must work together to exchange information and counter new cyberthreats and attack methods. The significance of these partnerships cannot be overstated.<sup>32</sup> Threat hunting, a proactive activity that motivates individuals to actively look for any indications of cyberthreats within systems or networks, is another component of this cooperative method. This strategy is one of the most significant for preventing potential harm since it detects and removes threats before any actual harm can occur.

### ***Artificial Intelligence***

Sophisticated methods are essential to counter cyber threats. By using techniques from both machine learning and artificial intelligence, it is possible to detect abnormal network patterns almost immediately, which aids in the early detection of possible risks. The US Armed Forces have enhanced its ability to identify and counter potential threats by investing in AI-enabled cybersecurity solutions. It is widely acknowledged that Russia employs state-of-the-art technology in cyberwarfare scenarios, even in the absence of publicly accessible evidence. “Today, the majority of weapons are operated through artificial intelligence, thereby eliminating the need for any in-person human presence,” states Mr. Rajnath Singh, India's defence minister, acknowledging this paradigm shift in combat.<sup>33</sup> Soldiers nowadays are a hybrid of technology and people in these technologically advanced times (‘Majority Weapons Operated Through Artificial Intelligence, 2023’).<sup>34</sup>

## **Legal Framework Governing Cyber Security in India**

India's legal architecture for cybersecurity has evolved from a basic e-commerce facilitation framework into a complex, national security-centric apparatus. This framework regulates digital crimes, critical defense infrastructure protection, tactical data governance, and incident reporting.

### ***A. Information Technology Act, 2000***

The Information Technology Act, 2000<sup>35</sup> serves as the primary statutory framework governing cyber offenses. While initially designed to provide legal recognition to electronic commerce,

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<sup>32</sup> Gulshan Rai, ‘*Cyber Security in India: Key Challenges and the Way Forward*,’ (2017) 49 *India Quarterly* at 129.

<sup>33</sup> Ministry of Electronics & Information Technology, Government of India, *National Cyber Security Policy, 2013* at 4.3–4.5.

<sup>34</sup> Rajnath Singh, Defence Minister of India, Address on the Occasion of the 75th Army Day, in Bengaluru, reported in ‘*Majority Weapons Operated Through Artificial Intelligence: Defence Minister*,’ NDTV (Jan. 15, 2023).

<sup>35</sup> Information Technology Act, No. 21 of 2000.

subsequent adjustments have transformed it into a core legislative instrument for national cybersecurity defense.

- *Section 43 (Penalty and Compensation for Damage to Computer System)*<sup>36</sup>: Provides for the right to compensation and civil liability for unauthorized access, download, copying or insertion of viruses into a computer system without the consent of the owner.
- *Section 66 (Computer-Related Offences)*:<sup>37</sup> Any dishonest or fraudulent act shall be punishable as a crime. It provides for penal provisions including imprisonment up to three years or fine.
- *Section 66F (Punishment for Cyber Terrorism)*:<sup>38</sup> This is the most significant national security provision. It makes criminal acts that are meant to threaten the unity, integrity, security or sovereignty of India. Conviction under Section 66F is punishable with imprisonment for life and hence is the primary means of defense against foreign or domestic actors engaging in cyber warfare.
- *Section 70 (Protected System)*:<sup>39</sup> Empowers the government to notify any computer resource impacting critical information infrastructure as Protected System.
- *Section 70A (National Critical Information Infrastructure Protection Centre)*:<sup>40</sup> NCIIPC designated as the national nodal agency for protection of designated critical infrastructure.
- *Section 70B (Indian Computer Emergency Response Team)*:<sup>41</sup> Makes CERT-In the national body for incident response. Its operation functions like collecting, analyzing, and distributing information about cyber incidents, along with issuing emergency cyber defense actions.

#### ***B. Information Technology (Amendment) Act, 2008***<sup>42</sup>

Given the changing nature of cyber threats, the Information Technology (Amendment) Act, 2008 substantially added to the Indian legal landscape on cyber security. This amendment added new types of cybercrimes, made provisions stronger in relation to data protection, and

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<sup>36</sup> supra note 32, §§ 43.

<sup>37</sup> supra note 32, §§ 66.

<sup>38</sup> supra note 32, §§ 66F.

<sup>39</sup> supra note 32, §§ 70.

<sup>40</sup> supra note 32, §§ 70A.

<sup>41</sup> supra note 32, §§ 70B.

<sup>42</sup> Information Technology Act, No. 21 of 2000, §§ 70, 70A, 70B, India Code (as amended by the Information Technology (Amendment) Act, 2008).

included measures to deal with attacks on national security and critical infrastructure. One of the notable features of the amendment is that it included the cyber terrorism crime through Section 66F in the law, acknowledging cyberspace as one of the arenas of future warfare.

In spite of all these developments, the Act still faces limitations in dealing with state sponsored cyber operations, advance persistent threats, and advanced technologies including artificial intelligence, quantum computing, and autonomous cyber weapon systems. There is thus a growing requirement of modern laws to counter modern cyber warfare.

### ***C. CERT-In Framework and the CERT-In Directions, 2022<sup>43</sup>***

The Indian Computer Emergency Response Team (CERT-In), created as per the provisions of Section 70B of the Information Technology Act, is the national agency for managing cyber incidents in India. It acts as the nodal agency for coordination related to cyber threat management, cyber incident response, cyber vulnerability assessment, and cyber security advisories.

The CERT-In Directions, 2022 were a game changer in the realm of cyber security regulation in India, since they made it mandatory for service providers, intermediaries, data Centres, government departments, and corporate firms to report. As per these directions, certain types of cyber incidents are required to be reported to CERT-In within six hours of their occurrence.

### ***D. Digital Personal Data Protection Act, 2023***

The Digital Personal Data Protection Act, 2023<sup>44</sup> is a crucial piece of legislation that represents an important milestone in the development of the digital governance framework in India. The law outlines responsibilities of data fiduciaries, acknowledges rights of data principals, and aims to facilitate the lawful and secure handling of personal data. While mainly focused on ensuring data protection, the law has significant consequences for national security and cyber resiliency. Section 17 outlines exemptions applicable to governmental institutions.<sup>45</sup> The Central Government has the authority to provide exemptions from the main clauses of the Act

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<sup>43</sup> Indian Computer Emergency Response Team (CERT-In), Directions Under Sub-Section (6) of Section 70B of the Information Technology Act, 2000 Relating to Information Security Practices, Procedure, Prevention, Response and Reporting of Cyber Incidents for Safe & Trusted Internet, No. 20(3)/2022-CERT-In (Apr. 28, 2022).

<sup>44</sup> Digital Personal Data Protection Act, No. 22 of 2023.

<sup>45</sup> *supra* note 42, §§ 17.

in the case of safeguarding the sovereignty, integrity, and security of India. It means that any tactical intelligence gathering, surveillance, and cyber warfare prevention measures cannot be hampered by individual consent or deletion of the collected data. While India has an existing legal framework that allows for tackling most conventional cyber-attacks, there are still many gaps when it comes to cyber warfare. Current laws have concentrated more on cybercrimes and cyber security than on state-sponsored cyber-attacks, offensive cyber capabilities, cyber deterrence, and cyber strategies for the armed forces. The lack of a separate cyber warfare law, a national cyber security strategy, and a cyber doctrine remain a hurdle that impedes India from dealing with emerging challenges in cyberspace.

## **International Legal Perspectives on Cyber Warfare**

Developing international legal frameworks requires adapting historical, state-centric laws to govern digital operations, state-sponsored actors, and shifting security dynamics.

*A. Tallinn Manual 2.0-* Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations,<sup>46</sup> compiled by an independent International Group of Experts, invited by the NATO Cooperative Cyber Defence Centre of Excellence, is an authoritative statement on Lex Lata. This manual examines the application of existing principles of international law to cyber operations during times of peace and war. In accordance with Article 2(4) of the UN Charter,<sup>47</sup> use of threats or force against the territorial integrity or political independence of any state is forbidden. The Tallinn Manual uses a scale and effects test to transpose this principle into cyberspace. A cyber operation will constitute use of force if it produces consequences similar to those of a traditional kinetic operation. According to Article 51 of the UN Charter,<sup>48</sup> there exists an inherent right of states to use individual or collective self-defense in case of an ‘armed attack’. In accordance with the Tallinn Manual, all uses of force do not necessarily equate to armed attacks.

As per the Draft Articles on State Responsibility of the International Law Commission,<sup>49</sup> a wrongful cyber act that violates international law could be attributed to a state under certain

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<sup>46</sup> Michael N. Schmitt ed., ‘*Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations*’ (2d ed. 2017) at 3-8.

<sup>47</sup> U.N. Charter art. 2, ¶ 4.

<sup>48</sup> U.N. Charter art. 51.

<sup>49</sup> Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Int’l Law Comm’n, U.N. GAOR, 56th Sess., Supp. No. 10, at 43, U.N. Doc. A/56/10 (2001).

circumstances as follows: Direct Attribution: This entails that the cyber operation be performed by elements of state organs and armed forces of the state in question (for instance, military intelligence). Indirect Attribution: This involves cyber operations conducted by private hacker groups or proxies of the state in question under instructions/direction/control of the state.

*B. UN Group of Governmental Experts (UNGGE) & Open-Ended Working Group (OEWG)*-It is noteworthy that the consensual UNGGE Reports highlighted that the current international law in totality, the United Nations charter, state sovereignty principles, and international humanitarian laws apply in cyberspace.<sup>50</sup>

The framework proposes eleven voluntary and non-binding norms on responsible state behaviour. These norms specifically prohibit any state from deliberately causing damage to another state's critical infrastructure and targeting Computer Emergency Response Team during times of peace. After completion of the OEWG cycle for the period 2021-2025,<sup>51</sup> the discussion process moved to a permanent Global Mechanism at the United Nations General Assembly.

*C. Budapest Convention on Cyber Crime*<sup>52</sup>- The NATO alliance has defined cyberspace as an operational domain on par with land, sea, air, and space. Collective Defense Threshold: NATO has determined that a serious enough cyber-attack on any of its members will be sufficient grounds for invoking Article 5 of the North Atlantic Treaty. Strategic Ambiguity: The alliance is strategically ambiguous about the exact level of scale, severity, or effect required for the invocation of Article 5.<sup>53</sup> The decision is made on a case-by-case basis.

*D. Comparative Analysis: India's Framework vs. International Standards*- When we compare the evolution of international trends with the current status of cyber security in India, we find that there have been significant improvements in Indian cyber security through the passing of the Information Technology Act, creation of CERT-In, Defence Cyber Agency, and Critical Information Infrastructure Protection. However, there are still some deficiencies. India has not formulated any national cyber warfare doctrine like many other NATO member countries and

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<sup>50</sup> Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security, Rep. of the Secretary-General, U.N. Doc. A/70/174 (July 22, 2015).

<sup>51</sup> Open-Ended Working Group on Security of and in the Use of Information and Communications Technologies 2021–2025, Final Report, U.N. Doc. A/79/214 (July 22, 2024).

<sup>52</sup> Budapest Convention on Cybercrime, Nov. 23, 2001, E.T.S. No. 185.

<sup>53</sup> North Atlantic Treaty art. 5, Apr. 4, 1949, 34 U.N.T.S. 243.

technologically advanced countries. The National Cyber Warfare Doctrine includes thresholds of cyber aggression, methods of attribution, deterrence and responses to cyber aggression. There is no comprehensive legislation to control state sponsored cyber activities and cyber warfare.

In addition, while India is an active player in global deliberations on cyber governance, the country's laws have not yet sufficiently proven successful in terms of dealing with new challenges like offensive cyber capacities, cyber deterrence, cyber operations of the military, and the role of international humanitarian law in the cyber domain. Developing these aspects will improve India's readiness for complex cyber threats.

## Case Studies

### *Georgia*

In August 2008, Georgia was the victim of an extremely sophisticated and unprecedented cyberattack while Russia and Georgia were at odds over South Ossetia and Abkhazia.<sup>54</sup> The goal of this hit, which coincided with ongoing military operations, was to disrupt Georgia's infrastructure and essential government institutions. Cutting off communication, inciting fear and uncertainty among the public, and demonstrating Russia's growing cyberwarfare capabilities were some of the attack's objectives.

By employing techniques including virus distribution, DDoS attacks, and possibly social engineering, the attackers were able to successfully disrupt government websites, news organizations, and financial institutions. Serious consequences resulted from the incident, such as disrupted services, psychological effects on the general public, and heightened awareness of the use of cyberwarfare in modern wars worldwide. This incident highlighted the need of cyber resilience, the need for international cooperation in addressing cybersecurity concerns, and the knowledge of hybrid warfare tactics.

Ultimately, the 2008 cyberattack on Georgia served as a sobering reminder of how dynamic cyberthreats are and how crucial it is for nations to remain vigilant and proactive in their defense against them.<sup>55</sup>

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<sup>54</sup> Ronald J. Deibert, Rafal Rohozinski & Masashi Crete-Nishihara, '*Cyclones in Cyberspace: Information Shaping and Denial in the 2008 Russia–Georgia War*,' 43 Sec. Dialogue (2012) at 3.

<sup>55</sup> Captain Paulo Shakarian, 'The 2008' Russian Cyber Campaign Against Georgia' <[https://www.armyupress.army.mil/Portals/7/militaryreview/Archives/English/MilitaryReview\\_20111231\\_art013.pdf](https://www.armyupress.army.mil/Portals/7/militaryreview/Archives/English/MilitaryReview_20111231_art013.pdf)> accessed on March 12, 2025.

## ***Iran***

In the field of cyberwarfare, Stuxnet, a sophisticated computer worm found in June 2010,<sup>56</sup> is a seminal case study because of its influence on Iran's nuclear program. The United States and Israel worked together during Operation Olympic Games to create Stuxnet, a weapon intended to interfere with Iran's nuclear enrichment facilities, with an emphasis on industrial control systems. Stuxnet, which exploited zero-day vulnerabilities in Siemens control systems and Microsoft Windows to propagate via infected USB drives and network shares, ultimately targeted the programmable logic controllers utilized in Iran's centrifuge cascades. The worm seriously damaged Iran's centrifuges at the Natanz location, causing operational problems and setbacks to the nation's nuclear aspirations.

Moreover, Stuxnet's discovery shed light on vulnerabilities in industrial control systems worldwide, highlighting the necessity of stronger cybersecurity defenses to protect vital infrastructure. This case underscores the effectiveness of covert cyber operations in achieving strategic objectives and highlights the implications of cyber warfare for global security. As cyber threats continue to evolve, nations must prioritize cybersecurity and resilience-building efforts to defend against similar attacks in the future.<sup>57</sup>

## **History of Cyber Attacks on India**

In 2022, the CERT-In (Indian Computer Emergency Response Team) responded to 13,91,457 incidents.<sup>58</sup> The type of incidents handled were “Website Intrusion & Malware Propagation, Malicious Code, Phishing, Distributed Denial of Service attacks, Website Defacements, Unauthorized Network Scanning/Probing activities, Ransomware attacks, Data Breach and Vulnerable Services.” Table 1 provides the breakup of these incidents. In order to handle incidents, remedial measures were implemented which were in duly coordination with stakeholders.

| <b><i>Security Incidents</i></b>      | <b><i>Frequency</i></b> |
|---------------------------------------|-------------------------|
| Phishing                              | 1,714                   |
| Unauthorized Network Scanning/Probing | 3,24,620                |
| Vulnerable Services                   | 8,75,892                |

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<sup>56</sup> Paulo Shakarian, ‘*Stuxnet: Cyberwar Revolution in Military Affairs*,’ 4 Small Wars J. (2011).

<sup>57</sup> Michael Holloway, ‘Stuxnet Worm Attack on Iranian Nuclear Facilities’ (July 16, 2015) <<http://large.stanford.edu/courses/2015/ph241/holloway1/>> accessed on March 11, 2025.

<sup>58</sup> CERT-In, Annual Report 2022, <<https://www.certin.org.in/s2cMainServlet?pageid=PUBANULREPT>> accessed on March 13, 2025.

|                                         |                  |
|-----------------------------------------|------------------|
| Virus/ Malicious Code                   | 1,61,757         |
| Website Defacements                     | 19,793           |
| Website Intrusion & Malware Propagation | 2,164            |
| Others                                  | 5,517            |
| <b>Total</b>                            | <b>13,91,457</b> |

*Table 1 - Breakup of Security Incidents handled (Source: CERT-In Annual Report 2022)*

Cyberattacks targeting India's vital infrastructure are on the rise. A cyberattack on the Kudankulam Nuclear Power Plant occurred in 2019.<sup>59</sup> An attack on the Mumbai Power Grid in 2020 resulted in a significant power outage that halted rail service and interrupted business operations. Fourteen Trojans were installed on the server, according to an examination into the attack, which was connected to a Chinese organization.<sup>60</sup> In 2021, there were cyberattacks on the servers of Air India.<sup>61</sup> Several ransomware attacks that affected organizations including Oil India Limited and Spice Jet servers were disclosed the following year.

Notably, a Chinese organization called Red Echo was blamed for a significant cyberattack on the Goa Flood Monitoring System.<sup>62</sup> Additionally, Delhi's AIIMS encountered a cyberattack that impacted five servers, "resulting in the encryption of approximately 1.3 TB of data."<sup>63</sup> Additionally, between 2018 and 2022, the banking industry reported 248 significant cyberattacks, but Cert-In recorded 1.391 million events in 2022 alone. Notably, cyberattacks on government organizations more than doubled in 2022, indicating a rise in state-sponsored assaults.<sup>64</sup> In August 2018, Pune experienced a severe cyber-attack targeting Cosmos Cooperative Bank. The attackers utilized advanced techniques such as malware injection and unauthorized transactions, resulting in a substantial financial breach. The consequences were

<sup>59</sup> Nirmal John, 'Breach at Kudankulam nuclear plant may have gone undetected for over six months: Group-IB' (November 25, 2020) <<https://economictimes.indiatimes.com/news/politics-and-nation/breach-at-kudankulam-nuclear-plant-may-have-gone-undetected-for-over-six-months-group-ib/articleshow/79412969.cms?from=mdr>> accessed on March 14, 2025.

<sup>60</sup> Sameer Patil & Aakanksha Kaushik, *Cyber Threats to India's Critical Infrastructure*, Observer Research Foundation Issue Brief No. 507 (2021).

<sup>61</sup> Sameer Patil & Aakanksha Kaushik, 'Cyber Threats to India's Critical Infrastructure,' Observer Research Foundation Issue Brief No. 507 (2021).

<sup>62</sup> Recorded Future, *China-Linked Group Red Echo Targeting the Indian Power Sector Amid Heightened Border Tensions* (Feb. 28, 2021).

<sup>63</sup> The Wire Staff, '5 AIIMS Servers Hacked, 1.3 TB Data Encrypted in Recent Cyberattack, Govt Tells RS' (December 16, 2022) <<https://thewire.in/government/aiims-servers-cyberattack-ransomware-rajya-sabha#:~:text=New%20Delhi%3A%20The%20Union%20government,terabytes%20of%20data%20was%20encrypted.>> accessed on March 14, 2025.

<sup>64</sup> SD Pradhan, 'Protecting critical information infrastructure: Growing challenges demand a robust cyber-ecosystem' (June 16, 2023).

dire, with unauthorized withdrawals from numerous accounts, inflicting significant financial hardship.<sup>65</sup>

The WannaCry ransomware assault, one of the largest and most destructive cyberattacks in history, struck the world in May 2017. India ranked as the third most severely affected nation by WannaCry ransomware, impacting over 200,000 computer systems.<sup>66</sup> This ransomware attacks targeted banks across India and several enterprises in Tamil Nadu and Gujarat. Numerous prominent organizations, including banks, government agencies, and healthcare facilities, were victimized by this global cyber onslaught.

Additionally, India experienced a number of worrying data breaches involving Aadhaar, the nation's biometric identity system, between 2017 and 2018. These breaches ranged from instances of personal data being made publicly available to illegal access to Aadhaar databases. These breaches have serious repercussions, possibly putting over 1.1 billion people at risk of fraud and identity theft. Names, residences, biometric information, and in some situations, even bank account details connected to Aadhaar were among the leaked data.

Recently, US based cybersecurity firm, Re-security claimed that “On 9 October, a threat actor going by the name ‘pwn0001’ posted a thread on Breach Forums brokering access to 815 million Indian Citizen Aadhaar & Passport records.”<sup>67</sup>

### **National Cyber Security Policy, 2013**

The National Cyber Security Policy of India, released in 2013, aimed at “vision of building a secure and resilient cyberspace for citizens, businesses and Government.”<sup>68</sup> It acknowledged the serious threats posed by cyberattacks, which could jeopardize “human lives, the economy, and national security”. While the policy outlined effective strategies for cyberspace security, it's now a decade old, highlighting the need for a timely revision.<sup>69</sup> Furthermore, a thorough

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<sup>65</sup> Sushant Kulkarni, ‘Pune Crime Files: Cyber-attack on Cosmos Bank that funneled Rs 94 crore in just 3 days Pune Crime Files: Cyber-attack on Cosmos Bank that funneled Rs 94 crore in just 3 days’ (February 19, 2019).

<sup>66</sup> ET Bureau, ‘India third worst hit nation by ransomware WannaCry; over 40,000 computers affected’ (May 17, 2024).

<sup>67</sup> Live mint, ‘Aadhaar data leak: Massive data breach exposes about 81 crore Indians' personal information on dark web’ (October 31, 2023) <<https://www.livemint.com/news/india/aadhaar-data-leak-massive-data-breach-exposes-815-million-indians-personal-information-on-dark-web-details-here-11698712793223.html>> accessed on March 14, 2025.

<sup>68</sup> Ministry of Communications & Information Technology, Government of India, *National Cyber Security Policy, 2013* 1–8 (2013).

<sup>69</sup> Nitish Desai Associates, ‘Cybersecurity: Law and Policy’ (July 2023).

analysis of the cyber organization and a closer look at NCSP-13 reveal a number of weaknesses in tackling the cyber dangers facing our country. The procedure also has a legislative gap. NCSP-13 was not the subject of a thorough public review before to its implementation, in contrast to legislation, which is debated in parliament before being passed into law.

The National Association of Software Service Companies was provided with a draft of the document prior to its publication; but, as with other policies, its enforceability and binding nature are diminished by the absence of public review. In addition, there are new dangers that must be dealt with. Due to the notable surge in electronic transactions via cloud computing and smartphones in 2012–2013, cybercriminals have redirected their efforts to take advantage of this platform. Nevertheless, NCSP-13 does not recognize this increasing danger or offer recommendations for protecting this medium.

A major issue is the absence of a national security strategy. Even though the National Security Council has been in charge of creating national policies since 1999, the National Security Policy has never been formally published. The national security policy does not include the cybersecurity-focused NCSP-13.<sup>70</sup>

Consequently, it was not seen as a comprehensive national-level policy, but rather as a solitary departmental paper of the Ministry of Communication and Information Technology. Also, over the past twenty years, the task of ensuring cybersecurity has been divided among various “ministries, agencies, departments, and even non-governmental organizations (NGOs)”. It is challenging to accomplish consistent and cohesive government-wide activity because of this fragmentation. An overview of all authorized cybersecurity agencies is given in Table 2.<sup>71</sup>

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<sup>70</sup> Arvind Gupta, *How India Manages Its National Security* (2018) Penguin Random House India 2018 at 17-28.

<sup>71</sup> Captain Sanjay Chhabra, ‘India’s National Cyber Security Policy (NCSP) And Organization: A Critical’ <Assessment [https://www.indiannavy.nic.in/sites/default/themes/indiannavy/images/pdf/resources/article\\_6.pdf](https://www.indiannavy.nic.in/sites/default/themes/indiannavy/images/pdf/resources/article_6.pdf)> accessed on March 18, 2025.

| <b>India – Cyber Organisation</b>                                           |                                              |                                                   |                                                                 |                                                                 |                                                                                                  |
|-----------------------------------------------------------------------------|----------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>PM Office/<br/>Cabinet Secy<br/>(PMO/ Cab Sec)</b>                       | <b>Ministry of Home<br/>Affairs(MHA)</b>     | <b>Ministry of<br/>External Affairs<br/>(MEA)</b> | <b>Ministry of<br/>Defence (MOD)</b>                            | <b>Ministry of Common<br/>Info Technology<br/>(MCIT)</b>        | <b>Non Govt<br/>Organisation<br/>(NGO)</b>                                                       |
| National<br>Security<br>Council (NSC)                                       | National Cyber<br>Coordin Centre<br>(NCCC)   | Country Ministers<br>and Ambassador               | Tri Service Cyber<br>Command -<br>Pending<br>Operationalisation | Department of<br>Information<br>Technology (DIT)                | Cyber Security and<br>Anti hacking<br>Organisation<br>(CSAHO)                                    |
| National<br>Technical<br>Research Orgn<br>(NTRO)                            | Directorate of<br>Forensic Science<br>(DFS)  | Defence<br>Attaches                               | Army (MI)                                                       | Department of<br>Telecommn (DoT)                                | Cyber Society<br>of India (CySI)                                                                 |
| National<br>Critical Info<br>Infrastructure<br>Protection<br>Centre(NCIIPC) | National Disaster<br>Mgt Authority<br>(NDMA) | Joint Secretary<br>(IT)                           | Navy (DNI)                                                      | Indian Computer<br>Emergency<br>Response Team<br>CERT-IN        | Centre of<br>Excellence for<br>Cyber Security<br>Research &<br>Development<br>In India (CECSRDI) |
| Joint<br>Intelligence<br>Group (JIG)                                        | Central Forensic<br>Science Lab (CFSLs)      |                                                   | Air Force (AFI)                                                 | Education Research<br>Network (ERNET)                           | Cyber Security<br>of India(CSI)                                                                  |
| National<br>Crisis<br>Management<br>Committee (NCMC)                        | Intelligence Bureau<br>(IB)                  |                                                   | Def Info<br>Assurance &<br>Research Agency<br>(DIARA)           | Informatics Center<br>(NIC)                                     | National Cyber<br>Security of India<br>(NCS)                                                     |
| Research and<br>Analysis Wing<br>(RAW)                                      |                                              |                                                   | Defence<br>Intelligence<br>Agency (DIA)                         | Centre for<br>Development of<br>Advanced Computing<br>C-DAC     | Cyber Attacks<br>Crisis Management<br>Plan of India<br>(CACMP)                                   |
| Multi Agency<br>Center (MAC)                                                |                                              |                                                   | Defence<br>Research Dev<br>Authority (DRDO)                     | Standardisation,<br>Testing and Quality<br>Certification (STQC) |                                                                                                  |
| National<br>Information<br>Board (NIB)                                      |                                              |                                                   |                                                                 |                                                                 |                                                                                                  |

*Table 2 Cyber Organization*

## India and Cybersecurity

With the development of cyber threats, these have become a serious concern for the national security of India because of the increased reliance of the Armed Forces on computerized means of communication, intelligence gathering, surveillance, and coordination of activities. The contemporary warfare involves heavy use of networking, satellite communication, and data analysis techniques and can therefore be a target of cyber-attacks from hostile nations. Cyber-attack on the networks of the military forces can adversely affect their command-and-control systems and their readiness for any operation.

The strategic situation within India is yet another factor that aggravates such fears. The increasingly powerful cyber capabilities of the rival nations in the neighborhood, especially China, have brought into question the security of critical national and defense infrastructure systems. Information about advanced cyber technology development capable of striking at the communication and satellite-based systems emphasizes the importance of a sound cyber protection strategy. Considering the Indian Armed Forces' dependence on intelligence

gathering and satellite-based systems, any attack on such systems would seriously affect their capability.<sup>72</sup>

The difficulty of attributing the attacker further complicates the situation in light of the challenges that exist in attribution within cyberspace.<sup>73</sup> This is because the nature of attacks in cyberspace involves the use of proxy actors, obfuscating malware, and complex computer networks to hide the identity of the attacker. In turn, this makes it very difficult for states to identify the attackers and come up with appropriate action plans. In any case of conflict, attacks aimed at communication, intelligence, and defense systems may affect military coordination and compromise national security.

### ***India's Cybersecurity Infrastructure***

The term *Indian Defence Cyber Infrastructure* encompasses various components and systems essential for ensuring cyber security and safeguarding India and its Armed Forces. One of the key components is the Defence Cyber Agency, a tri-services organization established in 2018 and operationalized by 2021.<sup>74</sup> DCyA is responsible for addressing cyber warfare threats and operations, forming a robust posture against cyber-attacks. It includes personnel from “the Army, Navy, and Air Force, headed by two-star officers.” Another critical component is the Cyber Emergency Response Teams, specialized units dedicated to detecting, preventing, and responding to cyber-attacks on military networks. In cooperation with DCyA and other organizations, each branch of the Indian Armed Forces has its own CERT.<sup>75</sup> Furthermore, “the Defence Information Assurance and Research Agency (DIARA), which was incorporated into DCyA, conducts research and development in the field of cyber security in addition to offering cyber security solutions including firewalls, antivirus software, and encryption.” In order to manage cyber threats, DIARA works with national organizations such as the National Technical Research Organization (NTRO) and CERT-In. The Defence Communication Network (DCN) forms another vital element, offering a secure communication platform for the Armed Forces, connecting headquarters, command Centres, and units through optical fiber and satellite

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<sup>72</sup> S. Chandrashekar & G. Madhavan Nair, *India's Space Program and National Security*, 44 Strategic Analysis 1 (2020).

<sup>73</sup> Thomas Rid & Ben Buchanan, ‘*Attributing Cyber Attacks*,’ (2015) 38 J. Strategic Stud. at 4, 4–37.

<sup>74</sup> Press Information Bureau, Government of India, press release on ‘*the creation of tri-service agencies including the Defence Cyber Agency*’ (2018).

<sup>75</sup> Ministry of Defence, Government of India, *Annual Report 2021–22* (New Delhi: Ministry of Defence, 2022).

technology for voice, data, and video exchanges.<sup>76</sup> Lastly, Critical Information Infrastructure (CII), comprising systems and networks essential to defence operations and national security (e.g., weapon systems, command systems, radar satellites), is a top priority for Indian Defence Cyber Infrastructure, ensuring their protection against potential cyber threats.

## **India's Countermeasures**

As the Military of India adapts to the digital era, it's crucial to bolster security against increasing cyber threats. The Indian military must maintain strong defenses because opponents are capable of carrying out sophisticated strikes. Assessing completed projects is a necessary step in determining India's preparedness for cyberwarfare. India has started implementing policy steps to combat cyber dangers from neighboring states after realizing the growing threat. These continuous initiatives seek to strengthen technology defenses and match the sophistication of cybercriminals. The various initiatives done by authorities must be taken into account when evaluating India's capacity to combat cyberwarfare.<sup>77</sup>

### ***Quantum Cryptography***

A key component of cybersecurity is the implementation of encryption techniques, which act as an essential barrier against illegal access and manipulation of data sent via networks. In order to discourage possible attackers, these protocols use "complex algorithms to scramble data, making it unreadable without decryption keys." Another crucial security feature for India's military communication networks is multi-factor authentication. With this method, users must authenticate their access to the network using several types of identification, including passwords and biometric information. Additionally, the Indian Army has collaborated with businesses to create quantum cryptography techniques that can be incorporated into military systems. These state-of-the-art methods help protect software from risks driven by quantum computing. To support these initiatives, the Indian Army established a quantum computing centre at the Military Engineering Institute in Mhow, Madhya Pradesh. Upgrading is imperative due to the vulnerability of traditional communication methods in cyberspace. Currently, quantum-resistant software represents the cutting edge of cybersecurity, ensuring protection against hacking attempts. Moreover, the development of quantum technology provides India

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<sup>76</sup> Defence Research and Development Organization, Government of India, official publications on secure defence communication systems including the Defence Communication Network and protection of Critical Information Infrastructure (CII).

<sup>77</sup> National Technical Research Organization, Government of India — statutory role and coordination in technical intelligence and cybersecurity operations relating to defence infrastructure.

with significant offensive cyber capabilities, enabling penetration of even well-secured targets.<sup>78</sup>

### ***Signals Corps***

Within India's defence services, the Signals Corps is the main organization and focal point for cybersecurity and telecommunications. It has established a notable goal of gaining information superiority through the creation of cutting-edge infrastructure designed for network-centric warfare on the future digital battlefield. In order to accomplish this, the Corps of Signals concentrates on complete network consolidation, giving the Indian Army a safe, dependable, and robust information exchange infrastructure. The Signals Corps is critical to the Indian Army's tactical efficacy, operational coherence, and communication capabilities. This unit not only creates a strong transmission infrastructure but also innovates and uses cutting-edge communication technologies to meet pressing needs.<sup>79</sup>

### ***Defence Cyber Agency***

In response to the evolving nature of warfare and the threats to national security, India established three tri-service bodies to address key areas of modern security issues. To counter technological threats to India's security, these agencies which include the Defence Cyber Agency, the Defence Space Agency, and the Armed Forces Special Operations Division are intended to pool military resources and manpower.

The DCA was established in 2021 with the dual objectives of developing a cyber doctrine and strategy for India and defending it against cyberwarfare by hostile states.<sup>80</sup> The DCA combines commanders and committed resources from the Army, Navy, and Air Force under the direction of a single commander. In situations of conflict, this organized framework enables quick and well-informed decision-making, guaranteeing a swift and appropriate reaction. It is expected that this kind of cooperation will work better than joint commands and theatre cyber divisions.

### ***Command Cyber Operations and Support Wings***

The Indian Army declared in April 2023 that it had activated its Command Cyber Operations and Support Wings with the goal of integrating specialist technologies into its online systems in order to modernize them.

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<sup>78</sup> Arjun Gangeya's, 'Securing India's cyberspace from quantum techniques (October 17, 2022)

<sup>79</sup> Ministry of Defence, Government of India, 'Joint Doctrine of the Indian Armed Forces' (2017).

<sup>80</sup> PIB, 'Cyber Warfare' <<https://pib.gov.in/PressReleaseDetail.aspx?PRID=1742322>> accessed on March 19, 2025.

This choice is indicative of the military's growing reliance on cutting-edge communication techniques as it moves toward net-centricity. The operationalization of cyber operations units has been approved by senior Army officials in order to ensure security and keep control of these digital networks. The military's use of advanced technologies has made this move necessary, such as anti-drone gear, loitering weapon systems, and swarm drones. Through the use of effective risk-reduction strategies, the program aims to improve safety in an increasingly complex digital environment.<sup>81</sup>

### ***Other Mechanisms***

The Indian government has put in place additional safeguards to prevent and lessen cybersecurity incidents in addition to these steps. The “National Critical Information Infrastructure Protection Centre” is one such project that attempts to protect critical information infrastructure that is essential to national security. To mitigate potential hazards caused by adversarial cyber threats, the “Indian Computer Emergency Response Team (CERT-In)” periodically publishes alerts and advisories. To further assist and oversee the application of information security best practices, the government has instituted certain security auditing protocols.<sup>82</sup> A contingency plan that guarantees prompt and efficient reactions during emergencies has been designed to improve readiness against cyberattacks and terrorism. In addition, regular mock drills are used to execute simulated situations, which allows firms to assess their cybersecurity posture and readiness. The “tri-services Integrated Defence Staff” is in charge of organizing drills that mimic cyberattacks on vital military assets.<sup>83</sup>

### **Legal and Policy Reforms for Strengthening Cyber Resilience**

Given the unpredictability of the global environment, India needs to make investments in knowledgeable cybersecurity experts and useful technology tools a top priority in order to preserve its overall national security. Fighting prospective assaults must become a focus of determined action, whether that is done by creating task forces to respond to specific dangers or by collaborating with international organizations to exchange best practices and take use of current experience.<sup>84</sup> Creating a cogent cyber policy is crucial given India's increasing reliance on cyberspace for strategic objectives. Establishing a coherent and transparent framework is a crucial first step in safeguarding national security against present and future threats, to handle

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<sup>81</sup> PTI, ‘Army to ‘test bed’ niche technologies; operationalize command cyber operations’ (April 27, 2023) < <https://economictimes.indiatimes.com/news/defence/army-decides-to-operationalise-command-cyber-operations-support-wings/articleshow/99807115.cms?from=mdr>> accessed on March 19, 2025.

<sup>82</sup> Rajesh Basrur & K. S. Parthasarathy, ‘*The Impact of Emerging Technologies on National Security*,’ 46 Strategic Analysis 205 (2022).

<sup>83</sup> David S. Alberts, John J. Garstka & Frederick P. Stein, *Network Centric Warfare: Developing and Leveraging Information Superiority* (CCRP 1999).

<sup>84</sup> Lucas Kello, “*The Meaning of the Cyber Revolution: Perils to Theory and Statecraft*,” International Security, Vol. 38, No. 2 (Fall 2013), pp. 7–40.

the complex issues related to cyberwarfare. In addition to assisting the military in formulating response plans for online conflicts, a strong cyber doctrine will encourage readiness among civilian players who might be targeted by adversarial foreign actors. In areas where strategic clarity is lacking, it will play pivotal roles.<sup>85</sup> A doctrine may also guide the creation of a military cyber strategy that guides the activities of the armed forces in this field. It would also necessitate a certain amount of accountability, which would document cybersecurity developments and make them public. Consequently, this will minimize leadership complacency and establish benchmarks for optimal practices. It is impossible to overstate how important it is to have a solid plan in place when handling possible cyber catastrophes. India's military forces require a complete cyberwarfare strategy in addition to a distinct one on state-sponsored cyberattacks.<sup>86</sup> Since technology improvements are permeating every part of society and the state, cybercrime has become one of the most existential challenges facing states globally. To carry out cyber operations targeted at accomplishing the organization's strategic goals, the Command Cyber Operations and Defence Cyber Agency must operate effectively. Creating and carrying out strategies to influence, obstruct, or disrupt adversaries' computer systems is the main duty. They are also in charge of deceit and cyber exploitation meant to thwart cyberattacks against military targets and vital infrastructure.

Enhancing public knowledge is just as crucial. Campaigns to raise awareness should inform people about the value of the internet, their rights when using it, and privacy issues. Furthermore, Pakistan's IT industry might be greatly improved by cyber partnerships with technologically advanced nations like China, which hopes to become a cyber superpower. Similar to India's strategy, agreements with nations like the US, Russia, or Israel, or even a bilateral cyber deal with India, might serve as a mechanism to boost mutual confidence and lessen future intrusions.<sup>87</sup> Cyber agreements are valuable, but in order to lessen reliance on outside assistance, technical self-sufficiency is essential. It is risky to rely solely on overseas partners because reliability isn't always assured. By growing its own industries, providing subsidies for the manufacture of computers and other tech equipment, and working to become

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<sup>85</sup> Joseph S. Nye Jr., "Deterrence and Dissuasion in Cyberspace," *International Security*, Vol. 41, No. 3 (Winter 2016/17), pp. 44–71.

<sup>86</sup> Arvind Gupta, "National Cyber Security Strategy: Challenges for India: Strategic Analysis," Vol. 41, No. 2 (2017), pp. 109–123.

<sup>87</sup> Pavan Duggal, "Cyber Security in India: Challenges and the Way Forward," *Journal of National Law University Delhi*, Vol. 4, No. 1 (2017), pp. 1–18.

a technology exporter rather than an importer, Pakistan should put self-reliance first. In the long run, this strategy would improve Pakistan's technological and cybersecurity capacities.

India's ability to prevent upcoming cyberattacks and strike back with skillful retribution that quickly disengages the enemy target would be crucial in guaranteeing cyber deterrence through defence and morality. Talent acquisition is necessary for this, as India's demographics favour it, as is the establishment of specialized cyber units such as China's 61398 and 61486 and Israel's Unit 8200. As technology advances quickly, malicious cyber actors have more opportunity to take advantage of weaknesses and destroy vital infrastructures. India must thus adopt a comprehensive strategy for creating and putting into place both offensive and defensively sound security measures that successfully handle and eliminate such dangers before they do any damage. The key to addressing these threats with workable solutions is establishing precise operational procedures.<sup>88</sup>

## Conclusion

The Indian military must take early and decisive measures in response to the critical threat posed by cyber threats. The potentially catastrophic effects of cyberattacks by enemies like China and Pakistan are at the centre of this worry. These attacks have the potential to seriously compromise India's preparedness for fighting on two fronts and its combat effectiveness, raising issues of “national security and territorial integrity”. India needs to immediately improve its cyberwarfare defence capabilities. To combat digital threats, this means creating “specialized cyber units” within the armed forces and putting in place cutting-edge systems. In contemporary warfare, sophisticated harmful software now plays a crucial role, much like naval ships and aircraft did in medieval warfare. The future's digital battlefield will operate in a challenging cyber environment. Disruptions and the loss of data and information will be felt at the tactical and operational levels. Ineffective cybersecurity and cyberwarfare capabilities might seriously harm India's armed forces and jeopardize national security. In addition to helping the Indian armed forces win a Net-centric war and prepare for cyberwar fighting, a strong National Cyber Force Structure led by Cyber Command will also make it easier for them to collaborate with other national agencies and organizations that use cyberspace, guaranteeing comprehensive cybersecurity for national assets. In order to protect India's defence infrastructure from electronic harm as it grows as a global force, a comprehensive framework

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<sup>88</sup> Sushant Sareen, “Cyber Deterrence and National Security: An Indian Perspective,” *CLAWS Journal*, Vol. 14, No. 2 (2021), pp. 45–62.

that incorporates industry-leading practices and established rules must be put in place. India must therefore create proactive measures rather than responding after a breach, which calls for specific regulations made to account for certain circumstances. The Indian Army's focus on 2023 as a year of transformation emphasizes its goal of creating a force that is technologically advanced, deadly, agile, and prepared to assist India's cyber readiness. It doesn't matter how great the threat is; what counts is how quickly and efficiently India can strengthen its defenses against cyberattacks and safeguard its national interests.

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IILM Law Journal (IILMLJ) Volume IV, Issue 1, 2026

ISSN: 2583-8806 (Online)

**Declaration**

| <b>S.No.</b> | <b>Particulars</b>                    | <b>Details</b>                                                                |
|--------------|---------------------------------------|-------------------------------------------------------------------------------|
| <b>1</b>     | <b>Place of publication</b>           | Greater Noida, Uttar Pradesh                                                  |
| <b>2</b>     | <b>Periodicity</b>                    | Biannual                                                                      |
| <b>3</b>     | <b>Language</b>                       | English only                                                                  |
| <b>4</b>     | <b>Editor</b>                         | Prof (Dr) Babita Singh Parasain                                               |
| <b>5</b>     | <b>Owner, Publisher &amp; Printer</b> | IILM University, Knowledge<br>Park-II, Greater Noida,<br>Uttar Pradesh-201306 |

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IILM Law Journal (IILMLJ) is a **peer reviewed journal** of the IILM School of Law, IILM University, Knowledge Park-II, Greater Noida, Uttar Pradesh-201306 at a distance of just 30 km from the Supreme Court of India connected by Noida Express Way. With an open airy location and delightful sentinel building, amidst the faculties of technology, management and liberal arts, its main feature is a holistic academic atmosphere in interdisciplinary settings. Students have an opportunity to excel to meet professional requirement at all possible levels. Experiential learning at the core of the academic programming with the finely defined outcome. The present journal is a humble attempt to proceed ahead with the hope of developing best research and writing skills.

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