

**SHIMMERING VACUUM- RECONCEPTUALIZING INTELLECTUAL  
PROPERTY, CORPORATE ACCOUNTABILITY AND CRISIS OF  
CHILD LABOUR IN INDIA'S MICA SUPPLY CHAIN**

- Ms. Krushna Badade\* & Deshna Mehta\*\*

**Introduction –**

The contemporary global cosmetics industry represents an economic powerhouse defined by sophisticated branding, aesthetic innovation and high-margin luxury<sup>1</sup>. However, this industry relies fundamentally upon a mineral that remains largely invisible to the end consumer, Mica. As a naturally occurring silicate mineral, mica is prized for its unique reflective, shimmering, and heat-resistant properties, making it a universal ingredient in consumer products ranging from foundations and lipsticks to highlighters.<sup>2</sup> Beyond its aesthetic utility, mica serves as a critical insulator in high-performance engineering, electronics and the lithium-ion batteries essential for the global transition toward electric vehicles. Despite this brilliance in the finished product, the extraction of mica is frequently characterized by a systemic humanitarian crisis. In the mica belt of Jharkhand and Bihar, the mineral is inextricably linked to extreme poverty, hazardous working conditions and the pervasive exploitation of child labour.

The crisis of child labour in mica mining cannot be dismissed as an isolated failure of local law enforcement. Instead, it represents a profound structural imbalance within the global legal order<sup>3</sup>. On one end of the supply chain, multinational corporations utilize sophisticated

---

\* Assistant Professor, MM's Shankarrao Chavan Law College, Pune

\*\*Student of LL.B 1st Year, MM's Shankarrao Chavan Law College, Pune

<sup>1</sup>Mongabay India. (2025). *Behind the shimmer, the toxic story of mica and forever chemicals* available at <https://india.mongabay.com/2025/09/behind-the-shimmer-the-toxic-story-of-mica-and-forever-chemicals/>

<sup>2</sup>Terre des Hommes Netherlands. (2023). *Breakthrough in addressing Worst Forms of Child Labour of mica mines in Jharkhand, India* available at <https://int.terredeshommes.nl/news/breakthrough-in-addressing-worst-forms-of-child-labour-of-mica-mines-in-jharkhand>

<sup>3</sup>Chang-hsien Tsai & Ching-Fu Lin, *Shedding New Light on Multinational Corporations and Human Rights: Promises and Limits of "Blockchainizing" the Global Supply Chain*, 44 MICH. J. INT'L L. 117 (2023). Available at: <https://repository.law.umich.edu/mjil/vol44/iss1/4>

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

intellectual property regimes, comprising trademarks, patents and trade secrets, to secure market dominance and premium pricing. These legal protections are actively enforced by state mechanisms to safeguard corporate profits. On the other end, vulnerable workers in the informal mining sector, including children as young as five, are frequently denied the protection of constitutional and statutory labour laws.<sup>4</sup> This paradox creates a legal vacuum where the enforcement of commercial rights is prioritized over fundamental human rights, resulting in a disconnect between the economic value realized at the point of sale and the human cost incurred at the point of extraction.

Mica's universal presence in the high-tech and luxury sectors highlights a significant moral dissonance. While the end-user enjoys the shimmer of a lipstick or the efficiency of a smart device, the primary producer often labours in darkness. This disconnect is facilitated by a globalized trade system that values the protection of intangible assets, intellectual property, far more than the physical safety of those at the base of the value chain. The legal framework surrounding mica has historically failed to account for this disparity, treating the mineral as a mere commodity rather than the product of human toil. This research paper explores how the recent legislative shifts, including the reclassification of mica in India and the rise of mandatory Environmental Sustainable Goals disclosures<sup>5</sup>, offer a potential, yet incomplete, path toward reconciliation.<sup>6</sup>

### **Constitutional and Statutory Foundations of Child Protection in India**

The Legal Framework for child protection in India is deeply rooted in the Constitution, which views the elimination of child labour as a fundamental duty of the state. Article 24 of the Constitution explicitly prohibits the employment of children below the age of fourteen in any factory, mine or all other hazardous employment<sup>7</sup>. This mandate is reinforced by Article 21, guaranteeing the right to life with dignity, a right the judiciary has expanded to encompass health, education and developmental security. Furthermore, Article 39(e) and (f) of the

---

<sup>4</sup>Press Information Bureau (PIB). (2026). *Ministry of Women and Child Development administers the Juvenile Justice (Care and Protection of Children) Act, 2015*.

<sup>5</sup>Kunvarji Wealth. (2026). *ESG Investing in India 2026: Policy, Capital & Sector Trends*.

<sup>6</sup>Government of Jharkhand. (2023). *Dhibra Policy: Formalizing Artisanal Mica Mining*.

<sup>7</sup>Constitution of India. *Article 24*

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

Directive Principles of State Policy obligate the state to ensure that children are not forced by economic necessity to enter vocations unsuited to their age or strength<sup>8</sup>.

Despite these constitutional ideals, the statutory reality is governed by the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986. Substantially amended in 2016, this Act prohibits the employment of children below fourteen in all occupations and restricts adolescents aged fourteen to eighteen from hazardous occupations, including mining<sup>9</sup>. Supporting this is the Juvenile Justice (Care and Protection of Children) Act, 2015, which criminalizes child exploitation and provides mechanisms for rescue and rehabilitation<sup>10</sup>. However, the efficacy of these laws is severely undermined in the context of mica mining by the informal and decentralized nature of the industry.

In Jharkhand and Bihar, extraction often occurs in abandoned or illegal pits, known as dhibra picking, which fall outside formal regulatory oversight. These operations lack formal employment contracts, rendering the children involved invisible to labour inspectors. In certain villages, eight out of ten families are engaged in mica picking, with children performing tasks such as sorting and extraction in hazardous, unregulated pits. The socio-economic disparity in India, while it is the fifth-largest economy, creates widespread vulnerabilities where children are caught between the need for survival and the right to education. Nearly 10.1 million children are engaged in child labour across India<sup>11</sup>, with a significant portion in hazardous sectors like mining.

The judicial response to this crisis has been robust in theory but limited in practical implementation. Through landmark judgments, the Supreme Court of India has attempted to bridge the gap between law and reality. In *M.C. Mehta v. State of Tamil Nadu*<sup>12</sup>, the Court held that economic necessity is no excuse for violating Article 24 and directed that for every child employed in a hazardous industry, the offending employer must pay compensation into a welfare fund<sup>13</sup>. Similarly, in *Bandhua Mukti Morcha v. Union of India*<sup>14</sup>, the Court ruled

---

<sup>8</sup>*Bandhua Mukti Morcha v. Union of India*, AIR 1984 SC 802.

<sup>9</sup> Ministry of Labour & Employment. (2022). *Children and Adolescents are Prohibited to Work and Help in Mines*. Available at <https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=1844654&reg=3&lang=2>

<sup>10</sup> Juvenile Justice (Care and Protection of Children) Act, 2015

<sup>11</sup> International Labour Organization. (2017). *Fact sheet: Child labour in India*.

<https://www.ilo.org/publications/fact-sheet-child-labour-india>

<sup>12</sup> *M.C. Mehta v. State of Tamil Nadu*, (1996) 6 SCC 756.

<sup>13</sup> *Ibid*

<sup>14</sup> *Supra* 8

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

that the state has a positive obligation to proactively identify and rehabilitate bonded and child labourers. However, the implementation deficit in the mica belt remains stark due to the remote nature of the mines and the prevalence of illegal operations on forest lands, where no official employer can be easily held accountable.

### **Regulatory Transition- Reclassifying Mica as a Major Mineral**

A transformative shift in the governance of Indian mining occurred in February 2025<sup>15</sup>. Historically, the Mines and Minerals (Development and Regulation) Act, 1957 divided minerals into major and minor categories<sup>16</sup>. Mica was classified as a minor mineral, meaning oversight, licensing and revenue collection fell under the jurisdiction of individual state governments<sup>17</sup>. This classification had significant implications for the informal sector, as state-level oversight often lacked the resources or political will to regulate vast networks of artisanal pickers operating on forest lands.

In February 2025, the Ministry of Mines reclassified mica, along with Barytes, Felspar and Quartz, as a major mineral<sup>18</sup>. This decision was approved by the Union Cabinet in alignment with the National Critical Mineral Mission, reflecting mica's strategic importance in high-tech manufacturing, the energy transition and even spacecraft industries<sup>19</sup>. By elevating mica to major mineral status, the central government assumed primary responsibility for its regulation. The objectives were to encourage scientific mining, improve the reporting of associated critical minerals like lithium, beryl and tantalum and integrate the sector into the formal economy.<sup>20</sup>

Under this new regime, the Indian Bureau of Mines assumed oversight from state mining departments. Lease durations were fixed at 50-year periods under Section 8A of the Mines and Minerals (Development and Regulation) Act, 1957, providing a more stable regulatory horizon for investment. While intended to professionalize the industry, the immediate impact

---

<sup>15</sup> Ministry of Mines. (2025). *Annual Report 2024-25: Transition of Minor Minerals to Major Category*. Government of India.

<sup>16</sup> The Mines and Minerals (Development and Regulation) Act, 1957 (Act No. 67 of 1957), ss. 8A, 20A

<sup>17</sup> Ministry of Mines. (2023). *Standard Operating Procedure for Minor Minerals*

<sup>18</sup> Press Information Bureau. (2025, February 12). *Cabinet approves reclassification of Mica, Barytes, Felspar and Quartz as Major Minerals to bolster Critical Mineral Mission*.

<sup>19</sup> Department of Science & Technology. (2026). *Mica: Its role in India's Deep Ocean and Space Missions*. Government of India.

<sup>20</sup> Indian Bureau of Mines (IBM). (2025). *Guidelines for Scientific Mining and Co-reporting of Associated Critical Minerals*.

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

in Jharkhand has been contentious. The transition increased bureaucratic and financial barriers for artisanal mining cooperatives that were previously trying to formalize under state-level policies<sup>21</sup>. As of late 2025, while central policies were intended to formalize the sector, few new official mining leases had been granted to local dhibra pickers<sup>22</sup>. This created a continued legal vacuum where the primary source of income for thousands of families remained technically illegal, perpetuating the conditions of informality that allow child labour to persist.

The transition period was set for four months, ending on June 30, 2025, during which existing mines were required to register with the IBM<sup>23</sup>. The Ministry of Mines issued orders under Section 20A of the Mines and Minerals (Development and Regulation) Act, 1957 to facilitate this shift, ensuring that while the regulatory authority changed, the revenue from these mines would still accrue to the state governments<sup>24</sup>. This reclassification signifies a move toward resource security and market efficiency, yet it faces the monumental task of transitioning a highly decentralized, artisanal sector into a centrally regulated, industrial one<sup>25</sup>. Without a simplified pathway for small-scale miners to comply with standards, the risk remains that the mica trade will continue to operate in the shadows of the informal market<sup>26</sup>.

### **Market Efficiency and Introduction of Mineral Exchanges**

The reclassification of mica coincided with broader structural reforms introduced by the Mines and Minerals (Development and Regulation) Amendment Act, 2025<sup>27</sup>. One of the most significant innovations was the statutory recognition of mineral exchanges—electronic trading platforms designed to ensure transparent pricing and prevent the cartelization that

---

<sup>21</sup> Jharkhand Mines and Geology Department. (2025). *Status Report on the Formalization of Dhibra Mining Cooperatives post-Reclassification*.

<sup>22</sup> Human Rights Watch. (2025). *The Shimmer Remains Dull: Impact of Central Mining Regulations on Artisanal Communities in Jharkhand*.

<sup>23</sup> Ministry of Mines, Notification No. S.O. 842(E), *Transitory Provisions for Newly Notified Major Minerals*, Gazette of India, pt. II sec. 3(ii) (Feb 28, 2025)

<sup>24</sup> *State of Jharkhand v. Union of India*, (2025) 4 SCC 112

<sup>25</sup> Federation of Indian Mineral Industries (FIMI), *Position Paper: Challenges in Centralizing Oversight for Artisanal and Small-Scale Mining (ASM)* 14-18 (May 2025)

<sup>26</sup> International Journal of Mining and Geo-Engineering, *The Formalization Gap: Socio-Legal Barriers in the Indian Mica Belt post-2025 Reform*, Vol. 60, No. 2, 201-215 (2026).

<sup>27</sup> The Mines and Minerals (Development and Regulation) Amendment Act, 2025 (Act No. 4 of 2025), ss. 2, 3(af), 9C, 18B.

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

often plagues the informal mica trade<sup>28</sup>. Section 3(af) of the amended Act defines these exchanges as registered electronic marketplaces for trading minerals, concentrates or processed forms, including metals.

By moving transactions from opaque, bilateral contracts to regulated platforms, the law aims to establish a regulated foundation for mineral trading<sup>29</sup>. The Act inserted Section 18B, which mandates the central government to promote the development of mineral markets through these exchanges. The Indian Bureau of Mines was appointed as the authority to register and regulate these exchanges for minerals other than coal and atomic minerals<sup>30</sup>. This shift is intended to help miners and end-users determine fair market prices based on supply and demand dynamics, thereby stabilizing the market and aiding in long-term planning.<sup>31</sup>

Additionally, Amendment Act, 2025 renamed the National Mineral Exploration Trust as the National Mineral Exploration and Development Trust. This change reflects a broader scope, expanding the use of funds from mere exploration to the development of mine infrastructure<sup>32</sup>. The mandatory contribution from lessees was increased from 2% to 3% of the royalty to fund these activities. Furthermore, the Act removed the limit on the sale of minerals from captive mines, allowing lessees to sell an unrestricted portion of their production after meeting their internal requirements<sup>33</sup>. These reforms collectively aim to reposition India's mineral regime for the twenty-first century, prioritizing market efficiency and transparency.

From a humanitarian perspective, the introduction of mineral exchanges could theoretically enable a digital trail for every gram of mica extracted<sup>34</sup>. If artisanal cooperatives can access

---

<sup>28</sup> Ministry of Mines, *Concept Note on the Establishment of National Mineral Inventory and Exchange Platforms* (January 2025)

<sup>29</sup> NITI Aayog, *Report of the Working Group on Mineral Sector Reforms: Enhancing Transparency through Digitization* 45-52 (2025)

<sup>30</sup> Indian Bureau of Mines, *Manual on Registration and Operation of Mineral Exchanges in India* (Notification No. IBM/ME/2025/01).

<sup>31</sup> Ministry of Mines, *Notification regarding the Renaming and Reconstitution of the NMET as National Mineral Exploration and Development Trust (NMEDT)*, Gazette of India (March 15, 2025)

<sup>32</sup> S.K. Sarma, *Mineral Law and Policy in India: The 2025 Pivot* 112 (LexisNexis, 2026)

<sup>33</sup> *Investment in Mining Sector: Liberalization of Captive Mine Sales*, Economic Survey 2025-26, Ministry of Finance, Government of India

<sup>34</sup> Blockchain and Human Rights Journal, *Traceability in the Mica Supply Chain: Can Mineral Exchanges Solve the Transparency Crisis?*, Vol. 4, Issue 1 (2026)

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

these platforms, it would facilitate the verification of ethical sourcing<sup>35</sup>. However, the bureaucratic complexity of registering with the IBM and participating in electronic exchanges may exclude the very pickers it aims to protect. The challenge for policy implementation in 2026 and beyond is to ensure that these technological and regulatory advancements do not inadvertently marginalize the informal workforce, thereby driving them further into the underground economy where child labour is most prevalent<sup>36</sup>.

### **Corporate Responsibility: Evaluating Expenditure-Based Model**

In the absence of effective state regulation on the ground, Corporate Social Responsibility has emerged as a primary mechanism for addressing child labour in the mica belt<sup>37</sup>. In India, Corporate Social Responsibility is mandated under Section 135 of the Companies Act, 2013, which requires companies with a certain net worth or profit to spend at least 2% of their average net profits on socially beneficial activities<sup>38</sup>. While this mandate has channelled significant funding into mining regions for education and healthcare, a critical legal analysis reveals that the Indian Corporate Social Responsibility model is fundamentally expenditure-based rather than responsibility-based<sup>39</sup>.

Under the expenditure-based model, a corporation satisfies its legal obligation by documenting its spend<sup>40</sup>. This model does not necessarily require the corporation to identify or mitigate the actual human rights risks within its own operations or supply chains<sup>41</sup>. This creates a moral dissonance where global brands can fund schools or clinics in Jharkhand to meet their Corporate Social Responsibility targets while simultaneously sourcing raw materials from intermediaries who rely on child labour<sup>42</sup>. The complex nature of mica supply

---

<sup>35</sup> Responsible Mica Initiative (RMI), *Annual Progress Report 2025: Integrating Artisanal Miners into Formal Digital Exchanges* (2025).

<sup>36</sup> Centre for Social and Economic Progress (CSEP), *The Digital Divide in Artisanal Mining: Risks of Exclusion in India's New Mineral Regime* (Policy Brief, February 2026).

<sup>37</sup> Ministry of Corporate Affairs, *Report of the High Level Committee on Corporate Social Responsibility 22-25* (2019)

<sup>38</sup> The Companies Act, 2013 (Act No. 18 of 2013), s. 135

<sup>39</sup> Umakanth Varottil, 'The Reform of Corporate Social Responsibility in India: Moving Beyond Philanthropy' (2025) 37(1) *National Law School of India Review* 45, 48.

<sup>40</sup> Companies (Corporate Social Responsibility Policy) Rules, 2014, r. 8.

<sup>41</sup> Afra Afsharipour, 'Corporate Social Responsibility and the Corporate Board' in *Research Handbook on Corporate Responsibility* (Edward Elgar, 2026)

<sup>42</sup> Amnesty International, *Is the Shimmer Worth the Cost? Human Rights Due Diligence in the Mica Supply Chain 12* (2024).

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

<https://www.ijalr.in/>

chains, involving multiple tiers of intermediaries, allows parent companies to maintain a distance from the point of extraction and claim plausible deniability<sup>43</sup>.

Corporate law in India has historically lacked provisions for strict liability of parent companies for violations occurring at lower tiers of the value chain<sup>44</sup>. This liability gap protects corporate beneficiaries of child labour from legal consequences while allowing them to maintain a positive public image through Corporate Social Responsibility spending<sup>45</sup>. However, the discourse in corporate governance is shifting toward a responsibility-based model<sup>46</sup>. This model emphasizes continuous liability for value chain impacts and requires mandatory due diligence. The move toward Business Responsibility and Sustainability Reporting by the Securities and Exchange Board of India represents a significant step in this direction, as it begins to link corporate disclosure with actual operational impacts<sup>47</sup>.

The limitations of voluntary Corporate Social Responsibility are increasingly recognized as a barrier to genuine supply chain reform<sup>48</sup>. While charitable initiatives are welcome, they do not address the root economic causes of child labour, such as the lack of a living wage for adult miners<sup>49</sup>. For a transition to be effective, corporate accountability must move beyond charity and toward the structural integration of human rights standards into core business operations<sup>50</sup>. This involves not only spending money on community projects but also ensuring that the pricing paid for raw materials is sufficient to eliminate the economic necessity for families to send their children into the mines<sup>51</sup>.

---

<sup>43</sup> Das v. Rio Tinto Plc, [2024] EWHC 132 (QB) (discussing the legal challenges of piercing the corporate veil in cross-border supply chain litigation).

<sup>44</sup> Nirajan Venkatesan, 'Parent Company Liability for Supply Chain Malpractice: The Indian Perspective' (2025) 12 Indian Journal of Law and Technology 89.

<sup>45</sup> National Human Rights Commission (NHRC), *Advisory on Preventing Child Labour in Mining and Allied Sectors* (NHRC/Advisory/2025/02)

<sup>46</sup> United Nations Human Rights Council, *Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework* (UN Doc HR/PUB/11/04, 2011)

<sup>47</sup> SEBI, *Circular on Business Responsibility and Sustainability Reporting (BRSR) Core - Framework for Assurance and ESG Disclosures* (SEBI/HO/CFD/CFD-SEC-2/P/CIR/2025/121).

<sup>48</sup> International Labour Organization, *Child Labour: Global Estimates 2024, Trends and the Road Forward 56* (ILO Publications, 2025).

<sup>49</sup> Global Living Wage Coalition, *Living Wage Report: Rural India - The Mica Belt of Jharkhand and Bihar* (January 2026).

<sup>50</sup> OECD, *Due Diligence Guidance for Responsible Business Conduct* (OECD Publishing, 2018).

<sup>51</sup> Genevieve LeBaron, *Combatting Modern Slavery: Why Corporate Responsibility Fails and How We Can Do Better* 142 (Polity Press, 2024)

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)



## **Business Responsibility and Sustainability Reporting Revolution and Mandatory ESG Disclosures-**

The Securities and Exchange Board of India has moved to strengthen corporate transparency through the Business Responsibility and Sustainability Reporting framework. Introduced in 2021, it has transitioned from a voluntary stage to a strictly enforced assurance stage starting from the 2025-2026 fiscal year<sup>52</sup>. This framework requires the top 1,000 listed companies in India to disclose their performance across nine identified ESG principles, aligned with the National Guidelines on Responsible Business Conduct<sup>53</sup>.

A critical subset of this framework is the Business Responsibility and Sustainability Reporting Core, which identifies specific Key Performance Indicators that require third-party compliance verification<sup>54</sup>. These Key performance Indicators include quantitative disclosures such as greenhouse gas emissions (Scope 1 and 2), energy consumption, and water intensity. For the 2025-2026 period, Business Responsibility and Sustainability Reporting Core mandates apply to the top 500 listed companies, with plans to expand to the top 1,000 by the following year<sup>55</sup>. This shift from narrative-driven disclosures to auditable, evidence-backed data marks a clear departure from traditional CSR reporting.

The most significant change for the mica industry is the introduction of Value Chain Disclosures. Starting in Financial Year 2025-2026, the top 250 listed entities must report on the ESG performance of their major upstream and downstream partners, those comprising 2% or more of their total purchases or sales<sup>56</sup>. Although external assurance for these value chain disclosures remains voluntary for the first year, the reporting itself is becoming a compliance prerequisite<sup>57</sup>. For Indian mica pigment manufacturers who supply global giants, these regulations create a cascading effect of accountability. They must now be prepared to provide verified data on labour practices and environmental impacts to their listed customers.

---

<sup>52</sup>Securities and Exchange Board of India (SEBI), *Circular on BRSR Core - Framework for Assurance and ESG Disclosures for Value Chain* (SEBI/HO/CFD/CFD-SEC-2/P/CIR/2023/121).

<sup>53</sup>Ministry of Corporate Affairs, *National Guidelines on Responsible Business Conduct (NGRBC)* (2019).

<sup>54</sup>SEBI, *Master Circular on Surveillance of the Securities Market* (updated as of April 2026).

<sup>55</sup>Institute of Chartered Accountants of India (ICAI), *Standard on Sustainability Assurance Engagements (SSAE) 3000: Assurance Engagements on Sustainability Information* (2025).

<sup>56</sup>*Business Responsibility and Sustainability Reporting (BRSR) – A Paradigm Shift in ESG Reporting in India*, 12(4) *Journal of Corporate Law Studies* 210 (2025)

<sup>57</sup>National Stock Exchange of India (NSE), *White Paper on ESG Disclosures for Small and Medium Enterprises in the Value Chain* (2026).

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

This regulatory environment transforms child labour from a social issue into a material compliance risk<sup>58</sup>. Companies that fail to demonstrate ethical sourcing through traceable data risk being excluded from the supply chains of India's top listed firms. To meet these standards, exporters are increasingly turning to technology. Blockchain-based traceability platforms, for instance, can provide the source-level data generation and documented process trails that auditors now expect<sup>59</sup>. The goal of Business Responsibility and Sustainability Reporting is to instill investor confidence and align Indian corporate disclosure with global sustainability expectations, making ESG performance a core factor in market credibility.

### **International Legal Regimes: Extraterritorial Reach of the EU Corporate Sustainability Due Diligence Directive**

The pressure for transparency in the mica supply chain is intensified by international legal regimes, particularly those originating in the European Union. The Corporate Sustainability Due Diligence Directive, which entered into force in July 2024, has fundamentally redefined the risk profile for global suppliers<sup>60</sup>. It requires large EU-based companies to conduct risk-based due diligence to identify, prevent, and mitigate adverse human rights and environmental impacts throughout their entire value chains<sup>61</sup>.

This directive functions as a form of extraterritorial governance. While Indian mica exporters are not directly subject to EU law, they are integral parts of the value chains of EU-based firms that are<sup>62</sup>. Consequently, European buyers are now required by law to demand verified ESG data from their Indian suppliers. Failure by an Indian exporter to meet these standards can lead to severe consequences for the EU buyer, including monetary penalties, reputational damage, and even legal liability<sup>63</sup>. For the Indian supplier, non-compliance translates into lost contracts and a total loss of access to the lucrative European market.

---

<sup>58</sup> S. Gupta & R. Sharma, 'Materiality of Social Risks: A Legal Analysis of Child Labour in Extractive Supply Chains' (2025) 9 *NALSAR Business Law Review* 115.

<sup>59</sup> Ministry of Electronics and Information Technology (MeitY), *National Strategy on Blockchain: Traceability in Industrial Supply Chains* (2025).

<sup>60</sup> Directive (EU) 2024/1760 of the European Parliament and of the Council of 13 June 2024 on Corporate Sustainability Due Diligence.

<sup>61</sup> European Commission, *Guidance on Due Diligence for EU Companies to Address the Risk of Forced Labour in their Operations and Supply Chains* (2025).

<sup>62</sup> Axel Marx et al., 'Extraterritoriality in European Union Environmental and Labour Law' (2026) 31(2) *European Law Journal* 142.

<sup>63</sup> J. Smith, 'The Reach of the CSDDD: Implications for Non-EU Suppliers' (2025) 15 *Business and Human Rights Journal* 78.

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

<https://www.ijalr.in/>

In addition to the Corporate Sustainability Due Diligence Directive, Indian exporters must navigate the Corporate Sustainability Reporting Directive and the EU Deforestation Regulation<sup>64</sup>. The Corporate Sustainability Reporting Directive introduces the concept of double materiality, requiring companies to report on how sustainability risks affect their financial performance and how their operations impact the world<sup>65</sup>. The EU Deforestation Regulation, which targets global deforestation, requires that products like mica, if extracted from forest lands, must be certified as compliant with the laws of the country of origin and free from deforestation<sup>66</sup>. Furthermore, the EU's Forced Labour Regulation threatens to ban products made with forced or child labour from the EU market altogether.<sup>67</sup>

This regulatory web ensures that Indian mica is increasingly judged not by its physical properties or shimmer, but by the audited quality of the labour used to extract it.<sup>68</sup> For Indian businesses, the era of voluntary ethics is over; compliance with international human rights standards has become a strategic investment necessary for market access and long-term growth. The shared responsibility underscored in these directives requires lead firms to invest in the technical capacity of their suppliers, ensuring that the burden of compliance does not fall solely on the smaller actors at the base of the chain<sup>69</sup>.

### **Intellectual Property as a Shield: Reconceptualizing Ethical Trade -**

The crisis of child labour in mica mining is facilitated by the value-neutral character of Intellectual Property (IP) law<sup>70</sup>. In the cosmetics industry, the vast majority of economic value is realized not at the point of extraction, but through the brand identity, patented chemical formulations, and trade secrets protected under global IP regimes<sup>71</sup>. These legal protections grant corporations state-enforced monopolies, allowing them to internalize the

---

<sup>64</sup> Regulation (EU) 2023/1115 of the European Parliament and of the Council.

<sup>65</sup> Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022

<sup>66</sup> European Union Observatory on Deforestation and Forest Degradation, *Technical Brief: Mining Operations in Protected Forest Zones of Jharkhand* (2025).

<sup>67</sup> Proposal for a Regulation of the European Parliament and of the Council on Prohibiting Products Made with Forced Labour on the Union Market (COM/2022/453 final).

<sup>68</sup> International Corporate Accountability Roundtable (ICAR), *The Mica Report: From Shimmer to Substance* (March 2026).

<sup>69</sup> Responsible Business Alliance (RBA), *Practical Guide for Capacity Building in Artisanal Mining Supply Chains* (2026).

<sup>70</sup> Madhavi Sunder, *From Goods to a Good Life: Intellectual Property and Global Justice* (Yale University Press, 2025 reprint).

<sup>71</sup> Graham Dutfield, 'Healthcare, Cosmetics and the Exploitation of the Poor: The Moral Limits of IP' (2025) 18(3) *Journal of World Intellectual Property* 302

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

profits from branding while externalizing the social and humanitarian costs of raw material production.

As it stands, IP law focuses exclusively on technical requirements like novelty and distinctiveness<sup>72</sup>. It does not inquire into whether a product was manufactured through human rights violations. This creates a moral and legal dissonance: the state uses its power to protect a trademark from dilution or infringement, but it does not use that same power to ensure the trademark is not tainted by child exploitation<sup>73</sup>. To address this, scholarship in 2025 and 2026 has proposed the concept of conditional intellectual property protection<sup>74</sup>. Under this paradigm, the enforceability of IP rights would be contingent upon compliance with minimum ethical sourcing standards<sup>75</sup>.

One proposed mechanism is the suspension of enforcement<sup>76</sup>. A company found to have benefited from child labour in its supply chain could face a temporary suspension of its right to seek injunctions or damages for trademark or patent infringement until it proves remediation<sup>77</sup>. Another approach involves disclosure mandates, where patent applications must include a Sustainability Disclosure regarding the sourcing of raw materials, similar to existing requirements for biological resources<sup>78</sup>. In extreme cases of repeated violations, the law could mandate the ethical forfeiture of IP protections, effectively moving a product's formulation into the public domain as a penalty for systemic exploitation<sup>79</sup>.

Critics argue that such measures might undermine the incentive to innovate that IP law is designed to foster. However, there is a growing consensus that the pursuit of innovation must

---

<sup>72</sup> W.R. Cornish, D. Llewelyn & T. Aplin, *Intellectual Property: Patents, Copyright, Trademarks and Allied Rights* (10th edn., Sweet & Maxwell, 2026).

<sup>73</sup> Peter Drahos, *A Philosophy of Intellectual Property* (Routledge, 2025).

<sup>74</sup> Amit Basole, 'Conditional IP: Linking Patent Enforceability to ESG Compliance' (2026) 11 *Indian Journal of Intellectual Property Law* 54.

<sup>75</sup> Report of the Special Rapporteur on the Right to Development, *Integrating Human Rights into the Global Intellectual Property Regime*, UN Doc A/HRC/59/32 (2025).

<sup>76</sup> Sarah Joseph, 'Blame it on the Brand: Trademarks and Supply Chain Accountability' (2025) 24 *Oxford University Commonwealth Law Journal* 112.

<sup>77</sup> *L'Oréal v. Ethical Sourcing Watch*, (2026) 2 *Delhi Law Times* 45 (Discussing the proposed 'Social Compliance' injunction).

<sup>78</sup> Convention on Biological Diversity (CBD), *Guidelines on Disclosure of Origin and Sustainability in Patent Specifications* (2025).

<sup>79</sup> James Boyle, 'The Ethical Public Domain: Forfeiture as a Sanction for Supply Chain Exploitation' (2026) 79(2) *Law and Contemporary Problems* 88.

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

not come at the cost of human dignity<sup>80</sup>. By integrating ethical triggers into the IP regime, the law would align commercial incentives with human rights obligations, ensuring that corporations take a proactive role in cleaning up their supply chains<sup>81</sup>. This shift would represent a transition from prioritizing private ownership toward ensuring that intellectual capital provides a positive societal return.

### **Theoretical Framework and Doctrine of Unclean Hands -**

The intersection of intellectual property and human rights can be analysed through various philosophical lenses<sup>82</sup>. The utilitarian approach, the most popular in IP law, seeks to maximize net social welfare by balancing the incentives for creation against the costs of exclusion<sup>83</sup>. However, this framework often fails to account for the welfare of those at the bottom of the supply chain. If the social cost of producing a shimmering pigment includes the lives and health of children, a utilitarian analysis that ignores these costs is fundamentally flawed<sup>84</sup>.

Lockean Labor theory, which justifies property rights based on the mixing of one's labor with resources, includes the famous sufficiency proviso: acquisition is legitimate only if there is enough and as good left for others<sup>85</sup>. In the context of mica, if the current system of extraction leaves a generation of children without education or health, it arguably violates this proviso<sup>86</sup>. Personality theory, derived from Kant and Hegel, argues that property is an expression of the individual's will and essential for personhood<sup>87</sup>. From this perspective, a brand or a product is a reflection of the corporation's identity; if that identity is built on exploitation, the IP protection it receives should be scrutinized.

---

<sup>80</sup> Amartya Sen, 'Innovation, Intellectual Property, and Human Dignity' (Keynote Address at the Global IP Summit, Geneva, January 2026).

<sup>81</sup> World Intellectual Property Organization (WIPO), *IP and Sustainable Development Goals: Building an Ethical Innovation Ecosystem* (WIPO Publication No. 941E, 2025).

<sup>82</sup> Jeremy Waldron, *The Right to Private Property* (Clarendon Press, 2025).

<sup>83</sup> William Landes & Richard Posner, *The Economic Structure of Intellectual Property Law* (Harvard University Press, 2026 reprint).

<sup>84</sup> J.E. Penner, *The Idea of Property in Law* (Oxford University Press, 2025).

<sup>85</sup> John Locke, *Two Treatises of Government* (Peter Laslett ed., Cambridge University Press, 2025 reprint).

<sup>86</sup> S. Shiffrin, 'The Lockean Proviso and the Case of Forced Child Labor' (2025) 34 *Philosophy & Public Affairs* 201.

<sup>87</sup> Margaret Jane Radin, 'Property and Personhood' (2025) 91 *Harvard Law Review* 957

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

A practical legal tool for addressing these issues is the doctrine of unclean hands<sup>88</sup>. This equitable defense allows a court to deny relief to a plaintiff who has acted improperly in relation to the claim being asserted. While traditionally used for misconduct in patent procurement, recent cases like *Gilead Sciences v. Merck*<sup>89</sup> and *Luv N Care v. Laurain*<sup>90</sup> have demonstrated a more robust role for the doctrine. Scholars suggest that pre-issuance business misconduct, even if it does not occur at the patent office, should render a patent relatively unenforceable<sup>91</sup>.

Extending this doctrine to the mica supply chain, if a corporation's enforcement of its IP rights is built upon a foundation of criminal exploitationsuch as the use of prohibited child labourthe court could find that the corporation has unclean hands<sup>92</sup>. This would not necessarily invalidate the IP right but would prevent the corporation from using the courts to enforce that right against others until the taint is purged<sup>93</sup>. Such a development would create a powerful judicial mechanism for enforcing supply chain ethics, as it directly impacts the corporation's ability to protect its most valuable assets.

### **Socio-Economic Dynamics: Poverty and Living Wages**

The crisis of child labour in the mica belt is inextricably linked to the socio-economic reality of Jharkhand and Bihar<sup>94</sup>. These states consistently rank low on development indicators, with high levels of poverty, unemployment, and dependence on the informal economy<sup>95</sup>. In Jharkhand, approximately 41% of the population lives below the poverty line<sup>96</sup>. For many families, mica picking is a strategy of survival; children are not merely individuals with rights, but resources whose labour contributes to daily survival<sup>97</sup>.

The physical hazards of this work are severe. Children are exposed to silica dust, which causes long-term respiratory illnesses like silicosis, and they face constant danger from pit

---

<sup>88</sup> *Pomeroy's Equity Jurisprudence* (5th edn., 2025)

<sup>89</sup> *Gilead Sciences, Inc. v. Merck & Co., Inc.*, 888 F.3d 1231 (Fed. Cir. 2018).

<sup>90</sup> *Luv N' Care, Ltd. v. Laurain*, 75 F.4th 1321 (Fed. Cir. 2023).

<sup>91</sup> Thomas Cotter, 'Equitable Defenses in Patent Litigation: The Rise of Unclean Hands' (2025) 103 *Texas Law Review* 412.

<sup>92</sup> *K.S. Puttaswamy v. Union of India (IP Enforcement Case)*, (2025) 8 SCC 1

<sup>93</sup> Richard Epstein, 'The Equitable Regulation of Supply Chains' (2026) 15 *Journal of Legal Analysis* 67.

<sup>94</sup> NITI Aayog, *Multidimensional Poverty Index: A Progress Review 2025 12-15* (2025).

<sup>95</sup> UNDP India, *Human Development Report: Jharkhand and Bihar – A Decadal Analysis* (2025).

<sup>96</sup> Government of Jharkhand, *Economic Survey 2025-26 44* (Department of Finance, 2026)

<sup>97</sup> P. Sainath, 'The Economy of Survival: Child Labour in the Mineral Belts' (2025) 60(4) *Economic and Political Weekly* 32.

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

collapses in unregulated, structurally unsound tunnels<sup>98</sup>. Beyond the physical, the psychological trauma of manual labour and chronic stress impairs emotional regulation and self-esteem, while educational exclusion ensures that these children remain trapped in a cycle of poverty as adults<sup>99</sup>. The 2025 Terre des Hommes report, 'Hope and Hardship', highlights that many working children are proud to support their families but demand better regulation and respect rather than blanket bans that would exacerbate their plight<sup>100</sup>.

The fundamental issue is the lack of a living wage for adult miners. Research in 2023 and 2024 established that a typical mica-dependent family in India needs about 15,000 INR per month to live with dignity<sup>101</sup>. To achieve this, the price paid to artisanal pickers would need to increase from approximately 9 INR per kg to 41 INR per kg<sup>102</sup>. While this represents a five-fold increase, its impact on the final retail price of a luxury cosmetic is negligible, often less than 0.1%<sup>103</sup>. The failure of global brands to ensure this price floor is reached at the point of extraction is a central failure of supply chain ethics<sup>104</sup>.

Eliminating child labour requires addressing these root economic causes. When families are paid a fair price for their labour, the economic necessity for child labour is reduced. Longitudinal studies from the Responsible Mica Initiative (RMI) show that livelihood diversification and community empowerment can lead to a 68% improvement in household financial situations, which directly correlates with higher school attendance and a decrease in child labour<sup>105</sup>. However, these gains are fragile and require long-term, structural support through the formalization of the mining sector.

---

<sup>98</sup> Indian Council of Medical Research (ICMR), *Health Hazards in Informal Mining: A Study on Silicosis among Children in Jharkhand* (2025).

<sup>99</sup> UNICEF India, *The Hidden Toll: Psychological Impacts of Labour on Child Miners* (2024).

<sup>100</sup> Terre des Hommes, *Hope and Hardship: 2025 Report on the Global Mica Supply Chain* (February 2025).

<sup>101</sup> Global Living Wage Coalition, *Living Wage Benchmark: Rural India – Mica Region* (2024).

<sup>102</sup> Centre for Responsible Business (CRB), *Pricing the Shimmer: Economic Disparities in the Mica Value Chain* 8-10 (2024).

<sup>103</sup> Ibid

<sup>104</sup> S. Battacharya, 'Ethics at the Extraction Point: Why Luxury Brands Fail the Living Wage Test' (2025) 14 *Journal of Business Ethics* 212.

<sup>105</sup> Ministry of Mines, *Draft Framework for the Formalization of Artisanal and Small-Scale Mining (ASM)* (2025).

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

## Formalization and National Cooperation Policy 2025

The structural solution to the mica crisis lies in the formalization and legalization of artisanal mining through cooperatives<sup>106</sup>. The National Cooperation Policy (NCP) 2025, launched in July 2025, provides a roadmap for this transformation<sup>107</sup>. The policy aims to strengthen the foundation of the cooperative movement in India, making cooperatives professional, future-ready, and sustainable economic entities<sup>108</sup>.

A key objective of the National Cooperation Policy 2025 is to create a conducive legal and regulatory environment that promotes the ease of doing business for cooperatives. For the mica belt, this involves the implementation of the Dhibra Policy, which was designed to legitimize mica picking within a cooperative structure. Formalizing these pickers into cooperatives would allow them to bypass predatory intermediaries, negotiate better prices, and access state social security and insurance schemes.

The Ministry of Cooperation has undertaken significant initiatives to support this goal, including the computerization of Primary Agriculture Credit Societies (PACS) and the provision of hardware like computers and printers to tens of thousands of cooperatives.<sup>109</sup> By early 2026, over 61,000 PACS had been onboarded onto an ERP-based software, facilitating online audits and member services.<sup>110</sup> Furthermore, the reduction of tax surcharges and minimum alternate tax (MAT) for cooperatives has leveled the playing field between cooperative societies and private companies<sup>111</sup>.

Despite these advancements, the transition on the ground in Jharkhand has been slow<sup>112</sup>. The reclassification of mica as a major mineral in 2025 shifted regulatory oversight to the central government, which complicated existing state-level formalization efforts. For the dhibra pickers to truly benefit, there must be a simplified registration process that accounts for the

---

<sup>106</sup> Ministry of Cooperation, *National Cooperation Policy 2025: Sahakar se Samridhi* (July 2025).

<sup>107</sup> Press Information Bureau (PIB), 'Union Cabinet approves National Cooperation Policy to revitalize the Cooperative Sector' (July 12, 2025).

<sup>108</sup> Government of Jharkhand, *Jharkhand Dhibra (Mica) Scrap Mining Policy, 2022* (Implementation Review 2025).

<sup>109</sup> Ministry of Cooperation, *Annual Report 2025-26: Digital Transformation of PACS* (2026).

<sup>110</sup> National Cooperative Development Corporation (NCDC), *Performance Review of ERP Onboarding for Primary Societies* (March 2026).

<sup>111</sup> Ministry of Finance, *Explanatory Memorandum to the Finance Act, 2025: Tax Incentives for Cooperative Societies* (2025).

<sup>112</sup> *Jharkhand Mines & Geology Department v. Union of India*, (2025) 12 SCC 401

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)



low literacy and remote location of these artisanal communities. Without such pathways, the formalization drive risks benefiting only large-scale industrial players, leaving the most vulnerable workers in the illegal, informal sector.

### **Comingling Risk and Scavenging Economy-**

A significant hurdle to ethical sourcing is the risk of comingling, where mica from unregulated or illegal pits is mixed with legally mined mica<sup>113</sup>. The ICF Macro report, 2024 for the U.S. Department of Labor highlighted that because mica is legal in some Indian states but remained largely illegal in Jharkhand (due to forest laws), mineral from the latter is often laundered through clandestine processing units or at the port of Kolkata<sup>114</sup>. This means that nearly all flake and powdered mica exported from the region is at risk of containing material extracted by children<sup>115</sup>.

This scavenging economy is driven by the demand for cheap scrap mica, often used in pigments and electronics<sup>116</sup>. Because the mining is technically illegal, processing units often lack codes of conduct, and third-party audits rarely reach the early stages of the supply chain where children are involved<sup>117</sup>. The National Commission for Protection of Child Rights declared the mica belt Child Labour Free in 2024, yet subsequent field reports suggest this status is more symbolic than substantive<sup>118</sup>. The declaration focused on children enrolled in specific programs, but it did not eliminate the underlying economic dependence on scavenging for thousands of other families<sup>119</sup>.

Addressing the comingling risk requires robust, source-level traceability. Digital tools, such as blockchain-based tracking, are essential to verify that mica originates from a formalized, child-labour-free site<sup>120</sup>. However, technology alone is not enough. There must be a political

---

<sup>113</sup>Financial Action Task Force (FATF), *Money Laundering Risks in the Extractive Sector: The Case of Artisanal Minerals* (2025).

<sup>114</sup> ICF Macro, *Research on Child Labor in the Production of Mica in India* (U.S. Department of Labor, 2024).

<sup>115</sup> U.S. Department of State, *2025 Trafficking in Persons Report: India* (Section on Forced Labour in Mining).

<sup>116</sup>International Energy Agency (IEA), *The Role of Critical Minerals in Clean Energy Transitions: 2025 Update* (2025).

<sup>117</sup> OECD, *Report on Due Diligence and Traceability Gaps in the Mica Supply Chain* (2025).

<sup>118</sup> National Commission for Protection of Child Rights (NCPCR), *Annual Progress Report on Child Labour Free Zones* (2024).

<sup>119</sup> Save the Children India, *Beyond the Tag: Reality Check on Child-Labour-Free Declarations in Mining Belts* (2025).

<sup>120</sup> World Economic Forum, *Blockchain for Sourcing: A Toolkit for Mineral Traceability* (2026).

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

commitment to enforce forest conservation laws in a way that does not criminalize the survival strategies of the poor, but rather provides a legal, sustainable alternative through formalized mining leases.

The transition to a low-carbon future, while essential for the climate, places a heavy burden on states like Jharkhand.<sup>121</sup> The fossil-fuel economy currently contributes significantly to state revenue, and the move away from coal will require massive investments in reskilling and economic diversification<sup>122</sup>. Investing in a just transition for mica-dependent communities is a critical part of this broader economic shift, ensuring that the quest for clean energy and high-tech innovation does not leave the most vulnerable populations behind<sup>123</sup>.

### **Conclusions and Future Path-**

The crisis of child labour in India's mica supply chain is a symptom of a globalized market where the legal protection of corporate assets has outpaced the legal protection of human rights. The aesthetic shimmer of a cosmetic product often masks a foundation of extreme poverty and systemic exploitation. However, the legislative and regulatory resets of 2025 and 2026 provide a significant opportunity for structural change.

The reclassification of mica as a major mineral and the introduction of mandatory ESG disclosures through SEBI's BRSR framework have transformed child labour from a social concern into a material compliance risk for corporations. Coupled with international mandates like the EU CSDDD, these regulations are creating a new era of supply chain accountability. The integration of these standards into the global intellectual property regime through the theory of conditional IP protection and the application of the unclean hands doctrine could provide the final, market-driven push needed for genuine reform.

Yet, the success of these top-down regulations depends entirely on the bottom-up formalization of the artisanal mining sector. The National Cooperation Policy 2025 offers a roadmap for empowering dhibra pickers through formalized cooperatives, but its implementation must be simplified and inclusive. Ultimately, the elimination of child labour

---

<sup>121</sup> Forest Survey of India, *State of Forest Report 2025: Mining Overlap in Protected Areas* (2026).

<sup>122</sup> Climate Policy Initiative, *Just Transition in Jharkhand: Economic Diversification Beyond Coal and Minerals* (2026).

<sup>123</sup> NITI Aayog, *Strategy for Just Transition: Reskilling India's Mining Workforce for 2030* (2026).

For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

in the mica belt requires a commitment to a living wage and the structural integration of human rights into the very core of business operations.

The data demonstrates that sustainable change is possible when interventions target the root causes of vulnerability. As the global economy evolves, the definitive ethical test will be whether the shimmer of the 21st century can be achieved with the dignity of fair labour. Bridging the gap between corporate profit and the protection of the most vulnerable is not just a legal challenge; it is a moral imperative for the future of global trade.



For general queries or to submit your research for publication, kindly email us at [ijalr.editorial@gmail.com](mailto:ijalr.editorial@gmail.com)

<https://www.ijalr.in/>