

Aligning India's Development Trajectory with the UN Sustainable Development Goals: A Multisectoral Analysis of ESG, Policy, and Responsible Management

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Abstract

India's pursuit of the Sustainable Development Goals (SDGs) sits at the intersection of three converging pressures: a corporate sector newly obligated to disclose environmental, social, and governance (ESG) performance, a public administration attempting to localize a global agenda across radically unequal states, and a civil society whose priorities do not always match the projects funded in its name. This paper draws on a decade of secondary data (2015–2025) — government indices, regulatory filings, corporate sustainability reports, and peer-reviewed literature — to examine how far India's ESG architecture has actually moved the needle on the SDGs, rather than

simply generating the appearance of movement. The analysis is organized around three tensions that recur throughout the evidence: the gap between disclosure mandates and disclosure quality, the gap between aggregate corporate social responsibility (CSR) spending and the needs communities actually report, and the gap between national averages and the state-level realities they obscure. State-level case material from Kerala, Himachal Pradesh, and Odisha is used to ground these tensions in specific policy and institutional contexts. The paper concludes that India's ESG framework has succeeded in making corporate behavior more visible without yet making it more accountable, and it proposes a set of institutional, financial, and community-level reforms — anchored in the Principles for Responsible Management Education (PRME) — intended to close that gap before 2030.

Keywords: Sustainable Development Goals, ESG, PRME, corporate social responsibility, India, corporate governance, policy localization

1. Introduction

India's engagement with the 2030 Agenda is unfolding under conditions few other signatories face at comparable scale. The country is home to 1.43 billion people, was growing at roughly 6.4 percent annually as of 2023–24, and still counted about a fifth of its population below the poverty line. It ranks among the ten most climate-vulnerable countries in the world by most composite indices. These three facts alone describe a policy environment in which industrial growth, climate mitigation, and social equity are frequently in direct tension rather than in the mutually reinforcing relationship the SDG framework assumes.

The regulatory response to this tension has been to bring corporate behavior into the SDG conversation. The Companies Act of 2013 introduced mandatory CSR spending for firms above a revenue threshold; more recently, the Securities and Exchange Board of India's Business

Responsibility and Sustainability Reporting (BRSR) framework has required standardized ESG disclosure from the top 1,000 listed companies. Both measures represent a meaningful institutional shift — sustainability reporting is no longer voluntary for large firms — but neither has resolved the structural obstacles beneath them: a fragmented regulatory landscape, acute agrarian water stress (more than half of India's groundwater monitoring wells show declining levels), and a corporate culture that, by most available evidence, still treats ESG as a compliance exercise rather than a strategic one.

This paper synthesizes secondary data spanning 2015 to 2025 to examine the ESG–SDG relationship in India through two theoretical lenses: ecological modernization theory, which holds that market mechanisms and technological innovation can decouple economic growth from environmental damage, and stakeholder capitalism, which argues that firms owe accountability to a broader constituency than shareholders alone. Three tensions structure the analysis:

- **Regulatory ambition versus implementation follow-through.** BRSR requires ESG disclosure from India's largest listed firms, yet only about 18 percent report Scope 3 emissions — the category most relevant to SDG 12 (Responsible Consumption) because it captures supply-chain impact rather than a firm's own operations.
- **Corporate signaling versus grassroots priorities.** Indian firms collectively spend roughly ₹25,715 crore annually on CSR, yet in Odisha's mining districts a majority of projects (an estimated 68 percent) fund schools while surveyed communities rank drinking-water infrastructure as their more urgent need.
- **National benchmarks versus subnational heterogeneity.** The SDG India Index shows Kerala achieving improved water access in the 50–64 percent range even as Sikkim

reports near-universal sanitation coverage — a spread wide enough that any single national figure conceals more than it reveals.

India's energy mix is a telling example of the tensions of ecological modernization: it is the world's third-largest country for renewable generation capacity, but coal still supplied some 73 percent of electricity generation as of 2024. The stakeholder capitalism lens fares little better in practice — an estimated 12 percent of Nifty 50 firms involve marginalized communities in ESG decision-making at all. Methodologically, this paper triangulates NITI Aayog's SDG Index, Central Pollution Control Board (CPCB) emissions data, and corporate BRSR filings, supplemented by geospatial analysis to expose mismatches between where CSR money is spent and where SDG deficits are concentrated — Karnataka's high aggregate CSR expenditure alongside Bengaluru's peri-urban water crisis being a case in point.

The aim is not simply to catalogue these gaps but to ask what would be required to close them — what institutional reform would move India's \$3.7 trillion economy from compliance-driven ESG reporting toward the kind of accountable, locally responsive development the 2030 Agenda envisions.

2. Literature Review

2.1 Conceptual Foundations

The Brundtland Commission's 1987 definition of sustainable development — development that meets present needs without compromising the ability of future generations to meet theirs — remains the conceptual anchor for both the SDG framework and corporate ESG practice. The 17 SDGs translate that principle into specific, measurable targets spanning poverty, inequality, climate, and environmental degradation. ESG operationalizes the same principle at the level of the individual firm, typically along three dimensions: environmental performance (resource

efficiency, carbon management, biodiversity impact), social performance (labor conditions, community relations, equitable access), and governance quality (board ethics, transparency, stakeholder inclusion). In principle, ESG adoption should align corporate incentives with SDG outcomes; in practice, the correspondence depends heavily on how rigorously "material" issues are defined and audited, and greenwashing remains a persistent risk wherever metrics are self-reported and loosely standardized.

2.2 Global Patterns in ESG–SDG Integration

Several national examples illustrate what more coherent ESG–SDG integration can look like. Norway's sovereign wealth fund has divested from fossil fuel holdings in direct service of SDG 13 (Climate Action). Germany has nudged the dial on SDG 12 by embedding circular economy principles into its industrial policy. Japan's corporate governance code mandates gender diversity at the board level, a direct lever on SDG 5. These cases share a common feature: the ESG mechanism is embedded in binding policy rather than left to voluntary disclosure. India's regulatory architecture, by contrast, still relies heavily on disclosure requirements rather than binding performance mandates, which helps explain why the country can simultaneously rank third globally in renewable energy capacity and remain three-quarters dependent on coal for electricity.

2.3 ESG in the Indian Regulatory Context

India's two principal ESG levers — Companies Act CSR mandates and BRSR disclosure — each carry a structural limitation. CSR obligations apply only to firms above a revenue threshold, and spending patterns are shaped more by state-level administrative convenience than by SDG-mapped need: Maharashtra alone has historically absorbed roughly 23 percent of national CSR funds, against about 4 percent for Jharkhand, despite the latter's considerably greater development deficits. BRSR, meanwhile, applies only to the largest listed firms and excludes the

MSME sector, which is nonetheless estimated to account for around 45 percent of industrial pollution nationally. The result is a regulatory net with two large holes: money that follows administrative ease rather than need, and disclosure obligations that stop well short of the firms actually doing the most environmental damage.

Sectoral evidence bears this asymmetry out. Large manufacturers such as Tata Steel have made visible commitments to renewable energy and water conservation, but MSMEs — resource-constrained and outside the BRSR net — lag substantially. Service-sector firms, particularly in IT, have found ESG commercially useful: energy-efficient data centers serve both brand positioning with socially conscious investors and SDG 7 (Affordable Energy) simultaneously, suggesting that ESG adoption tends to track wherever it is also commercially convenient rather than wherever the SDG need is greatest.

2.4 Corporate Leadership and its Limits

Tata Steel and the Mahindra Group are frequently cited as domestic ESG leaders — the former for linking renewable energy and community health/education initiatives to specific SDGs, the latter for embedding sustainable-mobility innovation aligned with SDG 9 (Industry, Innovation, and Infrastructure). These examples are real, but they are also concentrated among a small set of large, internationally exposed firms. Beyond that cohort, low MSME awareness, inconsistent reporting standards, and thin stakeholder engagement continue to cap the breadth of adoption — a pattern that recurs across nearly every sector examined in this review.

2.5 Persistent Structural Challenges

Three obstacles recur across the literature. First, regulatory gaps: despite BRSR's disclosure mandate, fewer than one in five listed firms report Scope 3 emissions, which limits comparability precisely where SDG 12 accountability matters most. Second is the danger of

greenwashing, where actions such as the planting of a single tree become a token gesture rather than a genuine act of corporate responsibility. Third, and closely tied to CSR's development impact, is the issue of socio-economic disparity: CSR investment concentrates in urban areas and other locations that require minimal administrative effort and cost, leaving poorer regions such as Bihar and Odisha comparatively without its benefits.

2.6 Emerging Opportunities

The same literature also identifies plausible levers for improvement. Tax incentives linked to SDG-relevant investment may serve as an impetus for businesses to modify their operations in ways that go beyond mere compliance — as illustrated by India's green bond market, which raised approximately \$7.3 billion in 2023. Even with the geographic limitations on where that capital currently flows, the underlying pool of capital is there and available to be redirected. Community-based models present another route to SDG impact, as Kerala's Kudumbashree program indicates.

2.7 India Against Global Benchmarks

Comparative analysis situates India between two poles: countries like Norway and Germany, where ESG is embedded in binding national policy, and countries facing comparable development constraints — Brazil, Vietnam — where mandatory reporting regimes are still being built. India's position is closer to the latter group in practice, even though its disclosure architecture (BRSR) is, on paper, more developed than many peer economies'. The gap is not in the rules themselves but in enforcement depth and MSME coverage.

2.8 Directions for Further Research

Two areas stand out as under-researched. Longitudinal studies of tribal health outcomes in mining-affected regions would test whether CSR-funded health interventions are producing measurable change or merely reportable activity. Separately, AI-assisted ESG auditing — real-

time monitoring of corporate sustainability claims against actual outcomes — could address the self-reporting bias that currently undermines confidence in BRSR data, though this remains a nascent field in the Indian context specifically.

3. Methodology

3.1 Research Design

This study adopts an exploratory-descriptive design built around three objectives: (1) evaluating how ESG practice aligns with SDG targets across energy, agriculture, manufacturing, and finance; (2) identifying where policy implementation and corporate governance diverge from stated regulatory intent; and (3) mapping regional disparities in ESG adoption and SDG progress using geospatial techniques. The analysis is grounded theoretically in ecological modernization theory and stakeholder capitalism, discussed above, both of which generate testable expectations about where ESG mechanisms should — and should not — translate into SDG progress.

3.2 Data Sources

Four categories of secondary data underpin the analysis. Government reports include NITI Aayog's SDG India Index (2018–2024) for state-wise performance across all 17 goals, Central Ground Water Board data on groundwater depletion in agriculturally intensive states such as Punjab and Haryana, and Ministry of Corporate Affairs audits of CSR expenditure under the Companies Act. Corporate disclosures refer to BRSR reports from the top 1,000 firms listed on the NSE, supplemented by sustainability reports released by Tata Consultancy Services, Reliance Industries, and Infosys. Academic sources cited here include peer-reviewed articles indexed in Scopus that discuss MSME ESG adoption, as well as meta-analyses examining the relationship between SDGs and corporate governance across nations. International datasets from the World Bank on air quality and renewable energy, along with the SDG Dashboard provided by UNDP,

were also consulted to provide comparative perspective. Finally, targeted case studies — Tirupur's Zero Liquid Discharge textile initiative and Kerala's Kudumbashree program — supply qualitative depth that aggregate indices cannot.

3.3 Analytical Approach

Qualitative material — ESG disclosures, CSR reports, government audits — was thematically coded in NVivo to surface recurring patterns, particularly the mapping of corporate actions to specific SDGs and the relationship between regional socio-economic indicators (literacy, poverty rates) and ESG adoption intensity. Quantitative analysis used SPSS to test correlations between CSR spending levels and SDG Index scores across states, and regression modeling to estimate the relationship between ESG investment and carbon emissions reductions over 2019–2024. QGIS was used to overlay district-level CSR expenditure against SDG performance metrics, exposing spatial mismatches such as Karnataka's comparatively high CSR spending against Bengaluru's persistent peri-urban sanitation gaps. Comparative benchmarking set India's performance against Brazil's Amazon Fund model (SDG 15) and Vietnam's mandatory state-owned-enterprise ESG reporting, both chosen for their relevance as middle-income-country comparators rather than as aspirational best-practice cases from wealthier economies.

3.4 Sectoral Case Studies

Three sectors received focused treatment. In agriculture, CGWB groundwater data was read alongside CSR water-conservation initiatives under SDG 6, with particular attention to Punjab's rice–wheat cropping cycle and its methane implications for SDG 13 — a case chosen because it illustrates how a policy instrument (the minimum support price for wheat) can actively work against an environmental target. In manufacturing, Tirupur's Zero Liquid Discharge system was examined as a cost–benefit case: roughly a 70 percent reduction in water pollution against an

estimated 18 percent increase in production costs, a trade-off with direct implications for how SDG 6 gains are priced against competitiveness. In finance, green bond allocation patterns were analyzed against World Bank data, with SBI's green lending criteria examined as a case of formally inclusive but practically exclusionary MSME eligibility rules.

3.5 Limitations and Ethical Considerations

Reliance on corporate self-reporting is the analysis's most significant limitation: Scope 3 emissions data, in particular, remains underreported by the large majority of firms, and groundwater depletion figures likely understate the true picture because they exclude illegal extraction, which is thought to be significant in mining regions such as Jharkhand. All secondary sources are attributed in full, and the analysis was checked against the risk of selective interpretation — where data patterns admitted more than one plausible reading, that ambiguity is noted in the findings rather than resolved in favor of a preferred narrative.

3.6 Validation

Findings were triangulated across governmental audits, corporate disclosures, and academic literature to reduce the risk that any single source's bias would drive the conclusions, and preliminary results were presented at academic venues hosted by IIM Ahmedabad and TERI University for expert feedback prior to finalization.

4. Findings

4.1 Environmental Governance: Progress Alongside Persistent Deficits

Water management (SDG 6). The Jal Jeevan Mission has provided tap water connections to 128 million households in India by 2024. Although this is an impressive achievement in terms of governance, this seemingly impressive figure actually belies the reality. In fact, in excess of 34 percent of rural water supply schemes are currently inoperative due to unreliable power supply

(CAG, 2023). When it comes to groundwater, the situation is worse. In Punjab, depletion of groundwater resources is occurring at a rate which is 166 percent higher than the rate of recharge – a completely unsustainable situation which endangers 80 percent of irrigated land in the region. Similarly, even though harvesting rainwater through traditional methods has proven effective in regions like Rajasthan’s johads, it is not employed widely due to the availability of subsidized groundwater instead. Finally, the sanitation situation differs from one state to another; for example, while Sikkim has attained universal coverage, in places like Odisha and Jharkhand, toilets are still not available in all areas of the state and open defecation continues to occur in around 15 percent of rural India.

Climate action (SDG 13). India's renewable energy expansion is real — third globally in installed capacity, with solar installations reaching roughly 70 GW by 2023 — but it has not yet displaced coal, which still accounted for about 73 percent of electricity generation. The Perform, Achieve, Trade scheme has reduced industrial emissions by an estimated 31 million tonnes annually, a meaningful figure, but its exclusion of SMEs — which are responsible for a substantial share of industrial pollution — caps its systemic impact. Coastal risk compounds the picture: Mumbai's projected 2050 sea-level rise of roughly half a meter threatens an estimated \$162 billion in assets, yet no ESG framework currently in force mandates climate-resilience investment as a condition of listing or disclosure.

Biodiversity (SDG 15). Compensatory afforestation funds (CAMPA) worth roughly ₹66,000 crore remain substantially underutilized because of bureaucratic delay in fund release and project approval, and only about 26 million hectares of degraded land are currently targeted for restoration against the 2030 goal. Marine ecosystems receive markedly less ESG attention than terrestrial

ones: coastal degradation continues to erode fisheries-dependent livelihoods, and no ESG framework in current use mandates marine conservation investment.

4.2 Social Equity: Uneven Progress Across Goals

Gender equality (SDG 5). Even though the Securities and Exchange Board of India has issued a regulation for including at least one female company director in every company, there has been only about 5% female representation in companies listed on the Bombay Stock Exchange. This indicates that most companies observe the SEBI directive in letter and not in spirit. On the other hand, Kerala's Kudumbashree program makes it possible for women to lead organizations, and four to four-and-a-half million families have greatly benefitted from the economic opportunities created through this program.

Poverty alleviation (SDG 1). It is estimated that MGNREGA has provided around 2.8 billion person-days of work during the fiscal year 2023-24. However, its effectiveness has been hampered by issues in wage payment because nearly one-third of the wages in Bihar were delayed for over 30 days. Corporate social responsibility (CSR) funding has also failed to address the needs of the communities concerned whereby 68% of the CSR funds in the mining areas of Odisha have been spent on educational projects when the people in the communities expect drinking water to be their first priority (Pan IIT Survey 2024) This tendency is evident in many other sources as well.

Health and education (SDGs 3 and 4). Ayushman Bharat has extended health insurance coverage to more than 500 million people, a landmark expansion by global standards, but coverage gaps persist for tribal populations in mining-affected regions — precisely the populations most exposed to the environmental health risks these industries generate. In education, CSR-funded school infrastructure investment has not translated into proportionate gains in rural dropout rates, which remain elevated largely due to inadequate teacher training rather than facility quality — a

distinction that matters because it suggests CSR capital is being directed toward the more visible (buildings) rather than the more consequential (staffing and pedagogy) determinant of outcomes.

4.3 Corporate Governance: Reporting Quality and Green Washing Risk

ESG reporting quality varies sharply by firm size and sector. Tata Consultancy Services links an estimated 89 percent of its disclosed ESG metrics directly to specific SDGs, including AI-assisted energy efficiency measures in its data centers — a genuinely sophisticated example of ESG-SDG integration. At the other end of the spectrum, textile MSMEs in Surat allocate roughly 0.2 percent of revenue to wastewater treatment despite the sector's roughly \$23 billion export base, a disparity that sits uncomfortably against SDG 6 commitments. Scope 3 disclosure remains the weakest link across the board: only about 18 percent of NSE-listed firms report it, which limits the entire system's ability to speak to SDG 12.

Green finance shows a similar pattern of concentrated rather than distributed benefit. India issued roughly \$7.3 billion in green bonds in FY2023–24, but around 60 percent of that capital funded renewable energy specifically, leaving sustainable agriculture comparatively starved of financing. SBI's green lending program offers meaningful interest-rate discounts — on the order of 14 percent — for qualifying green projects, but only an estimated 2 percent of MSME loans meet the eligibility criteria, which appear to function, in practice, as a filter that excludes the very firms most in need of transition capital.

4.4 Sectoral Case Studies

Agriculture (SDGs 2, 12). Punjab's rice–wheat rotation remains a significant methane source, and crop-diversification incentives have struggled against the pull of minimum support price guarantees that continue to favor wheat over lower-emission alternatives. Farmer Producer Organizations — the institutional vehicle best positioned to disseminate sustainable practice at

scale — receive ESG-relevant training in only an estimated 22 percent of cases, which caps how far sustainable farming knowledge can actually diffuse.

Manufacturing (SDGs 9, 11). Tirupur's Zero Liquid Discharge system reduced water pollution by roughly 70 percent, but at an estimated 18 percent increase in production costs — a trade-off that illustrates, concretely, why voluntary adoption of similarly rigorous systems elsewhere in the textile sector has been slow. Bengaluru's peri-urban industrial zones present a near-inverse problem: comparatively high CSR allocation for infrastructure has not translated into adequate waste management, suggesting that spending levels alone are a poor proxy for outcome quality.

Energy (SDGs 7, 13). Solar capacity growth continues broadly in line with national targets, but land acquisition disputes in Rajasthan and Gujarat have slowed specific projects. Coal's continued dominance in the generation mix reflects both cost advantages that renewables have not yet fully closed and political economy factors — regional employment dependence on coal, for instance — that ESG frameworks are not well designed to address.

4.5 Cross-state Comparison

The SDG India Index makes subnational disparity difficult to ignore. Himachal Pradesh leads on clean-energy adoption (SDG 7) and Kerala on sanitation coverage (SDG 6); both benefit from governance models that incorporate community feedback into policy design more consistently than the national average. At the other end, Bihar and Jharkhand lag across most goals, hampered by thin institutional capacity and limited private-sector presence — Bihar's CSR spending per capita (roughly ₹42) sits well below the national figure (roughly ₹112), a gap that tracks closely with, and likely reinforces, the state's broader development deficits.

5. Discussion

5.1 Institutional and Regulatory Friction

The gap between regulatory intent and regulatory effect recurs throughout this analysis, and it is worth asking why. Part of the answer lies in fragmented implementation: the Outlook ESG Bharat Survey found that only about 47 percent of Indian companies report consistent ESG data year over year, which suggests the problem is not simply non-disclosure but inconsistent disclosure — a harder problem to solve because it requires standardizing methodology rather than simply mandating a report. A second contributor is institutional overlap: ESG committees frequently duplicate the mandate of existing CSR committees rather than replacing or subsuming it, which produces isolated pockets of data collection that rarely feed back into strategic decision-making. Underlying both problems is a mindset issue that shows up repeatedly in the literature and in this study's findings alike: corporate boards still tend to treat ESG as a compliance obligation to be satisfied rather than a strategic capability to be built, and that orientation shapes everything downstream of it, from what gets measured to what gets funded.

5.2 Talent and Capacity Constraints

Nasscom's 2023 estimate of a 100,000-professional ESG talent gap is, if accurate, a binding constraint on everything else this paper discusses — institutional reform, standardized disclosure, and community-responsive CSR design all require people capable of doing the work, and India's education system has not yet built ESG training into standard business or public-administration curricula. The effect compounds for SMEs, which cannot absorb the cost of outsourced ESG expertise the way large listed firms can, and it extends into the public sector as well: high vacancy rates in Panchayati Raj institutions and municipal corporations slow fund absorption and project

execution at exactly the local level where SDG localization is supposed to happen, with knock-on effects visible in stalled MGNREGA disbursement and its consequences for SDG 1.

5.3 Financial Constraints

Green financing remains scarce relative to need, particularly for SMEs. Instruments like the Indian Green Climate Fund exist but have limited reach, and the broader fiscal picture is not encouraging: Union Budget expenditure declined from roughly 13.3 percent of GDP in 2014–15 to about 13.2 percent in 2019–20, a modest but real contraction in the government's capacity to mobilize domestic resources for exactly the kind of investment — circular-economy infrastructure, clean-technology adoption — that SDG 12 and SDG 13 require.

5.4 Greenwashing and the Erosion of Trust

Superficial ESG gestures — token tree-planting, symbolic donations — persist alongside the more substantive initiatives documented in Section 4, and the risk is not merely reputational for individual firms. Each visible instance of greenwashing makes investors and communities more skeptical of ESG claims generally, including the genuine ones, which raises the evidentiary bar every credible firm must clear and slows the overall pace of adoption.

5.5 The Localization Problem

If there is a single thread connecting the disparate findings in this paper, it is localization failure. NITI Aayog tracks SDG progress capably at the national level, but state governments frequently lack the administrative capacity or fiscal autonomy to translate that tracking into local action. The 73rd and 74th Constitutional Amendments envisioned a full devolution of funds, functions, and functionaries to local government, but that devolution remains incomplete in practice, which leaves Panchayati Raj institutions formally empowered but practically under-resourced. Kudumbashree's success in Kerala is instructive precisely because it has not traveled:

the model depends on a specific combination of women-led institutional design and sustained state government support that other states have not replicated, which suggests the barrier to scaling it elsewhere is political and administrative rather than technical. Rajasthan's *johad* systems present a similar case — a proven, low-cost solution to SDG 6 challenges that remains underused because it does not fit neatly into existing bureaucratic or funding channels.

5.6 Where the Opportunities Actually are

Several levers in the evidence base look genuinely promising rather than merely aspirational. The Green Hydrogen Mission offers a policy structure businesses can build around, rather than simply comply with. MSCI data showing ESG-integrated portfolios outperforming non-ESG portfolios by roughly 1.3 percent over five years gives boards a commercial rather than purely normative reason to invest in ESG capability. Resource constraints themselves are proving to be an innovation driver in specific cases — Tirupur's Zero Liquid Discharge system is the clearest example, demonstrating that environmental compliance and profitability are not always in tension, even where the initial cost trade-off (the 18 percent cost increase noted above) looks unfavorable on paper. Finally, India's comparative strength in IT services and renewable energy manufacturing creates room for international collaboration that could accelerate domestic SDG progress rather than requiring India to solve every problem with domestic capacity alone.

5.7 Toward Closing the Gap

Bridging the gaps identified in this paper will likely require action on several fronts simultaneously rather than sequentially. An SDG–ESG Convergence Council under NITI Aayog could audit corporate CSR spending against actual district-level SDG deficits, directly addressing the Odisha-type mismatch documented in Section 4. Full devolution of funds, functions, and functionaries to local bodies would address the localization problem discussed above more durably

than any national-level policy change could. University–industry partnerships could begin closing the ESG talent gap, while subsidized green finance options would lower the barrier SMEs currently face in adopting sustainable practices. Mandatory third-party ESG audits would raise the evidentiary bar in a way that self-reporting cannot, reducing greenwashing risk without requiring firms to overhaul their internal systems from scratch. Community-centric models like Kudumbashree deserve deliberate scaling into aspirational districts, ideally paired with traditional knowledge systems — the *johad* case again being instructive — rather than treated as a replacement for them. Finally, sustained longitudinal research, particularly on tribal health outcomes in mining-affected regions and on sector-specific vulnerability indices, would give policymakers the kind of evidence base this paper has had to assemble from disparate secondary sources rather than a single authoritative dataset.

None of these measures is sufficient alone. Taken together, they describe a shift this paper argues is necessary but not yet underway at scale: from ESG as a disclosure exercise to ESG as an accountability mechanism genuinely calibrated to India's own development priorities, rather than to a template borrowed from wealthier economies with very different starting conditions.

Conflict of Interest: The corresponding author, on behalf of all the authors, declares that there are no conflicts of interest regarding the publication of this article.

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