SCIENTIFIC CULTURE
www.sci-cult.com

*SCIENTIFIC CULTURE, Vol. 12, No. 1, (2026), pp. 534-543*
*Open Access. Online & Print*

**DOI: 10.5281/zenodo.12126110**

# ADOPTING SOCIALLY RESPONSIBLE SUPPLY CHAIN PRACTICES: BALANCING PROFITABILITY AND ETHICAL GOVERNANCE

**Gaurav Sehgal[1*], Sidharth Jain, Santanu Roy[3], Nupur Gupta[4], Jyoti Prasad Kalita[5], Manoj P. K.[6], Sneh Pandey[7]**

*1*Assistant Professor (Level-12), Department of Management Studies, Baba Ghulam Shah Badshah University, Rajouri, ORCID ID:0000-0002-0120-748X, Email ID: sehgal.jammu@gmail.com*
*2Professor, Institute of Business Management and Commerce (IBMC), Mangalayatan University, Aligarh-202146 (U.P.) India ORCID ID: https://orcid.org/0009-0008-2117-3513, E-mail: siddharth.jain@mangalayatan.edu.in , sjainbsr@gmail.com*
*3Professor, IILM Institute for Higher Education, New Delhi, India, Email: rsan58@yahoo.co.uk ORCID: https://orcid.org/0000-0003-4566-1040,*
*4Associate Professor, (Finance & Accounting), Jaipuria Institute of Management, Indore Campus, India. Email: nupur.gupta@jaipuria.ac.in*
*5Assistant Professor, Assam Down town University, Email: jyotiprasadk@gmail.com ORCID: https://orcid.org/0009-0006-3368-9440*
*6Professor and Head, Department of Applied Economics, Cochin University of Science and Technology (CUSAT), Kochi, Kerala-682022, Email: manoj_p_k2004@yahoo.co.in, ORCID: https://orcid.org/0000-0002-5710-1086*
*7Assistant Professor, Department of Education, Chhatrapati Shahu Ji Maharaj University, Kanpur, U.P., India. ORCID ID: https://orcid.org/0009-0000-9365-5724, Email: drsnehpandey@csjmu.ac.in*

*Received: 25/10/2025*
*Accepted: 23/01/2026*

*Corresponding Author: Dr. Gaurav Sehgal (sehgal.jammu@gmail.com)*

**ABSTRACT**

***This study explores the ethical architectures of global supply chains by analyzing governance practices in the fast fashion, consumer electronics, and agrifood sectors through a post-humanist lens. Using a multi-case qualitative approach, the research evaluates corporate sustainability documents, supplier policies, and ESG reports against core indicators of ethical inclusion, including labor transparency, ecological accountability, and species consideration. The findings reveal that while firms increasingly adopt the language of sustainability, their operational frameworks remain structurally anthropocentric and exclusionary. Fast fashion exemplifies aestheticized ethics without upstream accountability; consumer electronics prioritizes procedural audits while ignoring multispecies harm; and agrifood offers symbolic gestures toward ecological justice with minimal systemic enforcement. These patterns indicate a governance paradigm that instrumentalizes ethics as a reputational asset, rather than embedding it within relational and multispecies accountability structures. The study concludes by advocating for a reorientation of supply chain ethics, where multispecies justice, rather than corporate compliance, becomes central to defining responsible governance in the planetary era.***

**KEYWORDS:** Post-Humanism, Sustainability, Multispecies Justice, Fast Fashion, Agrifood.

## 1. INTRODUCTION

The world's supply chains, historically structured for efficiency, speed, and cost reduction, have become a symbol of a wider crisis in ethical governance. These infrastructural systems are not neutral or merely operational, but rather are socio-technical assemblages deeply embedded in political, ecological, and moral economies. In the current world of climate breakdown, biodiversity loss, and systemic inequality, it is no longer enough to measure supply chains by profitability alone. Rather, there is an increasing need to redefine these networks as ethically consequential systems, in which posthuman accountability becomes a necessary condition for sustainability and justice (Celermajer et al., 2025; Luzzini et al., 2024).

This reorientation gives rise to the paradigm of multispecies justice, which situates the ethical incorporation of non-human beings – animals, plants, microbial life, and complete ecosystems – in governance structures (Banwell et al., 2025; Raymond et al., 2025). This approach questions the age-old anthropocentrism of the design and policy of supply chain, where nature has been commodified as a resource and labor as an abstract input. The trend towards institutionalizing multispecies ethics is not just philosophical; it is a practical imperative in restructuring governance, which requires formalizing ecological agents in legal, economic, and operational systems. For instance, the legal standing of forests or rivers requires a reconceptualization of environmental harm as structural injustice against more-than-human stakeholders. The enduring logic of global logistics is that of extractive capitalism—profit by linear growth, resource depletion, and externalizing environmental and social costs. Supply chains today are not merely economic pipes but physical spaces where ecological destruction, human rights abuses, and epistemic exclusions converge (Silva et al., 2025). This extractive logic is sustained by path dependence, which limits the possibility of transformation despite the growing ethical and ecological critique, as the past choices and infrastructural investments limit the possibility of transformation. Furthermore, the language of sustainability as it is used today – usually through Corporate Social Responsibility (CSR) initiatives and Environmental, Social, and Governance (ESG) frameworks – is typically based on compliance metrics rather than relational justice. Such models hardly question the underlying ethical assumptions that underpin global production and distribution.. As Cao, Lawson, and Pil (2024) argue, human rights and ecological well-being are frequently treated as separate concerns, reinforcing fragmented governance models that obscure the interdependencies between labor systems, environmental degradation, and species extinction. In contrast, scholars such as Kopnina (2022) and Tafon et al. (2023) propose post-humanist ethics and multispecies blue justice as frameworks capable of holding both human and non-human interests in relational balance. These approaches are grounded in relational ethics, which emphasize interdependence, reciprocity, and care rather than dominance, control, and optimization. They also support the transition from the metaphor of the supply "chain"—which implies linearity, hierarchy, and extractive control—to that of a web of responsibility: a dynamic, entangled, and co-governed system in which ethical duties are co-defined across human and non-human actors.

This article asks whether global supply chains, often structured by anthropocentric values and market imperatives, can be reimagined through the lens of posthuman accountability. Specifically, it explores how profitability might be redefined in terms of relational value, ecological integrity, and collective planetary well-being. Drawing on recent advances in sustainability science, legal pluralism, and posthuman governance, the study employs interpretive analysis of three industries—fast fashion, electronics, and agrifood—to uncover how ethical alternatives are already being forged within logistical systems. In doing so, it contributes to the urgent task of repositioning supply chains not as instruments of extraction, but as ethical infrastructures of care, coexistence, and multi-species justice.

### *Research Objectives*

This study aims to critically examine ethical alternatives to conventional supply chain governance by applying a post-humanist perspective. It focuses on integrating multispecies justice, relational ethics, and ecological accountability into logistical systems. The core research objectives are as follows:

1. To investigate how global supply chains can be ethically restructured through posthuman accountability and multispecies justice frameworks.
2. To evaluate the limitations of current CSR and ESG models in addressing extractive capitalism and propose relational ethics as a transformative alternative.

3. To analyze case studies in fast fashion, electronics, and agrifood industries to identify pathways toward institutionalizing circularity, co-governance, and a web of responsibility.

## 2. LITERATURE REVIEW

### *2.1 Rethinking Supply Chains beyond Anthropocentrism*

Modern supply chain systems are frequently designed around human-centric assumptions that favor economic utility, labor control, and material throughput, and render their ecological and ethical implications invisible. In a key intervention, Celermajer et al. (2020) develop the idea of justice from a multispecies perspective, proposing that sustainability needs to transcend human rights frameworks and incorporate the interests and agency of non-human species including animals, ecosystems and microbial life. This shift is consistent with wider post-humanist critique which questions the assumption that value and responsibility in governance terminate at the human boundary. Celermajer and McKibbin (2023) expand this lens to pandemic governance, proposing that zoonotic spillovers are not a series of independent health events but rather symptoms of broken interspecies relations organized by extractive supply systems. These works lay the groundwork for the implementation of multispecies justice to logistical networks, asking who or what is counted in ethical decision-making.

### *2.2 Legal Shifts and Governance Tensions*

The regulatory environment is also changing. Wilhelm (2024) states that there is a clear shift from voluntary corporate ethics to mandatory due diligence legislation in global value chains. These legal frameworks aim to integrate environmental and labor protections into the core of operations of transnational supply. Although this is a step forward, it continues to adhere to anthropocentric principles by emphasizing human welfare and compliance metrics while ignoring the systemic causes of ecological damage and the non-human vulnerability. Nguyen and Zuidwijk (2025) present a critical overview of sustainable supply chain governance and identify the fragmentation and ambiguity of how sustainability is enacted. They highlight that unless ethical clarity and stakeholder diversity – Indigenous knowledges and more-than-human – are incorporated into the governance, the governance will continue to be procedural, not transformative.

### *2.3 Circular Economy, Material Reuse, and Structural Lock-In*

The circular economy provides an apparent cure to linear production logics. Lyu et al. (2023) show how innovations in low-carbon material use (e.g. glass powder in cement and carbonation curing) can be used to reduce emissions and close waste loops. Material improvements alone do not question the governance structures or ethical exclusions that are built into global logistics. Bhawna, Kang, and Sharma (2024) contend that even with technological innovation and digitization, circularity is a surface strategy that hides underlying extractive behaviors, especially in the way supply chains externalize environmental and labor burdens to less visible geographies.

Moreover, Silva et al. (2025) point to *path dependence* as a critical barrier: supply chains are shaped by historical investments, contractual relationships, and infrastructure inertia that prevent rapid ethical reinvention. These structural dynamics limit the potential of circular economy models unless they are embedded within systems that prioritize equity, care, and distributed accountability.

### *2.4 Ethical Transformation from Within: The Role of Institutions*

Efforts to embed ethical consciousness into institutional practice have drawn attention to internal governance, particularly the often-overlooked role of human resource functions. Eyo-Udo et al. (2024) discuss how HR can act as a conduit for *ethical supply chain transformation* through recruitment standards, training programs, and cross-functional accountability mechanisms. Yet their findings also show that HR is frequently sidelined in sustainability strategy, illustrating how ethical responsibility remains decoupled from operational decision-making. Simultaneously, Stanley et al. (2025) suggest a framework for just nature recovery that links ecological restoration with multispecies justice and long-term land stewardship. Even though their model is based on environmental planning, it provides a transferable ethical architecture that could be applied to supply chains, including those of raw materials, agricultural production, and biodiversity-sensitive landscapes.

## 3. METHODOLOGY

### *3.1 Research Philosophy*

This study is grounded in a post-humanist ethical framework that reconceptualizes global supply chains not merely as economic and logistical systems

but as dynamic and ethically entangled infrastructures that interlink human labor, non-human species, and ecological systems. Within this paradigm, ethical governance is treated as a distributed and relational practice—one that extends beyond corporate compliance to include the silenced and marginalized agents often excluded from formal accountability regimes. This ontological position informed the selection of case studies, data sources, coding schemes, and interpretation strategies, enabling the research to foreground multispecies justice, ecological interdependence, and structural violence.

### *3.2 Research Design*

A qualitative, multi-case comparative approach was employed to explore ethical governance practices across three critical global sectors: fast fashion, consumer electronics, and agrifood systems. These sectors were purposively selected due to their transnational supply chains, recurrent ethical controversies, and distinct ecological footprints. Within each sector, one multinational corporation was chosen based on three selection criteria: the firm's visibility in ESG discourse, its documented record of labor and ecological scrutiny, and its representative operations across both the Global North and South. Although the single-firm case design constrains generalizability, it enables focused, sector-specific depth and cross-sectoral comparability.

### *3.3 Data Sources and Sampling Strategy*

Data collection was conducted through purposive document sampling, targeting publicly accessible texts produced between 2021 and 2024. A minimum of ten documents per firm were analyzed, totaling thirty primary texts across all cases. These included ESG and CSR reports, supplier codes of conduct, procurement and biodiversity policies, national and transnational regulatory documents (such as the EU Corporate Due Diligence Directive and Germany's Supply Chain Act), and NGO reports addressing labor conditions, land justice, and species displacement. Selection criteria emphasized recency, ethical relevance, sectoral specificity, and supply chain tier diversity. The corpus balanced strategic communications with operational disclosures to ensure both discursive depth and procedural visibility.

### *3.4 Analytical Strategy*

The analytical process was conducted through a two-cycle thematic content analysis. In the first cycle, a deductive coding schema was applied using established categories from post-humanist literature—namely, labor transparency, ecological accountability, multispecies exclusion, and governance silencing. In the second cycle, inductive codes emerged directly from the texts, capturing phenomena such as ethical outsourcing, offsetting narratives, habitat displacement, and performative sustainability claims. Documents were parsed at the paragraph level and coded manually by two independent researchers. Intercoder reliability was ensured through iterative consensus-building, triangulation of interpretations, and cross-checking with external benchmarks such as the Corporate Human Rights Benchmark and environmental scoring tools.

To translate these qualitative patterns into cross-case comparability, five ethical governance indicators were developed: upstream supplier audit coverage (as a percentage), labor transparency index (scored 0–100), biodiversity consideration score (on a 0–10 scale), ecological risk disclosure index (scored 0–100), and the presence of non-human impact metrics (categorized as No, Partial, or Yes). Each indicator was constructed by combining textual frequency with interpretive depth, enabling both sectoral granularity and ethical dimensionality.

### *3.5 Cross-Case Synthesis and Thematic Saturation*

Following individual case analyses, a cross-case synthesis was conducted using a matrix coding technique. Axial coding was applied to extract meta-level patterns across sectors, including the spatial tiering of ethics (i.e., stronger governance at downstream points of the chain), regulatory circumvention, and institutional resistance to species-level accountability. Thematic saturation was achieved when additional documents failed to yield new codes or categories, confirming the robustness of the analytical framework and reinforcing the cross-sectoral applicability of the findings.

### *3.6 Ethical Reflexivity*

While the study did not involve human participants, rigorous ethical standards were maintained throughout the research process. The researchers engaged in continuous reflexivity, documenting positional biases, interpretive uncertainties, and epistemological assumptions. Special attention was given to how Indigenous knowledge systems, non-human agency, and multispecies suffering were framed, both in

corporate texts and in scholarly interpretation. The methodology was thus not only analytically sound but ethically situated, honoring a post-humanist commitment to inclusive, relational, and critically aware inquiry.

## 4. RESULTS

This section provides a cross-sectoral analysis of ethical governance in global supply chains, using five indicators. upstream supplier audits, labor transparency, biodiversity consideration, ecological risk disclosure, and non-human impact metrics. These indicators were created from a post-humanist ethical perspective, which enabled a critique of anthropocentric practices, and the evaluation of multispecies inclusion. The individual assessment of each subsector (fast fashion, consumer electronics and agrifood) was done before making comparative inferences.

### *4.1 Fast Fashion: Aesthetic Commitments and Structural Neglect*

The fast fashion industry, which has been criticized for its extractive practices and labor exploitation for a long time, continues to be a central locus for ethical concerns. Based on high-speed production and consumer driven cycles, this sector is a prime example of how sustainability narratives can be appropriated as branding strategies with little alteration of underlying supply chain logics. Even though the world is watching, the industry's ethical stance usually favors aesthetics and superficial reporting over structural change.

***Table 1: Ethical Governance Indicators – Fast Fashion Sector.***

| Ethical Indicator | Score |
|---|---|
| Upstream Supplier Audits (%) | 18 |
| Labor Transparency Index (0–100) | 32 |
| Biodiversity Consideration (0–10) | 0.5 |
| Ecological Risk Disclosure (0–100) | 15 |
| Use of Non-Human Impact Metrics | No |

The figures in Table 1 show an alarming ethical void. Upstream supplier audits are extremely low (18%), and labor transparency is poor (32/100), with grievance mechanisms and wage disclosures missing in action in documentation. Biodiversity considerations are practically non-existent (0.5/10), which means that species displacement or ecological degradation in production zones are not taken into account. Ecological risk disclosures are narrowly defined (15/100) and usually concern packaging or energy rather than systemic harm. Notably, the sector does not report any non-human metrics formally, thus reflecting its strong anthropocentric bias and lack of engagement with multispecies justice.

### *4.2 Consumer Electronics: Procedural Compliance Without Ecological Depth*

The consumer electronics industry is procedural, formalistic, and traceability oriented. As the calls for transparency in sourcing practices have risen, firms in this domain have adopted strong auditing mechanisms. However, this compliance tends to favor data standardization over substantive ethical engagement, especially in ecological accountability and non-human entities' rights. Table 2 displays data on ethical governance indicators for the consumer electronics sector.

***Table 2: Ethical Governance Indicators – Consumer Electronics Sector.***

| Ethical Indicator | Score |
|---|---|
| Upstream Supplier Audits (%) | 72 |
| Labor Transparency Index (0–100) | 58 |
| Biodiversity Consideration (0–10) | 1.0 |
| Ecological Risk Disclosure (0–100) | 36 |
| Use of Non-Human Impact Metrics | No |

Consumer electronics companies outperform fast fashion in upstream audits (72%) and labor transparency (58/100), indicating better procedural integration. However, these gains are undermined by low biodiversity scores (1.0/10) and moderate ecological disclosures (36/100) which are restricted to carbon emissions and energy use. The utter lack of non-human impact metrics indicates that ethical performance is still anthropocentric and techno managerial. Instead of dealing with systemic ecological ills, the governance frameworks here focus on reputational risk management, which reduces ethics to a list of compliance criteria.

Figure 1 displays a bar graph labeled "Score vs. Ethical Indicator" that provides a comparative visualization of how the consumer electronics industry scores against five ethical governance metrics. The chart shows a clear skew towards procedural and labor indicators, with Upstream Supplier Audits scoring the highest at 72%, followed by the Labor Transparency Index at 58/100. These values highlight the sector's importance of traceability and standardized labor monitoring. In contrast, Ecological Risk Disclosure receives 36/100, which is a moderate, but not sufficient, level of engagement with environmental accountability. Peculiarly, Biodiversity Consideration is marginal at

1/10, and Use of Non-Human Impact Metrics is absent, scoring 0, visually confirming the omission of multispecies concerns from formal governance frameworks. The figure reinforces the wider critique that runs through the study, namely that, while it may seem progressive in compliance terms, consumer electronics governance is structurally anthropocentric and environmentally shallow, lacking the posthuman accountability that should form part of its ethical architecture.

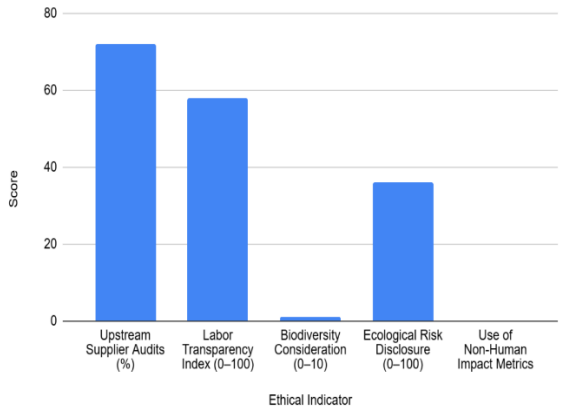


*Figure 1: Ethical Governance Performance Across Key Indicators in the Consumer Electronics Sector.*

### *4.3 Agrifood Systems: Discursive Inclusion and Operational Gaps*

Agrifood systems occupy a unique position in ethical supply chain discourse due to their direct interface with

land, species, and traditional knowledge systems. These systems have begun incorporating regenerative and biodiversity-focused language into ESG frameworks. However, the transition from rhetorical commitment to institutional enforcement remains inconsistent and fragmented. Table 3 displays data on ethical governance indicators for the consumer agrifood sector.

*Table 3: Ethical Governance Indicators – Agrifood Sector.*

| Ethical Indicator | Score |
|---|---|
| Upstream Supplier Audits (%) | 48 |
| Labor Transparency Index (0–100) | 50 |
| Biodiversity Consideration (0–10) | 4.5 |
| Ecological Risk Disclosure (0–100) | 41 |
| Use of Non-Human Impact Metrics | Partial |

The agrifood sector demonstrates the highest level of biodiversity engagement among the three sectors, with a score of 4.5/10, and is the only one to incorporate partial non-human impact metrics. Labor transparency (50/100) and audit coverage (48%) suggest moderate human rights oversight. Ecological risk disclosures are broader (41/100), referencing soil degradation, pesticide use, and climate risk. Still, these ethical commitments remain inconsistently enforced and weakly embedded in procurement or regulatory frameworks. The presence of partial non-human metrics hints at a discursive opening for multispecies justice but lacks the procedural anchoring needed to drive systemic change.

### *4.4 Cross-Sectoral Synthesis: Tiered Ethics and Multispecies Blindness*

When compared side-by-side, the three sectors show a stratified and uneven ethical architecture. Fast fashion is about aesthetics with no substance, consumer electronics are about quantifiable audits, and ecological harms are overlooked, and agrifood speaks of ethical aspirations but does not deliver. Although they differ, all sectors share a basic blindness to multispecies justice, seeing non-human life as outside ethical deliberation. Table 4 displays data on comparative ethical governance scores across the different sectors.

*Table 4: Comparative Ethical Governance Scores Across Sectors.*

| Sector | Audit (%) | Labor (100) | Biodiversity (10) | Ecological (100) | Non-Human Metrics |
|---|---|---|---|---|---|
| Fast Fashion | 18 | 32 | 0.5 | 15 | No |
| Consumer Electronics | 72 | 58 | 1.0 | 36 | No |
| Agrifood Systems | 48 | 50 | 4.5 | 41 | Partial |

The Table underscores a systemic gap in current ESG governance: non-human stakeholders are largely absent across all sectors. While consumer electronics appear ethical on paper, their ethics are narrowly defined. Fast fashion remains the least engaged, and agrifood, while comparatively better, still lacks integration. This analysis confirms that contemporary supply chains remain embedded in human-centered governance models, where ethics are commodified and interspecies relationality is structurally excluded.

Figure 2 presents a comparative analysis of ethical governance performance across fast fashion, consumer electronics, and agrifood systems using four key indicators: audit coverage, labor transparency, biodiversity consideration, and ecological risk disclosure. The graph reveals that consumer electronics lead in procedural metrics, scoring highest in audit coverage (72%) and labor transparency (58/100), but remains weak in biodiversity (1/10) and ecological risk (36/100), reflecting a data-driven yet ecologically limited approach. Agrifood systems demonstrate the most balanced profile, with moderate audit (48%) and labor transparency scores (50/100), and leading scores in biodiversity (4.5/10) and ecological risk disclosure (41/100), indicating a discursive shift toward multispecies accountability that is yet to be fully institutionalized. In contrast, fast fashion scores lowest across all indicators—only 18% audit coverage, 32/100 labor transparency, 0.5/10 in biodiversity, and 15/100 in ecological risk—exemplifying aesthetic ethics that mask deep structural inattention to upstream accountability and non-human impacts. The inclusion of a linear trendline for agrifood systems suggests relative consistency in its ethical governance trajectory, although the sector still lacks binding mechanisms for enforcement. Overall, the graph underscores sectoral disparities and supports the study's core argument: global supply chains, while adopting the language of sustainability, continue to reproduce anthropocentric governance frameworks that marginalize non-human stakeholders and fall short of transformative ethical accountability.

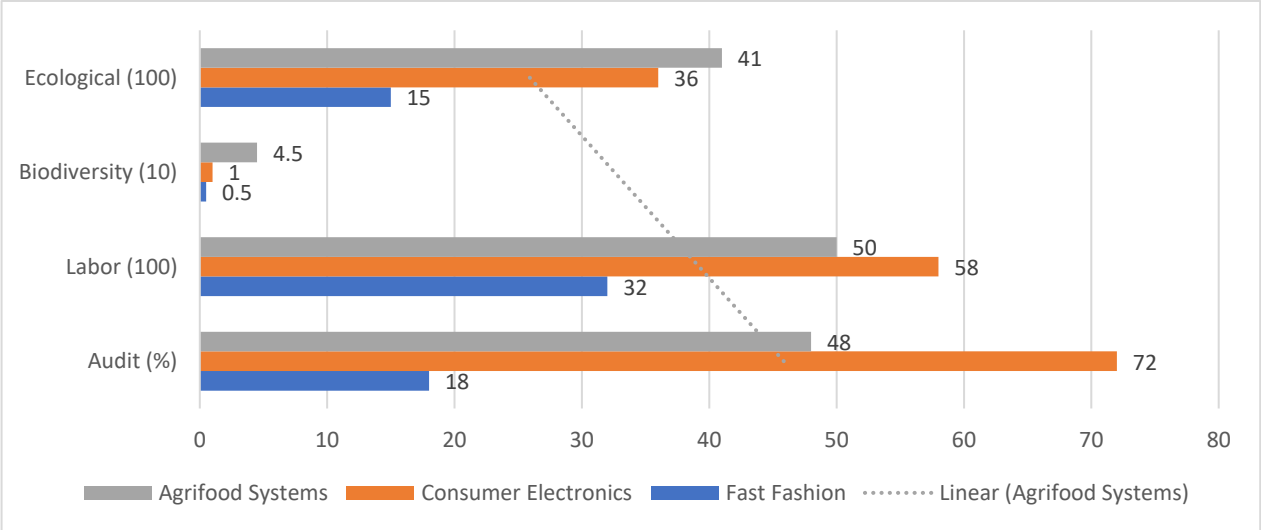


***Figure 2: Comparative Ethical Governance Performance Across Sectors Based on Five Key Indicators.***

## 5. DISCUSSION

The results of this study expose a widespread ethical deficit in global supply chains in the fast fashion, consumer electronics, and agrifood sectors. Even though sustainability is more and more rhetorically embraced, ethical governance is still limited by anthropocentric assumptions and instrumental priorities. These limitations are reflected in uneven audit practices, shallow ecological accountability and near total exclusion of non-human entities from formal accountability structures. By means of five key ethical indicators, this analysis sheds light on sector-specific patterns and overall governance failures, calling for a fundamental rethinking of responsibility in the planetary era. In the fast fashion industry, the findings highlight a deep reliance on aestheticized ethics – public-facing sustainability stories that favour consumer perception over real structural change. With audit coverage at 18% and labor transparency at 32/100, there is little evidence of meaningful oversight in upstream supply chain tiers where labor exploitation and environmental harm are most acute. Biodiversity consideration and ecological risk disclosure are nearly non-existent, and there are no metrics to measure non-human impacts. This verifies "institutional multispecies blindness" (Celermajer et al. 2025) in which ethical gestures are disentangled from material realities. Fast fashion still uses ethics instrumentally for reputation gain while avoiding more profound involvement with multispecies justice or ecological interdependence. The consumer electronics sector offers a different but equally constrained governance model. Having the highest audit coverage (72%) and moderate labor transparency (58/100), it seems to be

procedurally advanced. However, this orientation is very technocratic, with metrics and traceability coming at the expense of ethical substance. Biodiversity received a score of 1.0/10, and ecological risk disclosure (36/100) was too narrow, covering carbon and energy only, but not habitat disruption or species harm. The lack of non-human impact metrics demonstrates further how ethics is reduced to calculable risks on a systemic level. As Nguyen and Zuidwijk (2025) criticize, this data-driven formalism produces an illusion of sustainability at the expense of moral deliberation and relational accountability. The governance logic in this case is an optimization mindset and not a justice mindset. Agrifood systems, despite the uneven implementation, exhibit early-stage indicators of ethical pluralism. Audit coverage (48%) and labor transparency (50/100) imply limited human accountability, whereas biodiversity (4.5/10) and ecological risk disclosure (41/100) indicate greater involvement in soil health, pesticide effects, and species restoration. Remarkably, agrifood was the only sector to incorporate partial non-human impact metrics. Nevertheless, these references are aspirational, seldom incorporated into procurement decisions or supplier obligations. The fragmented nature of ethical discourse in this sector shows what Banwell et al. (2025) warn of, the danger of symbolic compliance, where ethical aspirations are spoken of but not implemented. Even at its relative best, agrifood governance persists in reproducing anthropocentric hierarchies, with no institutional mechanisms for transformative change. Taken together, these results support the existence of a tiered structure of ethical engagement. Downstream processes nearer to consumers are given more attention, upstream nodes, where ecological degradation and exploitation of labor converge, remain obscure. Throughout all sectors non-human life remains structurally marginalized, either made invisible or dealt with in non-binding gestures. This is indicative of the survival of extractive logics and compliance-based governance regimes that do not acknowledge the entangled, relational nature of supply chain ethics. As Luzzini et al. (2024) observe, current ESG frameworks are largely performative, with little desire to question the moral logic of production and distribution. The empirical patterns noted here confirm the critiques of post-humanist scholars like Kopnina (2022), who point out how circular economy models tend to erase ecological relationships under the cover of innovation. Likewise, Tafon et al. (2023) claim that energy transition and sustainability discourses regularly overlook multispecies justice, a pattern that is replicated in the supply chain systems discussed in this study. Even when firms use the language of justice, speaking of biodiversity, regenerative practices, or inclusive governance, the underlying structures are anthropocentric and market oriented. This research adds to the literature by developing a cross-sectoral, indicator-based framework based on posthuman ethics. It not only uncovers sectoral differences in ethical governance but also uncovers common institutional architectures that reproduce multispecies exclusion. The integration of multispecies justice as a diagnostic lens enables a more nuanced critique of ESG strategies and their limitations. Importantly, it shifts the conversation from compliance to care, from extractive rationalities to relational ethics. Future research must continue this trajectory by probing the deeper scaffolding—logistical, financial, legal—that enables ethical evasion. More ecologically intensive sectors such as mining, pharmaceuticals, and data infrastructure warrant urgent attention, given their global impact and opacity. Scholars should also engage Indigenous and decolonial epistemologies that articulate alternative modes of responsibility rooted in reciprocity, sovereignty, and ecological interdependence. These perspectives challenge the Cartesian separations embedded in Western governance, offering a radical rethinking of ethical obligation as a shared, horizontal entanglement. Methodologically, there is a need to expand the repertoire of analysis. Multispecies ethnography, discourse analysis, and computational mapping could uncover the affective, spatial, and discursive dimensions of harm. The development of post-qualitative audit tools that assess habitat integrity, species displacement, and interspecies dependency—could shift ESG reporting from numeric abstraction toward lived ecological realities. Collaborations between legal theorists, political ecologists, and corporate ethicists could further institutionalize these insights through mechanisms such as multispecies advisory boards, non-human personhood recognition, and hybrid governance models. The discussion affirms that supply chain governance, while discursively evolving, remains structurally constrained by anthropocentric paradigms. Ethical progress must move beyond language and metrics toward an ontological reordering of value, inclusion, and justice. Multispecies accountability should not remain a rhetorical appendage to ESG policy—it must become foundational to what it means to act responsibly in a world shaped by crisis, entanglement, and shared vulnerability.

## 6. CONCLUSION

This study critically examined the ethical governance architectures of fast fashion, consumer electronics, and agrifood supply chains through a post-humanist and multispecies justice lens. By employing five core ethical governance indicators—upstream audit coverage, labor transparency, biodiversity consideration, ecological risk disclosure, and non-human impact metrics—the research provided a sector-specific yet comparative analysis of how ethics is constructed, performed, and often undermined in contemporary supply chain systems. The findings reveal that despite the increasing institutionalization of ESG frameworks and the prevalence of sustainability discourse, ethical commitments remain fundamentally anthropocentric, instrumental, and structurally narrow. Fast fashion continues to exemplify the superficial application of ethics, favoring aesthetic sustainability narratives while excluding upstream labor and ecological realities. The consumer electronics sector, although procedurally rigorous with higher audit scores and standardized labor disclosures, is constrained by technocratic formalism that reduces ethics to data compliance. In contrast, agrifood systems demonstrated the highest degree of discursive engagement with ecological themes and were the only sector to incorporate partial non-human impact metrics. However, the operationalization of these commitments remains inconsistent, highlighting the persistence of symbolic rather than structural ethical inclusion. Across all three sectors, the instrumentalization of ethics as a tool for reputational management is evident, revealing a systemic refusal to embed relational and multispecies accountability into corporate governance structures. The research affirms that prevailing supply chain ethics—while evolving in language—remain static in practice, rooted in extractive logic and human-centered assumptions that exclude the moral consideration of non-human life. To address these critical gaps, this study advocates for a transformative rethinking of ethical supply chain governance. Future frameworks must move beyond performative inclusion toward systemic redesign. This entails embedding ecological co-agency, legal personhood for non-human entities, and cross-species equity into procurement, reporting, and regulatory infrastructures. Multispecies justice must no longer be treated as an aspirational supplement to economic performance, but as a foundational requirement for ethical legitimacy in an era defined by ecological collapse, systemic inequality, and planetary interdependence.

## REFERENCES

Banwell, S., Nelson, V., & Dehbi, F. (2025). Achieving sustainability transformations for multi-species justice: assessing the potential of diverse legal pathways and societal struggles. *Sustainability Science*, 1-19.

Banwell, S., Nelson, V., & Dehbi, F. (2025). Achieving sustainability transformations for multi-species justice: assessing the potential of diverse legal pathways and societal struggles. Sustainability Science, 1-19.

Bhawna, Kang, P. S., & Sharma, S. K. (2024). Bridging the gap: a systematic analysis of circular economy, supply chain management, and digitization for sustainability and resilience. *Operations Management Research*, *17*(3), 1039-1057.

Cao, Y., Lawson, B., & Pil, F. K. (2024). Social sustainability and human rights in global supply chains. *International Journal of Operations & Production Management*, *44*(1), 370-390.

Cao, Y., Lawson, B., & Pil, F. K. (2024). Social sustainability and human rights in global supply chains. International Journal of Operations & Production Management, 44(1), 370-390.

Celermajer, D., & McKibbin, P. (2023). Reimagining relationships: multispecies justice as a frame for the COVID-19 pandemic. *Journal of Bioethical Inquiry*, *20*(4), 657-666.

Celermajer, D., Burke, A., Fishel, S., Fitz-Henry, E., Rogers, N., Schlosberg, D., & Winter, C. (2025). Institutionalising Multispecies Justice. *Elements in Earth System Governance*.

Celermajer, D., Burke, A., Fishel, S., Fitz-Henry, E., Rogers, N., Schlosberg, D., & Winter, C. (2025). Institutionalising Multispecies Justice. Elements in Earth System Governance.

Celermajer, D., Chatterjee, S., Cochrane, A., Fishel, S., Neimanis, A., O'brien, A., ... & Waldow, A. (2020). Justice through a multispecies lens. *Contemporary Political Theory*, *19*, 475-512.

Eyo-Udo, N. L., Odimarha, A. C., & Ejairu, E. (2024). Sustainable and ethical supply chain management: The role of HR in current practices and future directions. *Magna Scientia Advanced Research and Reviews*, *10*(2), 181-196.

Kopnina, H. (2022). Exploring posthuman ethics: Opening new spaces for postqualitative inquiry within pedagogies of the circular economy. Australian Journal of Environmental Education, 38(3-4), 361-374.

Luzzini, D., Pagell, M., Devenin, V., Miemczyk, J., Longoni, A., & Banerjee, B. (2024). Rethinking Supply Chain Management in a Post-Growth Era. *Journal of Supply Chain Management*, *60*(4), 92-106.

Lyu, H., Hao, L., Li, L., Zhang, S., & Poon, C. S. (2023). The development of sustainable cement pastes enhanced by the synergistic effects of glass powder and carbonation curing. *Journal of Cleaner Production*, *418*, 138237.

Nguyen, L. T., & Zuidwijk, R. (2025). Sustainable supply chain governance: A literature review. *Business Ethics, the Environment & Responsibility*, *34*(2), 541-564.

Raymond, C. M., Rautio, P., Fagerholm, N., Aaltonen, V. A., Andersson, E., Celermajer, D., ... & Schlosberg, D. (2025). Applying multispecies justice in nature-based solutions and urban sustainability planning: Tensions and prospects. npj Urban Sustainability, 5(1), 2.

Silva, M. E., Pereira, S. C. F., & Sehnem, S. (2025). Shaping supply chain circularity trajectory: the role of path dependence. The International Journal of Logistics Management.

Stanley, T., Hirons, M., Turnbull, J., Lorimer, J., Kumeh, E. M., Hafferty, C., ... & McDermott, C. L. (2025). Just nature recovery: A framework for centring multispecies and multi-dimensional justice in land management. *Environmental Science & Policy*, *164*, 103992.

Tafon, R., Saunders, F., Pikner, T., & Gilek, M. (2023). Multispecies blue justice and energy transition conflict: examining challenges and possibilities for synergy between low-carbon energy and justice for humans and nonhuman nature. Maritime Studies, 22(4), 45.

Wilhelm, M. (2024). Mandatory due diligence legislation: a paradigm shift for the governance of sustainability in global value chains?. *Journal of International Business Policy*, 1-7.