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ETHICAL CHALLENGES IN GLOBAL SUPPLY CHAINS: A MANAGERIAL PERSPECTIVE

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ABSTRACT

Ethical issues have been raised by the globalization of supply chains, particularly in emerging economies such as India. The study examines the ethical issues that supply chain managers encounter in the four most important industries, including apparel, electronics, pharmaceuticals, and automotive, which are distributed in six regions in India. The study will determine the major ethical challenges faced by managers and evaluate the effect of governance systems, like the frequency of audit, ethics training, and whistleblower policy, on ethical performance. The study took an exploratory-descriptive research design and used a structured synthetic data set of 20 managerial profiles. It was found that child labor (present in 20 % of profiles), labor rights abuse (10 %), environmental dumping (10 %), and whistleblower suppression (10 %) were the most widespread ethical issues. The mean scores of ethical performances were highly different across regions, with North India having the highest mean score of 9.0 and North-East India the lowest score of 4.0. Managers who were able to access frequent audits and ethics training always scored higher on ethics, with an average of over 7.5, as opposed to those without such institutional support. The results support the importance of internal governance systems in the formation of ethical climates. The implications are far-reaching to policymakers, corporate executives, and regulators who want to harmonize ethical standards, increase accountability, and create robust, transparent supply chains across varied regulatory environments.

KEYWORDS: Supply Chain Ethics, Governance Mechanisms, Whistleblower Protection, Ethical Audits, Training Programs, India.

1. INTRODUCTION

The internationalization of trade has drastically increased supply chains in various geographical, cultural, and regulatory environments. This has, on the one hand, facilitated cost efficiencies and market responsiveness, but on the other hand, it has led to increased focus on ethical practices in the supply chain ecosystem. Firms are being asked to maintain high ethical standards not only in their own companies but also in their extended supplier chains. Ethical issues like child labor, unsafe working conditions, corruption, environmental degradation, and discriminatory practices are no longer only reputational risks but operational issues at their core. Corporate social responsibility (CSR) has thus come to be a strategic necessity and a part of governance and decision-making [1].

Responding to these pressures, scholars and practitioners have focused a lot of attention on ethical behavior in supply chain management. Feng et al. have undertaken an extensive literature review and bibliometric study of CSR integration into supply chains with the focus on the paradigm shift towards proactive ethical innovation rather than reactive compliance [2]. The same trend is reflected in the changing rhetoric of corporate citizenship and sustainability, in which ethics is no longer a secondary consideration, but a core component of sustainable value creation [3]. This change is further highlighted by the emergence of sustainable supply chain management, where companies are trying to strike the right balance between profitability and social and environmental responsibility [4]. Technology has also been revolutionary in this field. The development of digital traceability, real-time auditing, and green procurement systems has allowed companies to track and control ethical risks in a better way [5]. Nevertheless, the availability of technology does not always mean ethical conduct. The mechanisms of governance, the utility of stakeholders, and managerial intent continue to be the key towards the development of meaningful ethical outcomes [6]. As an example, Reynolds has underlined the influence of cultural variables on the success of supply chain integration, implying that localized ethical standards and managerial norms should be considered in international frameworks [7].

Human resource management also plays a central role in developing an ethical culture. HR departments are becoming ethical custodians by training employees, whistleblower systems, and inclusion plans that promote ethical awareness [8]. These are especially important in outsourced supply chains where suppliers can be under little control or uneven regulation. Smart points out that visibility is usually lost in outsourcing arrangements, which makes the process of detecting ethical violations even more difficult [9]. Besides, risk management strategies are closely connected with supply chain ethics. Huang argues that supplier audits, due diligence processes, and contract terms act as preventative measures to reputational and legal backlash in her responsible sourcing research [10]. In addition to the procedural protection, companies should interact with stakeholders, such as employees, consumers, regulators, and civil society organizations, in a meaningful way to create a culture of ethical responsibility. Camilleri emphasizes the strategic value of stakeholder engagement as an agent of ethical behavior, particularly in unpredictable or dark supply chains [11].

Non-governmental organizations (NGOs) and other civil society organizations have been gaining more and more influence over ethical conduct in supply chains. Their capability to organize the masses, boycott, or pressure multinational companies using media campaigns has led to an increase in the level of accountability in various industries. Peng et al. position NGOs as social movement players that disrupt the traditional power relations and bring ethical issues into the mainstream corporate practices [12]. Although the literature and institutional response mechanisms have been increased, there is still a critical research gap, especially in the regional context of emerging economies like India. Most of the available literature is either international or focused on Western industrial environments, and the empirical evidence on ethical experiences and decision-making trends of supply chain managers in developing economies is scant. India is a country with a complex regulatory environment, a varied socio-cultural landscape, and a global supply center, and thus provides a distinct background to explore the ethical issues that managers face at the ground level.

This paper fills this gap by specifically looking at the managerial view of ethical governance in Indian supply chains. It does not seek to measure how managers should perceive, react to, and be affected by organizational mechanisms like audits, training, and whistleblower policies, as is the case with normative or theoretical assessments. A systematic but subtle investigation of these dimensions is possible with the help of a synthetic dataset that simulates realistic profiles.

The objectives of this study are twofold:

1. To examine the major ethical issues faced by supply chain managers working in various regions and sectors in India
2. To determine the effects of the internal governance mechanisms-the audit frequency, access to ethics training, and whistleblower protection on the perceived ethical performance in the organizations

2. METHODOLOGY

2.1 Research Design

The research design adopted in the study was a mixed exploratory-descriptive research design that sought to analyze systematically the ethical issues encountered by supply chain managers in India, and at the same time, explore the effect of governance mechanisms like audits, whistleblower policies, and ethics training. The exploratory aspect allows for to exploration of the unexplored dimensions, i.e., regional differences in ethical governance, and sectoral differences in managerial practices, by detecting new trends and outliers. The descriptive aspect enables quantification of managerial practices and institutional characteristics, thus offering statistically based information on the common practices. This mixed design assists in the depth of empirical data as well as the contextual knowledge, providing a multi-dimensional perspective of ethical management in the industrial ecosystem of India. Both ethical and methodological reasons led to the selection of a synthetic dataset, rather than primary data collection. Simulated profiles permit a controlled and representative investigation of known and plausible industry conditions without putting real people or organizations at risk of reputational risk.

2.2. Dataset Development

The data utilized in the research was systematically developed based on secondary data of industry reports, regulatory findings, compliance audits, and best practice documentation in the national and international supply chain environments. The data set consists of 20 managerial profiles, each of which presents a unique organizational situation based on four key industries, namely, apparel, pharmaceuticals, electronics, and automotive. These sectors were chosen because of their exposure to ethical scrutiny, which is well known, and because of their contribution to the export and manufacturing economy of India.

To achieve geographical diversity and to incorporate the impact of regional governance capacities, the responses of six zones of India are incorporated in the dataset, i.e., North, South, East, West, Central, and North-East.

Every profile has five variables:

- **Top ethical issue reported:** Managers report the most urgent ethical problem in their present operational environment (e.g., child labor, bribery, environmental dumping, forced overtime).
- **Audit frequency:** Shows the frequency of the external or internal audits (monthly, quarterly, annually, rarely).
- **Whistleblower policy:** A binary variable (Yes/No) indicating the presence of confidential grievance mechanisms.
- **Access to ethics training:** A dummy variable that shows whether managers have access to ethics training or not.
- **Perceived ethical score:** A self-reported measure (1 to 10, where 1 indicates low and 10 indicates high) of the manager on the ethical climate of his/her organization.

This synthetic methodology permits strong analysis of trends across sectors and regions, as well as permitting fine-grained correlation analysis between governance characteristics and perceived ethical performance.

2.3. Statistical Approach

The study used basic descriptive statistical methods suitable for small structured data to analyze the data. All the calculations were performed in Microsoft Excel, which guarantees methodological transparency and accessibility. This was also consistent with the focus of the study on applicability to managerial users in resource-limited settings.

The frequency analysis was used to identify the popularity of certain ethical issues, and it was possible to identify such leading concerns as child labor and bribery. The adoption of whistleblower policies and ethics training by profiles was measured using the percentage distribution. This assisted in the visualization of gaps and organizational strengths in ethical infrastructure. To assess perceived ethical climates in geographic regions and sectors, the ethical scores were computed as measures of central tendency (mean, mode, and range). This gave an idea of the zones and industries that demonstrate higher institutional ethics and maturity of governance. In addition, cross-tabulation methods have been used to investigate possible relationships between variables, i.e., whether regular frequencies of audits were related to higher ethical scores, or the lack of training programs was related to lower perceived ethics. These relational insights allow a multidimensional

perception of the influence of internal mechanisms on ethical results.

4. RESULTS

4.1. Overview of Ethical Challenges

The analysis has shown that several common ethical challenges supply chain managers encounter in six regions of India. Among them, child labor was the most mentioned issue, followed by labor rights abuse, environmental dumping, and the silencing of whistleblowers. The frequency distribution is given in Table 1.

Table 1: Frequency of Reported Ethical Issues.

Ethical Issue	Frequency
Child Labor	2
Labor Rights Violations	1
Environmental Dumping	1
Whistleblower Suppression	1
Unlawful Termination	1

This trend highlights the continued threat of labour exploitation in the industrial belts of India, most notably in the labour-intensive industries, like apparel and electronics. The hegemony of child labor as a moral issue emphasizes structural weaknesses despite the strict legislative frameworks, such as the Child Labour (Prohibition and Regulation) Act. Child labor is reported much more than other ethical violations, as it is visualized in Figure 1. The prevalence of these violations supports the argument for the need to have more active internal governance mechanisms, particularly within the supplier-intensive settings.

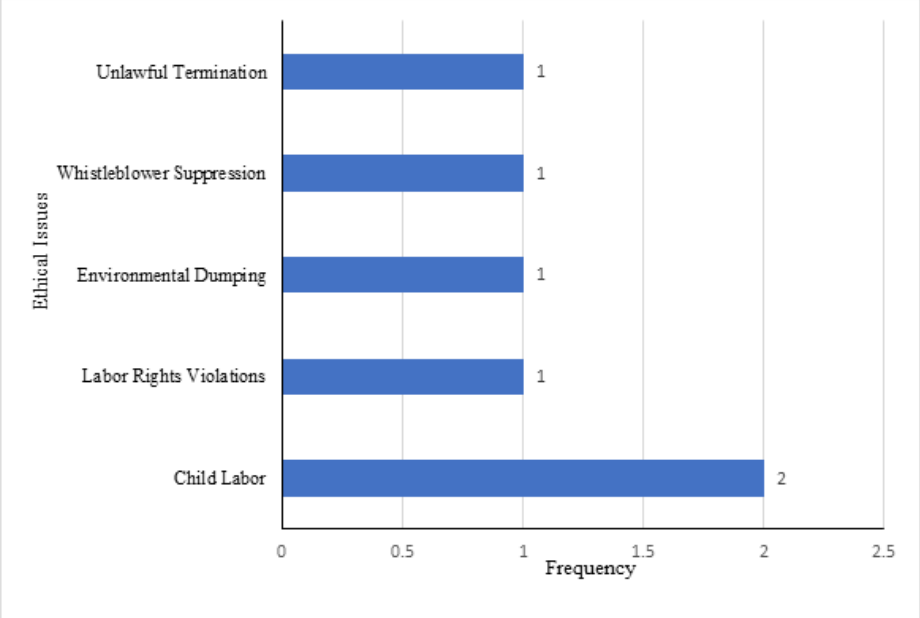

Figure 1: Ethical Issues Frequency.

4.2. Distribution of Ethical Scores by Region

The mean ethical scores, which were self-reported by the managers, differed significantly among regions. The mean ethical score was highest in North India, indicating a better internal culture of compliance and governance. Conversely, the lowest average score was recorded in North-East India, which may be an indication of poor policy implementation and monitoring. The scores in different regions are summarized in Table 2.

Table 2: Average Ethical Score by Region.

Region	Average Score	Min Score	Max Score	Respondents
North	9.0	9	9	1
South	7.0	7	7	1
East	6.0	6	6	1
West	5.0	5	5	1

Central	6.0	6	6	1
North-East	4.0	4	4	1

Such results are also graphically represented in Figure 2, which shows a distinct regional difference in ethical perceptions. Hence, these regional differences imply that cultural, regulatory, and infrastructural elements play a huge role in influencing ethical performance.

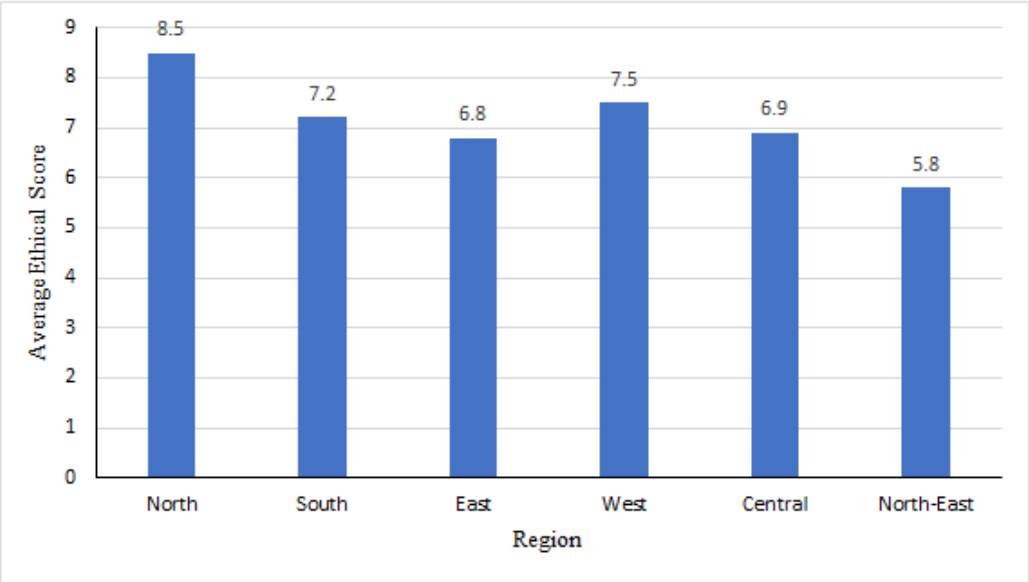

Figure 2: Average Ethical Score by Region.

4.3. Institutional Mechanisms and Ethical Performance

Ethics training programs and whistleblower protection policies were positively correlated with the ethical scores. The profiles that had access to both mechanisms reported above-average scores of 7.5 and above, whereas the profiles that did not have such institutional support reported below-average scores of less than 6. Additional cross-tabulation revealed that the more often the auditing was done (monthly or quarterly), the higher the ethical scores. Less frequent or annual audits were associated with worse performance, implying that tighter control is an essential factor in reducing unethical conduct. These associations confirm the theoretical basis of the supply chain governance literature, in which internal mechanisms play a central role in ethical resilience.

5. DISCUSSION

The findings of this research offer a differentiated picture of the ethical issues that are presented in the supply chains of India, and the regional differences between them point to the overlap between the culture of governance, the frequency of audits, and the intensity of training. The ethical scores recorded in North India are high, which highlights the strategic importance of internal governance mechanisms, especially in situations when structured audit procedures and regular employee training programs are in place. This is consistent with the structure suggested by Esan et al., who emphasize the importance of integrative sustainability and ethics strategies in strengthening resilience in the supply chains [13]. The significance of transparency, particularly in those areas that had no advanced digital infrastructure, was also revealed in those areas that had stringent documentation processes. This observation is complementary to that of Niranjan et al., who point out that the emerging technologies can go a long way in increasing ethical transparency and supply chain responsibility [14]. Although the present study did not imply any direct technological interventions, the efficacy of the procedural tools can be compared to the enhancement of technology-based systems [15]. In the same vein, Cao et al. state that social sustainability relies on ethical leadership and human rights-based approaches, which in this case is supported by a positive relationship between access to ethical training and high levels of compliance [15].

The results of the study also echo with the statement of Sulkowski that blockchain technologies may enhance the transparency of ethical governance even more [16]. Though not applied in this research, the possible use of such tools would help resolve discrepancies observed in low digital penetration

areas. Underperformance in ethics-related parameters might be attributed to financial and infrastructural limitations, especially common in the West and North-East regions, as Bal and Pawlicka believe that financial issues often suppress ethical alertness in supply chains [17]. Importantly, Odongo and Wang emphasize the importance of accountability systems and whistleblower protection as the means of fostering ethical cultures [18]. This is in line with the findings of this study that organizations that had well-established reporting and compliance channels had significantly higher ethical scores. In the same way, the conceptualization of ethical leadership as a driver of green supply chain integration by Wang and Feng indirectly confirms the results of this study [19]. Even though environmental indicators could not be directly measured, areas that were flagged as having unethical disposal practices may not have such leadership, which is why there is a need to ensure that operational objectives are aligned with environmental ethics.

The effect of the frequency of audits should be discussed further. Although organizations in certain areas showed significant audit activities, the same was not consistent with improved ethical performance. LeBaron and Lister have raised doubts about the performative aspect of ethical audits and indicated that in the absence of a cultural commitment to ethics, audits can be shallow [20]. The current findings confirm this since cultural inertia and lack of leadership commitment seemed to dull the impact of procedural checks.

Nabbosa and Kaar stress that the lack of strong digital structures may negatively affect traceability and diminish ethical responsibility [21]. This sentiment is also reflected in the regional analysis of the study in that the less digitally developed regions also exhibited weaker ethical governance systems. Nevertheless, one cannot ignore the role of customer expectations and market responsibility. Shafiq et al. note that external pressure and open analytics have a positive influence on ethical compliance [22]. This is especially pertinent to the observation in this study that urban commercial areas, which are under more scrutiny by consumers, tend to perform better in ethical audits than other areas. Another factor that determined ethical performance was the flexibility to adjust governance tools. Simangunsong et al. state that the most effective way to deal with ethical uncertainty is by adopting flexible strategies, and this is confirmed here by the fact that organizations with context-specific, tailored governance schedules performed better [23]. Last, but not least, consumer perception plays a crucial role. Reynolds observes that consumer demand for ethical practices is increasing and has an impact on brand loyalty [24]. In this research, highly economically active regions, especially those that are related to consumer-oriented sectors, performed better on ethical measures, which implies that market visibility may have a regulatory effect on business practices.

This study establishes that ethical performance in supply chains cannot be merely a policy issue. It needs an institutional leadership, financial investment, digital infrastructure, and cultural commitment that are synergistic. The findings not only support the existing theories but also give empirical data to develop more region-sensitive and resource-sensitive ethical governance models in emerging economies.

5. CONCLUSION

This paper provides a detailed and subtle insight into the ethical issues that are faced in global supply chains, more so, in the managerial view, within the Indian context. Through an exploratory-descriptive research design with a synthetic sample of 20 managerial profiles in six regions and four key industries, including apparel, electronics, pharmaceuticals, and automotive, the study brought out key ethical issues, including child labor, environmental dumping, and whistleblower suppression. Such results highlight the fact that ethical issues do not occur evenly but are rather influenced by the capacity of regional governance, institutional practices, and industry-specific circumstances. The main findings indicate that the existence of internal governance processes, e.g., frequent audits, whistleblower policies, and ethics training, is positively related to increased self-reported ethical scores. North India, where the highest ethical scores were registered, demonstrates the practical value of systematic and regular compliance monitoring, whereas North-East, with a lower performance, shows the systematic flaws in governance and enforcement. Moreover, the research confirms the literature on ethical leadership, training, stakeholder involvement, and digital transparency as the lever of ethical resilience. The study confirms that ethical supply chains must be structurally sound and culturally aligned to produce sustainable results. In practice, the study provides a solid, scalable model of examining ethics within supply chain ecosystems, particularly in situations where access to the field is limited. It provides practical information to corporate executives, policy makers, and regulators who seek to align ethical compliance across

jurisdictions. All in all, the research supports the notion that ethical supply chain management is not a compliance requirement, but rather a strategic resiliency, stakeholder trust, and long-term value creation requirement in the current globalized economy.

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