



HRM Strategies for Environmental and Social Impact in Odisha's IT Firms

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ABSTRACT

This research explores the degree to which social and environmental sustainability practices are incorporated into Human Resource Management (HRM) in the IT industry of Odisha. Drawing on information gathered from 100 HR experts from small, medium, and big IT companies located in Bhubaneswar, Cuttack, and Rourkela, this research points out main sustainability measures already being practiced. Environmental sustainability initiatives are largely centered on virtual HR activities and telecommuting, among other flexible work options, that minimize the industry's ecological footprint. Nevertheless, the research records a relative deficit in environmental training and sensitization programs. Social sustainability initiatives such as diversity and inclusion training, equal remuneration, gender diversity, and employee mental wellbeing support are increasingly formalized, although community engagement activities need more emphasis. Notably, the research discloses that sustainable HRM practices contribute positively to organizational performance through improved employer branding, employee retention, and cost savings in operations. The findings of this research imply that incorporating sustainability into HRM is not merely a regulatory or moral obligation but also a business strength for IT firms in Odisha. The study highlights the imperative role of HR professionals in integrating sustainability into organizational culture and practices and thus promoting responsible, long-term growth in the region's IT sector.

Keywords: Sustainable HRM, Environmental Sustainability, Social Sustainability, IT Sector, Odisha, Digital HR Processes, Gender Inclusivity, Employee Retention.

1. INTRODUCTION

Over the past few years, incorporating sustainability into organizational functioning has become a key area of concern for global businesses. The development has been accelerated by growing environmental issues, increasing social inequalities, and the worldwide movement towards corporate responsibility. In light of the same, Human Resource Management (HRM) has progressed from its conventional administrative role to become a strategic ally for instilling sustainability into the fabric of the organization. HR departments now have the central responsibility of developing and implementing policies that not only guarantee compliance but also ensure long-term environmental responsibility and social justice.

The IT industry in Odisha is growing at a fast pace, and it is playing an immense role in the economic growth of the state. While growing, the industry is also facing increasing pressure from the stakeholders—including customers, regulators, and employees—to become more sustainable in its business practices. Environmental sustainability in HRM is being realized through green initiatives like paperless digital workflows, telecommuting to minimize carbon footprints, and recruitment processes focusing on eco-friendly skills. At the same time, social sustainability is also gaining momentum, with greater focus on gender diversity, mental health of employees, diversity of the workplace, and community. All these activities demonstrate a larger-than-life approach towards building ethical, inclusive, and resilient organizations.

This study seeks to explore the prevailing scenario of social and environmental sustainability practices in HRM among IT firms in Odisha. Through examining the manner of adoption and belief, the study attempts to find out how far integration has taken place and its influence on firm performance. The results should provide insights into the efficacy of sustainable HRM practices and provide policy makers, HR managers, and business

leaders with practical guidance for improving their sustainability profile. Finally, this research highlights the scope of HRM as a vehicle for propelling environmentally and socially sound development in the IT industry.

1.1. Scope of the Study

IT industry located in Bhubaneswar, Cuttack and Rourkela are included in this research. Human Resources Sustainability Management studies green practices in recruitment, efficient digital routines, tools for promoting inclusivity and partnering with the community. The research focus only on information from HR specialists, managers and sustainability officers. The study pointed out not only the present activities but also the strategic and operative merits of sustainable HRM.

1.2. Objectives of the Study

The study's objectives are to:

- Evaluate how well environmental sustainability principles are being incorporated into Odisha IT companies' HRM systems.
- To assess how HRM incorporates social sustainability goals including community involvement, mental health, and gender equality.
- To examine how sustainable HRM approaches are thought to affect organisational success, with a focus on operational cost reduction, employee retention, and employer branding.

2. LITERATURE REVIEW

Kaith and Sachdeva (2024) investigated the adoption of Green Human Resource Management (Green HRM) practices by leading Indian companies like ITC and ONGC. Their paper pointed out how environmental sustainability was incorporated into HR functions like recruitment, training, and employee engagement and led to sustainable business growth. They underlined the fact that organizations embracing Green HRM practices had seen enhanced environmental performance while developing employee consciousness and commitment towards green practices. The study offered useful findings on the strategic position HR departments had taken in infusing sustainability into corporate culture, particularly in industries with large environmental impacts.

Khatua et al. (2024) constructed a benchmarking model of HRM drivers in the big mining sector based on an Interpretive Structural Modeling (ISM) framework. The research sought to establish and rank principal HR best practices that lead to organization efficiency and sustainability for a sector with intricate operational and environmental issues. The study highlighted the need for structured HRM models for striking the right balance between workforce administration and sustainability targets, particularly in resource-driven sectors. Their study helped advance knowledge on how HRM interventions could help promote sustainable development goals through tailored policy implementation and ongoing improvement.

Kumari and Singh (2024) discussed the theme of social sustainability in the Human Resource Management framework through the philosophical paradigm of "dharma of work." Their research highlighted the potential of harmonizing HR practice with social and ethical obligations for meeting the intricate needs of social sustainability of the future workforce. They maintained that it was important to instill a sense of social purpose and commitment among employees to build agile and inclusive workplaces. The study emphasized the new HR practices that combine social values, employee well-being, and community involvement as the cornerstones of sustainable organizational development.

Leena et al. (2023) examined the leadership role of corporate social responsibility (CSR) in promoting sustainable development goals (SDGs) from the viewpoints of responsible business leaders. Their empirical research examined CSR activities' alignment with overall sustainability agendas, where special focus was laid on leadership dedication, stakeholder interaction, and ethical business. The study presented evidence that successful CSR not only leads to social and environmental impacts but also enhances organizational reputation and long-term sustainability. Their report highlighted the leading role of leadership in promoting sustainable business approaches that benefit both society and company success.

Mishra and Rath (2023) performed a comparative analysis of the effects of green Human Resource Management (HRM) practices on the environmental Corporate Social Responsibility (CSR) efforts of Indian banks, studying both a public sector and private sector bank. Their findings showed that green HRM practices, including environmental-friendly recruitment, training in environmental awareness, and sustainable workplace policies, had a significant positive effect on the banks' commitment to environmental CSR. The research indicated that although both banks exhibited positive results, the private bank exhibited more organizational support and innovation in the application of green HRM to its CSR system, signaling stronger organizational support and a greater emphasis on sustainability practices. The research highlighted the strategic capability of HRM in institutionalizing environmental responsibility into corporate activities and the necessity for sector-specific applications of green HRM to achieve enhanced environmental effects.

Mishra and Rath (2024) carried out an empirical research study analyzing the influence of Green Human Resource Management (GHRM) practices on the environmental performance of the Indian banking industry. Their study exhibited the way the implementation of environmentally friendly HR practices—like green recruitment, training, and performance management—played a vital role in enhancing the overall

environmental performance of banks. The research revealed that public as well as private banks applying GHRM programs exhibited quantifiable decreases in their environmental impacts, highlighting that HR practices have an important part to play in supporting organizational sustainability endeavors. In addition, Mishra and Rath underscored the strategic significance of incorporating green HRM practices as a way to boost not just ecological accountability but organizational competitiveness in the banking sector.

3. RESEARCH METHODOLOGY

The research utilized a descriptive research approach, using purposeful sample of one hundred information technology company human resource experts in Odisha. The data collection process involved using structured questionnaires. Data analysis was conducted through descriptive statistics, and the findings were presented in tables and graphs. Excel and SPSS were used.

3.1. Research Design

The research takes a descriptive research design to investigate the level at which environmental and social sustainability practices are merged into Human Resource Management (HRM) in the case of IT firms in Odisha. Descriptive research is appropriate since it seeks to systematically describe the present level of adoption and perception of sustainable HR practices. This design allows for the gathering of measurable data to determine trends, implementation levels, and perceived impacts of sustainability on organizational performance.

3.2. Population and Sampling

The sampling population of this study consists of HR managers, sustainability officers, and top executives in IT firms in Odisha. The purposive sampling method was used to ensure that only respondents possessing adequate knowledge about HR practices and integrating sustainability into their work were chosen. The ultimate sample size consisted of 100 respondents belonging to small, medium, and large IT firms operating in Bhubaneswar, Cuttack, and Rourkela, making the sample both geographically and organizationally diverse.

3.3. Questionnaire Design and Dimensions

The questionnaire in the study is arranged to measure the three key points linked to its objectives.

1. Environmental Sustainability in HRM: In HRM, items in this dimension look at green recruitment, digital HR processes, flexibility in the workplace and environmental training.

2. Social Sustainability in HRM: This part looked at ways organizations can boost gender inclusivity, offer support for mental health, participate in community projects and provide training on diversity.

3. Perceived Impact on Organizational Performance: Questions focused on how sustainable HRM practices influenced employer branding, employee retention, and cost efficiency.

All the items were measured with closed-ended and Likert-scale questions to guarantee the same results across respondents and the ability to count the responses.

3.4. Data Collection Method

The primary data was gathered with the help of a structured questionnaire prepared specially for this research. The questionnaire comprised closed-ended and Likert-scale questions in order to measure the frequency of social and environmental sustainability practices, and the perceptions of their effects on organizational performance. The instrument was pilot-tested with 10 participants and refinements were made as required to enhance clarity and relevance.

3.5. Tools for Data Analysis

Quantitative data gathered from the questionnaires were processed with the help of descriptive statistics, such as frequency distribution and percentage analysis. The findings were presented in three main tables and respective graphical illustrations (Figures 1, 2, and 3) to represent the adoption of sustainability practices and its effects. Microsoft Excel and SPSS software were employed to calculate percentages and form graphs for easier clarity and comprehension.

4. DATA ANALYSIS AND INTERPRETATION

Table 1 presents the use of environmental sustainability practices in Human Resource Management in Odisha IT firms. The four most important practices are green recruitment, telecommuting/flexible work, environmental policy training, and digital HR processes. The highest percentage for consistent use is found for digital HR processes at 75%, as 75% of the respondents reported always using them. Teleworking and flexible work arrangements also have high adoption, with 58% of organizations always practicing them. Green recruitment has moderate adoption, with 42% always practicing it and 38% sometimes.

Tables 1: Adoption of Environmental Sustainability Practices in HRM

Environmental HR Practice	Always (%)	Sometimes (%)	Rarely (%)
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Green Recruitment (e.g., hiring for green skills)	42	38	20
Telecommuting/Flexible Work to reduce emissions	58	32	10
Training on Environmental Policies	34	45	21
Use of Digital HR Processes (Paperless)	75	20	5

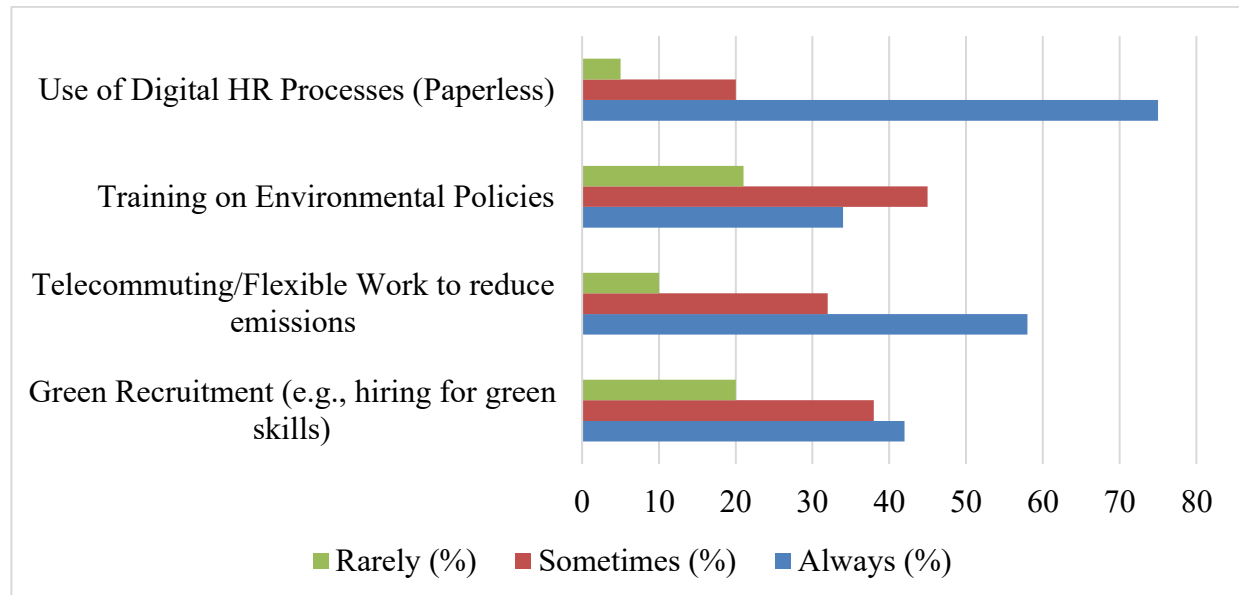


Figure 1: Graphical Representation of Adoption of Environmental Sustainability Practices in HRM

The statistics in Table 1 indicate that Odisha IT firms value technology-based solutions such as paperless HR and remote work more than awareness-based mechanisms such as environmental training. The prevalence of digital HR practices attests to a wider trend toward automation and ecologically friendly documentation systems within the industry. Lower levels of recurrent training, however, suggest areas where improvement can take place. The figure indicates that although operation practices are effectively integrated in HR strategies, sustainability's behavioral and educational aspects require greater focus. A more balanced strategy with training and skill building could increase environmental sustainability's overall contribution towards HRM. Table 2 indicates that all four of these social sustainability practices were implemented in the IT sector of Odisha with specific attention to gender inclusivity and equal pay, employee mental health support, community engagement activities, and diversity & inclusion training. Gender Inclusivity & Equal Pay has been implemented most, followed by diversity & inclusion training and mental health support. The activities of community engagement have the lowest rate of full implementation at 45%, with 20% of the respondents stating they are not implemented. Partial implementation is prevalent, especially in mental health care support and community engagement, indicating potential for improvement.

Table 2: Social Sustainability in HRM

Social Sustainability Indicator	Fully Implemented (%)	Partially Implemented (%)	Not Implemented (%)
Gender Inclusivity & Equal Pay	60	30	10
Employee Mental Health Support	50	40	10
Community Engagement Activities	45	35	20
Diversity & Inclusion Training	55	33	12

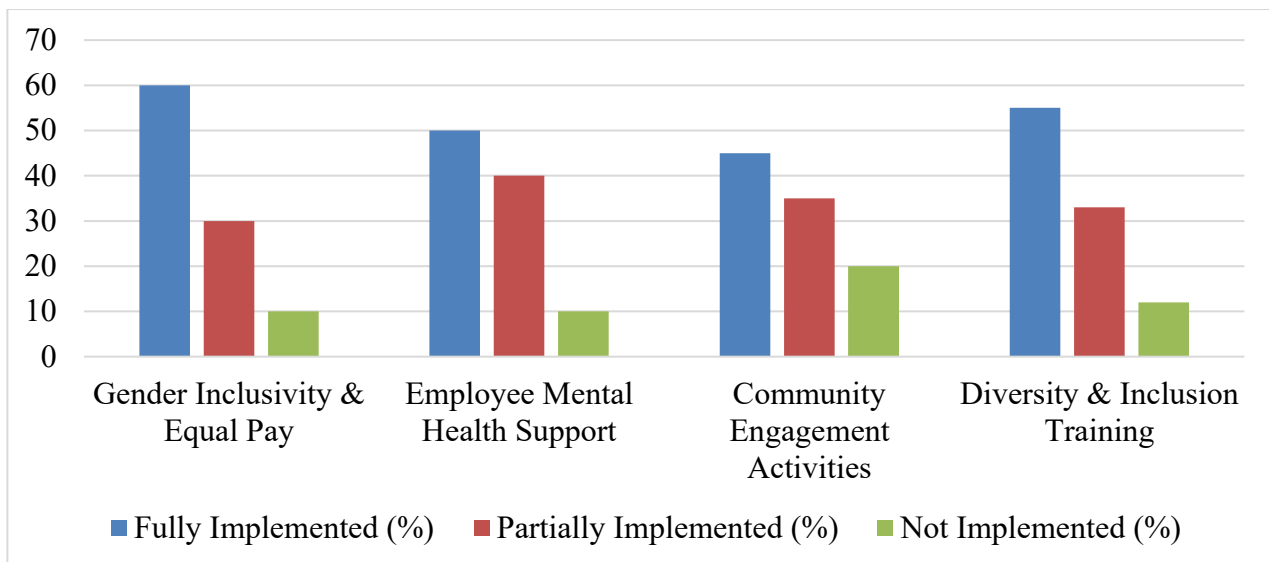


Figure 2: Graphical Representation of Social Sustainability in HRM

The graph indicates that IT companies in Odisha are moving forward in terms of encouraging equitable workplace practices, especially gender pay equity and inclusion training. There is still a gap between public policy and community-facing efforts, with less implementation of community outreach activities. Mental health support is more widely recognized, but half of the organizations have not yet institutionalized it. The number indicates that although fundamental HR policies are changing, comprehensive social sustainability, especially concerning workers' well-being and neighborhood engagement, requires additional enhancement and incorporation.

Table 3 illustrates the effect of sustainability practices on organizational performance in Odisha's IT sector. The views are segmented into three primary outcomes: employer branding improvement, employee retention increase, and lowering of operating expenses through Green HRM. Most respondents (48%) highly agree that sustainability improves employer branding, and 42% think that it improves employee retention. Cost effectiveness is also an important one, with 36% of interviewees stating that Green HRM minimizes operating costs.

Table 3: Impact Perception of Sustainability on Organizational Performance

Perceived Impact	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)
Sustainability improves employer branding	48	38	10	4
Sustainability increases employee retention	42	40	14	4
Green HRM reduces operational cost	36	45	15	4

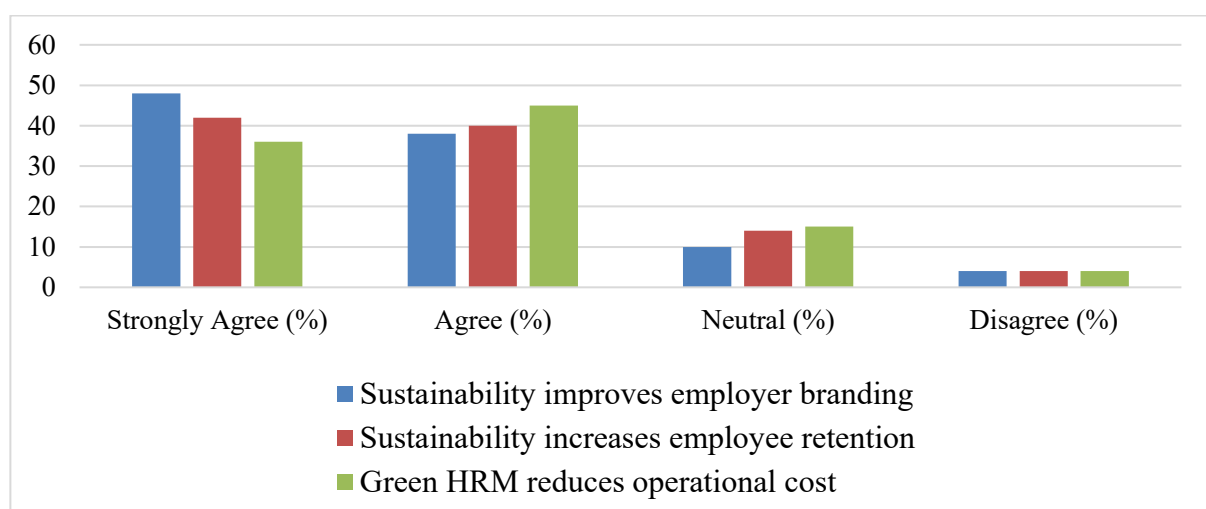


Figure 3: Graphical Representation of Impact Perception of Sustainability on Organizational Performance

The research identifies that sustainability is not just a regulatory or ethical obligation but a strategic benefit for organizations. It is perceived to strengthen employer branding, make companies come to the talent market which is competitive for IT, and retain employees. Green HRM minimizes operation costs, suggesting increased recognition of the economic worth of sustainable strategies. The low levels of disagreement across all the dimensions indicate robust support for incorporating sustainability into business strategy, both human

and business resource-wise. Overall, sustainability is perceived as an important driver of organizational performance improvement.

5. CONCLUSION

The findings of the present study unambiguously reveal that the IT firms in Odisha are actually embracing both environmental and social sustainability practices in their Human Resource Management structures, though to different extents. High usage levels of electronic HR procedures and flexible working mechanisms indicate high degrees of congruence with environmentally sustainable operational practices, whereas social sustainability procedures like gender equity, diversity management training, and counseling for mental well-being are being increasingly institutionalized. Nevertheless, sectors like environmental training and corporate community involvement remain underdeveloped, indicating potential for further improvement. Notably, the positive image of sustainability's influence on employer branding, staff retention, and cost-saving reinforces its strategic benefits over compliance or ethics. Therefore, it is clear that sustainable HRM not only supports environmental and social objectives but also adds value to organizational performance, making HR a driving force behind long-term, responsible development in Odisha's growing IT industry.

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