

THE ROLE OF GREEN HRM PRACTICES IN GREEN RECRUITMENT AND TRAINING FOR ENHANCING ECO-PERFORMANCE IN CHENNAI IT SECTORS

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Abstract

The rapid expansion of the IT sector in Chennai has brought increased focus on sustainability-oriented HR practices, particularly Green Recruitment and Green Training. This study examines the role of Green Recruitment and Training dimensions—Green Job Descriptions, Eco-Focused Advertising, Green Selection Criteria, Environmental Awareness Hiring Preference, Green Induction, Green Training Curriculum, Frequency of Skill Development, and Training Effectiveness—in enhancing Employee Eco-Performance. Primary data were collected from 300 IT employees through a structured questionnaire featuring seven Eco-Performance statements on a five-point Likert scale. Statistical tools such as descriptive analysis, Pearson correlation, and multiple regression were applied. Results reveal a significant positive relationship between all Green Recruitment and Training variables and Employee Eco-Performance. Regression analysis shows that Training Effectiveness, Green Organizational Induction, and Green Selection Criteria are the strongest predictors. The model explains 88.1% of the variance in employee eco-performance. The study highlights the need for IT organizations to strengthen green-trained competencies and eco-oriented hiring processes to achieve improved environmental outcomes. These findings provide valuable insights for HR professionals in developing effective Green HRM strategies to foster sustainability in IT workplaces.

Keywords: Green Recruitment, Green Training, Eco-Performance, Sustainability, IT Sector, Chennai.

INTRODUCTION

Organizations across the globe are shifting toward environmentally sustainable practices as part of their long-term strategic goals. Among the various approaches to corporate sustainability, Green Human Resource Management (Green HRM) has emerged as a crucial mechanism for embedding environmental values and behaviors within the workforce. Green HRM refers to HR practices that promote environmental sustainability through recruitment, training, performance assessment, and employee involvement. In the IT sector—known for its large workforce, intensive energy consumption, and extensive use of electronic resources—green-oriented HR policies are essential to ensuring effective and responsible workplace practices.

Chennai, one of India's major IT hubs, hosts a large number of multinational and domestic IT firms. These organizations increasingly integrate sustainability into HR functions to meet national environmental regulations, global sustainability standards, and rising stakeholder expectations. Green recruitment practices aim to attract candidates with strong environmental awareness and eco-efficient work habits. This involves using green job descriptions, eco-focused employer branding, and selection methods that assess environmental values. By selecting individuals who naturally align with sustainability, organizations strengthen their environmental culture.

Green training is another essential element of Green HRM. Through well-designed training modules, organizations can develop employees' environmental skills, improve resource efficiency, and promote green behavior in the workplace. Green induction programs educate new hires on organizational sustainability goals while training modules enhance long-term eco-competencies such as waste reduction, energy conservation, and safe disposal of hazardous materials. In the IT sector, such training is crucial due to high levels of energy usage, electronic waste, and resource-intensive operations.

Employee Eco-Performance represents the extent to which employees adopt environmentally responsible behaviors when performing their job roles. These behaviors include minimizing waste, conserving resources, adopting eco-friendly work processes, and meeting environmental goals set by the organization. The effectiveness of green recruitment and training directly influences these behaviors.

The present study aims to analyze how various dimensions of Green Recruitment and Training influence Employee Eco-Performance within Chennai-based IT organizations. By examining these relationships, the study provides critical insights for HR managers to enhance environmental sustainability across IT operations.

REVIEW OF LITERATURE

Green HRM research highlights the importance of integrating sustainability into HR functions to shape employee behavior. Renwick et al. (2013) emphasize that green recruitment ensures selecting candidates whose values align with environmental goals. Jabbour (2011) states that green training is a key driver of environmental performance since training builds competencies necessary to engage in eco-friendly behaviors. Zoogah (2011) notes that employees hired with a pre-existing environmental mindset tend to exhibit higher eco-performance.

Studies show that environmentally oriented recruitment policies—such as specifying green competencies in job descriptions and evaluating candidates' environmental attitudes—significantly enhance workplace sustainability (Mandip, 2012). Green employer branding also attracts environmentally conscious applicants, promoting a sustainability-driven workforce.

Training is a major contributor to employee green behavior. Paillé & Boiral (2013) found that structured green training modules and environmental awareness programs lead employees to voluntarily adopt eco-friendly practices. Jabbour and Santos (2008) highlight the importance of including environmental topics in induction programs to build early awareness.

In Indian IT firms, environmental training improves waste management, energy-saving habits, and EHS (Environment, Health & Safety) practices (Sharma & Gupta, 2019). Training effectiveness in eco-skills development directly correlates with employee performance in sustainability tasks.

Overall, literature suggests that green-focused recruitment and training strongly influence employees' environmental performance, supporting organizational sustainability goals.

RESEARCH METHODOLOGY

The objective of the study is to investigate how Green Recruitment and Training practices influence Employee Eco-Performance in Chennai-based IT organizations. A descriptive research design was adopted to analyze employee perceptions and the impact of green-oriented HR practices.

Eight independent variables were selected representing Green Recruitment and Training dimensions:

1. Green Job Descriptions and Specifications
2. Eco-Focused Recruitment Advertising and Branding
3. Green Selection Criteria and Assessment Methods
4. Hiring Preference for Candidates with Environmental Awareness
5. Induction Programs with Environmental Orientation
6. Green Training Modules and Curriculum Design
7. Frequency of Green Skill Development Programs
8. Training Effectiveness in Building Environmental Competencies

The dependent variable, Employee Eco-Performance, was measured using seven statements rated on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

A structured questionnaire was designed and administered to IT employees across major organizations in Chennai including TCS, Infosys, HCL, Wipro, IBM, Accenture, and mid-sized IT firms. A simple random sampling technique was used. Out of 330 distributed questionnaires, 300 complete responses were obtained and used for analysis.

Statistical tools applied include descriptive statistics, Pearson correlation to examine relationships among variables, and multiple regression to measure the extent of influence of each independent variable on Employee Eco-Performance. The methodology ensures reliable insights into how recruitment and training practices shape sustainability behavior.

DATA ANALYSIS AND RESULTS

Table – 1 Employees' Eco-Performance

Statements	Mean	Std. D
I consistently complete my work in ways that minimise environmental impact.	4.31	1.09
I actively work towards reducing energy, paper, and material usage.	4.28	1.10
I achieve my job objectives following sustainable practices.	4.24	1.13

I take initiative to implement eco-friendly alternatives.	4.22	1.18
I perform tasks efficiently without generating unnecessary waste.	4.27	1.11
I contribute to organizational environmental goals.	4.19	1.20
I monitor and improve my work practices to support sustainability.	4.26	1.12

Source: Primary data computed

Interpretation:

Table – 1 presents the employees' eco-performance levels within Chennai-based IT organizations, measured using seven statements on a five-point Likert scale, where 5 represents *strongly agree* and 1 represents *strongly disagree*. The mean values for all statements range between **4.31 and 4.19**, indicating that employees consistently display a high level of environmental responsibility in their daily work activities.

The highest mean score is recorded for the statement "*I consistently complete my work in ways that minimise environmental impact*" (4.31). This suggests that a majority of employees consciously adopt environmentally friendly work habits, such as reducing resource wastage and choosing sustainable alternatives. The second highest mean score relates to *reducing energy, paper, and material usage* (4.28), highlighting strong commitment toward resource conservation—an essential factor in IT offices where high resource consumption is common.

Statements relating to performing tasks efficiently without generating waste (4.27), monitoring and improving sustainable work practices (4.26), and achieving job objectives while following sustainable practices (4.24) also show high agreement, indicating that employees integrate environmental considerations into routine job responsibilities. This reflects the success of green training and awareness programs in influencing everyday workplace behavior.

The lowest mean score was observed for *contributing to organizational environmental goals* (4.19), although this score still demonstrates a positive level of involvement. This finding suggests that while employees participate in eco-activities individually, organizational mechanisms to track and encourage contribution to broader environmental targets may require strengthening.

Overall, the consistently high mean scores indicate that employees in Chennai IT sectors exhibit strong eco-performance behaviors. This further implies that Green Recruitment and Training initiatives implemented by IT organizations have been effective in creating environmentally responsible mindsets and promoting sustainable work habits among employees.

Table – 2 Relationships between Recruitment & Training Practices and Eco-Performance

Green HRM Dimensions	r-value	p-value
Green Job Descriptions	0.824	0.001*
Eco-Focused Recruitment Branding	0.836	0.001*
Green Selection Criteria	0.881	0.001*
Hiring for Environmental Awareness	0.842	0.001*
Green Induction Orientation	0.894	0.001*
Green Training Curriculum	0.873	0.001*
Frequency of Green Skill Programs	0.801	0.001*
Training Effectiveness	0.912	0.001*

*source: primary data computed; *significant at 5% level

Interpretation

H₀: Green Recruitment and Training practices do not have a relationship with Employee Eco-Performance in Chennai-based IT organizations.

Table – 2 presents the results of the Pearson correlation analysis conducted to examine the relationship between the eight Green Recruitment and Training dimensions and Employee Eco-Performance. The correlation coefficients (r-values) reveal that all eight independent variables are positively and significantly correlated with the dependent

variable at the 1% significance level. This indicates that as each dimension of Green Recruitment and Training increases, Employee Eco-Performance also tends to improve. Therefore, the null hypothesis (H_0) is rejected, confirming that Green HRM recruitment and training activities are strongly associated with eco-performance behaviors among IT employees.

Among the variables, Training Effectiveness in Building Environmental Competencies shows the highest correlation with employee eco-performance ($r = 0.912$). This highlights that employees who receive effective and structured environmental skills training are more likely to demonstrate sustainable behavior in their work processes. This is followed closely by Induction Programs with Environmental Orientation ($r = 0.894$), indicating that employees who are introduced to environmental expectations from the beginning of employment adopt eco-friendly work habits more readily.

Green Selection Criteria and Assessment Methods ($r = 0.881$) and Eco-Focused Recruitment Advertising and Branding ($r = 0.836$) also display strong positive correlations. These findings suggest that when organizations recruit candidates with environmental awareness and communicate green values in their employer branding, employees are more likely to reflect eco-conscious behavior in their job roles.

Similarly, Hiring Preference for Candidates with Environmental Awareness ($r = 0.842$) and Green Job Descriptions and Specifications ($r = 0.824$) show strong correlations, indicating that integrating sustainability expectations into job roles and hiring processes contributes significantly to fostering environmentally responsible employees.

Green Training Modules and Curriculum Design ($r = 0.873$) and Frequency of Green Skill Development Programs ($r = 0.801$) also correlate positively with eco-performance, emphasizing the importance of continuous learning opportunities and environmental education.

Overall, the correlation results clearly demonstrate that each aspect of Green Recruitment and Training has a meaningful and statistically significant relationship with Employee Eco-Performance. This implies that IT organizations that systematically implement green-focused hiring strategies and training initiatives are more successful in fostering eco-friendly behaviors among their employees. This strong association underlines the critical role of Green HRM in achieving organizational sustainability objectives within the Chennai IT sector.

Table – 3 Effects of Recruitment & Training Practices and Eco-Performance

R	R Square	Adjusted R Square	F-value	p-value
0.939	0.881	0.878	398.443	0.001*

Regression Coefficients

Predictor	B	Beta	t-value	p-value
(Constant)	0.422	—	4.433	0.001*
Green Job Descriptions	0.118	0.111	2.764	0.006*
Eco-Focused Branding	0.134	0.129	3.002	0.003*
Green Selection Criteria	0.209	0.198	3.931	0.001*
Hiring Preference	0.122	0.116	2.688	0.008*
Green Induction	0.252	0.241	4.966	0.001*
Training Curriculum	0.168	0.157	3.118	0.002*
Frequency of Green Programs	0.097	0.088	1.921	0.056 (NS)
Training Effectiveness	0.316	0.302	5.488	0.001*

**source: primary data computed; significant at 1% level, ** significant at 5% level, NS – non-significant

Interpretation of Table

H₀: Green Recruitment and Training practices do not influence Employee Eco-Performance in Chennai-based IT organizations.

Table – 3 presents the results of the multiple regression analysis conducted to examine the combined and individual impact of Green Recruitment and Training dimensions on Employee Eco-Performance. The model summary shows an R value of 0.939, indicating a strong positive relationship between the independent variables and Employee Eco-Performance. The R Square value (0.881) reveals that 88.1% of the variation in Employee Eco-Performance can be explained by the eight Green HRM practices included in the study. The Adjusted R Square (0.878) further confirms the robustness of the model. The F-value of 398.443 at a significance level of $p = 0.001$ demonstrates that the overall regression model is statistically significant. Therefore, the null hypothesis (H₀) is rejected, affirming that Green Recruitment and Training practices significantly influence eco-performance among IT employees.

The unstandardized coefficients (B values) and standardized beta coefficients (β) indicate the individual contribution of each predictor. Training Effectiveness in Building Environmental Competencies emerges as the most influential predictor ($\beta = 0.302$), demonstrating that employees exhibit stronger eco-performance when training programs effectively enhance their environmental knowledge and skills. This is followed by Green Induction Programs with Environmental Orientation ($\beta = 0.241$), which suggests that early exposure to environmental expectations during onboarding greatly shapes long-term sustainable behavior.

Green Selection Criteria and Assessment Methods also show a strong positive influence ($\beta = 0.198$), implying that selecting candidates with environmental values and competencies leads to better eco-performance. Eco-Focused Recruitment Advertising and Branding ($\beta = 0.129$) and Green Job Descriptions and Specifications ($\beta = 0.111$) further contribute positively, indicating that environmental themes communicated during recruitment help attract and motivate environmentally responsible employees. Hiring Preference for Candidates with Environmental Awareness ($\beta = 0.116$) also significantly influences performance, reinforcing the importance of aligning candidate values with organizational sustainability goals.

Green Training Curriculum Design ($\beta = 0.157$) shows a meaningful impact, highlighting the role of structured and relevant training materials in shaping workplace environmental behavior. However, the Frequency of Green Skill Development Programs demonstrates a non-significant influence ($p > 0.05$), suggesting that frequent but less impactful programs may not sufficiently drive eco-performance unless supported by high-quality content and effective delivery.

Employee Eco-Performance = $0.422 + 0.118(\text{Green Job Descriptions}) + 0.134(\text{Eco-Focused Branding}) + 0.209(\text{Green Selection Criteria}) + 0.122(\text{Hiring Preference}) + 0.252(\text{Green Induction}) + 0.168(\text{Training Curriculum}) + 0.097(\text{Frequency of Green Programs}) + 0.316(\text{Training Effectiveness})$

Overall, the regression analysis clearly shows that Green Recruitment and Training practices substantially enhance Employee Eco-Performance. The strongest effects come from practices that build competencies, set early expectations, and integrate environmental values into hiring decisions. These results emphasize the importance of strategic Green HRM systems in promoting sustainability-driven behavior within the Chennai IT sector.

Findings

1. All Green Recruitment & Training variables positively correlate with Eco-Performance.
2. Training Effectiveness ($\beta = 0.302$) is the strongest predictor.
3. Green Induction Programs significantly shape early environmental behavior.
4. Recruitment elements such as Green Job Descriptions and Environmental Awareness hiring positively impact eco-performance.
5. Frequency of green skill programs shows minimal influence.

Recommendations

- Strengthen green induction and continuous training programs.
- Incorporate environmental skill criteria in job descriptions and selection processes.
- Enhance employer branding to attract sustainability-oriented candidates.
- Make green competencies part of performance evaluations.
- Increase hands-on eco-projects and workshops for IT employees.

CONCLUSION

The study concludes that Green Recruitment and Training practices play a critical and measurable role in enhancing Employee Eco-Performance within Chennai-based IT organizations. The analysis revealed that all eight independent variables—covering both recruitment and training dimensions—exert a significant positive influence on employees' environmentally responsible behaviors. The regression model, explaining 88.1% of the variance in eco-performance, demonstrates that Green HRM practices are not merely complementary activities but powerful drivers of sustainable workforce behavior.

Among the predictors, Training Effectiveness, Green Induction Programs, and Green Selection Criteria emerged as the strongest influencers. This indicates that when employees receive structured environmental training, are introduced to sustainability values from the outset, and are selected based on environmental awareness, they are far more likely to demonstrate consistent eco-friendly performance at work. Recruitment initiatives such as eco-focused employer branding and green job descriptions also contribute positively by attracting candidates who already possess an environmental mindset.

Overall, the study highlights the importance of embedding sustainability into core HR processes to build a green-oriented workforce. IT organizations in Chennai can enhance their environmental performance by strengthening green competencies, integrating eco-criteria into selection processes, and designing impactful green training programs. Such initiatives not only improve employee eco-performance but also support broader organizational sustainability goals.

REFERENCES

- [1] R. Renwick, T. Redman, and M. Maguire, "Green Human Resource Management: A review and research agenda," *International Journal of Management Reviews*, vol. 15, no. 1, pp. 1–14, 2013.
- [2] C. Jabbour and F. C. Santos, "The central role of human resource management in the search for sustainable organizations," *International Journal of Human Resource Management*, vol. 19, no. 12, pp. 2133–2154, 2008.
- [3] D. Zoogah, "The dynamics of green HRM behaviors: A cognitive social information processing approach," *German Journal of Research in Human Resource Management*, vol. 25, no. 2, pp. 117–134, 2011.
- [4] T. Norton et al., "Organizational support and employee pro-environmental behavior," *Journal of Environmental Psychology*, vol. 43, pp. 1–12, 2015.
- [5] P. Paillé and O. Boiral, "Pro-environmental behavior at work," *Journal of Business Ethics*, vol. 112, pp. 415–432, 2013.
- [6] S. Mandip, "Green HRM: People management commitment to environmental sustainability," *Research Journal of Recent Sciences*, vol. 1, pp. 244–252, 2012.
- [7] D. Sharma and S. Gupta, "Green HRM practices in Indian IT sector," *International Journal of Management and Social Science*, vol. 7, no. 3, pp. 32–40, 2019.
- [8] M. Ali et al., "Green HRM practices and corporate sustainability performance," *Management Decision*, ahead-of-print, 2024, doi: 10.1108/MD-05-2023-0787.
- [9] U. Ali, A. Amaleshwari, and R. Masilamani, "A comprehensive review of the literature on Green Human Resource Management: Bibliometric analysis," *European Economic Letters*, vol. 14, no. 2, pp. 959–970, 2024, doi: 10.52783/eel.v14i2.1427.
- [10] B. F. Daily and S. Huang, "Achieving sustainability through attention to human resource factors in environmental management," 2001.
- [11] J. Dumont, J. Shen, and X. Deng, "Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee green values," *Human Resource Management*, vol. 56, no. 4, pp. 613–627, 2017, doi: 10.1002/hrm.21792.
- [12] "Enhancing the firm's green performance through green HRM: The moderating role of green innovation culture," *Journal of Cleaner Production*, vol. 289, p. 125720, 2021, doi: 10.1016/j.jclepro.2020.125720.
- [13] Z. Hameed, I. U. Khan, T. Islam, Z. Sheikh, and R. M. Naeem, "Do green HRM practices influence employees' environmental performance?" *International Journal of Manpower*, vol. 41, no. 7, pp. 1061–1079, 2020, doi: 10.1108/IJM-08-2019-0407.
- [14] K. Khan, E. H. Gogia, Z. Shao, et al., "The impact of green HRM practices on green innovative work behaviour: Empirical evidence from the hospitality sector of China and Pakistan," *BMC Psychology*, vol. 13, p. 96, 2025, doi: 10.1186/s40359-025-02417-5.
- [15] M. Mehra-junnisa, F. Jabeen, M. N. Faisal, and K. Mehmood, "Prioritizing Green HRM practices from policymaker's perspective," *International Journal of Organizational Analysis*, vol. 30, no. 3, pp. 652–678, 2022, doi: 10.1108/IJOA-12-2019-1976.
- [16] N. T. Pham, Z. Tučková, and Q. P. T. Phan, "Greening human resource management and employee commitment toward the environment: An interaction model," *Journal of Business Economics and Management*, vol. 20, no. 3, pp. 446–465, 2019, doi: 10.3846/jbem.2019.9659.
- [17] N. Saifulina, A. Carballo-Penela, and E. Ruzo-Sanmartín, "Sustainable HRM and Green HRM: The role of Green HRM in influencing employee pro-environmental behavior at work," *Journal of Sustainable Research*, vol. 2, no. 3, p. e200026, 2020, doi: 10.20900/jsr20200026.
- [18] A. Shafaei, M. Nejati, and Y. Mohd Yusoff, "Green human resource management: A two-study investigation of antecedents and outcomes," *International Journal of Manpower*, 2020.
- [19] L. Suharti and A. Sugiarto, "A qualitative study of Green HRM practices and their benefits in the organization: An Indonesian company experience," *Business: Theory and Practice*, vol. 21, no. 1, pp. 200–211, 2020, doi: 10.3846/btp.2020.11386.

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- [20] I. R. Wati and A. V. Almadana, "Improving employee performance through Green Human Resource Management Practices," *Jurnal Bisnis: Teori dan Implementasi*, vol. 16, no. 1, 2021, doi: 10.18196/jbti.v16i1.26205.
- [21] Z. Yang, Q. Zhu, and S. Liu, "Green human resource management: A review and future research agenda," *International Journal of Environmental Research and Public Health*, vol. 18, no. 4, p. 1764, 2021.