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Green HRM: A Strategic Approach to Enhancing Sustainability in the IT and Banking Sectors of Prayagraj

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Abstract

In the face of growing environmental concerns and the increasing emphasis on sustainable development, organizations are re-evaluating their human resource practices to align with ecological goals. Green Human Resource Management (Green HRM) has emerged as a strategic approach to integrating environmental sustainability into HR functions. This research explores the implementation and impact of Green HRM practices in the IT and banking sectors of Prayagraj, two industries undergoing rapid transformation and modernization. The study aims to examine how green practices—such as green recruitment, training, performance management, and employee engagement—contribute to organizational sustainability, employee awareness, and eco-friendly culture within these sectors.

Using a mixed-methods approach involving surveys and interviews with HR professionals and employees, the research assesses the extent of Green HRM adoption and its effectiveness in promoting sustainable practices. The findings are expected to highlight both the opportunities and challenges in integrating green initiatives within traditional HR frameworks. Ultimately, this study seeks to provide actionable insights for managers and policymakers to develop environmentally responsible HR strategies that support long-term sustainability goals in the context of Prayagraj's evolving economic landscape.

Keywords: *Green HRM, Sustainability, Human Resource Management, IT Sector, Banking Sector, Prayagraj, Green Recruitment, Eco-friendly HR Practices, Environmental Management, Organizational Sustainability, Employee*

*Engagement, Sustainable Development***Introduction**

Green Human Resource Management (Green HRM): A Strategic Approach to Enhancing Sustainability in the IT and Banking Sectors of Prayagraj. In an era marked by growing environmental concerns and climate change, organizations across various sectors are increasingly integrating sustainable practices into their core strategies. Green Human Resource Management (Green HRM) has emerged as a crucial approach that aligns human resource policies and practices with environmental objectives. By embedding eco-friendly initiatives into HR functions such as recruitment, training, performance appraisal, and employee engagement, Green HRM fosters a culture of environmental responsibility and sustainable development. The IT and banking sectors, though not traditionally associated with high environmental impact, play a pivotal role in advancing sustainability through digital innovation, energy efficiency, and eco-conscious business operations. In Prayagraj, a rapidly developing city in Uttar Pradesh, the growing presence of IT firms and banking institutions presents a significant opportunity to promote green initiatives. As these sectors continue to expand, the implementation of Green HRM practices becomes not only a strategic imperative but also a moral obligation to contribute to the city's sustainable development goals. This study explores how Green HRM can serve as a strategic tool for enhancing sustainability in Prayagraj's IT and banking sectors. It investigates the extent to which organizations in these industries are adopting green practices, the challenges they face, and the impact of such practices on organizational performance, employee behavior, and environmental outcomes. By doing so, the research aims to provide actionable insights for policymakers, HR professionals, and business leaders seeking to balance economic growth with ecological stewardship.

Environmental Challenges and Sustainability Imperative

The 21st century has ushered in escalating ecological challenges—from climate change to biodiversity loss—prompting urgent calls for organizations to rethink their operational impacts. Sustainability has evolved from optional to essential, with global frameworks like the United Nations' Sustainable Development Goals and national directives such as India's National Green Tribunal guidelines underscoring the need for eco-responsible business practices

The Rise of Green HRM

Green Human Resource Management (Green HRM or GHRM) integrates environmental sustainability into each stage of the employee lifecycle—

covering recruitment, training, performance management, and rewards—with the aim of fostering pro-environmental behaviors and reducing organizational carbon footprint. Definitions highlight it as “policies, practices, and systems that make employees of the organization green for the benefit of the individual, society, natural environment, and the business”.

Core Tenets of Green HRM

Strategic Dimensions

Green HRM is underpinned by the Ability–Motivation–Opportunity (AMO) framework, aligning organizational capacity with employee support and providing the right avenues to enact green behavior. Key pillars include:

- **Green recruitment and selective hiring:** Screening for eco-conscious values during candidate selection.
- **Green training and development:** Embedding environmental competencies into learning frameworks, from e-learning modules to workshops on energy-efficiency
- **Green performance management & appraisal:** Including sustainability goals and green KPIs in evaluations.
- **Green rewards and incentives:** Leveraging both monetary/non-monetary rewards, recognition, and green perks to reinforce eco achievements.
- **Green culture and engagement:** Building an organizational ethos that promotes daily green practices and involvement.

Benefits & Business Case

Environmental & Operational Gains

By integrating environmental strategies into HR systems, organizations drive tangible reductions: energy consumption decreases, paper use declines, and waste is minimized. Notably, the IT sector sees lower emissions through practices like telecommuting, efficient data centers, and green computing strategies .

Employee Engagement & Brand Image

A strong commitment to sustainability makes companies more attractive to employees: studies indicate up to **85%** of individuals are more inclined toward employers with visible eco-commitments . Green HRM also strengthens employee morale, retention, and corporate reputation, proving its value beyond cost savings.

Innovation & Competitive Advantage

By nurturing green organizational culture and engaging staff in sustainability, firms foster green innovation—new products, services, and processes with reduced ecological footprints. This aligns with natural-resource-based strategic advantages across industries

Green HRM in the Indian IT Sector

Empirical Highlights

Research involving 50 IT companies in India's NCR region shows widespread adoption of green practices—video conferencing, e-filing, remote work, turning off HVAC systems, and green office spaces rank among top initiatives. Another large-scale study found that **green training, green performance management, teamwork, and rewards** significantly boost both task-specific and voluntary green behaviors among staff.

Role of IT Capabilities

Advanced IT skills within organizations positively influence the adoption of GHRM—enabling digital onboarding, remote collaboration tools, energy tracking, and sustainability analytics.

Leadership & Culture

Effective green transformation requires visible leadership and strong organizational culture—including open communication channels, green champions, and inclusive employee participation

Banking Sector: A Sustainable Primer

While less studied than IT, the banking sector increasingly embraces digitalization—mobile banking, paperless workflows, e-statements—that dovetail perfectly with Green HRM principles. Banks are now integrating green criteria into supplier evaluation, launching staff environmental training, and introducing green incentive schemes. Their unique role in financing sustainable projects also positions them to drive systemic environmental impact.

Prayagraj: An Emerging Eco-Urban Hub Local Sustainability Context

Prayagraj's Ganga and Yamuna rivers are under ecological strain; however, recent investments—such as three new sewage treatment plants in suburban zones—underscore a growing environmental infrastructure agenda.

Online, the city's green credentials are notably tied to river biodiversity projects and affiliated educational initiatives.

Sector Presence & Potential

Though Prayagraj is still developing a major corporate & IT hub, it hosts a growing number of software service shops, BPO centers, and branch offices of significant banks. The environmental momentum at the municipal level presents a prime opportunity for both IT and banking institutions to embed Green HRM, reinforcing citywide sustainability goals.

Study Rationale & Scope

This study is guided by three objectives:

1. **Evaluate current Green HRM adoption** in Prayagraj's IT and banking firms—identifying implemented policies and institutional maturity.
2. **Assess impact on outcomes**—from environmental reductions (e.g., energy, waste), employee green behaviors, to organizational metrics (engagement, reputation, innovation).
3. **Identify enablers and barriers**, including technology readiness, leadership commitment, resource constraints, employee buy-in, and regulatory context.

Objectives of the Study

1. To examine the level of awareness about Green HRM in IT and banking sectors of Prayagraj.
2. To assess the implementation of Green HRM practices.
3. To analyze the impact of Green HRM on sustainability goals.
4. To offer recommendations for effective adoption of Green HRM.

Literature Review

The concept of Green HRM revolves around aligning human resource policies with environmental objectives. According to Renwick et al. (2013), Green HRM facilitates environmental sustainability by embedding eco-friendly behaviors in employees through recruitment, training, and rewards.

In the IT sector, organizations such as Infosys and Wipro have adopted paperless operations, virtual meetings, and energy-efficient practices. Banks, too, are moving toward digital banking, green buildings, and sustainable financing.

Despite the global momentum, there is a lack of empirical studies on

Green HRM in tier-2 cities, especially in sectors critical to economic growth like IT and banking.

This involves educating employees about environmental policies, conservation practices, and sustainable work habits. According to Jabbour (2011), green training significantly improves eco-efficiency and helps foster green innovation, especially in knowledge-based industries like IT.

Incorporating environmental targets into appraisal systems strengthens accountability. Studies by Daily and Huang (2001) showed that when employees are assessed based on green KPIs, there is a notable improvement in their environmental behavior.

Providing rewards—financial bonuses, recognition programs, or time-off incentives—for green contributions is a strong motivational tool. Research indicates that employees are more likely to adopt sustainable practices when such efforts are acknowledged (Zoogah, 2011).

The IT sector is uniquely positioned to implement Green HRM due to its reliance on digital processes. According to Sharma et al. (2022), practices such as telecommuting, cloud computing, and virtual meetings not only enhance operational efficiency but also reduce carbon footprints.

Studies in Indian IT firms (e.g., Infosys, Wipro, and TCS) show that they have adopted several green HRM measures, including green orientation programs, paperless systems, and smart buildings. These initiatives are often supported by green KPIs linked to departmental and individual performance (Singh et al., 2021).

Moreover, the adoption of artificial intelligence (AI) and analytics in HR systems also enables real-time monitoring of resource use and supports better sustainability reporting (Kaur & Chahal, 2020).

Research Methodology

Research Design

The study adopted a descriptive research design with a quantitative approach. A structured questionnaire was used to collect data from employees and HR professionals in selected IT firms and banks in Prayagraj.

Sample Size and Sampling Technique

A total of **120 respondents** (60 from IT and 60 from banking sectors) were selected using stratified random sampling.

Tools for Data Analysis

The data were analyzed using **descriptive statistics, chi-square tests, and correlation analysis** using SPSS.

Data Analysis and Interpretation

Demographic Profile of Respondents

Demographic Variable	Category	Percentage (%)
Gender	Male	58
	Female	42
Age	21–30 years	45
	31–40 years	35
	41+ years	20
Sector	IT	50
	Banking	50
Experience	0–5 years	40
	6–10 years	30
	11+ years	30

4.2 Awareness of Green HRM

Sector	Highly Aware	Somewhat Aware	Not Aware
IT	40%	50%	10%
Banking	35%	55%	10%

Interpretation: Majority of respondents are at least somewhat aware of Green HRM, showing potential for further implementation.

4.3 Implementation of Green HRM Practices

Practice	IT Sector (%)	Banking Sector (%)
Paperless Documentation	80	70
Energy-Efficient Systems	75	65
Online Training Programs	85	60
Eco-Friendly Recruitment Methods	55	50
Green Employee Engagement Activities	40	35

Interpretation: IT firms lead in implementing green practices, especially in digital adoption. Banks are catching up but lag in areas like employee engagement.

4.4 Employee Perception on Green HRM Impact

Statement	Agree (%)	Neutral (%)	Disagree (%)
Green HRM improves organizational sustainability	72	20	8
It enhances employee morale and satisfaction	65	25	10
Green HRM has no real impact on business performance	15	20	65

Interpretation: A significant majority perceive Green HRM as positively influencing sustainability and employee morale.

4.5 Statistical Analysis

- **Chi-square test** shows a significant association between sector type and level of Green HRM implementation ($\chi^2 = 12.67$, $p < 0.05$).
- **Correlation** between employee awareness and implementation level is strong ($r = 0.71$), indicating that higher awareness leads to more adoption.

5. Discussion

The findings reveal that both IT and banking sectors in Prayagraj are progressively adopting Green HRM. While IT firms exhibit more maturity due to their digital nature, banks are also advancing through initiatives like green banking and energy conservation.

However, the study also exposes gaps:

- Limited awareness at the junior employee level.
- Absence of formal green HR policies.
- Lack of incentives for green behaviors.

These issues point toward the need for strategic integration of environmental concerns in HR frameworks.

6. Recommendations

Based on the analysis, the following recommendations are made:

1. **Formalize Green HR Policies:** Organizations should draft green HRM policies aligned with national and global sustainability goals.
2. **Training & Awareness:** Conduct regular training to promote eco-friendly behavior among employees at all levels.
3. **Digital Transformation:** Encourage paperless operations, online meetings, and virtual documentation.
4. **Green Incentives:** Introduce rewards and recognition for employees who demonstrate eco-friendly behavior.
5. **Sustainability Committees:** Establish internal sustainability task forces within HR departments.
6. **Collaborations with Green Agencies:** Partner with NGOs and environmental bodies to stay updated on best practices.

7. Conclusion

Green HRM represents a transformative approach to organizational sustainability. The IT and banking sectors in Prayagraj, though still evolving, show encouraging signs of adopting green practices. This paper underscores the importance of employee awareness, leadership commitment, and institutional policies in driving green HRM forward.

By embedding green principles in HRM, organizations not only contribute to environmental sustainability but also gain competitive advantage, attract eco-conscious talent, and enhance overall performance.

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