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Fostering Environmental Responsibility: HRM's Role in Green Banking Initiatives

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Abstract Sustainability is now at the forefront of organisational agendas, especially in the financial sector, due to the increasing urgency with which climate change and environmental degradation must be addressed. Green human resource management, or GHRM, has become a key tactic for encouraging ecologically conscious business practices. The study, "Fostering Environmental Responsibility: HRM's Role in Green Banking Initiatives in India," explores the ways in which GHRM practices support sustainability in the Indian banking industry, particularly in the country's public and private banks. The three main goals of the study are to: (1) evaluate the HRM strategies used in green banking to advance sustainability; (2) assess how these strategies affect employee involvement and engagement in green banking initiatives; and (3) look into the relationship between green HRM strategies and the success of green banking initiatives. Through personal outreach and the distribution of structured surveys via Google Forms, information was gathered from 200 banking experts. A variety of banking staff members were surveyed using a non-probability sample technique that combined convenience and snowball sampling to get their opinions. The results show that good green banking outcomes are strongly and favourably correlated with green recruitment and selection as well as green documentation. These findings highlight how crucial it is to incorporate environmental values from the very beginning of the employee lifetime and to uphold responsibility and transparency through organised documentation procedures. The requirement for comprehensive organisational support and efficient implementation frameworks is shown by the indirect influence of eco-friendly policies and green training, even though their direct effects were not statistically significant. Additionally, the study finds a strong link between employees' active participation in green banking operations and their awareness of green practices. This demonstrates how important communication and awareness-raising campaigns are in developing a workforce that is dedicated to environmental responsibility. It's interesting to note that the gender-based research shows no discernible disparities in attitudes, indicating that green HRM practices are being spread equally and inclusively across genders. The study concludes by urging a thorough, inclusive, and strategic approach to GHRM and highlighting its critical role in ensuring the success of green banking projects. In addition to providing useful information for HR and policy leaders in fostering ecologically conscious banking cultures, the study adds to the expanding corpus of research on sustainable banking.

Keywords Green Human Resource Management (GHRM), Green Banking, Sustainability, Employee Engagement, Environmental Responsibility, Recruitment, Documentation, India, Banking Sector.

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Introduction

Complex environmental concerns are being confronting society. In recent decades, individuals are more mindful

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of how global warming affects human life. The catastrophic effects of recent storms, floods, droughts, and excessive heat around the world force us to take global warming seriously and take action. Environmental challenges in the global economy are of great concern for the entire world. Climate change is one of the mostly caused by man-made gases such as dioxide, methane, nitrous oxide, hydrofluorocarbons. Bukhari et. al 2020 observed in his study that human health, dry areas, agriculture, water resources, forests, and biodiversity have all been significantly badly impacted the environmental factors. Hayward (2013) also found that 67% of CEO out of 1000 peoples are thinking about the globally world economy is not headed in the correct direction to proper address the environmental issues or satisfy and meet the demands of the expanding population. In the United Nations Environmental Program 2014 address these issues and found that the green economy is one of the lowers environmental risks and resource shortages while enhancing social justice and human well-being. In a nutshell, a green economy is socially inclusive, low in carbon emissions, and efficient with resources. Nath et. al., 2014 In his study, it was found that along with government officials and direct polluters, other stakeholders like banks and financial institutions also play a significant role in addressing environmental issues. While banking operations are not directly tied to the natural world, their customers' actions have a significant external impact. Therefore, banks have to incorporate green practices into their operations, structures, investments, and financing plans Ullah et.al., 2021 the study additionally examined at how the financial sector has recently grown increasingly concerned about sustainable development and global warming

Banks are increasingly using the idea of "green banking" as a strategic method to deal with these issues (chen et.al, 2022). Adopting eco-friendly procedures in banking operations, investments, and financial goods is known as "green banking." By lessening the environmental impact of financial institutions and motivating clients to take part in ecofriendly activities, it seeks to advance sustainable development (Khairunnessa et.al., 2021). An inventive strategy that incorporates sustainability into financial operations is called "green banking." Paperless banking, internet transactions, green loans, eco-friendly infrastructure, and investments in renewable energy projects are some of the practices that fall under this category. Financial institutions can improve their corporate social responsibility (CSR) and long-term profitability while simultaneously protecting the environment by putting green banking practices into practice (Sharma and choubey 2022). In order to solve the problems caused by warming temperatures and achieve sustainable development, green banking is an essential first step. Financial institutions improve their own profitability and reputation while also helping to create a more sustainable future by incorporating environmental responsibility into their operations. Banks are essential in creating a more sustainable and conscientious global economy by encouraging ecofriendly behaviours, funding green initiatives, and increasing public awareness (Zhang et.al., 2022) Financial institutions gain from the implementation of green banking, which also promotes long-term economic stability and environmental preservation. Green banking will become more and more crucial in creating a sustainable financial system for coming generations as awareness rises and technology advances. (Park and kim 2020) By making banking operations more easily accessible, seamless, and effective for everybody, green banking has completely transformed the conventional banking sector. By implementing a number of cutting-edge technologies that improve sustainability and convenience, it does away with the necessity for in-person trips to bank offices. The way that people and businesses handle their financial transactions has changed dramatically as a result of significant innovations including ATMs, credit cards, debit cards, SMS banking, online banking, and mobile banking. These technologies guarantee smooth transactions while saving time and effort by offering 24/7 access to financial services (Kala 2020). Customers can access financial services, pay bills, transfer money and check balances from the convenience of their homes via online banking. Even more freedom is provided by mobile banking apps, which let users use their cell phones to conduct transactions at any time and from any location. Customers are kept updated on account activity through SMS banking, which offers immediate notifications for increased security. Green banking also helps to sustain the environment by lowering the amount of paperwork and physical infrastructure needed. Digital transactions encourage environmentally friendly financial practices, reduce resource use, and reduce carbon footprints (Teresa et. al., 2023) Says that Paperless banking, green investment and financing, eco-friendly banking infrastructure, sustainable credit policies, green products and services, and lowering carbon emissions are just a few of the eco-friendly tactics that make up green banking. These programs seek to increase banking efficiency while advancing sustainability. However, the backbone of any sector is its workforce employees who drive these projects ahead. The idea of green human resource management, or GHRM, is essential to green banking since it integrates sustainability into the workplace (Ali et. al.,2021). Green Human Resource Management (GHRM) refers to the adoption of eco-friendly HR practices that align employees' roles with sustainable banking goals. Strategies under GHRM include paperless employee documentation, digital training programs, eco-friendly workplace policies, and green performance appraisals. Banks encourage employees to adopt sustainable work practices, such as reducing energy consumption, minimizing waste, and supporting green corporate social responsibility (CSR) initiatives. Additionally, sustainable hiring and training programs focus on equipping employees with knowledge environmental regulations and responsible banking. By promoting a green organizational culture, banks can enhance employee engagement, improve corporate and contribute to environmental reputation,

conservation. Thus, green banking is not only about financial sustainability but also about creating an ecoconscious workforce that drives long-term positive change (Beneven and Buonomo 2020). incorporating sustainable practices into workforce management, Green Human Resource Management (GHRM) is essential to the successful execution of green banking. Its main goal is to match environmental goals with human resource policy so that workers may actively support sustainability initiatives (Jamal et. al., 2021). By coordinating HR operations with environmental objectives, green human resource (HR) initiatives are essential to promoting sustainability in the banking industry. These tactics aid in developing an environmentally conscious workforce that actively promotes sustainable banking practices in the field of green banking (Rabiul et., al 2021). Banks may improve operational efficiency and their environmental effect by incorporating sustainability into hiring, training, performance management, and employee engagement (Mousa and Othman 2020). Employees are encouraged by green HR methods to embrace ecofriendly workplace practices, energy conservation, and paperless banking. Additionally, they cultivate a corporate culture that prioritises sustainability, inspiring staff members to take part in eco-friendly projects including carbon footprint reduction, digital banking adoption, and environmental awareness campaigns. By using these tactics, banks improve their brand recognition and regulatory compliance in addition to their environmental responsibilities. Niazi et., al 2023 This study is conducted in India, covering both private and public sector banks, with bank employees as respondents. A structured questionnaire has been used to gather information about the different green HR practices used in the banking industry as well as the function of green human resource management (GHRM) in green banking. Important tactics like ecofriendly hiring and selection practices, paperless documentation, sustainable workplace regulations, and green training and development are essential to improving the effectiveness and efficiency of banking operations. Freites et., al 2020 Finding that by encouraging digital banking, cutting down on paperwork, and incorporating eco-friendly practices into HR management, GHRM improves operational efficiency. By giving staff members, the information and abilities they need to use green banking practices, GHRM guarantees a smooth transition to sustainability (Shah and Soomro 2023). In addition, by lowering resource consumption and the carbon footprint of banking operations, implementing green HR practices not only enhances employee engagement performance but also helps to conserve environment. As a result, GHRM in green banking is an effective strategy that strikes a balance between organisational expansion and sustainability, enhancing the environmental friendliness, economic viability, and customerfocused nature of financial services (Tanovaad and Bajighamog 2022)

Literature Review

This article explores how digital technologies, such the Internet of Things (IoT) and artificial intelligence (AI), might support environmental sustainability. It investigates how these developments might improve energy efficiency, minimise waste, and maximise resource management. The study identifies important advantages, difficulties, and possible hazards by examining their effects across industries. Additionally, it offers a tactical framework for incorporating AI and IoT into sustainable practices, guaranteeing long-term financial and environmental gains (Feroz et., al 2021). In order to assess the environmental sustainability of Indian smart cities, this study creates an index. It evaluates the sustainability performance of five chosen cities using the index, pointing out important areas for development. The results shed light on sustainable plans development and urban environmental regulations for India's smart cities. Singh and ohri 2021 This article examine technical advancements in sustainable supply chain management, emphasising the opportunities and difficulties associated with integrating green practices in industrial companies. It explores how new technologies promote sustainability, boost productivity, and solve environmental issues while going over adoption hurdles and tactics for encouraging environmentally friendly supply chain changes. Yung et., al 2022 This article examines how Industry 5.0 improves environmentally friendly and sustainable manufacturing by fusing human creativity with cutting-edge technologies. It emphasises how automation and human intelligence work together to promote more environmentally friendly industrial methods. In order to ensure environmental responsibility and maximise efficiency in contemporary industrial practices, the conversation focusses on innovation-driven sustainability (Rame et. al., 2024). The dramatic fall in biodiversity worldwide and its effects on human welfare are covered in the essay. It highlights the necessity of all-encompassing approaches in urban planning and environmental policy to deal with these issues, promoting integrated policies that support resilience and sustainability in both human societies and natural ecosystems (Landrigam et., al 2024). In order to create a more sustainable and greener future, this study looks at how Big Data Analytics helps with environmental sustainability through resource optimisation, better decision-making, and assistance for ecofriendly projects. Islam et., al 2025 This paper explores e-governance as a way to improve environmental sustainability in Nigeria, pointing out both its possible advantages and implementation difficulties while spotting chances for successful incorporation into sustainable development plans (Awoyele et., al 2025).

This review investigates the role of artificial intelligence in finance, analysing its current applications and recent advancements. It also explores challenges and opportunities, proposing a future research agenda to enhance AI integration in financial services, improve decisionmaking, optimize risk management, and drive innovation in the evolving financial landscape. Sun and Zhang 2019 This paper

examines blockchain's role in green finance, highlighting how decentralized ledgers enhance sustainable financial practices. It explores key benefits, challenges, and future research directions, emphasizing blockchain's potential to improve transparency, efficiency, and accountability in environmentally responsible financial systems (Goodell and wang 2019). The importance of blockchain technology in banking is examined in this systematic assessment, which emphasises how it might increase efficiency, security, and transparency. technology examines how technology might be used in banking operations, weighing the advantages and difficulties of changing financial transactions and regulatory compliance (Ding and Wu 2020). With an emphasis on green banking programs and their influence on encouraging environmental responsibility in the financial sector, this article assesses the sustainable practices used by Indian banks Khan and Yadav 2020. This systematic literature review identifies and analyzes emerging themes in green finance, highlighting the evolving landscape of sustainable financial practices and the integration of environmental considerations into financial decisionmaking Mudalige 2023. This comprehensive study of the literature examines articles on sustainability and green finance from 2012 to 2024, emphasising the spike in interest during the COVID-19 epidemic. The study highlights the need for more research on green banking practices in the post-pandemic age by identifying important themes and gaps in the literature through the use of bibliometric and thematic analysis. Goswami 2024 This study looks at how green banking activities can be strengthened by technological improvements in the banking industry. It examines how sustainable banking practices can be integrated with financial innovations by synthesising current literature. It comes to the conclusion that this integration greatly environmentally encourages conscious banking operations and sustainable development (Munnu Prasad 2024).

This review highlights the impact of GHRM techniques improving organisational environmental performance by examining them across 12 HRM departments. The study highlights how important it is to incorporate environmental factors into HRM procedures (Arulrajan et., al 2015). Ten themes are identified from the analysis of 74 GHRM-related articles in this systematic literature study. It highlights the incorporation of sustainable development strategies within HRM, identifies research gaps, and suggests a thorough framework for further research (Hoang and Phan 2020). Green job analysis and design, green green recruiting and selection, performance management, green training and development, and green reward management are the five main practices covered in this article, which examines the function of GHRM in businesses. It highlights how GHRM contributes to environmental management initiatives and makes recommendations for further study on the green behaviour of millennials Khaira 2023. The impact of GHRM practices on organisational sustainability is investigated in this comprehensive assessment of the literature. According to the study's

analysis of research articles from journals with a Scopus index, GHRM significantly improves long-term performance in businesses Mulia and Yunit 2024 This review examines how Green HRM practices, including eco-friendly policies, enhance corporate sustainability, employee productivity, and environmental responsibility within organizations. singh and verma 2021 The study looks at the relationship between GHRM practices and employee engagement, showing how green HR initiatives increase organisational commitment and employee drive. Patel and Kumar 2019 This study explores how GHRM may support sustainability in the hospitality sector, including the implementation of eco-friendly HR practices by hotel chains. Brown and Carter 2020 This essay addresses revolutionary management in green banking, staff engagement, and green HRM practices. Particularly, we investigate transformational management affects employee relationships and how green HRM practices affect worker engagement. Noor et., al 2023 This study examines how employee green behavioural (EGB) is impacted by green human resource management (GHRM) strategies. Using knowledge gathered from 397 participants across a variety of Indian industries, a theoretical framework with two doublemoderations is created and evaluated. veerasamy 2024 His study looks at the connection between Environmental Performance (EP) and Green Human Resource Management (GHRM), with a particular emphasis on how Green Supply Chain Management (GSCM) may improve organisational environmental results and sustainability (Saeed 2021). Using the Ability- Motivation-Opportunity theoretical lens, this study expands on ideas of "Green HRM" practices by integrating sustainability into such centres and encouraging environmental responsibility through employee opportunities, motivation, and abilities (Ghalami et., 2016). Through the development of green HRM measures, this study empirically investigated this relationship. We examined how green HRM affects organisational results by drawing on behavioural HRM, psychological climate literature, and supplies-values fit theory. This gave us a thorough framework for comprehending how green HRM affects employee behaviour. Dumout et.al 2017 This study explores the green relationship between human management bundle practices and green supply chain management (internal and external), analysing their impact on sustainability performance through the Triple Bottom Line framework, encompassing environmental, social, and economic dimensions Ziad et., al 2018. The objective of this research was to create and verify a tool for evaluating Green Human Resource Management (GHRM). In order to ensure a thorough evaluation, five essential GHRM aspects were identified through an exploratory analysis (Study 1): green employee involvement, green performance management, green training, green recruiting and selection, and green remuneration and rewards Tang et., al 2018. This paper aims to review Green HRM literature across diverse scopes, approaches, and contexts, identify key focus areas within the field, and suggest directions for future

research, contributing to a deeper understanding and advancement of Green HRM studies. Young et., al 2019.By examining how green practices support an organization's social sustainability objectives and pointing out future options for incorporating sustainability into HR strategy, this article examines developments and research gaps in the field of green human resource management. Amutha and Geetha 2021 By investigating the connection between organisational environmental performance and human resources determinants, this study seeks to close the empirical knowledge gap. To accomplish the goal of the study, 165 workers from particular industrial companies provided primary data. (Saumya et., al 2021). With an emphasis on sustainability and corporate environmental responsibility, this literature review examines the relationship between Green Human Resource Management (G-HRM) practices and important outcomes, including employee green attitudes, green behaviour, organisational green performance, and green satisfaction both employee and client (Alketbi and Rice 2024)

Research Methodology Research Gap

While green banking has gained prominence in India, there remains a significant gap in the literature regarding the role of Human Resource Management (HRM) strategies in driving the success of these initiatives. Previous research has primarily focused on the environmental and financial aspects of green banking, with limited attention given to how internal HRM practices—such as sustainability training, employee engagement, and eco-friendly workplace policies—contribute to successful green banking outcomes. Most studies have concentrated on external factors, such as regulatory pressures and consumer demand, rather than the internal mechanisms within banks that influence green banking initiatives. Additionally, there is a lack of empirical evidence on how green HRM strategies affect employee motivation and engagement in sustainability practices. This study addresses this gap by examining the role of green HRM strategies in promoting sustainability within the banking sector in India. By focusing on primary data from employees in leading banks, this research aims to offer fresh insights into how HRM can support green banking and contribute to broader environmental goals.

Research Question

- 1. What human resource management strategies are employed in green banking to promote sustainability?
- **2.** How do green HRM strategies impact employee engagement and involvement in green banking initiatives?
- **3.** What is the relationship between green HRM strategies and the success of green banking initiatives?

1.2. Research Objectives

Objective 1: To assess the human resource management strategies employed in green banking to promote sustainability.

- **Objective 2:** To evaluate the impact of green HRM strategies on employee engagement and involvement in green banking initiatives.
- Objective 3: To investigate the link between green HRM strategies and the success of green banking initiatives

Based on the above research objective we define the research hypothesis statements as follows;

- H1: Banks that implement green HRM strategies (such as sustainability training and green workplace practices) experience higher success in green banking initiatives.
- **H2:** Employee engagement in banks increases with the adoption of green HRM strategies, leading to better sustainability outcomes.
- **H3:** Awareness of green HRM practices among employees positively correlates with the level of their involvement in green initiatives.
- **H4:** There is a statistically significant difference in green banking outcomes based on the position scale of the employee.
- **H5:** Banks implementing green HRM strategies experience greater success in green banking, with employee engagement and involvement influenced by awareness and demographic factors.

Methodology

Study Area and Sample The current study is a quantitative analysis that looks at how green human resource management (GHRM) practices- more especially, green employee involvement, green performance management, green reward compensation, green training and development, and green recruitment and selection-affect innovation in green banking. Employees from the Indian banking industry, such as Branch Managers, Operations Managers, staff members from the Administration and Operations divisions, and officers from the Loan and Insurance divisions, make up the target population. (scale 1, scale 2, scale 3, scale 4) Using a standardised questionnaire, information was gathered from eight significant public and private sector banks in India. A total of 200 respondents are included in the sample distribution among the following banks: 26 from Bank of Baroda (BOB), 24 from Canara Bank, 36 from State Bank of India (SBI), 17 from ICICI Bank, 20 from Axis Bank, 19 from HDFC Bank, 37 from Punjab National Bank (PNB), and 21 from Kotak Mahindra

Statistical Methods The study uses a quantitative approach to investigate how green banking innovation is impacted by Green Human Resource Management (GHRM) practices. A systematic questionnaire and inperson interviews were used to gather information from workers in Indian public and private sector banks. Nonprobability sampling methods, namely convenience and snowball sampling, were used to collect 200 responses in total. The mean, mode, median, standard deviation (SD), ANOVA, factor analysis, chi-square test, and correlation analysis were among the statistical methods used to examine the gathered data. These techniques made it easier to asss the connections between GHRM

tactics and outcomes related to green banking, employee engagement, and awareness.

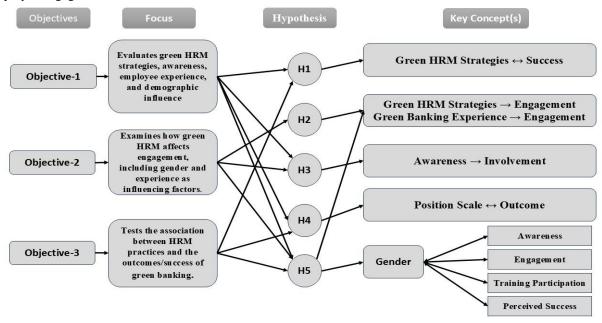


Figure 1 Theoretical Framework

This study will gather primary data through questionnaires and interviews with employees from leading Indian banks, aiming to provide empirical insights into the role of HRM in green banking practices. A conceptual framework depicted in the diagram describes the relationships between the study's objectives, hypotheses, and key concepts related to Green Human Resource Management (GHRM) in the context of green banking. The analysis is guided by five hypotheses (H1–H5) that highlight the roles of

awareness, position scale, and gender while connecting green HRM methods to engagement and success. The relationship between important constructs like awareness, engagement, training participation, and perceived success is examined. Gender is investigated as a moderating factor in a number of different constructs. All things considered, the framework offers an organised method for comprehending how strategic HRM practices might promote sustainability and staff participation in green banking projects.

Results

 Table 1.1 Descriptive Statistics (Respondent profile table)

Variables	Attributes	Frequency	Percent	Variables	Attributes	Frequency	Percent
	BOB	26	13.0		Male	94	47.0
BANK NAME	Canara bank	24	12.0	Gender	Female	106	53.0
	SBI	36	18.0		Total	200	100.0
	ICICI	17	8.5		Scale 1	84	42.0
	AXIS	20	10.0		Scale 2	30	15.0
	HDFC	19	9.5	Employee Position	Scale 3	55	27.5
	PNB	37	18.5	Scale Level	Scale 4	31	15.5
	Kotak Mahindra	21	10.5		Total	200	100.0
	Total	200	100.0		0-9	130	65.0
	0-4	56	28.0	EVDEDIENCE	10-19	63	31.5
EXPERENCE	5-9	75	37.5	EXPERIENCE	20-30	7	3.5
WITH GREEN	10-14	65	32.5		Total	200	100.0
BANKING	15-20	4	2.0		Yes	194	97.0
	Total	200	100.0	AWARENESS OF GHRM	No	6	3.0
GHRM	Yes	194	97.0	OF GIIKW	Total	200	100.0
PRACTICES	No	6	3.0				

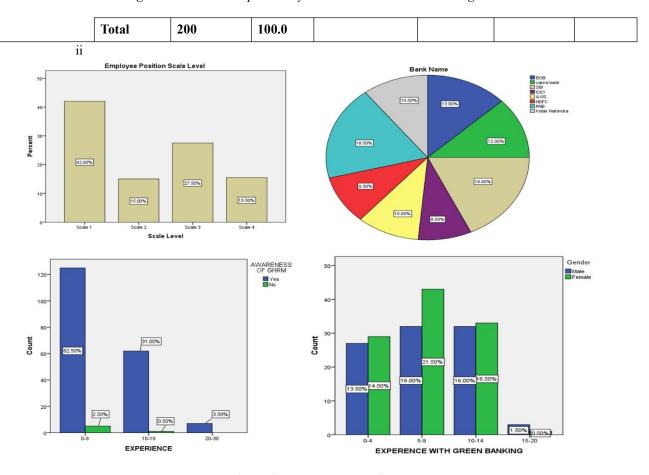


Figure 2 Respondents profile

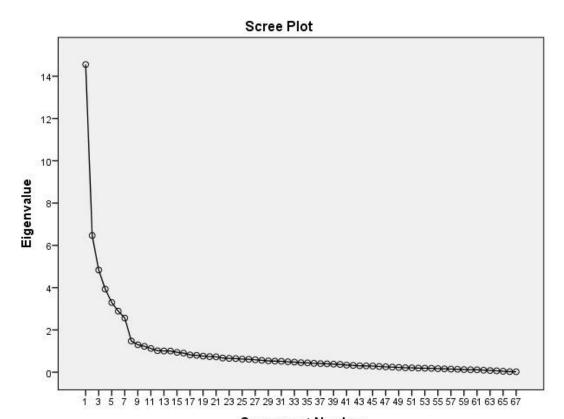
200 bank personnel from both public and private sector banks make up the sample, with PNB (18.5%) and SBI (18.0%) having the most participation. A considerable percentage of respondents (42%) hold Scale 1 positions, suggesting a higher presence of junior-level employees, and the gender distribution reveals a slight female majority (53%). The majority of participants (70%) had 5-14 years of experience especially with green banking, indicating a moderately experienced workforce in this field, while the majority of participants (65%) have

fewer than 10 years of overall job experience. 97% of respondents acknowledged familiarity with and implementation of Green Human Resource Management (GHRM) practices in their respective banks, indicating a significantly high level of awareness of GHRM. This implies that the operational architecture of the banks evaluated effectively incorporates sustainable HR practices and green banking activities.

Factor Analysis

Table 2.1 KMO and Bartlett's Test for Sampling Adequacy and Sphericity KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure	.839	
Bartlett's Test of Sphericity	9523.952	
	Df	2211
	Sig.	.000



Component Number

Figure 2.2 Scree plot

Table 2.2 (Factor Analysis Results for Green HRM Practices in Green Banking")

F			3.6	T 7.	Initial Eigenva	lues	Reliability	
Factor	Attributes	of Items	Mean	Variance	% of Variance	Cumulative %	(a)	
1	Outcome	7	4.289	0.638	21.723	21.723	0.973	
2	Green Trainin Programme	10	3.179	1.387	9.653	31.376	0.906	
3	Green Requirement & Selection	10	3.065	1.353	7.213	38.589	0.907	
4	Facilities and It Implementation	9	3.017	1.524	5.865	44.454	0.897	
5	Green Documentation	10	3.151	1.365	4.92	49.374	0.908	
6	Eco-friendly Policy	10	3.168	1.559	4.308	53.683	0.871	
7	Employee Engagement	10	3.133	1.499	3.823	57.506	0.863	

The finding of the factor analysis for green HRM practices in green banking are shown in table 2.2 outcome, Green Training program, Green Recruitment and selection, Facilities and Implementation, Green Documentation, Eco-Friendly policy, and Employee Engagement were the seven main elements that were determined. With a high reliability ($\alpha = 0.973$) and the highest mean (4.289), the outcome factor explained 21.723% of the total variance. When taken together, these variables account for 57.506% of the variance. With Cronbach's alpha values ranging from 0.863 to 0.973, all components exhibit good internal consistency, demonstrating strong dependability and the importance of HRM practices in advancing green banking

Statistical hypothesis for H1

H₁₀: No relationship between green HRM strategies and green banking success.

 \mathbf{H}_{11} : Significant relationship exists.

Table 3.1 (Correlation Matrix Between Green HRM Strategies and Outcomes of Green Banking")

			HRM Strategies			
Variables		Outcomes of Green Banking	1	2	3	4
Outcomes of Green Banking	Pearson Correlation	1				
Green Banking	Sig. (2-tailed)					
HRM Strategies 1:	Pearson Correlation	.203**	1			
Green recruitment and selection	Sig. (2-tailed)	.004				
HRM Strategies 2: Green	Pearson Correlation	.084	.409**	1		
training program	Sig. (2-tailed)	.235	.000			
HRM Strategies 3:	Pearson Correlation	.151*	.329**	.525**	1	
Green Documentation	Sig. (2-tailed)	.033	.000	.000		
HRM Strategies 4: ECO	Pearson Correlation	.077	.305**	.448**	.498**	1
friendly policy	Sig. (2-tailed)	.280	.000	.000	.000	

The table presents Pearson correlation coefficients between various Green HRM strategies and the outcomes of green banking. Green recruitment and selection show a statistically significant positive correlation with green banking outcomes (r = .203, p = .004), indicating a meaningful relationship. Green documentation also has a significant positive correlation (r = .151, p = .033). However, green training (r = .084, p = .235) and eco-friendly policy (r = .077, p = .280) show weak, non-significant correlations with green banking outcomes. Significant intercorrelations exist among the HRM strategies themselves, particularly between green training and green documentation (r = .525**), suggesting these practices are interlinked. **Statistical hypothesis for H3**

H₃₀: No association in between awareness and involvement.

H₃₁: Significant association in between awareness and involvement.

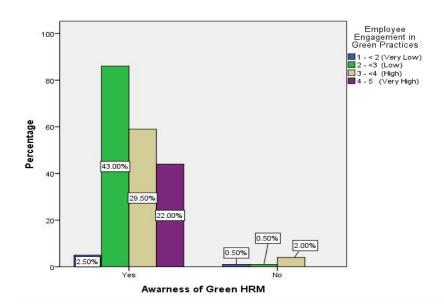


Figure 3.1 (Relationship Between Awareness of Green HRM and Employee Engagement in Green Practices)

Table: 3.2 Chi-Square Test Results for Association Between HRM Strategies and Green Banking Outcomes"

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.664a	3	0.034
Likelihood Ratio	7.775	3	0.051

N of Valid Cases 200

Table 3.2 presents the Chi-Square test results analysing the association between HRM strategies and green banking outcomes. The Pearson Chi-Square value is 8.664 with 3 degrees of freedom and a significance level of 0.034, indicating a statistically significant association at the 5% level. The Likelihood Ratio value is 7.775 with a significance level of 0.051, which is marginally above the threshold. The test was conducted on 200 valid cases, supporting a moderate relationship between HRM strategies and green banking outcomes.

Statistical hypothesis for H4

H₄₁₀: No difference across position scales, Banking working Experience and

Experience with Green Banking with employee enrolment in Green Banking HRM.

H₄₂₀: No difference Banking working Experience with employee enrolment in Green Banking HRM.

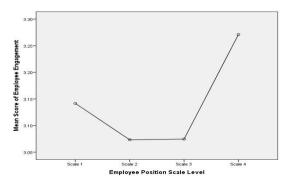
H₄₃₀: No difference Experience with Green Banking with employee enrolment in Green Banking HRM.

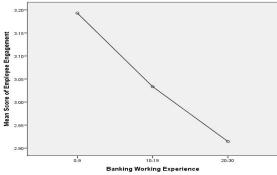
H_{411,412,413}: Significant difference exists.

Table 4.1 (One-Way ANOVA Results for Differences in Green HRM Perceptions Across Demographic Variables")

Variables	·	Classes	N	Maan	Std. Test of Homogeneity of Variances One Way		Test of Homogeneity of Variances		ANOVA	
Varie		Classes		Mean	Deviation	Levene Statistic	P-Value	F-Statistic	P-Value	
		Scale 1	84	3.142	0.860					
	<u>e</u>	Scale 2	30	3.073	0.894					
l o	Sca	Scale 3	55	3.075	0.711	1.576	0.196	0.439	0.726	
Employee	Scale 2 Scale 3 Scale 3 Scale 4	31	3.271	0.835	1.370	0.170	0.437	0.720		
	e)	0-9	130	3.193	0.848					
ng	ien	10-19	63	3.033	0.759	0.914	0.403	1.065	0.347	
Banking	Experience	20-30	7	2.914	0.786		0.103	1.005		
		0-4	56	3.188	0.901					
Ĭŧ		5-9	75	3.219	0.794					
Ge/	∑	10-14	65	2.982	0.770	0.944	0.421	1.114	0.344	
Experience with	Green HRM	15-20	4	3.225	0.854		7.121	1.111		

The table presents ANOVA results assessing differences in green HRM perceptions across employee position, banking experience, and green HRM experience. All p-values exceed 0.05, indicating no statistically significant differences among groups. Homogeneity of variances is also confirmed, supporting consistency in responses across different demographic and experiential categories.





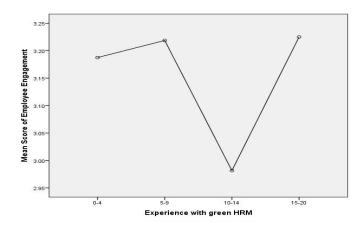


Figure 4.1 Mean plots of Employee Position Scale Lavel

Statistical hypothesis for H5

H₅₁₀: No effect of employee experience on engagement in Green Banking HRM.

H₅₁₁: Employee experience significantly affects engagement in Green Banking HRM.

H₅₂₀: No association exists between gender and awareness of Green Banking HRM. **H**₅₂₁: A significant association exists between gender and awareness of Green Banking

HRM.

H₅₃₀: No difference in engagement in Green Banking HRM between genders. H₅₃₁: A significant difference

exists in engagement in Green Banking HRM between genders.

H₅₄₀: No relationship exists between gender and training in Green Banking HRM. **H**₅₄₁: A significant relationship exists between gender and training in Green Banking

HRM.

H₅₅₀: No difference in perceived success in Green Banking HRM between genders. **H**₅₅₁: A significant difference exists in perceived success in Green Banking HRM between genders.

 Table 5.1 (Chi-Square and Fisher's Exact Test Results for Association Between Two Categorical Variables")

	Value	Df	Asymp. Sig. (2sided)	Exact Sig. (2sided)	Exact Sig. (1sided)
Pearson Chi-Square	.960	1	.327		
Continuity Correction	.319	1	.572		
Likelihood Ratio	.970	1	.325		
Fisher's Exact Test				.423	.286
Linear-by-Linear Association	.956	1	.328		
N of Valid Cases	200				

Table 5.1 shows Chi-Square and Fisher's Exact Test results assessing the association between two categorical variables. All p-values are above 0.05, indicating no statistically significant relationship. Both Pearson Chi-Square (p = .327) and Fisher's Exact Test (p = .423) support the conclusion of no meaningful association between the variables.

Table 5.2 (Descriptive Statistics of Green HRM Strategies and Outcomes by Gender")

	Table 5.2 (Descriptive Statistics of Green Theor Strategies and Outcomes by Gender)							
Test Va	Test Variables with Gender				Mean	Std. Deviation	Std. Mean	Error
HRM	Strategies	2:	Green Male	94	3.201	0.869	0.090	
trainin	g program		Female	106	3.159	0.868	0.084	
HRM	Strategies	3:	Green Male	94	3.168	0.859	0.089	
Docum	nentation		Female	106	3.135	0.874	0.085	
Outcor	ne		Male	94	4.109	0.662	0.068	
			Female	106	4.147	0.668	0.065	

Table 5.2 presents descriptive statistics of Green HRM strategies and outcomes by gender. Mean scores for males and females are similar across all variables, with slight differences. Both genders show comparable perceptions of green training, documentation, and outcomes, indicating minimal gender-based variation in responses.

 Table 5.3: Independent Two Samples t- Test Results for H5

Test Variables	Equal variances Test Hypothesis	Levene's Test for Equality of Variances						
with Gender	16st 11y pouresis	F	Sig.	T	Df			
						Sig. (2tailed)	Mean Difference	Std. Error Difference
HRM Strategies	H ₀ : Equal variances assumed	.195	.660	.338	198.000	.735	.042	.123
2: Green training program	H ₁ : Equal variances not assumed			.338	195.125	.735	.042	.123
HRM Strategies	H ₀ : Equal variances assumed	.281	.596	.270	198.000	.787	.033	.123
3: Green Documentation	H ₁ : Equal variances not assumed			.271	195.902	.787	.033	.123
	H ₀ : Equal variances assumed	.005	.944	398	198.000	.691	037	.094
Outcome	H ₁ : Equal variances not assumed			398	195.530	.691	037	.094

Table 5.3 presents independent two-sample t-test results evaluating gender differences in perceptions of HRM strategies and green banking outcomes. Levene's Test confirms equal variances for all variables (p > 0.05). The t-test results show no significant gender-based differences in Green Training (p = .735), Green Documentation (p = .787), or Outcome (p = .691), as all p-values exceed 0.05. The mean differences are minimal, indicating consistent perceptions between male and female respondents regarding HRM practices and green banking effectiveness.

6; (Summary of Hypothesis Testing Results for Green HRM and Banking Outcomes")

Hypothesis	Statistical Tool Used	Decisions
H1	Correlation	H ₁₁ Accepted
H2	Correlation	H ₂₁ Accepted
Н3	Chi-square Test	H ₃₁ Accepted
H4	One-Way ANOVA	H410, H420, H430 are Accepted
Н5	Chi-square Test and Independent Samples t-test	H ₅₁ Accepted

Results

The studies provide a sophisticated understating of the ways in which green banking initiatives are impacted by Green Human Resource Management (GHRM) techniques. Green

Recruitment and selection (r = 0.203, p= 0.004) and Green Documentation (r= 0.151, p=0.033) were the two HRM strategies that showed statistically significant positive connections with green banking results, demonstrating their critical role in improving environmental performance. However, there were no significant direct connections found for Eco friendly policies (r= 0.077, p= 0.280) or Green Training Programs (r= 0.084, p= 0.235) in dictating that their impact may be context- dependent or indirect. The synergistic nature of these tactics is further shown by strong inter- correlations among the HRM activities, such as between Green Training and Green

Documentation (r= 0.525) and Green Documentation and Eco-Friendly policy (r= 0.498). The alternative hypothesis was accepted and the null hypothesis was rejected as a result of hypothesis testing, confirming that specific GHRM practices have a major influence on the results of green banking. Furthermore, the chi square test revealed a strong correlation between employee participation in green projects and their knowledge of GHRM ($\chi^2 = 8.664$, p = 0.034), highlighting awareness as a crucial factor in green engagement. But according to employee job scale (p= 0.726), total banking experience (p = 0.347), and prior exposure to green HRM (p= 0.344), one- way ANOVA tests did not show any statistically significant differences in Green HRM enrollment. These results highlight the significance of organizational support, culture, and individual environmental attitudes in promoting sustainable workplace practices, indicating that demographic experience characteristics do not significantly influence Green HRM involvement.

Discussion

According to recent studies, there may be a link between the adoption of Green Human Resource Management (GHRM) techniques and the success of green banking projects Shakir and khan 2022. The purpose of this study is to investigate the degree of adoption of Green Human Resource Management (GHRM) techniques in India's banking sectors, both public and private, as well as the major factors affecting this acceptance. Additionally, it investigates the possible connection between a bank's dedication to environmental sustainability and GHRM policies. The results show that, despite the introduction of specific GHRM policies by Indian public and private sector banks to promote pro-environmental behaviour among employees, these practices have not been fully or consistently applied. Renwick et al., 2013. The "green management of company culture" method is the most efficient means of raising staff commitment and environmental awareness. This entails top-level management's active participation and assistance in integrating environmental knowledge and values across the entire organisation. Ramus & Steger, 2000. According to the literature currently in publication, companies with high environmental performance (EP) hardly ever implement individual green assessments or establish green goals and obligations beforehand Fernandez et al., 2003. Recent studies highlight the significance of these practices in fostering an environmentally conscious organizational culture and a more eco-aware workforce. Bansal & Song, 2017; Renwick et al., 2013.

To assess the human resource management strategies employed in green banking to promote sustainability.?

The study's conclusions offer insightful information on how well human resource management (HRM) practices support sustainability and green banking activities. Only Green Recruitment and Selection and Green Documentation showed statistically significant positive relationships with green banking results out of the four HRM techniques that were evaluated: Green Training Programs, Green Documentation, Green Recruitment and Selection, and Eco-Friendly Policies. The perceived success of green banking activities was found to be strongly influenced by Green Documentation (r = 0.151, p = 0.033) and Green Recruitment and Selection (r = 0.203, p = 0.004). These findings highlight how crucial it is to incorporate environmental values into HR procedures from the very beginning. Prioritising environmentally conscientious applicants during the hiring process aids in establishing a sustainability attitude early on, and thorough and organised documentation procedures accountability and uphold the bank's environmental pledges. On the other hand, this study found no statistically significant correlations between green banking outcomes and eco-friendly policies (r = 0.077, p = 0.280) or green training programs (r = 0.084, p =

0.235). While this does not necessarily diminish their significance, it does imply that their influence may be indirect or mediated by other factors like organisational support, staff engagement, or implementation depth. A discrepancy between policy and practice or difficulties in program implementation could also be indicated by the low statistical significance. Additionally, the high inter-correlations between the HRM practices-for example, between Green Documentation and Eco-Friendly Policy (r = 0.498) and between Green Training and Green Documentation (r = 0.525)—show that these tactics are not operating independently. Instead, they come together to create a cohesive framework that supports the organization's green goals. This synergistic link suggests that when individual methods are used as part of a thorough and integrated HRM approach, their efficacy may be increased. The conclusion that HRM procedures, especially those pertaining to hiring and documentation, are crucial to the success of green banking activities is supported by the rejection of the null hypothesis (Ho) and the acceptance of the alternative hypothesis (H₁).

According to these findings, banks that want to improve their sustainability agendas should implement strategic and focused HRM initiatives that closely match environmental objectives. To sum up, creating a green corporate culture necessitates a comprehensive strategy that includes coordinated and mutually supporting hiring, documentation, training, and policy actions. In order to improve long-term organisational resilience and environmental performance, banks should give top priority to strategic HRM planning that incorporates sustainability into all facets of the employee lifecycle.

To evaluate the impact of green HRM strategies on employee engagement and involvement in green banking initiatives.?

This study sought to assess how employee engagement and participation in green banking activities were affected by green human resource management (HRM) practices. The Pearson Chi-Square test results show a statistically significant correlation between employees' participation in green banking activities and their understanding of green practices ($\chi^2 = 8.664$, df = 3, p = The alternative hypothesis (H₃₁)—that employees who are better informed about green initiatives are more likely to actively participate in them—is supported by the rejection of the null hypothesis (H₃₀) due to the p-value being below the traditional 0.05 threshold. The idea that awareness is a key factor in encouraging participation in sustainable behaviours is supported by this research. Green HRM tactics, like internal communications and training initiatives, can be extremely important in raising employees' understanding of environmental issues and motivating them to support the sustainability objectives. It is necessary to acknowledge a methodological constraint, though. 50% of the cells had anticipated counts below 5, with the lowest count being 0.18, which undermines the validity of the Chi-Square test. This goes against one of the test's main presumptions and could affect how accurate the results

are. Future studies should think about merging response categories or using different statistical tests, such as Fisher's Exact Test, to overcome this constraint, particularly when working with small sample sizes or irregular distributions. All things considered, the results highlight the importance of strategic green HRM practices in developing a motivated and ecologically conscious workforce in the banking industry.

To investigate the link between green HRM strategies and the success of green banking initiatives.?

The purpose of this study was to examine the relationship between green HRM practices and the accomplishment of green banking projects, with an emphasis on any potential gender-based disparities in employee attitudes. To find out if male and female employees had different perceptions of the Green Training Program, Green Documentation, and the Results of green HRM techniques, an independent samples t-test was used. For all three factors, the results showed no statistically significant differences between male and female respondents. The pvalues for Outcomes (0.691), Green Training (0.735), and Green Documentation (0.787) were all significantly higher than the significance level of 0.05. Furthermore, with p-values of 0.660, 0.596, and 0.944, respectively, Levene's Test for Equality of Variances verified that the assumption of equal variances was satisfied. The conclusion of gender consistency in perceptions is further supported by the minimal mean differences, which range from 0.033 to 0.042. These results imply that gender has little bearing on how green HRM practices are perceived or how they affect the success of green banking. This gender-neutral reaction speaks well of the banking industry's inclusivity and consistent dissemination of green HRM practices. Other demographic variables might be investigated in future studies to gain a better understanding of how employees view the efficacy of green HRM.

Conclusion

The importance of Green Human Resource Management (GHRM) in furthering green banking strategies is highlighted in this paper. The results demonstrate that encouraging sustainability in the banking industry requires incorporating environmental values into HR procedures. the significance of incorporating sustainability from the beginning of hiring and operational procedures is highlighted by the fact that, among the GHRM tactics studied, green documentation and recruitment and selection had significant positive effects on green banking outcomes. Green training and eco friendly eco- friendly policies did not demonstrate statistically significant direct effects, but their possible indirect effects imply that more extensive organizational integration and support required for successful implementation. Furthermore, it was shown that staff understanding of green practices was a significant determinant of involvement in green banking initiatives, underscoring the significance of constant communication and information exchange. Male and female employee'

attitudes toward green HRM practices did not differ significantly, according to gender-based analysis suggesting that sustainability initiatives are implemented inclusively and successfully throughout the workforce. The study concludes by highlighting the necessity of an organization-wide, inclusive, and strategic approach to GHRM in order to guarantee the longterm viability of green banking and make a significant contribution to more general environmental sustainability objectives.

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- 63. Appendix

Appendix Table A1: Rotated Component Matri	ixª
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	Factors								
Q.ID	1	2	3	4	5	6	7		
S63	.950								
S64	.935								
S62	.933								
S65	.928								
S66	.926								
S67	.898								
S61	.890								
S21		.782							
S22		.764							
S30		.715							

Fostering Environmental Responsibility: HRM's Role in Green Banking Initiatives

S23	.681			
S27	.679			
S26	.675			
S29	.673			
S28	.614			
S24	.610			
S25	.561			
S12		.775		
S11		.744		
S16		.735		
S15		.724		
S13		.723		
S18		.698		

	14 .691				
I					

S17 .685

S20 .662

S19 .654

S1	.799					
S3	.749					
S2	.729					
S4	.722					
S8 S6	.701 .688					
S5	.681					
S9	.665					
S7	.654					
S10	.638					
S32	.756					
S37	.754					
S31	.754					
S35	.707					
S33	.663					
S34	.662					
S36	.650					
S40	.619					
S38	.577					
S39	.565					
S41	.713					
S43	.681					
S48 S46	.659 .647					
S50	.628					
S47	.620					
S42	.615					
S49	.577					
S45	.572					
S44					.530	
S51						.772
S53						.704
S57						.700
S58						.691
S55						.668
S56						.606
S60						.594
S52						.593
S54						.592
S59						.551

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.