

# Investigating The Role of Sustainable Human Resource Practices in The Manufacturing Sector in Odisha

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## Abstract:

**Purpose:** Establishing an ecological environment in the industrial division requires enticing uppermost ability, so long as comprehensive training, and integrating ecological awareness into the business's ethos. In the manufacturing sector of Odisha, numerous instances of environmental contamination have resulted in major health issues, conflicts with locals, dissatisfied employees, a decline in confidence, and organizational unhappiness. With an emphasis on manufacturing firms in Odisha State, this study examined corporate sustainability and green human resource management (GHRM).

**Design/methodology/approach:** A survey was employed in the quantitative research approach, and information was gathered from 236 workers at different industrial companies in Odisha State, India.

**Findings:** The study's findings exhibited a momentous relationship amongst the pasts of GHRM and business sustainability in the industrial sector. Regression analysis was used in the study to illustrate the benefits of GHRM for companies. Employees with greening training and abilities decrease leftover and repurpose resources, boost the company's image, fascinate and preserve eco-friendly customers, and mitigate hostile eco-friendly effects, all of which boost financial performance.

**Research limitations/implications:** The generalizability of the results of this investigation is likewise limited. The tiny sample size and constrained geographic area are the main causes.

**Practical implications:** Innovative manufacturers need to have a consistent green management strategy in order to satisfy the needs of their worldwide customer base and maintain their competitiveness in global markets. Government officials must also create environmental regulations that mandate the use of pro-environmental business practices and the assessment of their effects.

**Originality/value:** This achievement profits the corporation and empowers personnel to progress their individual ecologically sentient projects and attitudes. By providing an empirical examination of Green HRM techniques for attaining administrative competence and ecological sustainability in the industrial sector, this study will add to the body of knowledge. It will offer fresh context for upcoming studies on Green HRM and associated subjects.

**Keywords:** Corporate sustainability, Green human resource management, green hiring and selection, green pay, and green training and development

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## INTRODUCTION

It's become harder to believe that businesses are driven only by the desire for profit. Individuals are the key to achievement, as businesses and enterprises now recognize. Corporate sustainability, which uses environmentally friendly methods to benefit stakeholders over the long term, including customers and employees, has emerged as a result of this change in the business environment. [1]. By examining the entire spectrum of effects in social, cultural, economic, and environmental company actions, this strategy places a high priority on environmental protection. [2]. More traditional concepts of justice and ethics in the workplace have given rise to sustainable business practices. Corporate sustainability is a broader word, even though ideas like corporate social responsibility (CSR) and corporate citizenship are still used today.

In the preceding, supportable business performs have been linked to increased revenues and decreased expenses. These studies [2,3] have connected organizational sustainability to a number of favourable outcomes, such as increased productivity from current employees, reduced expenses related to hiring new employees and employee turnover, and decreased risks to strategy and operations. Therefore, it is essential that academics and industry specialists share a common understanding of the factors influencing a company's sustainability. People have a noteworthy influence on in what way businesses function and the success of their sustainability programs [4]. An important scholarly and practical contribution to the HRM field will be made by analysing and integrating these green HRM approaches that companies and other organizations are implementing and intend to implement [45].

Only those with a resilient sensation of individual liability for their actions and a concern for the environment may apply green management techniques. Hiring practices that reduce environmental effect, increasing employee possibilities, and compensating workers fairly while motivating them to contribute to environmental conservation are all part of Green HRM.

The design of environmentally approachable practices and regulations inside enterprises is obviously a critical function of GHRM [5]. GHRM practices are crucial, affording to the writers, since they afford the framework for accomplishing organizational sustainability [6]. More recently, articles have emphasized the potential and significance of GHRM in accomplishing organizational sustainability [7].

This article's goal is to examine, from an insider's point of view, how the implementation of specific green HRM elements affects business sustainability goals. By investigating the relationship between GHRM practices and organizational sustainability, this pertinent study closes a significant investigation gap. The business's perception on this important issue is especially inattentive from the corpus of present research.

The current education fills this knowledge vacuum and donates to the body of works by offering an industrial viewpoint on GHRM and organization sustainability. Practitioners will have a better understanding of how GHRM practices support long-term business survival thanks to the current study's findings. Despite the fact that GHRM practices have been associated with increased firm sustainability [3], this assertion is unsupported by any scholarly research. Research from both developed and developing nations supports the growing calls in the writings to examine the relationship between Green HRM practices and organization sustainability [4]. Research has indicated that the previously described connection is rarely examined across industries [2]. To meet this demand, the existing study applies the main concepts of the stakeholder theory to the industrial and industrial sectors. The GDP of the entire nation is mostly derived from the aforementioned industries. Likewise, in the previously described domain, the nation places a high priority on long-term sustainability and complete human development. Now that its main objective has been achieved, the study makes several contributions to the literature. First, the study is theoretically relevant since it supports the core idea of stakeholder theory about how GHRM and corporate sustainability KPIs are related.

Second, the study fills a vacuum in the literature by providing a specific example of the subject-verb interaction in a developing-economies situation. Because the Security Exchange Commission (SEC) released a code of organization domination in 2019 that highlights the adoption of green and sustainable workplace practices in these industries, the study concludes with practical consequences for these companies. Before moving on to the next step, which is the creation of research hypotheses, we give a quick summary of the literature on GHRM and commercial sustainability. After that, a detailed explanation of the methods employed in this inquiry is provided. Before going into great detail about the conclusions and their implications for further research and therapeutic use, we give a comprehensive explanation of the methodology and findings.

The study's shortcomings are discussed in the report's conclusion, which also offers several suggestions for more research.

## **2.LITERATURE REVIEW**

### **2.1. Green Recruitment & Selection**

Green job announcements should highlight the business's ecological strategies (e.g., to be intricate in reaching green goals). Attracting eco-aware workers may be facilitated by aggressively positioning the company as a top "green employer of choice" [8]. A growing number of businesses now understand that establishing a reputation as a green employer is an effective recruitment strategy [9]. Green HRM practices' effects on environmental sustainability were examined in Ref. [4]. They came to the conclusion that choosing environmentally conscientious employees will aid a company in reaching its sustainability objectives. In reality, companies that care about the environment may hire the staff they want to implement ecological administration programs, which ultimately helps them meet their environmental goals. The relationship between green hiring practices and Odisha's durable monetary feasibility, however, has not received much attention.

It's not a fleeting trend. The green hiring trend is being adopted by businesses worldwide. The hiring process is paperless and has little effect on the environment. Applications can be submitted online using the Global Talent Pool, online application forms, or email [46]. To lessen the impact of travel on the environment, interviews are conducted over the phone or via video whenever feasible. When hiring and choosing new staff, companies should take into account candidates' similar values and dedication to environmental issues [10].

The following is a definition of green recruitment and selection based on the three elements that [11] identified: the green awareness of applicants and the green principles that are used to attract applications. According to [12], the most essential element of green RS is a candidate's green responsiveness, which includes the psychological traits that help candidates

achieve environmental objectives like green awareness as well as the environmental objectives themselves. According to observations, employees who are concerned about the environment are always improving their awareness of it, which boosts their productivity at work. Employers should ensure that all staff members are aware of the issues at hand by using standards to attract and choose environmentally responsible workers. Environmental problems and considerations should be emphasized by employing companies, for instance, in their job descriptions and personnel qualifications. To find personnel who excel in these areas, a comprehensive series of questions concerning their philosophical beliefs, morals, and environmental awareness might be employed [11]. When it comes to hiring decisions, green recruiting can be successful if prospects are aware that the metrics based on environmental factors align. The number of candidates who turn down offers due to a bad record, the degree to which prospective hires mention the company's excellent environmental record as a primary factor in their decision to accept the offer, and the degree to which candidates are aware of the company's strong environmental record should all be included in the metrics. Lastly, to determine whether environmental variables had a role in your top performers' departure, the HR manager can set up exit interviews with them [46].

It is anticipated that the hiring process will identify candidates who are passionate about the workplace and who can support the objectives and goals of the company. Employees who participate in "job-related and voluntary" green activities to further the company's objectives and who share the company's green values and culture are more likely to be hired and selected using green hiring practices.

### **1.1. Green Training**

Green training, according to Ref. [13], is defined as exercises that encourage staff members to be mindful of environmental issues. According to Ref. [13], "green training" is essential to reaching environmental objectives. By raising staff awareness, knowledge, and competences, environmental operations can be made safer and more ecologically friendly. Employees with green training are more aware of the need of preserving the environment and, consequently, the environmental control procedure. Green recruiting, according to [13], entails giving training opportunities, delivering high-quality training, and assessing training and its relevance. According to Ref. [14], employee training has a big impact on how effective a company is.

Employees can acquire conservation and environmental protection abilities through green training and development (TD). To achieve environmental goals, several abilities are required [15]. Increasing employees' awareness of environmental issues, fostering green values, and enhancing their ability to apply green working practices are all examples of green TD practices [16]. It increases their awareness of how their actions impact their environment. It equips students with the knowledge and abilities necessary to identify environmental issues and take the necessary steps to resolve them [16].

Through training, employers can raise their employees' awareness, knowledge, and skill levels [10]. By taking part in a green training program, employees will become more conscious of the need of environmental protection. These kinds of programs can raise employees' awareness of this issue. [17]. Employees must be trained in the organization to protect the environment; this will help them embrace the problem by helping them adopt acceptable environmental habits [17]. Employees can obtain comprehensive sustainability training through the use of green human resource adoption, which enhances their knowledge and skills in environmental preservation and enlightens them on how to handle challenging motivational scenarios [18]. Workers must get training on environmental competency and waste collection techniques. Because of the training they get, all employees are encouraged to participate in environmental efforts [18].

In an effort to create a workforce that is more environmentally sensitive, some companies now evaluate and analyse the environmental training needs of their workers. These are genuinely beneficial actions that are also required to fulfil environmental management initiatives within the firm. With the goal of equipping staff members with the skills, attitudes, and knowledge necessary for superior environmental management, these organizations conduct rigorous and methodical education, training, and development programs [47]. If workers are able to recognize and address organizational environmental issues, they are more likely to feel that their employment is meaningful, which enhances green behaviour at work.

### **1.1 Green Compensation**

According to [19], companies can try to hire and keep workers by providing both monetary and non-monetary incentives. Employees can be motivated to work toward environmental goals by using these incentives.

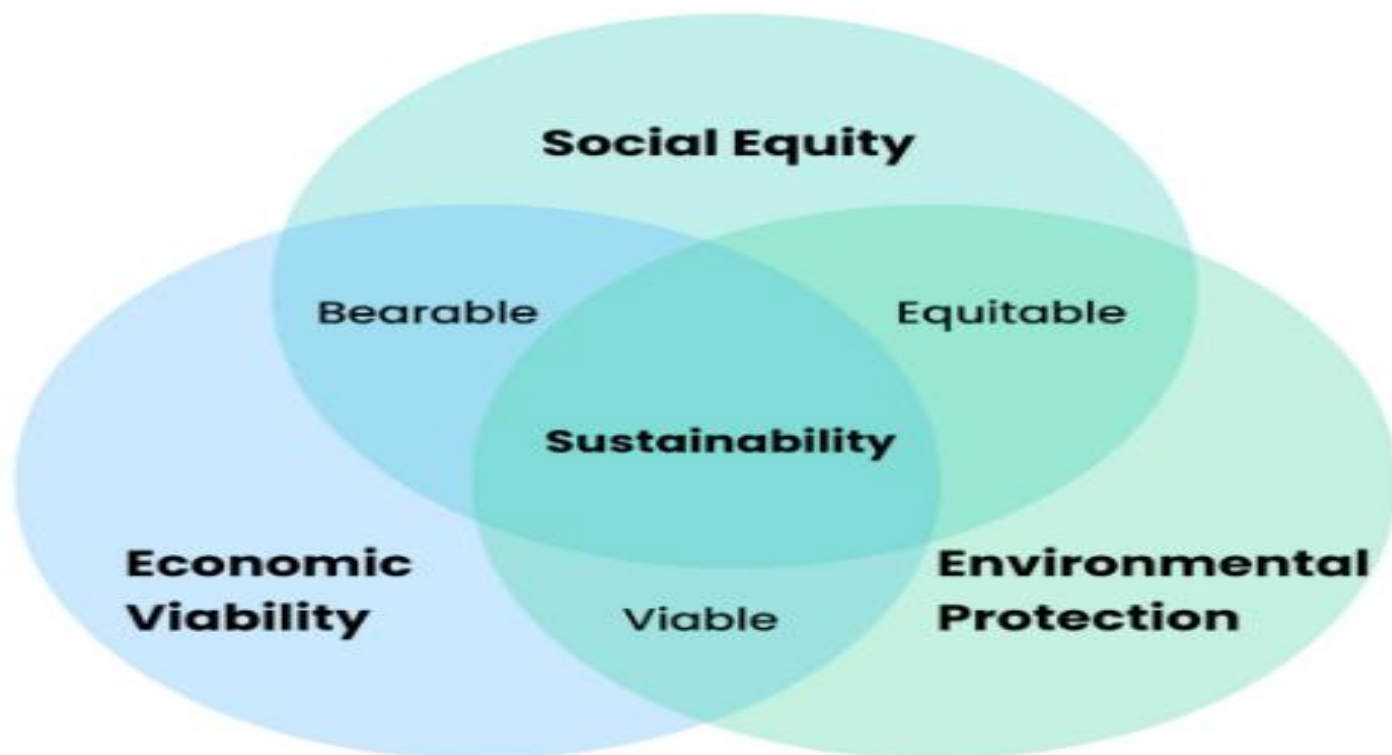
According to the results of [20], employee performance and retention are strongly correlated with compensation packages. Financial incentives may not be as successful at motivating employees as non-monetary ones like green pay, recognition, and praise. When it comes to motivating employees to achieve company objectives, employee incentives and awards may be more successful than other HRM practices, such as performance reviews. Engaging employees in green compensation management, which provides organizations with both monetary and non-monetary incentives, increases employee retention

and support for environmental goals [21]. Participants can receive non-monetary benefits like free vacation time and special recognition for their environmental stewardship in addition to monetary incentives. Providing rewards for eco-friendly behaviour boosts staff pride and creates a feeling of community [10].

According to the U.S. experience, it could be necessary to use negative reinforcements (such as warnings, criticisms, and suspensions) to persuade workers to modify their environmental practices, such as when they fail to handle hazardous material properly. Such undesirable supports, however, may not teach employees how to properly arrange of leftover, and they may fail to disclose environmental issues at the source since they are self-protective [48]. Work-related and voluntary behaviours can be encouraged by reimbursement policies that support environmental goals and give employees the right kind of incentive to take environmentally responsible acts.

### 1.1 Concept of organization Sustainability

According to Ref. [4], organization sustainability is the capacity of an organization to conduct its activities in a custom that certifies the durable viability and well-being of the organization and the related economic, public, and conservational organizations. Green human resource management (HRM) is different from ordinary HRM in that it identifies and classifies the particular behaviour's, practices, and procedures that contribute to long-term viability. Using green HRM strategies and practices is one way to define sustainability in this environment [9]. This could be the first step toward shared sustainability. [22] claims that an organization's operations and organizational policies that prioritize relationships, growth, and the environment are what lead to its sustainability [23]. "Green" and "sustainable" enterprises are two different categories. A "sustainable" company considers all three aspects of sustainability, whereas a "green" company just considers the environment. It is necessary to acknowledge and take into consideration the interdependencies among the domains [24]. The attempt by private sector, especially manufacturing, to become "sustainable" has been challenged by a number of authors due to the environmental dimension's limitations [25].



The four-step approach for workable growth in firms proposed by [26] states that implementing environmental efforts can act as a launching pad for more sustainability advancements. At first, the main focus of efforts was on creating eco-friendly procedures and environmental management techniques. These last actions encourage organizations to expand their focus to incorporate group and ethical issues and combinations in their local areas [26].

Organizations can take specific actions to attain long-term stability and viability according to a similar model created by [27]. The last phase of a business is referred to as "the sustaining corporation," during which time the sustainability philosophy is absorbed and a core pledge is made to support social justice and human fulfilment while assisting the world in maintaining

its ecological viability. [27] asserts that no organization has attained this degree of maturity. Businesses who are only beginning to integrate the economic, social, and environmental facets of sustainability must continue their efforts.

#### **1.1. Economic Sustainability**

Businesses need to consider things like creation of jobs, local salaries, and their impact on the surrounding economy in order to provide enough income to sustain itself and help the national and local economies [28]. This involves suppliers and participation throughout the supply chain to guarantee that comparable standards and practices are issues of economic viability. Businesses need to be both financially solid and profitable [28]. The environmental economy, which links economic and ecological principles, emerged in developed nations in the 1970s as a reaction to environmental degradation and over use of normal assets [29].

However, this concept did not spread throughout the developing world until much later. Because economic theory has widened the meaning of "capital" outside the limitations of conventional economics, commerce, and finance, it has had a substantial impact on sustainable development [30]. The economic component needs to be taken into account in order to guarantee the sustainability of sustainable development [31].

There are disagreements on how to define and use the term "sustainable economy." It is said that poverty in developing countries is reduced by sustainable economic growth [26]. However, the Rutland Report [32] states that the primary objective of finances in sustainable progress is to assess ecological and environmental harm while developing a pertinent consequence to reduce such deficiencies in the growing globe. It is challenging to define the word "sustainable economy" in a way that all stakeholders can agree upon because it cannot be distinct separately from the other sustainability provisions.

#### **1.1 Social Sustainability**

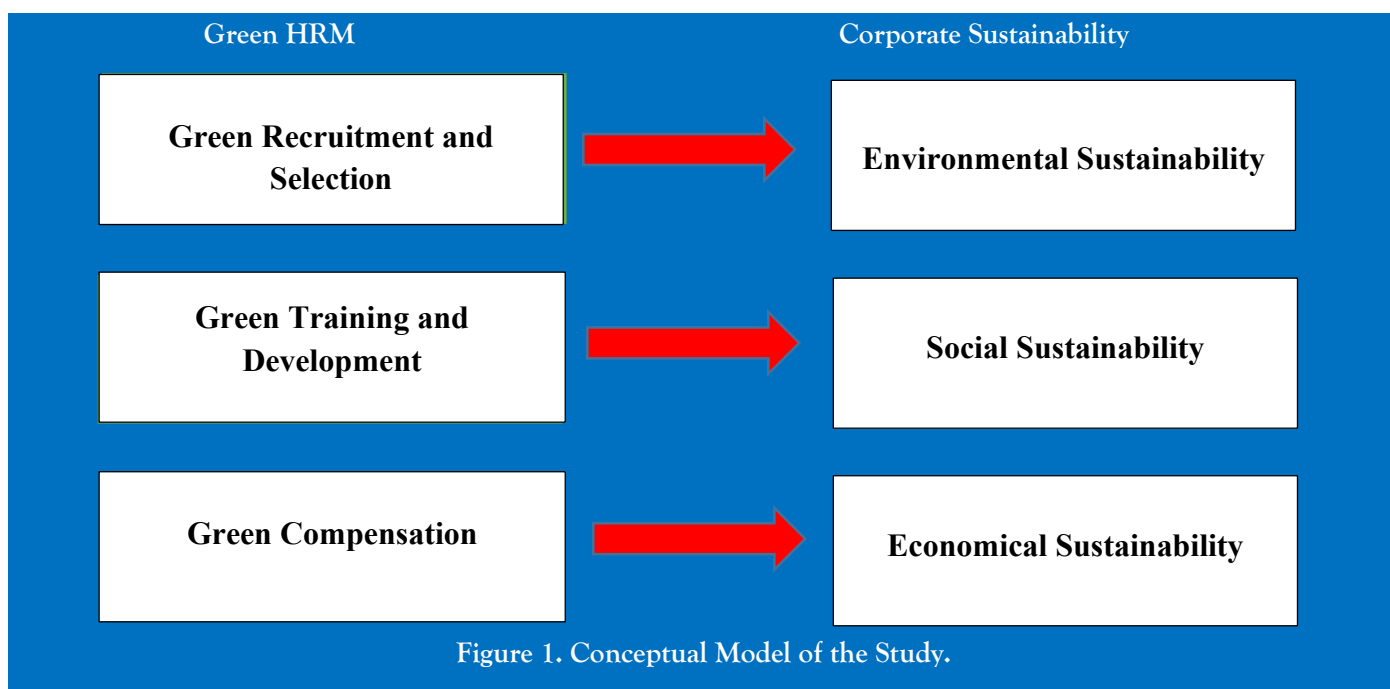
Because social sustainability includes clarifications of community, culture, and society, it has many different meanings. To put it briefly, social sustainability is the study of how individuals interact with one another through their relationships, activities, and values [33]. To be sustainable, businesses need to respect their host communities, interact with locals, and recognize the importance of culture and customs in their operations and experiences [33].

The ability of nature to support human life and habitats must be balanced with individual and societal requirements. The social aspect of sustainability is demonstrated by the rise in public mistrust of corporate behaviour, which is typified by controversy. This component clearly shows the struggle between business and society, yet when enterprises respond to sustainability, welfare also converges. Businesses' responses to sustainability are a microcosm of a broader macro-level worry for environment and quality of life. Two-thirds of consumers stated in a 1999 global poll that they favoured companies that promoted social objectives [34].

Global issues pertaining to human activity in both developed and developing nations can be resolved through sustainable development [48]. The social duration of sustainability has been the subject of extensive research in the field of corporate social responsibility (CSR).

#### **1.1 Environmental Sustainability**

In the scientific literature, the environmental component of sustainability has received the greatest attention. Manufacturing workers have access to a wealth of environmental information, such as how to recycle waste and reduce energy and water consumption. Nearly all respondents are taking action on environmental challenges, according to survey results from a research on manufacturing in London [34]. Others have discovered that the majority of businesses are conscious of their detrimental effects on the environment, particularly those in product-based industries like manufacturing. Environmental intervention is necessary in response to the depletion of non-renewable resources, including water, energy, and others [35]. Other eco-friendly operations management strategies used by manufacturers include the use of unbleached, undyed fabrics, recyclable materials, and recycling systems [34, 36]. The physical environment is influenced and interacted with by economics, communities, and ecological systems. The physical world will change as a result of these evolving systems, but in other ways, they will thwart or oppose those changes. As a result, a program aimed at promoting environmental sustainability could never aspire to safeguard and preserve all of nature [37]. The first stage in achieving the purposes of any ecological sustainability program is to comprehend the bodily atmosphere, counting come again should be changed and whatever should stay the same. The bodily atmosphere, aristocratic standards, wants, and abilities, skill, and the assets obtainable to sustenance the achievement platform will all influence their specific goals [37] (Figure 1).



## 2.Theoretical Review

The investor hypothesis states that managers' main responsibility is to positively impact all "stakeholders," not just shareholders [3]. The term "stakeholder" here refers to any individual who has a financial, political, or other specific interest in the company's success. Anybody who is affected by or has an interest in an organization's conduct is essentially considered a stakeholder. Groups and people/objects external the company have unintended risks, whereas workers and investors are samples of investors that are situated close to the business atmosphere and partake straight risks. This idea was selected for this study in order to completely clarify its notions. Preceding revisions on the subject also employed the stakeholder concept's main premise [37]. Achieving organizational sustainability requires an understanding of the company's interior and exterior conservational and social possessions [38].

Involvement from stakeholders is crucial to comprehending and resolving the issues and concerns this raises. Within, a business may strive for organizational sustainability by training employees and creating plans or guidelines that support long-term sustainability. A diverse range of individuals and organizations may be regarded as stakeholders when looking at the world outside the company. In this case, the organization has to weigh their own interests against those of several interested parties. Internal and external stakeholders' active participation is crucial to the viability of an organization. GHRM and sustainability enable the business to serve a variety of stakeholders. According to [39], the fundamental ideas of stakeholder theory are also applicable to a variety of industries, such as information technology, manufacturing, finance, and education. Despite the fact that different stakeholders have different needs across different industries, their importance is nevertheless crucial [40]. Since both GHRM and Organization Sustainability concentrate on how an administration's activities impact its societal, ecological, and financial performance, they are closely related.

### 1.1 Materials and Methods

According to the study's correlational analysis exploration methodology [41], an inspection strategy is the best way to learn about a group's attitudes, behaviours, and beliefs. our method is therefore pertinent to our study since it provides a fundamental explanation of how green HRM variables affect worker inspiration in the chosen industrial businesses in Odisha State. The greatest industrial hub in the nation is located in the Indian state of Odisha, where the study was carried out.

Odisha is recognized as one of India's most important industrial regions, with major cities like Bhubaneswar, Sambalpur, Angul, Jajpur, and Keonjhar playing significant roles. It is particularly well-known for its mineral-based enterprises and steel production. The population of the research consists of the several organizations that represent the strata. Each stratum,

which is composed of a homogeneous group, is divided into multiple administrations (heterogeneous groupings) that occupy in changed tasks. Homogeneous groups are groups of organizations in the same industry (stratum). Samples were arbitrarily designated from each stratum.

A total of 20 administrations that are likely to reason ecological wellbeing problems as a result of their business activities were chosen from among various organizations in Odisha State in accordance with the study's objectives, which include evaluating the level of companies' consciousness and participation in green HRM practices. 84 workers were also chosen from among those who were employed by these companies. A total of 20 administrations were haphazardly chosen from the 14 manufacturing zones, with three administrations chosen from each of the 12 industrial zones. Only managers and human resources officers a total of 236 HR employees were chosen to contribute in this investigation from the 20 haphazardly chosen firms.

This reading employed an organized survey to gather data in two segments: Section A sought demographic information about the inhabitants, such as educational background, centuries of facility, and gender; Section B inquired about Green HRM; and Section C inquired about the elements of an organization's sustainability. Three indicators were used to measure administrative sustainability and green HRM. According to the Supplementary Materials, the questionnaire was developed using a 5-point Likert scale, where 1 means strongly disagree, 2 disagree, 3 neutrals, 4 agree, and 5 strongly agree.

The survey was distributed to human resources specialists in order to evaluate its validity. After that, Cronbach's alpha was used to verify each construct's dependability. Pilot research was used to determine these features, and the results showed that the scale reliability was more than 0.80% and the data were normally distributed. The data was coded using SPSS between those two points in time, and the responses of respondents were analysed using regression to ascertain the relationships between green HRM and organizational sustainability in specific manufacturing sectors in Odisha State.

In order to be given due attention, ethical concerns were raised. The study guarantees that all participants will be able to remain anonymous and that those who choose to discontinue participation at any time will not have to provide a reason for doing so. Additionally, each respondent was told that the information they provided would be kept as secret as possible.

### 1.1 Response Frequency

The response rate details are displayed in Table 1. The researcher's constant follow-ups contributed to the high response rate. However, 202 copies (85.59%) of the 236 copies that were distributed were recovered for analysis, while 34 copies (10.12%) could not be located. This indicated an 85.59% response rate, which is significant sufficient to make inferences about how the variables relate to one another.

**Table 1.** Response rate.

Questionnaire	Frequency	Valid Percentage
Valid	202	85.59%
Invalid/unfilled	34	14.41%
<b>Total</b>	<b>236</b>	<b>100%</b>

Source:2025 Researcher's Survey.

Table 2 displayed the participants' gender distribution. There were 77 (38.1%) female and 125 (61.8%) male responders in the training sample.

**Table 2.** Gender.

	Frequency	Percent
Male	125	61.9%
Female	77	38.1%
<b>Total</b>	<b>202</b>	<b>100.0%</b>

Source: 2025 Scholar's Survey.

## 2.Results

### Test of Hypotheses

**Hypotheses 1 (H1).** Green hiring and selecting practices have little effect on ecological sustainability.

### Rule

(R) is very weak between 0.0 and 0.20, weak between 0.20 and 0.40, moderate between 0.40 and 0.60, strong between 0.60 and 0.80, and extremely potent beyond 0.80. analysis of the findings. With a R of 0.370, the model summary in Table 3 shows a weak correlation between environmental sustainability and green hiring.

The table shows how much the independent variable (green recruiting and selection) may be explained by the dependent variable (environmental sustainability). R square = 0.126, or 12.6%, is used for this.

This suggests that just 12.6% of the variation in environmental sustainability can be attributed to green hiring. Thus, 87.4% (100–12.6%) of the variance in environmental sustainability may be explained by other factors that are not part of the model. The standard error estimate, or fault term, is 0.51480.

**Table 3.** Model Summary for Green Recruitment and Selection and Environmental Sustainability.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.370 a	0.126	0.137	0.51480

Source:2025 Researcher's Survey. a Predictors: (Constant), Green Recruitment and Selection.

### Decision

The impact of green appointment and selection on eco-friendly sustainability is minimal (Table 4).

### Rule

If the p value is less than 0.05, reject the null hypothesis, or H<sub>0</sub>. When the p value is greater than 0.05, the null hypothesis, or H<sub>0</sub>, ought to be accepted.

**Table 4.** Green hiring and selecting practices' impact on environmental sustainability

ANOVA a						
	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.815	1	12.815	44.605	0.000 b
	Residual	78.476	300	0.266		
	Total	91.291	301			

2025 Researcher's Survey is the source. <sup>a</sup> Environmental sustainability is a dependent variable.

<sup>b</sup> Green recruitment and selection are the predictors (constant).

### Decision

Environmental sustainability is significantly impacted by green hiring and selection, as demonstrated by the rejection of H<sub>1</sub> due to the significant value being less than 0.05.

The result interpretation indicates that the regression is intercepted by the constant, B = 2.271. Green Recruitment and Selection is therefore equal to zero, resulting in Environmental Sustainability of 2.271.

Green Recruitment and Selection's B value, which is 0.356, indicates the regression slope; for every unit increase in Green Recruitment and Selection, Environmental Sustainability rises by 0.356. Green employment and selection improves environmental sustainability (Table 5;  $\beta$  = 0.361;  $t$  = 6.678;  $p$  = 0.000).

**Table 5.** Significant effect on environmental sustainability.

Coefficients a		Standardized				
Unstandardized		Coefficients		Co efficient	$t$	Sig.
Model	B	Std. Error	Beta			
	(Constant)	2.272	0.195		11.652	0.000
1	Green Recruitment and Selection	0.356	0.053	0.361	6.678	0.000

Source:2025 Researcher's Survey. a Dependent Variable: Environmental Sustainability.

**Hypotheses 2 (H<sub>2</sub>).** Social sustainability is not significantly impacted by green training and development.



### Rule

Between 0.0 and 0.20, R is very weak; between 0.20 and 0.40, it is weak; between 0.40 and 0.60, it is moderate; between 0.60 and 0.80, it is strong; and over 0.80, it is quite potent.

### Examination of the Findings

According to Table 6's model description, social sustainability and green training and development have a moderate link, as indicated by the R value of 0.446 sustainability. The standard error estimate, also referred to as the error term, is 0.45889.

As the table illustrates, the dependent variable (social sustainability) may account for the self-determining variable (green training and development). The value of R square = 0.198, or 19.8%, illustrates this. According to this study, green training and development might only account for 19.8% of the variation in social sustainability. This indicates that factors not included in the model account for 80.1% of the variance in Social Sustainability. The error term, sometimes known as the standard error estimate, is 0.45888.

**Table 6.** An overview of the model for socially sustainable green training and development.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.447 a	0.198	0.194	0.45888

Source:2025 Researcher's Survey. a Predictors: (Constant), Green Training and Development.

### Interpretation of Result

The F value for the previously provided ANOVA table is 37.219 with a significance level of 0.00. This suggests that green hiring and selection procedures have a major impact on environmental sustainability.

### Decision

Green training and development has a negligible impact on social sustainability (Table 7).

**Table 7.** Green education and training's impact on social sustainability.

ANOVA a					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	14.675	1	7.836	37.219	0.000 b
Residual	63.962	298	0.212		
Total	78.637	301			

Source:2025 Survey of Researchers. Sustainable social practices are a dependent variable. b Predictors: Green Training and Development (Continuous).

### Rule

If the p value is less than 0.05, the null hypothesis, or H1, need to be disregarded. Accept the null hypothesis, or H1, if the p value is greater than 0.05.

### Result Interpretation

According to the aforementioned ANOVA table, the F value is 37.218 20.109 at 0.00 significance. This suggests that social sustainability is significantly impacted by green training and development.

### Decision

Since the significance level is smaller than 0.05, H1 is rejected, suggesting that green training and development have a major impact on social sustainability.

### Result Interpretation

The constant that intercepts the regression is  $\beta = 2.031$ . Accordingly, Economic Sustainability is 2.030 when Green Training and Development is 0 (Table 8).

**Table 8.** Coefficient for Social Sustainability and Green Training and Development.

		Coefficients a			
		Unstandardized Coefficients	Standardized Coefficient	t	Sig.
Model		B	Std. Error	Beta	
	(Constant)	2.031	0.214		9.498 0.000
1	Green Training and Development	0.290	0.041	0.373	7.141 0.000

Source:2025 Researcher's Survey. a Dependent Variable: Social Sustainability.

The regression slope is shown by the  $\beta$  value for Green Training and Development, which is 0.291; for every unit increase in Green Training and Development, Social Sustainability likewise increases by 0.291. Social sustainability is impacted by green training and development, as Table 8 demonstrates ( $\beta = 0.373$ ;  $t = 7.141$ ;  $p = 0.000$ ).

**Hypotheses 3 (H3).** Economic sustainability is not significantly impacted by green compensation.

Rules

(R) is very weak between 0.0 and 0.20, weak between 0.20 and 0.40, moderate between 0.40 and 0.60, strong between 0.60 and 0.80, and extremely potent beyond 0.80.

### The outcome

Interpretation

The R has a 0.252 effect on Green Compensation on Financial Sustainability in the perfect instant exhibited in Table 9, indicating a very weak association. The table shows the extent to which the independent variable (green compensation) is explained by the dependent variable (economic sustainability).

R square = 0.063, or 6.3%, is used to represent this. This suggests that just 6.3% of the variation in Economic Sustainability can be clarified by Green Reimbursement. Thus, 93.7% of the modification in Financial Sustainability can be attributed to other factors that were not incorporated into the model. The error term, or standard error estimate, is 0.49563.

**Table 9.** An overview of the model for sustainable economic growth and green compensation.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.252 a	0.065	0.061	0.49564

Source:2025 Researcher's Survey. a Predictors: (Constant), Green Compensation.

### Decision

Economic sustainability and green compensation have a negligible relationship (Table 10).

**Table 10.** Green compensation's impact on economic sustainability.

ANOVA a					
Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	3.990	1	4.941	20.108	0.000 b
Residual	74.645	299	0.245		
Total	78.635	300			

Source: Researcher's Survey for 2025. Economic sustainability is one of the dependent variables. b Predictors: Green Compensation, Constant,

### Rule

If p is less than 0.05, reject H1 (null hypothesis). When p is greater than 0.05, accept H1 (the null hypothesis).

### Result Interpretation

The F value in the preceding ANOVA table is 20.109 at 0.00 significance. This suggests that green reimbursement has a big impact on financial sustainability.

### Decision

Green compensation has a considerable impact on economic sustainability, as evidenced by the rejection of H1 because the significant is less than 0.05.

### Result Interpretation

The constant that intercepts the regression is  $\beta = 2.918$ . It shows that Economic Sustainability is 2.918 when Green Compensation is 0. The  $\beta$  value for Green Compensation, which is 0.228, indicates the regression slope; for each unit increase in Green Compensation, Economic Sustainability rises by 0.229. Table 11 shows that Green Compensation has an effect on Economic Sustainability ( $\beta = 0.252$ ;  $t = 4.485$ ;  $p = 0.000$ ).

**Table 11.** Coefficients for Green Compensation and Economic Sustainability.

		Coefficients a			
		Unstandardized Coefficients	Standardized Coefficients	t	Sig.
Model		B	Beta		
	(Constant)	2.918		15.553	0.000
1	Green Compensation	0.228	0.252	4.485	0.000

Source: 2025 Researcher's Survey; dependent Variable: Sustainability of the Economy

## CONCLUSIONS AND RECOMMENDATIONS

In India's manufacturing sectors, the results of the study demonstrated a strong correlation between GHRM antecedents and organizational sustainability. Studies have shown that implementing green HRM will increase an organization's sustainability [16, 18, 42].

This suggests that a substantial incentive to build a green environment would result from paying employees fairly for using green human resources. Their efficiency and performance at work will also be much enhanced. The aforementioned findings show that green training and development and organizational success are most strongly correlated.

Consistent with the opinions expressed by [42], the findings also showed that educating staff members to follow the company's green culture is equally as crucial as employing them on the basis of presumptions that they have similar values. This suggests that the circumstance study organizations make sure that new hires understand and support the company's environmental values and green initiatives. Additionally, a trustworthy sign of a business's sustainability is green compensation management. This reasoning supports the findings of [17,29,31], who proposed offering incentives to encourage trash management, recycling, and reuse.

This education detected at in what way green HRM affected the sustainability of businesses in a few sectors in Odisha, India. The study's findings indicate a favourable relationship between corporate sustainability and green HRM. The study has added to the body of current literature since it demonstrates how important green HRM is to achieving the SDGs.

Additionally, the study concludes that GHRM is beneficial for green organizations. Among these advantages are green hiring and selection, which exposes staff to greening techniques; green training, which teaches staff how to cut waste, recycle, and reuse materials; enhancing the property's reputation, which attracts and retains customers; reducing the adverse effects on the environment; and enhanced financial performance. Last but not least, in order to compensate employees for implementing green workplace practices, green compensation management should become deeply embedded.

### Practical Implications

Eco-friendly methods ought to be incorporated into HRM procedures by human resource managers. In order to assist businesses in improving their environmental performance in a more sustainable way, HR managers should be aware of GHRM practices and seek to increase and improve their application.

To strengthen green practices, the government should generally support companies that use green human resource management (HRM) and include greening strategies into Indian labour law.

Institutions should also comprise Green HRM in their courses to demonstrate and generate the ethos of greening in the workstation. Businesses should also put in place GHRM-based strategic HRM policies that give priority to the development of ecologically friendly workers.

### 3.1 Limitations of the Study

1. The paranoid element that is prevalent in India made it harder to obtain responses, which had a detrimental impact on this study. Because of this, getting a complete copy of the questionnaire that was given to the responders was difficult.
2. Because the study mainly examined workers in manufacturing businesses in Odisha State, its geographic scope was limited.
3. In conclusion, it was difficult for the researcher to persuade the respondents to complete the online survey. However, due to the additional work done by the researcher and the research assistants, none of the aforementioned constraints prevented the success or generality of this study.

### Recommendations for Additional Research

- ✓ Future research should examine green HRM and organizational sustainability in additional segments, such as education, oil and gas, agriculture, and so forth, as this study only examines the Indian manufacturing industry.
- ✓ Additionally, as the current study used a cross-sectional strategy, future researchers should utilize a longitudinal approach to observe the consistency of variables evaluated over time.
- ✓ To demonstrate how a moderating role can alter the variables, future research must include a regulating variable.

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