

The Role of HRM in Promoting Environmental Sustainability Within Organisations

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Abstract: To meet the knowledge and competency difficulties posed by the new processes and technologies of Industry 4.0, modern human resource management must adopt new strategic methods. The significance of social, ethical, and environmental goals is also being recognised by businesses. Businesses are shifting their emphasis from maximising profits to improving the lives of their employees, the communities in which they operate, and the environment. Sustainable Human Resource Management is one of the fields that advocates for "green" jobs. When an organization's human capital embraces new ecological methodologies and incorporates creative sustainable strategies, it may accomplish the sustainable development goals (SDGs). They lay out the blueprint for future HR strategies and practices that will help accomplish monetary, social, and ecological objectives while also ensuring the longevity of the HR foundation. Manufacturing and large-scale service businesses are their main areas of interest. There will be a greater need for highly educated workers as the number of complicated workplaces grows as a consequence of the ongoing automation of basic production processes. And for this, we need to use cutting-edge methods and fresh concepts. To help businesses and HR departments face the new challenges of Industry 4.0, this article will detail the steps used to create a competency model and provide a framework for using it. In addition, we will provide a synopsis of the possibilities and threats that could shape HRM's trajectory in the years to come.

Keywords: Sustainability, Human Resource management, Industry 4.0, advance techniques, Innovative ideas, manufacturing process.

Introduction

Most recent developments have been made in the context of environmental change that has similarly emerged as "dangerous deviations of the atmosphere". Associated greenhouse gases are the result of aerobic exercise which includes petroleum-based foods, modern fusion tests, etc. This requires the need for temporary mobility on the part of baby gas producers in order to reduce their carbon footprint. [1]

In 1992, the United States Climate Program (UNEP) was linked to natural disasters as a result of mixed efforts from around the world. The most important organization is the sponsor of the United Nations Conference on Climate Change and Development. These days they are known as "World Summits" and their purpose is to get countries to recognize and monitor climate protection in general. At the largest world summit in 1997, the Kyoto Protocol was adopted when it approved emission reduction targets that are expected to be achieved in 2012 when the conference may come to an

end).[2] The director of the United Nations World Commission for Climate and Development (WCED) at the time, Gro Harlem Brundtland, published a basic text called "Our Common Future" in 1987.. The survey highlighted Human asset the board (HRM) definition of supporting organizations as they continue to look for long lines. in terms of record, sustainable development "development that meets the needs of innovation without compromising the future human ability to meet their own needs", regardless of the principle of progress in which the double sale of goods, speculation, the direction of equipment development and institutional change are all in agreement and improve both the current capacity and the future to address human problems and goals. Likewise, states and organizations should do everything possible to improve their overall natural execution and reduce their impact on the environment, furthermore,[3] organizations are expected to address solid concerns about financial difference in exercise and social engagement from a lonely perspective and to take advantage of restrictive efforts. Elements can also discover their measurements of overall nature using generally established techniques that incorporate the assortment of ISO 14000 certificates, the General Reporting Initiative (GRI) file, etc.[4] The current period calls for the implementation of novel strategic methods for comprehensive human resource management in order to meet the difficulties of knowledge and competence that are associated with the new technologies and processes that are part of Industry 4.0. Additionally, businesses are becoming more conscious of the significance of social, ethical, and ecological goals in their operations. In addition to maximizing their financial profits, businesses are establishing new objectives for themselves, with an emphasis on individual, A performance and development approach that is both community and environmentally responsible. "Green" organizations are promoted by Sustainable Human Resource Management (SHRM), which is one of the disciplines that supports "green" companies. Both the incorporation of creative sustainable strategies and the adoption of new ecological approaches by the organization's human capital are necessary in order to accomplish the Sustainable Development Goals (SDGs). The pattern of planned or emergent human resource strategies and practices is defined by them. The purpose of these strategies and practices is to allow the attainment of financial, social, and ecological goals while simultaneously replicating the HR base over an extended distance. The majority of their attention is directed on manufacturing and large-scale service organizations. It is expected that the number of workplaces that have a high degree of complexity will rise as a consequence of the ongoing automation of straightforward industrial processes. This will lead to an increased need for a high level of education among the workforce. However, in order to do this, it is necessary to make use of cutting-edge methods and creative concepts. The purpose of this article is to discuss the creation of a competency model and to provide a method that demonstrates how businesses and human resource management may make use of it to tackle the difficulties that are emerging in Industry 4.0. In addition, we will provide an overview of the possibilities and challenges that will have an impact on the future of human resource management.

It is possible that the sustainability paradigm has the capacity to change the objective of human resource management from a single economic goal to several and different reasons. There are a number of different viewpoints on human resource management (HRM) that are related with sustainability concerns in the literature. Some of these approaches include socially responsible HRM and green HRM. In addition, measures pertaining to corporate social responsibility are directly connected to sustainable human resource management. The Human Resources Management department has not assumed responsibility for social responsibility problems, and they are anxious about how to tackle these concerns. By the same token, human resource management is more likely to provide operational assistance in the execution and implementation of internal social responsibility activities as opposed to providing strategic input in the process of building a corporate social responsibility strategy. It was also shown that human resource management does not play a significant part in the decision-making process for corporate social responsibility inside firms. The most influential individuals are members of the board of directors, followed by the departments of legal affairs, public relations, sales, and marketing. Millennials and members of Generation Z are also of the opinion that firms should change their mission and place a greater emphasis on people (including workers, consumers, and society) rather than profits. Sixty-two percent of those who participated in the survey are in agreement that firms should investigate the reasons why human resource management does not participate more in activities related to sustainability and corporate social responsibility.

It has been extensively established for a considerable amount of time that one of the primary issues is the difficulties that the human resources function experience when attempting to play a strategic role in businesses. The degree to which sustainability activities in businesses are purely symbolic and self-serving concerns or, on the other hand, are

normative and substantive undertakings is another explanation. This is because sustainability initiatives may be either symbolic or self-serving. The first strategy is characterized by an ad hoc approach and greenwashing language. It is primarily driven by cause marketing reasons, and it does not need a significant amount of engagement from human resource management, "such as attempts to improve working conditions along the supply chain, efforts to reduce the carbon footprint, or corporate volunteering and service assignments," is an example of the latter, which includes an authentic commitment to addressing societal needs and an impactful approach. In this particular instance, a high level of human resource management involvement is required.

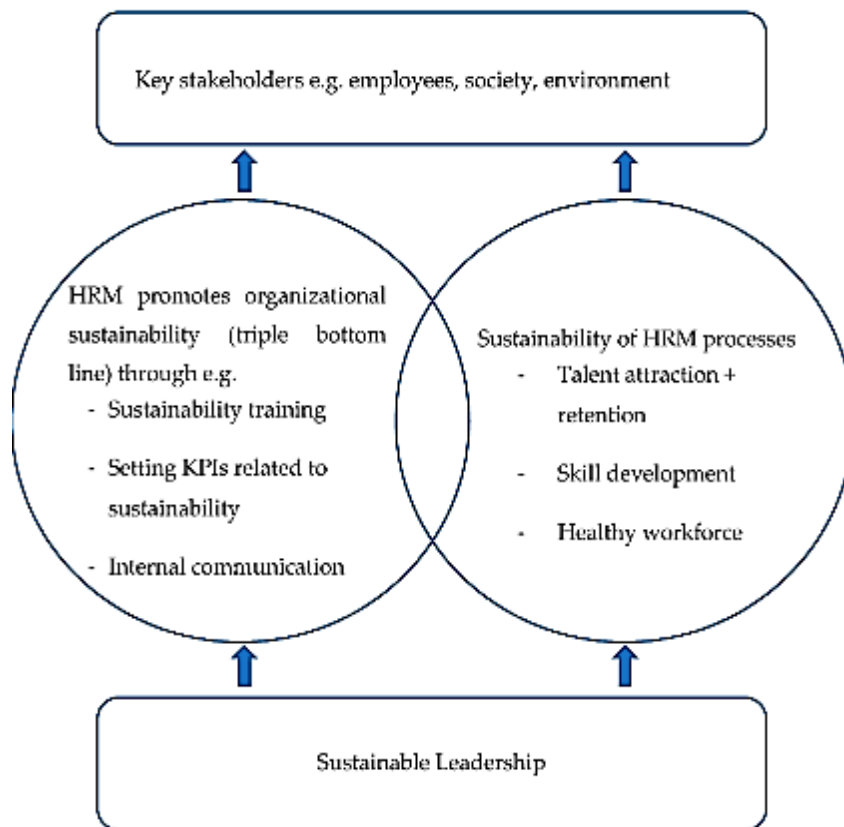


Figure 1. Conceptual Framework

The panorama that was shown before is a duty that falls to HRM. In their argument, the authors contend that human resource management (HRM) has been trying to achieve success over the last three decades by creating a restricted emphasis on economic performance. It was difficult for human resource managers to become business partners in order to convince the board of directors. They were looking for ways to show the profitability (ROI) of their interventions, which became one of their primary motivations. In some way, human resource management has "ignored its role in building corporate sustainability and corporate social responsibility capabilities and balancing the interests of different parties within the organization."

Over the last several years, there has been a rise in the significance of environmental concerns and sustainable development in both developed and developing countries. 'Green practices' have become more necessary for companies to implement as a result of the growing concern for the environment on a worldwide scale and the establishment of international standards for environmental management. Organizations are concerned about these issues.

In today's world, people are becoming more aware of the rising significance of integrating environmental management with human resource management, sometimes known as "green HRM" practices. In the context of corporate organizations, green human resource management refers to the implementation of HRM policies that encourage the sustainable use of resources and, more broadly, support the cause of environmental sustainability. Initiatives pertaining

to human resources are being implemented in order to promote environmentally responsible activities, as well as to raise employee understanding and commitments on problems related to sustainability.

Environmentally responsible human resource practices and the protection of knowledge capital are the two fundamental components that make up green human resource management. It involves implementing activities that are friendly to the environment, which ultimately leads to increased productivity, decreased expenses, and improved employee engagement and retention, all of which contribute to the reduction of carbon footprints for the associated business. As a matter of fact, green human resource policies center their attention on the collective and individual capacities to bring about green behavior. These kinds of regulations are designed to foster an environmental culture inside the company. The emphasis of green human resource management is on the environmental behavior of workers while they are working for the firm, which may then be carried over to their consumption patterns in their personal lives. Researchers in the field of Green Management efforts stated that in order for an Environmental Management System (EMS) to be successfully implemented, it is necessary for businesses to have employees that possess the appropriate skills and abilities (Daily and Huang 2001). Due to the fact that the implementation of these initiatives necessitates a high level of technical and management expertise on the part of employees, Green HR initiatives include the implementation of recruitment and selection practices, compensation and performance-based appraisal systems, as well as training programs specifically designed to increase the employees' awareness of environmental issues.

Green management for sustainable development is a concept that has been defined in a number of different ways in the environmental literature. These definitions, in general, seek to explain the necessity of striking a balance between the expansion of industrial production for the purpose of wealth creation and the protection of the natural environment in order to ensure that future generations are able to flourish. Despite the fact that modern businesses have been focusing on developing new products to promote environmental awareness and sustainability Nevertheless, the question of how a single firm or an entire society might attain sustainability via the green management movement is still a contentious and ambiguous one. In light of this, the purpose of this research study is to try to describe a process model of the HR practices that are engaged in green HRM by using the literature that is currently accessible.

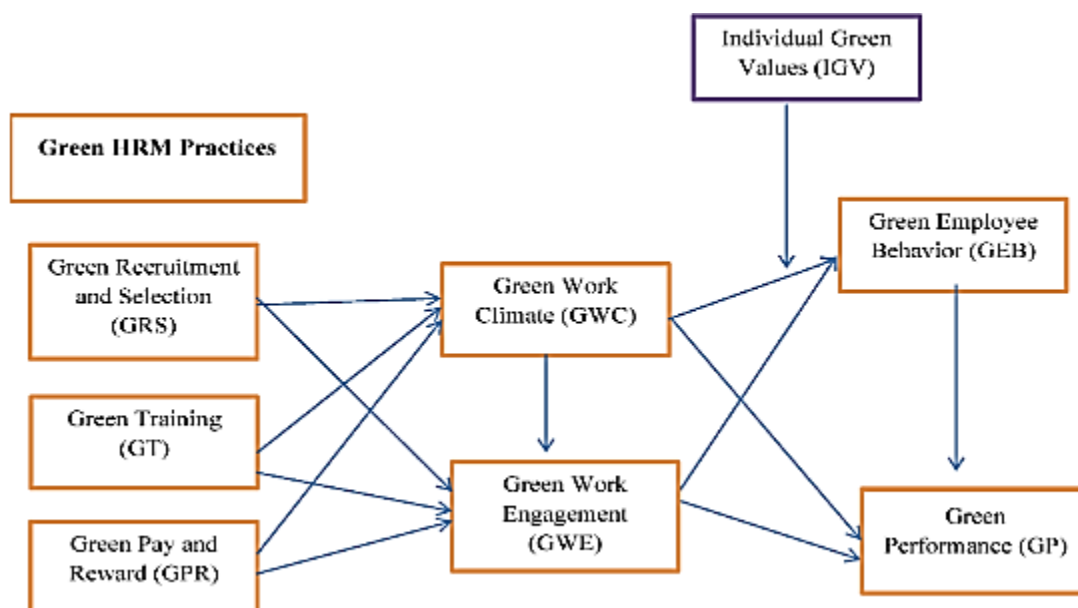


Figure 2. Theoretical Framework of Green HRM sustainability

One of the needs for human resource management is to transform the organization's desired objectives and values into HR processes and regulations. This is one of the requirements. The development of humanitarian methods is something that should be carried out from a simply human perspective synchronized with the Natural Resource-Based View (NRBV) methodology in order to enable organizations to achieve the highest possible level of profitability. In addition,

environmental concerns must to be safeguarded throughout the process of hiring and selecting employees . Furthermore, human resources programs have the power to provide incentives and recognition for resolving environmental concerns, which may aid in the improvement of an employer's sustainability. organization

It is the perception of social legitimacy that is responsible for the development of violent profits. An incomprehensible advantage that can be gained via competition is the silent capability that can be attained with the engagement of workers in order to lower pollution levels. Due to the fact that it enables complicated sources of profit and facilitates fluid communication between departments and elements, product management is related with aggressive profits, as was indicated before . While the organization is in the process of recruiting environmentally conscious employees, an environmental plan is effective. As a consequence of this, the contributions that staff members make to the execution of this kind of strategy may be of great significance (Chan, 2005).Due to the fact that there is a substantial responsibility for change within the business cultures, human resource control is the backbone of organizational change management. As a result, human resource experts are the ones that recognize and monitor important changes, therefore aiding workers in the process of establishing brand new work styles and habits.

This is due to the fact that miles are able to establish trusting connections, deal with issues, and improve and carry out intentional activities.

This one-of-a-kind resource, which is generated from human knowledge and abilities, is known as human money. There is a connection between the performance of the characters and the country that represents an essential source at the same time. It is possible that the aggressive and destructive advantages of how to establish organizational stability might be the consequence of harmonizing HR procedures with the natural NRBV mechanisms that were stated before in this respect describe an environment in which an organization conducts a comprehensive evaluation of its environmental initiatives, ranging from their execution to its strategic flexibility, with the goal of ensuring sustainable development. It is easy to see how this concept is connected to the continuing skills of the employer. This is due to the fact that some HR procedures have the potential to influence the establishment of a sustainable lifestyle as well as the implementation of NRBV initiatives (sections et al., 2011).

The help-based viewing approach (RBV) has been used by a number of pioneers in order to assess human resource management as a means of delivering a competitive edge, RBV is a strong version of the entire performance, which makes it distinctive to the resources and capabilities of the organization as an aggressive profit asset. Consequently, human resources may be precious, uncommon, and immeasurable, and they can be replaced by greater aggressive gains. This is the primary premise upon which this strategy is built. According to Buller and McEvoy (2016), human resource procedures are a valuable instrument for increasing organizational performance. These processes define organizational skills, character skills, knowledge, and institutional skills.

The management of human resources and the pursuit of continual aggressive profitability are connected to two factors. The primary issue is connected to the human resources procedures that are taken into consideration by the computer. In light of this, if the organization has a machine that is clearly defined, then it is possible to fulfill the requirements of RBV, which are that it must be significant, uncommon, difficult to copy, and incomprehensible. The second component is comprised of personnel of the company who are uncommon, modest, and unassuming in their own right. As a consequence of this, human capital is seen as the most important factor in ensuring the continued sustainable growth of companies.

The fruitful reconciliation of these confirmed business models is hugely prone to everyone even outside the commercial enterprise, with the human resources (HR) style having the best potential to force "green" techniques and cycles. HRM is an essential element in controlling the firm's most famous asset: its capital.[5] Human resources procedures have a broad status and have not been worked on now, which makes it increasingly difficult for businesses to create Ecological Administration (EMS) frameworks. Human-valued assets preparation, practices, projects, and proactive council activities with Approved Natural Control (EM) are for further scrutiny. It ventured considerably forward in 2008 as advances in EM and HR had been slashed, with the time frame initiated by "non-human resource loading" (GHRM) . some HRMs were not made "as a utility of HRM guidelines to improve the proper use of resources in corporate substances and to shift the reason for noticing the climate, comparably improving teacher engagement and satisfaction",

at the same time as others describe it as an "agreed goal"., and an efficient system for normal human administration practices and ecological partnership goals.[6]

Green HRM accentuates the association's ability to fascinate, in any case, moreover, to control the prosperity and monetary and social knowledge of the company. Its importance is to allow green representatives with guidance to truly consider and collaborate in amazing exercises. Last but not least, a fundamental portion is the commitment and devotion of the specialists.[7] The feature has been rigged to see almost a method to adapt to the problems of the board, which game should make green arrangements and how the environment can exploit them. on the issue of adapting agents to the tough rules of the firm, numerous computer games related to membership, commonly the manner of 3 conduct and evaluation of directors, advancement of representatives and senior executives have been recognized as key individuals .Much of the ongoing interest has been coordinated with the natural problem of trade, indistinguishable from "an alteration in world temperature". Ozone depleting substances are the end product of human exercise and oil eats less, gaming business experience and numerous others. This necessitates the need for rapid preparation by fuel manufacturers to reduce their carbon footprint. In 1992, the United World Areas (UNEP) environmental program changed due to natural problems that regularly emerged as a result of conflicting efforts by various global networks within the area. That said, the limitations concerned in the use of green human resource management trials should be considered with caution. Firms are feasible to address specific dangers while directing sustainability, some of which include a lack of help from corporate hierarchical pioneers, maintenance expenses, and a lack of inner skills or abilities. Some other problems may be the vulnerability of the fact that predicted outcomes can, indeed, be calculated at times, associations are directed to look at the dangers of taking an interest in such a strategy deliberately. Similarly, businesses are encouraged to talk together about why green HR management rules and guidelines are adopted to their staff that intentional cooperation will eventually become obvious and counterproductive outcomes will be eliminated.[8] The phrase "Green Human Resource Management" has emerged as a popular buzzword in the corporate world at the current moment, and the relevance of this concept is growing exponentially with the passage of time. In addition, this phrase has firmly established itself as a subject of strong interest in recent study efforts due to the increased knowledge on the amount of attention paid to environmental management and sustainable development has been steadily expanding on a daily basis throughout the whole world. In today's world, the concept of green human resource management (HRM) encompasses not only an awareness of environmental issues, but also the social and economic well-being of the firm as well as the workers within a larger perspective. Within the context of this developing discipline, it has been commonly noticed that the existing body of literature has to be expanded further from the point of view of the functions of Human Resource Management (HRM). The findings indicate that a significant portion of the previous research concentrated on a few functions of human resource management (HRM), including recruitment, training and development, performance evaluation, and reward management, when it came to integrating environmental management with HRM. This is despite the fact that HRM has a greater potential and scope in improving the environmental performance of organizations. It has been shown via previous research and literature that there is a strong connection between green human resource practices and employee dedication, organizational citizenship, and company performance. Research has also shown that individuals of various ages, incomes, genders, and other characteristics have diverse ways of understanding green human resource management.

In addition, individuals who have varying levels of expertise and different positions in the hierarchy of an organization have a substantial association with their civic behavior and their dedication to the organization. The literature has provided a list of numerous green initiatives that firms might implement; nevertheless, it is necessary for each organization to adopt individual initiatives that are in accordance with its purpose, objectives, and operational procedures requires a particular level of adaptation. Due to the fact that ONGC is one of the major oil and natural gas producing units in India, it has been their primary obligation to ensure that the natural environment is preserved. For the purpose of preserving a sustainable organizational environment that is in harmony with the natural and physical surroundings, they have implemented a number of environmentally conscious initiatives. However, in light of the findings that were obtained from earlier research, a number of issues come to mind, such as whether or not the personnel of ONGC were dedicated to the preservation of the natural environment. Does the implementation of green human resource policies and initiatives at ONGC have any effect on the employees' commitment to the company, their citizenship behavior, or their overall performance? Is there a difference in how workers of ONGC who come from diverse demographics view green human resource management? The responses to these questions will not only enhance

the mechanism, but they will also develop trust and commitment among the workers. Additionally, they will present initiatives that other organizations need to follow in order to establish their own green human resource management practices. Therefore, the questions that were expressed before were summarized in the form of a research issue and presented as "A comprehensive study, a process model, and a research agenda are presented here on green human resource management policies and practices.

What are the Primary Goals of Sustainability?

The reasonable development competent system takes actions into account and operates on a global scale. The United Nations Conference on Sustainable Development (UNCSD) was held in 2012 to discuss and establish a set of goals to strive for; these goals evolved from the Millennium Development Goals (MDG), which promised to reduce global poverty, but acknowledged that there was still a long way to go. [9–10]. In the end, the SDG came up with a list of seventeen items, which comprised, among other things:

- The elimination of hunger and thirst
- Improved models of healthcare and education, particularly in relation to water quality and cleanliness
- Achieving parity in sexual orientation
- Progress towards more stable economies and better jobs via long-term monetary development

The effects of climate change, pollution, and other natural disasters on people's health, livelihoods, and lifestyles are becoming more severe, and all of the aforementioned are becoming more pressing.

- Long-term viability that takes into account the strength of the sea, land, and air Finally, it acknowledged that nature has rights, that humans are world stewards, and that people must take the lead in shedding light on the aforementioned global issues via environmental and consumption management (e.g., by reducing packaging and food waste and encouraging the use of recyclable materials).[11]

Green HRM Concepts

On analyzing the responses of employees towards the dimensions of green HRM, majority of employees were found that green HR practice s preserves the natural environment (65.1%) and ensures healthy working environment and raise morale of the employees (56%) as well as provides competitive advantage through ensuring the corporate responsibility towards environment (43.2%). Employees perceives such practices as cost saving measures to the organization (43.3%) as well as enhances the image of the company (63.3%) and reduces intervention from the government and other law enforcing agencies (45.7%). Green HR practices also develops ecofriendliness and environmental learning among the employees (77.2%) and thus stimulates innovation and growth in the organization (48.8%) by facilitating green learning and shaping green behaviour among employees (40.4%) and thus these practices maximizes the use of resources and helps in reducing waste (40.5%).[12]

Green HR practices preserve the natural environment

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	9	3.1	3.1	3.1
Disagree	26	9.0	9.0	12.1
Neutral	66	22.8	22.8	34.9
Agree	129	44.6	44.6	79.6
Strongly Agree	59	20.4	20.4	100.0
Total	289	100.0	100.0	

Table 1: Green HR practices preserves natural environment

HR practices stimulate innovation and growth

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	46	15.9	15.9	15.9
Disagree	31	10.7	10.7	26.6
Neutral	71	24.6	24.6	51.2
Agree	69	23.9	23.9	75.1
Strongly Agree	72	24.9	24.9	100.0
Total	289	100.0	100.0	

Table 2: Green HR practices stimulate growth and innovation

Conclusion

In this study, we acknowledge the challenges that come with investigating sustainability and HRM at the same time. Management of human resources should prioritise the well-being of workers and their families above and beyond what is required by law. Staff engagement, workplace democracy, career management, and development opportunities would all fall under this category. In addition to aiming for both short-term efficiency and long-term sustainability, it should give attention to social responsibility activities while keeping an eye on the interests of both internal and external stakeholders. A technique with several dimensions is used in this article. The purpose of this study is to provide a comprehensive examination of sustainable development across all of its dimensions. This study presents a model that combines the ways in which human resource management may help businesses stay in business by summarising different conceptual and empirical results, defining all HRM roles clearly, and identifying key research gaps in the literature.

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