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Gaining a Competitive Advantage through Green Human Resource Management

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Abstract

The practices of environmental protection and the prevention of environmental pollution have emerged as a result of recent environmental problems when the humans noticed that natural resources are limited. Environmental management practices have accelerated with the conscious acts of businesses on environmental issues since they have the greatest responsibility for environmental pollution. After the 2000s, businesses have started to prefer to be a part of the solution rather than being at the center of the problem and tended to green business and management practices. For improved environmental performance, sustainable competitive advantage, and environmental management, environmental consciousness should be taken into consideration in each and every human resource function ranging from recruitment to training of employees, from performance assessment to rewarding. In this sense, green human resources management (GHRM), allowing improved employee consciousness and commitment to environmental sustainability, has become an interesting issue. In the present study, green human resources management and practices are evaluated, significant issues are pointed out, and recommendations are made for future researchers who wish to work upon this subject.

Keywords: GHRM, competitive advantage, GHRM practices, environmental management, green management

1. Introduction

In today's societies, the concepts like global competition, technological changes and development, communication, environment, and environmental problems are getting more and more common in everyday life with the acceleration of globalization. In this sense, societies, businesses, and individuals develop new dynamics to cope with this global change. Human resource constitutes the primary elements for change and development in organizations. On

the other hand, environmental problems occur due to the human perception that the world resources are endless and offer free goods. Today, such problems with various destructive outcomes and impacts have become remarkable. Several environmental disasters, ranging from global warming to droughts, point out the severity of the problem. Significance of environmental problems has brought up the need for environment-conscious (green) activities in individual, organizational, and community levels. These activities are generally implemented on a voluntary basis, but sometimes implemented within the scope of legal obligations.

In the 2000s, businesses began to take conscious acts to contribute to the green movement [1], and the concepts of environmental consciousness and environment-conscious (green) business have evolved. Environment-conscious (green) management as a business concept is defined as a management and business perception in which ecological environment is the primary issue in the activities and decisions of an organization [2], and such concepts targeting the optimum balance between economic and ecologic performance of a business in management are regarded as a process in which all management functions are integrated with environmental protection [3]. In other words, green management and business implies a transition from a perception which does not pay much attention to efficient use of natural resources and the production waste materials released to the environment without any treatment into a perception with an awareness of world's limited natural resources and having and implementing this awareness as a business ethics [4]. An efficient implementation of such a perception has a great significance not only for a sustainable competitive advantage of businesses, but also for the future of mankind. However, the primary actor in making a business sensitive to environmental problems is human, and therefore, full implementation of such a management and business perception will not be possible when the businesses are not able to make their employees conscious about environment [5].

In other words, for improved environmental performance and efficient environment-conscious (green) business, environmental consciousness should be taken into consideration in each and every human resources functions ranging from recruitment to training of employees, from performance assessment to rewarding. Briefly, with green human resources management (GHRM), businesses are able to create a win-win strategy and then can satisfy their employees and improve their environmental performance. Right at this point, identification of implementations and opinions of the business in this subject become a significant matter. As a result, GHRM and its actions are determined as a field of research. In the present study, green human resources management and practices were evaluated, significant issues were pointed out, and recommendations were provided for future researchers who wish to study on this field.

2. Green human resources management (GHRM)

Human resource constitutes a vital function for businesses. Rapid technological changes which occurred after the industrial revolution in the eighteenth century required a specialization in labor force and made human resource a significant aspect of production. Human resource has become a function encompassing entire people employed in the organization.

Today, human resource management undertakes not only recruitment, assessment, dismissal, and similar routine processes but also a managerial function and becomes an inseparable component of management like the other management functions. Therefore, human resource has a strategic significance today. It is quite significant in identification of organization vision, mission, and objectives [6]. In recent years, several businesses have employed a strategic tool known as green human resources management and pro-active implementations to gain a competitive advantage. Environmental management system includes a structure allowing a better control of environmental footprint the businesses leave. GHRM represents the most significant dimension of environmental management system.

Today, the businesses under ever-changing environmental conditions have to develop and implement environment-oriented strategies to gain a sustainable competitive advantage. However, the success of these strategies is totally dependent on proper selections and implementations. In this process, the condition for the success of businesses is the awareness of employee and responsibility in environmental protection. In recent years, businesses are under increasing pressure of environment-conscious production activities, and they have mostly amended their environmental regulation, but they didn't feel necessity to change their human resource management. Therefore, most of the time they experienced various problems in the implementation of their environment-conscious strategies. They have to adapt their human resources factors to the changing conditions while implementing environment-conscious activities such as environment-friendly products, waste management techniques, introduction of green products, and establishment of new relations with various environmental partners. When they are not able to convince and motivate their employees about environmental consciousness, it is impossible to successfully apply such a strategy. In other words, the businesses without human resource who perceives environmental action as a life philosophy and acts accordingly will not be able to have environment-conscious implementations [1]. Therefore, sensitivity and commitment of employees in these programs are the pre-conditions for the success of environment-oriented programs [7]. In this sense, businesses carry out environment-conscious human resources management practices to create an awareness and commitment in their employees.

Green human resource management (GHRM) is considered as a pre-condition for green management and business practices of organizations, and it is pointed out as the critical step for a sustainable competitive advantage. GHRM studies have begun at the end of 1990s and accelerated in the following decades. The relations of environment and environmental management issues with human resources of businesses are placed in literature as follows: Callenbach et al. indicated that within the scope of environmental management, businesses should assign their employees duties to fulfill their environmental responsibilities and should improve their awareness in environmental issues [8]; Welford indicated that environmental management can only be fulfilled through employee participation [9]; Milliman and Clair indicated that environmental management programs should be integrated with human resource management [10]; Wehrmeyer pointed out that an environmental management in a business can only be mentioned when the environmental values of businesses were formed and adopted by human resource professionals and staffs of the business [11]. The book of Wehrmeyer [11]

titled as “Greening People: Human Resources and Environmental Management” and the study of Revill [3] named as “The ‘Greening’ of Personnel/Human Resource Management: An Assessment” are the pioneering works in GHRM literature. Sadgrove mentioned about green human resources managements forming a bond between human resource and environmental management practices [12]; Wehrmeyer classified the functions of green human resource management under the headings of recruitment of authorized staff, staff management, and support of organizational dynamics. On the other hand, Milliman and Clair formed a model classifying the functions of green human resource management as strategies, training, performance assessment, and rewarding and pointed out the need for proper organizational structures in which environmental management is harmonized with human resources [13]. Keog and Polonsky indicated that green vision, green objectives, green policy, and programs to fulfill environmental commitments of a business could only be possible through green human resource management [14].

Daily and Huang indicated the significance of human resources for the success of environmental management systems and reported that human resource may influence the performance [15]. Brio and Junquera indicated that environmental management was a quite complex process, but environment-conscious human resources contribute to environmental management [16]. Fernandez et al. emphasized the significance of environmental awareness employees, their participation in environmental activities, and training and motivation for the environmental strategies to be successful [17]. Govindarajulu and Daily claimed the significance of the parameter of human resources in environmental management systems [7]. Boudreau and Ramstad in a study revealed that sustainability principles could be upheld with strategic human resources planning and high level of environmental awareness [18]; however, they also indicated that sufficient interest hasn’t been created in this subject in literature. Jabbour and Santos determined human resources as the pre-condition for the success of environment-conscious management of organizations [19]. Akdoğan and Aykan stated that green human resource management practices became functional based on the perspectives of executives about the issue [5]. Mandip described GHRM as a management system integrating environmental management including employee participation and commitment in environmental sustainability with the practices of human resources [20]. According to Mishra et al., GHRM expresses an innovative process including human-oriented technological innovations and developments [21]. While Deshwal described GHRM as an organizational strategy to improve environmental consciousness of employees [22], Renwick et al. [23], Mohd-Yusoff and Mohd-Yusoff [24], Sheopuri and Sheopuri [25], Ahmad [26], Razab et al. [27], Arulrajah et al. [28], and Sharma [29] focused on GHRM practices as the critical success factors, a strategic tool, or a strategy for competitive advantage.

Green human resource management targets human resources to bear an environmental responsibility in their tasks, to turn them into employees who are able to develop positive behaviors with other co-workers, to present new ideas and recommendations, and thus to enable the implementation of environmental programs. The basic target actually is to motivate employees, to turn them into environment-conscious individuals, and to improve environmental performance of the organizations.

The characteristics of traditional human resource management and green human resources management are briefly provided and compared in **Table 1** [3].

	HRM	GHRM
Beliefs and assumptions	Central vision and shared Values Strong culture	Centrally shared environmental Vision Environmental culture
Strategic driven	People Strategic driven Pursuit of excellence and competitive advantage	People Cross-functionally driven pursuit of environmental excellence and sustainable practices
Management direction	Systems structure Supervisory and change leadership Two-way relationship and personal control	Systems structure and institutionalize Policy champion and change leadership two-way relationship and open dialogue
Management direction	Commitment and teamwork Recruitment and selection Appraisal and reward Training, development, and learning	Environmental commitment and teamwork Environmental recruitment and selection Environmental appraisal and reward Environmental training, Development, and learning

Source: Revill [3, p. 4].

Table 1. Comparative analysis of HRM and GHRM.

As it was seen in **Table 1**, the basic difference between human resources management and environment-conscious (green) human resources management is the sustainable and environment-oriented perception in environment-conscious human resources management. While the characteristics like perfection, competitive advantage, and inspector leadership are prominent in human resource management, environmental sustainability and evolutionary leadership that help to develop and implement environmental policies are prominent in environment-conscious human resource management.

Within this perspective in general, green HRM also uses the HRM policies to support the sustainable use of resources within organizations, which contribute to the environment sustainability. The term “Green HRM” is most regularly used to refer to the concern of people about management policies and practices of the broader corporate environmental schedule [22]. Renwick et al. defined GHRM as the human resources dimension of environmental management system and the influence of employees on environmental performance outcomes within the frame of Ability-Motivation-Opportunity (AMO) theory [23] (ability—recruitment and development of highly qualified employees; motivation—improvement of employee commitment and motivation through efficient rewarding and performance management; opportunity—providing employee participation in the process of problem solving by sharing information with them and providing opportunities).

Renwick et al. [33] and Deshwal [22] have explained that GHRM involves an integration of company’s environmental management objectives to the HR processes of recruitment and selection, job description, training and development, health and safety at work, performance management and evaluation, talent management, succession and career planning and rewards, etc. and have highlighted the necessity of implementation of rigorous recruitment and selection of employees, performance-based appraisal system, and introduction of developmental programs aimed at increasing the employees’ environmental awareness.

Zoogah indicated that GHRM makes the human resources practice, philosophy, and policies sustainable business sources [30]; similarly, Ahmad [26] illustrated that GHRM brings the human resources policies into force allowing the sustainable use of resources in every job/process of the business. With another perspective, Mandip [20] and Mishra et al. [21] defined GHRM as the implementations that support environmental activities and improve employee consciousness and commitments for environmental sustainability. Besides providing improved efficiency like reduced cost and employee commitment, and improved organizational outcomes, the green human resource management practices include the implementations that reduce the carbon footprint of the business. Then, Mishra et al. [21] defined green human resource management as an innovative process that includes human-related technological innovations and developments. GHRM involves human-related technology advancements and mainly includes initiatives like car-pooling, job-sharing, teleconferencing and virtual interviews, recycling, telecommuting, online training and optimally utilizing the energy-efficient office spaces, etc.

As a result, green human resource management can be defined as the triggering force of the human resource implementations that improves both economic and environmental sustainability of business resources by undertaking change and developing environmental conditions.

3. Green human resources management practices

Since the objectives in GHRM implementations aim to make human resources conscious about environment, to reduce carbon footprint of companies, and to motivate employees to improve their environmental performance, the absence of the implementations of these objectives causes problems in some companies. In such businesses, it is impossible to create an environment-conscious culture and an understanding mindful of environment. With GHRM practices, a business intends to improve productivity, minimize the risks, and protect the interests of shareholders [8].

Wehrmeyer [11] expressed the significance of human resources management in environmental management, significance of employee participation in environmental performance, the complex nature of environmental problems requiring specific analytical and communication skills, and the emergence of environmental management from the needs of cooperation and communication among the entire functions of the organizations. Wehrmeyer [11] described the most significant role of human resources in environmental management as supporting the environmental activities of the organization and classified inter-related human resources functions under two categories including environmental human resources management (EHRM) and environmental management activities [3]. These functions are authorized staff recruitment, staff management, and supporting organizational dynamics (**Table 2**).

Renwick et al. [23] described environmental management as a dimension of human resources management, approached it within the frame of the Ability-Motivation-Opportunity theory (AMO Theory), and grouped GHRM functions under development of green abilities, motivation of green employees, and providing green opportunities (**Table 3**). Razab et al. [27] revealed that environmental consciousness of the businesses was shaped around human resources activities involving entire employees and classified these functions under four

GHRM functions	Activities
Recruitment of authorized personnel	<ul style="list-style-type: none"> • Job description • Recruitment • Start to work • Dismissal
Personnel management	<ul style="list-style-type: none"> • Training • Health and safety at work • Personnel assessment • Industrial relations • Motivation and rewarding • Dispute resolution and discipline
Support of organizational dynamics	<ul style="list-style-type: none"> • Monitoring culture and attitudes • Development of environmental ethics • Support of change management • Developing multi-perspectives • Improving communication

Source: Revill [3, p. 23].

Table 2. GHRM functions.

headings as recruitment and selection, training and development, performance management system, and waging and rewarding. Mandip [20], Sheopuri and Sheopuri [25], and Mohd-Yusoff and Mohd-Yusoff [24] pointed out that environmental activities of HRM consist of major component of social responsibility of the businesses and assessed these activities within

Developing green abilities	Practices
Green job design and analysis	<p>Incorporating a number of environmental protection-related tasks, duties, and responsibilities in each job and putting into effect.</p> <p>Including environmental, social, personal, and technical requirements of the organizations in job descriptions and person (job) specifications as far as possible and put into effect.</p> <p>Using teamwork and making cross-functional teams as job design techniques to successfully manage the environmental issues of the company.</p> <p>Including environmental dimension as a duty in job description.</p> <p>Including green competencies as a special component in job specification. Designing and implementing new jobs and positions in order to focus exclusively on environmental management aspects of the organizations.</p>
Green human resources planning	<p>Engaging in forecasting the number of employees and types of employees, needed to implement the corporate environmental management initiatives/programs/activities (e.g. ISO 14001, cleaner production, responsible care, etc.).</p> <p>Engaging in deciding strategies to meet the estimated demand for environmental works (e.g. appointing consultants/experts to perform energy or environmental audit etc.).</p>

Developing green abilities	Practices
Green recruitment	<p>Indicating or making organizations' environmental performance (past and current) transparent in the publication of recruitment announcements.</p> <p>Becoming a green employer or green employer of choice.</p> <p>Including environmental criteria in the recruitment announcements.</p> <p>Asking the employer's concern about greening through recruitment efforts.</p> <p>Including the environmental policy and strategies of the organization in its recruitment policy.</p> <p>Expressing certain environmental values (e.g. be a part of the green team of ABC or we are socially and environmentally responsible) in the job advertisements of the company.</p> <p>Expressing the preference of the organization to recruit the candidates who have competency and willingness to participate in corporate environmental management initiatives in the recruitment announcement.</p>
Green selection	<p>Considering candidates' environmental concern and interest as a selection criterion.</p> <p>Asking questions related to environmental issues in the recruitment interviews or in evaluating the candidates'</p> <p>Selecting the applicants who are sufficiently aware of greening for the job vacancies.</p> <p>Selecting the applicants who have been engaging in greening as consumers in their private life.</p>
Green induction	<p>Providing general green induction.</p> <p>Providing job-specific green induction.</p> <p>Making the new employees familiar with greening efforts of the organization and encourage them to engage in green interpersonal citizenship behavior.</p> <p>Developing induction programs showing green citizenship behavior of current employees.</p>
Green training and development	<p>Providing environmental training to the organizational members (employees and managers) to develop required skills and knowledge.</p> <p>Providing training to learn or adapt environmental-friendly best practices (e.g. reducing long-distance business travel and recycling).</p> <p>Providing training to create "environmental awareness" among the workforce.</p> <p>Providing environmental education to the workforce.</p> <p>Providing training to the staff to produce green analysis of work space.</p> <p>Applying of job rotation to train green managers of the future.</p> <p>Imparting right knowledge and skills about greening (to each employee through a training program exclusively designed for greening).</p> <p>Conducting training needs analyses to identify green training needs of employees.</p> <p>Analyzing and identifying environmental training needs of employees in order to make them more environmental concerned.</p> <p>Conducting a serious and systematic training program which is given to each employee for the purpose of giving the necessary knowledge, skills, and attitudes for good environmental management.</p> <p>Providing opportunities to everybody to get training on the aspect of environmental management.</p>

Source: Arulrajah et al. [28, pp. 3–9].

Table 3. Developing green abilities.

the framework of recruitment of environment-conscious employees under the functions of performance management system, training and development, employee participation, conflict and discipline, wage and reward system and appreciation. While Uddin and Islam [31] and Ahmad [26] classified GHRM functions under five categories as green recruitment, green

performance management, green training and development, green waging, and green industrial relations, Deshwal [22] added personnel management, ability management, success, and career management to these functions, and thus classified them under eight groups. Arulrajah et al. [28] carried out a review study on the current green human resource practices and gathered these practices under several categories as green job analysis and design, green human resource planning, green recruitment, green selection, green induction, green performance assessment, green training and development, green rewarding system, green job safety, green discipline management, and green employee relations. Below, the GHRM functions were considered within the frame of Ability-Motivation-Opportunity theory (AMO Theory) of Renwick et al. [23] as developing green abilities, motivation of green employees, and providing green opportunities.

3.1. Developing green abilities: attracting and developing talented staff

Development of green abilities attracts environment-conscious and qualified labor force, develops these employees with proper training programs, and places them in a position in which they are able to provide positive organizational outcomes and value-added to the business. At this point, the first step for environmental sustainability is the recruitment and selection of environment-conscious employees.

Businesses should pay special attention to recruitment and selection of employees to work with and with whom they share their vision, mission, objectives, and values. Thus, the activities of the companies are important for the attraction and promotion of conscious employees who have comprehended the environmental objectives and targets of the business well. In this sense, businesses tend to the practices that include job analysis, job design, human resources planning, recruitment, and selection, and then target the training and development of employees.

The objective of training is to let the employees to have certain knowledge, skill, and behaviors and to use all these knowledge in daily activities [1]. Businesses provide environmental knowledge and skills that are necessary for the employees through environmental training programs [6]. Training expresses the effort/efforts planned by the business to ease the learning process of the job-related skills. Such skills involve analytic information, and skills or behaviors for a successful business performance.

Training activities are significant in that they are accepted as the indicator of environmental consciousness. Continuous and publicized trainings significantly influence the public image of the organizations in terms of environmental performance [15].

Success of environmental management systems primarily depends on the consciousness of employees about environmental protection and their comprehension of their role and responsibilities within this process [4]. Special training programs including environmental issues may provide several benefits in defining organizational responsibilities of employees, in creating a positive organizational image, and in providing active participation of employees in environmental management practices [15]. Besides, compliance with legal regulations and laws is also supplied through training practices. In a review study, Arulrajah et al. [28] specified GHRM practices and those that are related to developing green abilities are provided below (**Table 3**).

3.2. Motivating green employees

Employee motivation through rewarding and performance management practices is among the primary functions of GHRM. A well-designed rewarding system is a significant tool to orient employees toward environment-conscious practices. Monetary rewards or publicity for every kind of activities improving environmental performance promotes employees to take environment-related responsibilities and to keep the best practices [1]. Conscious attitudes of executives on environmental issues will also have great impacts on management practices and especially on the behaviors of employees. Each and every implementation ranging from decision making to organizational targets, from employment policies to training and development policies, from business ethics to social responsibility, all are realized under the inspection of executives. The more the executives adopt environmental practices, the more the human resources get conscious about environment and actively engage in green movement along with organizational policies and stay motivated.

The relationships between environmental consciousness and economic success of the business constitute the bases of environmental management system, and the attitudes of executives deeply influence these relations [32]. Executives have the authority to allocate funds to environmental management and thus they have significant influences on medium-level executive since they frequently meet with environmental problems each day and on the other staff with an influence on business activities and processes effecting environment. Support of executives may require the following factors [15]:

- Communication about knowledge, plan, and policies required for employees,
- Promotion of cultural exchanges in activity and implementations,
- Authorizing and rewarding employees for well behaviors and implementations,
- Overview of environmental management processes.

Beside the support of executives in environmental issues, *commitment* also constitutes a significant component. Commitment comes to the forefront in environment-conscious attitudes not only of executives, but also of all employees.

Renwick et al. specified GHRM practices that motivate the employees as follows [33]:

- Monetary-based: bonuses, cash, and premiums.
- Non-monetary-based: sabbatical and leave gifts.
- Recognition-based: awards, dinners, publicity, external roles, and daily praise.
- Positive rewards in environmental management: feedback.
- Personal rewards: Gain green citizenship, connecting suggestion scheme with rewards system, and connecting the participation in green initiatives with career gains.

Performance management practices imply all kind of goods, services, and ideas to achieve pre-specified task and objectives along with business targets. Objectives and such practices

also constitute a significant component of employee motivation. The objective herein is to assess environmental performance standards of employees, their participation in environmental friendly business activities, new idea and projects and feedback which are provided for existing problems and to provide new objectives and methods if necessary. Green performance assessment includes the assessments of environmental accidents and performance of environmental responsibilities, environmental issues, and policies [11].

Additionally, establishing environmental management information system (EMIS) and environmental audits, incorporating corporate environmental management objectives and targets with the performance evaluation system of the organization, installing corporate-wide environmental performance standards, integrating green criteria in appraisals or evaluating employee's job performance according to green-related criteria, including a separate component for progress on greening in the performance feedback interview, providing regular feedback to the employees or teams to achieve environmental goals or improve their environmental performance, and introducing or formally evaluating all employees' green job performance are included in environmental assessments for GHRM practices [28].

3.3. Providing green opportunities

The very basic condition for implementation of GHRM and environmental sustainability is adoption and internalization of environmental issues by the entire business. In this sense, it is quite significant to provide the participation and contribution of all employees, from the lowest to highest position, in to the environmental program. Identification of employee attitudes toward environmental issues and turning them into positive behaviors will ease environmental management. Getting the recommendations, expectations, complaints, and ideas of employees on environmental issues [23, 33], increasing their task and authorities, including environmental issues in their job contracts, identification of environmental programs and policies, and announcing them within the organization, creation of green teams will all motivate employees to actively participate in the environmental management. The practices that help to motivate green employees are summarized in **Table 4**.

Authorization on employees basically means transfer of authority by the management instead of keeping it in its hand. In other words, authorization can be expressed as allowing employees to communicate about the business problems and assigning them responsibilities with opportunities related to the subject. In this way, employees will be empowered and allowed to participate in decision-making process and to generate ideas. There are several benefits of employee authorization in businesses [15]:

- Improvements in employee health and safety and in environmental health practices,
- Improvements in economy and organization image,
- Improvements in knowledge of employees and managers, thus empowering employees.

Empowerment of employees first of all prevents them from being a source of pollution. In other words, in an organization that is able to dissipate environmental consciousness to the lowest level, empowered employees as the individuals who know their tasks well will better assess the

Developing green abilities	Motivating green employees	Providing green opportunities
<i>Attracting/selecting</i>	<i>Performance management</i>	<i>Employee involvement</i>
<ul style="list-style-type: none"> • Green issues specified in job descriptions • Green job candidates, applicants use green criteria to select organizations • Green employer branding (green employer of choice) • Firms recruit employees who are “Green aware”—Green issues in induction /socialization processes 	<ul style="list-style-type: none"> • Green performance indicators included in performance management system and appraisals • Communication of green schemes to all levels of staff through PMA scheme, establishing firm-wide dialogue on green matters • Managers/employees are given green targets, goals, and responsibilities • Managers are given objectives on achieving green outcomes included in appraisals • Dis-benefits in performance management system for non-compliance/not meeting EM goals 	<ul style="list-style-type: none"> • EI practices in EM including newsletters, suggestion schemes, problem-solving groups, low carbon champions, and green action teams Empowerment and Engagement • Encouraging employees to make suggestions for EM improvements • Increasing employees’ psychological empowerment enhances their willingness to make suggestions for EM improvements • Supportive managerial and supervisor behaviors develop employee engagement in EM
<i>Training & development</i>	<i>Pay and reward systems</i>	<i>Supportive climate/culture</i>
<ul style="list-style-type: none"> • Employee training in EM to increase awareness, skills, and expertise. • Training for green jobs and integrated training to create an emotional involvement in EM—Trade union representatives get information on EM and union activist EM training • Green knowledge management—using employees’ tacit knowledge in EM • Training workshops for managers—Green MBAs • Green leadership style 	<ul style="list-style-type: none"> • Staff suggestions rewarded in EM • Reward schemes linked to staff gaining EM skills via skill-based payment • Green benefits (transport/travel) rather than pay benefits cards to gain green products • Financial/tax incentives (bicycle loans, use of less polluting cars) • Monetary-based EM reward system • Monthly managerial bonuses for good EM • Including green targets as part of PRP for senior staff • Executive compensation for managers partly based on EM stewardship • Recognition-based rewards in EM for staff (public recognition, awards, paid vacations, time off, gift certificates) 	<ul style="list-style-type: none"> • Wider EI in EM underpins pro-environment culture Union role in EI and EM • EM education programs for union members • Joint management/union training programs in EM—Green union representatives

Source: Renwick et al. [23, p. 9].

Table 4. Summary of GHRM practices.

environmental impacts of their tasks and take measures accordingly. Finally, number of knowledgeable employees who prevent pollution and provide solutions is increasing, thus environmental performance of businesses is improving [1]. Thus, qualified human resources have been created.

Team work covers the implementations allowing performance and synergetic corporation of employees along with their abilities. Team work is related to multi-dimensional practices performed in collaboration with common objectives and targets. The teams that are composed of environment-conscious individuals (generally expressed as green teams) are the units created by different groups, individuals, or organizations gathered around various environmental issues and objectives [34]. These teams identify environmental problems, assess them from different perspectives, use a strong communication for the solution of problems, and get together to provide the best solution. Green teams provide several benefits to businesses [34, 35] as follows:

- Creation of new ideas in businesses,
- Improve and ease learning,
- Define environmental problems better and faster,
- Create optimum solutions for these problems.

Green teams inform employees about deeply identification, comprehension, and assessment of environmental issues in businesses and guide them in finding solutions for these problems in a collaboration and coordination.

4. Gaining a competitive advantage through green human resource management

Considering the recent rapid changes and developments, businesses should be more active and innovative in this dynamic process. The pressure of competition and quality through globalization on the one hand and the changing conditions on the other hand force the businesses to change or renovate their business structure, processes, and implementations. Within this system, human resources constitute the primary source of business growth and development; therefore, human resource management becomes more significant. Human resources constitute the driving power for change and renovations in businesses, and they also play a distinctive role in economic, social, and environmental sustainability of the business.

Green human resource management orients the environmental practices toward the protection of environment. Business mission and vision about environmental issues, management philosophy, harmonization of human resources policy and implementations, employee consciousness about the rules and implementation related to environmental protection, and informing and training of employees on these issues are all among the environmental practices of the businesses.

Various sources and capabilities are not sufficient for companies to gain a competitive advantage. Competitive advantage mostly is gained through exclusive capabilities or resources of the business. Therefore, while traditional sources of competitive advantage like natural resources, technology, and scale-economy create a value for the business, source-based approach indicates that these factors could easily be imitated as compared to social structures like personnel system. Indeed, a well-developed human resource management system can be a significant source for competitive advantage. Source-based approach constitutes the theoretical basis for

the potential role of human resources as a strategic value. Business tendencies toward the valuable and inimitable internal sources to gain a competitive advantage further increase the strategic significance of human resources [36].

Business consciousness on natural environment developed through the environmental disasters experienced throughout the world and pressures exerted on businesses about environmental consciousness have carried the environmental practices of businesses a step further. Green business practices pave the way for an atmosphere with a competitive advantage through economic and environmental sustainability [23]. As a result, business performance is improved, costs are reduced, employee commitment and other organizational outcomes are improved, and carbon footprint of the companies is reduced [23] with GHRM and green human resource practices thanks to increased employee awareness of sustainability. The practices like electronic filing, car-pooling, job-sharing, teleconferencing and virtual interviews, recycling [20] telecommunication technologies, online training, optimal utilization of energy-efficient office spaces, etc. are efficient in reducing the carbon footprint of the businesses. The productivity gained through GHRM practices reduces the operational costs and helps the businesses to be aware of their organizational and social responsibilities [22, 37]. GHRM strictly implements ISO14000 Standards, takes the environmental inspection into account, alters the organizational culture, and helps the employee and producers in creating a business image and a brand.

5. Conclusions

The subject of human resource management includes several issues ranging from organizational design to recruitment activities, from rewarding systems, employee supports, and aid activities to improvement of employees and organization, from performance assessment to waging activities. In addition, green human resource management covers the human resource practices by taking environmental impacts into consideration in all business activities and complying with environmental mission and objectives of the business. Consciousness of employees, as the key stone of organizations, will determine the direction of the business.

Improved environmental performance of the executives to the lowest level workers in an integrative fashion, improved positive communication between the organization and the employees, reduced carbon footprint through monitoring and developing technological innovations and developments, efficient resource utilization, reduced costs, and improved efficiency and productivity can all be used as strategic tools within the scope of GHRM.

When the literature on GHRM was reviewed, it was observed that GHRM functions and practices were considered in various different fashions. The broadest GHRM literature classified GHRM practices under the categories such as green job analysis and design, green human resources planning, green recruitment, green selection, green induction, green performance assessment, green training and development, green rewarding system, green job safety, green discipline management, and green employee relations. The similarities and differences in these practices in different industrial fields and cultures can be elucidated in further studies.

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