HONORARY ARTICLE



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"Green HRM is referred to all the activities involved in the development, implementation, and ongoing maintenance of a system that aims at making employees of an organization green. It is the side of HRM that is concerned with transforming normal employees into green employees to achieve the environmental goals organization and finally make a significant contribution to environmental sustainability. the refers to policies, practices, and systems make employees of the organisation green for benefit of the individual, society, natural environment, and the business."





The Need

We are human beings and we do need the natural environment which is the planet that includes lands, forests, plants, animals, and other natural things. We as individuals and organizations do need various inputs from the natural environment as resources, therefore we depend on the natural environment. Not only we but also other living things need oxygen to survive. A tree can provide an essential thing of life for all living things on our planet - oxygen, and the power to remove harmful gases like carbon dioxide making the air we breathe healthier (Stancil, 2019)¹. Seven or eight trees are needed to produce the amount of oxygen that is essential for a human being per year (Villazan, n.d.)². According to the estimate made by scientists, 50-80% (at least half) of the oxygen production on Earth comes from the ocean; and the majority of this production is from oceanic plankton (drifting plants, algae, and some bacteria that can photosynthesize) (US National Oceanic and Atmospheric Administration, 2021)3. Thus, we do need nature or the natural environment. Resultantly, we need to be concerned with environmental sustainability. Environmental sustainability is defined as improving the quality of human life while living within the carrying capacity of supporting ecosystems (Mesmer-Magnus, Viswesvaran, and Wiernik, 2012)4. GHRM includes all the aspects which are concerned with environmental sustainability.

Definition, Roles, and Characteristics

GHRM is a new branch of Human Resource Management (HRM), and Opatha (2013, p. 28)⁵ defines it: "Green HRM is referred to all the activities involved in the development, implementation and ongoing maintenance of a system that aims at making employees of an organization green. It is the side of HRM that is concerned with transforming normal employees into green employees to achieve the environmental goals of the organization and finally to make a significant contribution to environmental sustainability. It refers to the policies, practices, and systems that make employees of the organization green for the benefit of the individual, society, natural environment, and the business." At least four meanings of the term 'Green' or 'Greening' in the context of HRM exist (Opatha, 2013⁵; Opatha and Arulrajah, 2014⁶). They are (1) Preservation of the natural environment; (2) Conservation of the natural environment; (3) Avoidance or minimization of environmental pollution; and (4) Generation of gardens and looking-like natural places. A composite term, i.e., nature-lover or eco-activist can be used for the four roles (Opatha, 2013⁵; Opatha and Arulrajah, 2014⁶). These four meanings logically result in four roles to be played by a green employee, i.e., preservationist, conservationist, nonpolluter, and maker. The purpose of GHRM is to create, enhance and retain greening within each employee of the organization so that he or she gives a maximum individual contribution to each of the four roles, i.e., preservationist, conservationist, non-polluter, and maker (Opatha, 2013⁵; Opatha and Arulrajah, 2014⁶). Viewing from the four meanings, six characteristics of GHRM (Opatha, 2019)⁷ are:

- 1. GHRM focuses on making employees green.
- 2. It is the environmental side of HRM.
- 3. It is a new field of HRM.
- 4. It has environmental aspects of managing people at work.
- 5. It is mainly concerned with human dealings with the natural environment within an organisational context.
- 6. It has policies, procedures, and practices influencing the greening of employees.



Refer to Exhibit 1 for the roles of greening, their meanings, and major behaviour patterns. **Exhibit 1. Four Roles of Greening, Their Definitions, and Major Behaviour Patterns**

Role	Definition	Major Behaviour Patterns
Preservationist	To keep nature in its original form and protect it from harm, loss, or negative change.	 Respect and admire nature Prevent from using or changing various and amazing aspects of nature
Conservationist	To be very careful in the way of using nature to allow it to last as long as possible; to use nature so that future generations will be able to utilize it.	 Use some parts of nature because such usage is unavoidable Minimize the usage of some parts of nature as much as possible
Non-polluter	To stop contaminating the water, air, atmosphere, etc through human use of dangerous and poisonous substances and wastes from human activities	 Restrain from polluting the water, air, atmosphere, etc. Launch and/or encourage campaigns to stop contaminating nature whenever possible
Maker	To build gardens and places which look like nature purposefully by a human being	 Assist construction and maintenance of parks Build gardens

Source: Opatha (2019)⁷

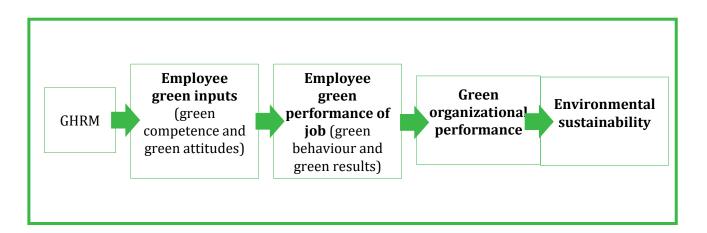
Modelling GHRM

HRM includes at least 18 functions called HRM functions starting from job design and ending with labour relations (Opatha, 2009)⁸. GHRM includes making this HRM functions green to create, maintain, and enhance employee green inputs, i.e., green competence and green attitude which lead to employee green performance of a job, i.e., green behaviour and green results which then result in a green organizational performance which finally leads to environmental sustainability. This theorisation is shown in Figure 1. Green behaviour includes actions taken by employees in greening, and they are of three types, i.e., green organisational citizenship behaviour, green interpersonal citizenship behaviour, and green official behaviour.



Green results include outputs produced by employees concerning greening, and they are of two types, i.e., green outcomes and green innovations. For definitions of the relevant concepts of GHRM excluding green organizational performance, refer to Exhibit 2. Green organizational performance refers to the extent of performing greening by a particular organization during a particular period. Employee green performance of job contributes to green organisational performance, and indeed summation of green performance of job done by all the employees in the organisation is green organisational performance (Opatha, 2019)⁷.

Figure 1. Relationships among GHRM, Green Inputs, Green Performance of Job and Green Organizational Performance



What are the specific beliefs, feelings, and tendencies to behave for an employee to have a positive green attitude? Green attitude is a psychological concept, and it is not green behaviour that includes actions or activities done in greening. It has generally been theorized that a positive green attitude results in positive actions in greening. What are the specific actions which can be taken by an employee to engage in the three types of green behaviour, i.e., green organizational citizenship behaviour, green interpersonal citizenship behaviour, and green official behaviour? What are specific examples of green results? Refer to Exhibit 3 which gives some specific items or specific examples under the green attitude, green behaviours, and green results.

Making an HRM function green involves the inclusion of policies, procedures, and practices which ensure that the relevant employees will have the right green attitudes, green competencies, green behaviours, and green results (Opatha, 2019)⁷. Successful performance of green HRM functions will lead to creating green employee inputs and subsequently employee green performance of a job. Exhibit 4 presents specific green practices under 10 HRM functions. The more these practices are performed in the organization the higher the intensity of the green orientation of HRM in the organization will be.



Exhibit 2. Meanings of the Concepts of GHRM

Concept	Definition
Green Competencies	A person who is required to be green should possess knowledge and skills about preserving and conserving the natural environment, avoiding or reducing its pollution, and generating gardens and looking-like natural places.
Green Attitude	A person who is supposed to be a green one should believe in greening, feel it positively and interestingly, and tend to behave positively and seriously towards it. The person's attitude needs to be complete cognitively, affectively, and behaviourally as well.
Green Behaviour	A person who is supposed to be green should engage in various actions the totality of which falls under three general labels i.e., green organisational citizenship behaviour, green interpersonal citizenship behaviour, and green official behaviour.
Green Organizational Citizenship Behaviour	A person who is required to be green should involve in executing certain actions or activities which are in support of the attempt taken by the organisation to achieve the goal of greening. Such activities performed by the employee are not the duties which have been specified in the job description given to him or her by the organisation.
Green Interpersonal Citizenship Behaviour	A person who is supposed to be green should involve in certain actions or activities which are in support of making peers and others green. The actions done by the employee to assist other employees to contribute to greening are not official tasks or duties to be performed as per the job description.
Green Official Behaviour	A person who is required to be a green employee must perform certain activities or do certain actions on greening specified officially by the organisation. The actions done by the employee are not volitional ones, but duties which have been specified in the job description given to him or her by the respective organisational authority.



Green Innovations	A person who became a green employee should be able to make things which are useful for the realization of greening by using new ideas. Such innovations are to be schemes, solutions, procedures, measures, etc., for reducing waste, minimizing damage to nature, and expanding nature.
Green Outcomes	A person who became a successful green employee should be able to make certain outputs or results as evidence of the realization of greening to a significant extent. Such green outcomes can include the extent to which the employee worked with natural light (in terms of hours), the extent to which the employee used electricity bulbs (in terms of number), the extent to which the employee reduced electricity consumption (in terms of expenditure), the extent to which the employee reduced wastage (in terms of units or expenditure), etc.
Employee Green Inputs	A person who is supposed to be green should possess two types of resources or assets and they include his or her competencies and attitude concerning greening.
Employee Green Performance of Job	A person who is a green employee should contribute to fulfilling the green aspects of his or her job and they include behaviour and results on greening.

Source: Hewapathirana, Opatha, and Gamage $(2020)^9$ based on Material Opatha and Arulrajah $(2014)^6$

Exhibit 3. Specific Items or Examples of Some Concepts of GHRM

Concept	Specific Items or Examples
Green Attitude	Cognitive: I believe in greening. It is very important for the survival and sustainability of myself, my organisation, my society, my country, and the earth. Greening is one of the most important virtues. Affective: I like working in greening. I feel happy when I think and talk about greening. Behavioural: I intend to be a serious contributor to greening. I hope to live with greening. I am going to be a serious green employee.



Green Organizationa l Citizenship Behaviour	Preservationist: Decide to respect and admire nature. Prevent from using or changing various and amazing aspects of nature. Firmly decide not to contribute to any movement of anti-environmentalism. Observe the norm of protecting the virginity and originality of nature as much as possible. Conservationist: Use both sides of the paper when writing or printing or photo-copying. Come to work by walking or bus/train. Use natural light when working. Turn off the light when not needed. Use mugs, dishes, cans, bottles, bags, etc continuously as many times as possible.
	Non-polluter: Buy organic food for parties. Report to a relevant officer about damages, possible harms etc to the environment whenever noticed. Stop dumping harmful chemicals and industrial wastes to avoid contamination. Maker: Contribute to building parks near the organizational premises. Contribute to planting new trees and grass.
Green Interpersonal Citizenship Behaviour	Stimulate others to become green. Answer questions asked by others about greening positively. Teach others about how to become green. Spend time and effort to influence others to become green. Perform green works which are supposed to be performed by others. Discuss the importance of greening with others. Personally appreciate green works done by others.
Green Official Behaviour	Follow specific policies, procedures, and rules to reduce wastage and remove wastes, and reduce environmental pollution.
Green Innovations	New environmental initiatives. New solutions for waste reductions. New solutions for reduction of polluting water, air, land etc. New opportunities for repurposing used objects and materials.
Green Outcomes	The number of hours of working with natural light or a minimum number of electricity bulbs. Amount of reduction of electricity consumption. Amount of reduction of water consumption for production and organizational works. Amount of reduction of the existing level of input wastage. Degree of achievement of specific environmental performance targets. Several repurposes were generated. The number of reusing things to be reused. Duration of reusing the things to be reused.

Source: Based on Material by Opatha $(2019)^7$

Exhibit 4. Ten HRM Functions and Specific Green Practices

HRM Function	Green Practices
Job Design	 To incorporate environmental-related tasks, duties and responsibilities in each job and put them into effect.
	To use teamwork and cross-functional teams as job design techniques to successfully manage the environmental issues of the organization.



(Moving minds!	
Job Analysis	 To include the environmental dimension as a duty in the job description. To include green competencies as a special component in the job specification.
Human	 To engage in forecasting the number of employees and types of employees
Resource	needed to implement the corporate environmental management
Planning	 programmes (e.g., ISO 14001, cleaner production, responsibility care etc). To engage in deciding strategies to meet the forecasted demand for environmental works (e.g. appointing consultants/experts to perform energy or environmental audits etc).
Selection	To select applicants who are sufficiently aware of greening to fill job
	vacancies.
	 To select applicants who have been engaging in greening as consumers under their private life domain.
Induction	 To make new employees familiar with the greening efforts of the organization.
	 To develop induction programs showing the green citizenship behaviour
	of current employees.
Training	 To impart the right knowledge and skills about greening to each employee through a training program exclusively designed for greening.
	 To apply for job rotation to train green managers of the future.
	 To do training needs analyses to identify the green training needs of employees.
Performance	To evaluate employees' job performance according to green-related
Evaluation	criteria.
	To include a separate component for progress on greening in the
	performance feedback interview.
Rewards	To give financial incentives to employees for their good green performance
Management	of a job.
	 To introduce rewards for innovative environmental initiatives.
	To give non-financial rewards such as praise and recognition to employees
	for their greening.
Discipline	 To formulate and publish rules of conduct relating to greening.
Management	
Management	To develop a progressive disciplinary system to punish employees who violate the rules of green conduct.
Labour	To provide opportunities to the trade union and its members to participate
Relations	in greening.
	 To introduce green whistle-blowing and helplines.
	To provide training to the union representatives about environmental
	management.
	To recognize a union as a key stakeholder in environmental management.

Source: Based on Material by Arulrajah, Opatha and Nawaratne (2015)¹⁰



GHRM and **Sri Lanka**

We are in Sri Lanka and our motherland is Sri Lanka. Currently, Sri Lanka is encountering several crises and one of them is the fuel crisis. Another one is the electricity crisis. Is GHRM instrumental in alleviating the fuel crisis and electricity crises? This is a very important question, and the answer is indeed positive ('Yes'). I believe firmly that GHRM has great potential to alleviate these crises. I do not intend to present a lengthy discussion in this regard as it is beyond the purpose of this magazine article. However, I will present a brief note on the contribution that GHRM can give in the context of alleviating the fuel crisis. We all faced, are facing, and will face further a time of intense difficulty in getting fuel for our transport needs. Unfortunately, we as Sri Lankans depend on imported fuel. Sri Lanka's population is over 21.9 million and our country is almost totally dependent on petroleum fuels (diesel and petrol) for transport. Yet Sri Lanka does not have indigenous sources of fossil fuels, and therefore she has to import the total petroleum requirement.

There is a role to be played by GHRM in achieving efficiency and effectiveness in petroleum fuel usage. In this context I mean efficiency in petroleum fuel usage as the degree of minimizing wastage and consumption in petroleum fuel usage; and effectiveness in petroleum usage as the degree of using it only for productive purposes which contribute to achieving primary or strategic goals of the organization. Exhibit 5 presents some actions for increasing efficiency and effectiveness in petroleum fuel usage. I believe that many GHRM schemes or programs can be developed by any organization that wishes to do greening. The real success of any GHRM scheme depends on the degree of right implementation as planned. Formulation of the right scheme is one task and implementation of that scheme in the right way is another task. For real success, both are equally essential along with the right measurements.

Concluding Remarks

GHRM is a recent phenomenon and hardly it is possible to observe its implementation in a sophisticated or considerate way in Sri Lankan organizations yet. In some cases, it is possible to observe talks about GHRM but not walk the talks. GHRM has a great potential to make a highly positive impact on creating, maintaining, and enhancing green performance both at the individual and organizational level and ultimately environmental sustainability. To realize this potential in full the relevant top managers, HRM professionals, as well as HRM academics need to be genuinely concerned with, sufficiently competent in, highly motivated on, and fully engaged in greening and GHRM.

Exhibit 5. Some Actions for Increasing Efficiency and Effectiveness in Petroleum Fuel Usage

- 1. Use vehicles only for productive reasons.
- 2. Get used to a car or vehicle pooling.
- 3. Reuse the official vehicle as much time as possible (without changing the vehicle every three or four years).
- 4. Stop using separate official vehicles for top or senior managers (one vehicle for each manager). Instead, use one vehicle for at least two top or senior managers.
- 5. Use large or medium size buses or vans for transporting employees including managers.



- 6. Use large or medium size buses or vans for transporting employees including managers.
- 7. Use hybrid and electronic vehicles.
- 8. Train properly and sufficiently all personnel who drive vehicles to use the vehicles efficiently and effectively.
- 8. Reward non-financially personnel for reducing the cost of petroleum fuel.

References

- Arulrajah, A.A., Opatha, H.H.D.N.P. and Nawaratne, N.N.J. (2015), "Green Human Resource Management Practices: A Review", Sri Lankan Journal of Human Resource Management, Vol.5, No.1, pp.1-16.
- Hewapathirana, R.A., Opatha, H.H.D.N.P., and Gamage, P. (2020), "Identification of some research gaps in green human resource management", International Business Research, 13(12), pp. 63-78.
- $\frac{https://oceanservice.noaa.gov/facts/oceanoxygen.html\#:\sim:text=Scientists\%20estimate\%20that}{\%2050\%2D80,some\%20bacteria\%20that\%20can\%20photosynthesize}.$
- $\underline{\text{https://www.sciencefocus.com/planet-earth/how-many-trees-does-it-take-to-produce-oxygen-for-one-person/}$
- Mesmer-Magnus, J. Viswesvaran, C. and Wiernik, B.M. (2012), "The Role of Commitment in Bridging the Gap Between Organizational Sustainability and Environmental Sustainability", as in Jackson, S.E., Ones, D.S. and Dilchert, S. (Editors), Managing Human Resources for Environmental Sustainability, San Francisco: Jossey-Bass, A Wiley Imprint.
- Opatha, H. H. D. N. P. (2013), "Green Human Resource Management: A Simplified Introduction", HR Dialogue, Department of HRM, Faculty of Management Studies and Commerce, University of Sri Jayewardenepura, pp. 22-41.
- Opatha, H. H. D. N. P. and Anton Arulrajah, A. (2014), "Green Human Resource Management: Simplified General Reflections", International Business Research, Vol. 7, No. 8, pp. 101-112.
- Opatha, H.H.D.N.P. (2009), Human Resource Management: Personnel, Colombo: Department of HRM, University of Sri Jayewardenepura.
- Opatha, H.H.D.N.P. (2019), Sustainable Human Resource Management: Expanding Horizons of HRM, Colombo: Department of HRM, University of Sri Jayewardenepura.
- Stancil, J. M. (2019), "The Power of One Tree The Very Air We Breathe", US Forest Service. https://www.usda.gov/media/blog/2015/03/17/power-one-tree-very-air-we-breathe#:~:text=Through%20a%20process%20called%20photosynthesis,and%20released%20by%20the%20tree.
- US National Oceanic and Atmospheric Administration (2021), "How much oxygen comes from the ocean?"
- Villazon, L. (n.d.), "How many trees does it take to produce oxygen for one person?" BBC Science Focus Magazine.