



# APPLICATION OF FISH BONE ANALYSIS IN THE IMPLEMENTATION OF GREEN HUMAN RESOURCE PRACTICES

<sup>1</sup> Dr.T.Navaneetha

<sup>2</sup> Dr.S.Sowjanya

<sup>1</sup> Assistant professor MBA Department Annamacharya Institute of Technology and Sciences (Autonomous) Rajampet Kadapa Dist. A.P

<sup>2</sup> HOD, Department of M.B.A.Rajeev Gandhi Memorial College of Engg and Technology (Autonomous) Nandyal Dist A.P

## ABSTRACT

Green Human Resource Management is the process of integrating environmental management into Human resource management. Green HR refers to using every employee interference in promoting sustainable practices to supplement employee responsiveness and commitment on the problems of sustainability. The present study focus on studying employee perception and awareness towards Green HRM practices, identifying and assessing the root causes in implementation of GHR practices and exploring the green HR initiatives taken by selected IT companies. For this a structured questionnaire is used for the study. Various statistical tools like Cronbach's Alpha technique, KMO and Bartlett's Test, Rank analysis tests, ANOVA and Regression analysis tests are used in the study.

DOI: 10.48047/ecb/2023.12.si12.117

## INTRODUCTION

Green Human Resource Management is defined as the use of HRM policies to encourage the sustainable use of resources within the business organization and promote the causes of environmentalism that further enhances employee morale and satisfaction (Mampra, 2013). Green HRM includes two facets: environmental conducive business practices and nurturing of knowledge capital. Fishbone analysis is an instrument for assessing the business methods and its effectiveness. The fishbone diagram and analysis usually assess the causes and sub-causes of one specific problem. It helps to find out all the symptoms of business problem. Fishbone diagram for green human resource practices includes Green HR planning, Green selection, Green Induction, Green performance evaluation, Green reward management and Green employee discipline management.

### Major Research works reviewed:

**Dharma, F. P., Z. F. Ikatrinasari, H. H. Purba and W. Ayu (2019)** in their study on "Reducing nonconformance quality of yarn using pareto principles and fishbone diagram in textile industry" found that nonconformance quality of yarn within the ringspinning machine is high unevenness on the yarn. The unevenness is continually expanding. Unevenness has the high frequency of recurrence therefore it turns into a priority for completion.

**Shaban, S. (2019)** in his study entitled “Reviewing the Concept of Green HRM (GHRM) and its Application Practices (Green Staffing) with Suggested Research Agenda: A Review from Literature Background and Testing Construction Perspective” found that green HRM has turned out to be one of the foremost important points within the business world. Most of the researchers and studies showed that, green staffing strongly related with the achievement of monetary and marketplace segments. The need of this study is to show a complete theoretical structure for green HRM practices and to check the aspect of the green HRM approach in construction companies in Egypt and UK.

**Patil, J. and A. P. Sarode (2018)** in their study on “Green Human Resource Management: Role of HR Managers to Achieve Sustainability” explained that for building the pollution free workplace, commitment of all the departments is important. HR managers perform important role in building the campus pollution free. Duties of HR department are not only restricted regulate, they create and keep employees within the organization and furthermore select right person at the right job, train them, hold and develop them according to need and recent patterns in business. Study revealed that significance of green HRM will increase day by day. It is today’s need to expand the scope of HRM practices.

**Rebekah, T. R. and A. Madhu (2017)** in their study entitled “The Practice of Green HRM and Its Endurance with Reference to Tier II IT Industries” stated that human resource management is a most significant function of management that manages the very important resources of an organization that is work force. The entire concept of HRM is now being studied within the direction of sustainability everywhere and green activities inside HRM structure is a segment of corporate social responsibility. The objective of the study is to explore the green HRM in IT companies, and analyze the participation of employees and HR experts in IT industries. Study showed that there is an important connection among the instruction of the respondents and their general comfort with the change in IT enterprises because of implementing green HRM work change practices.

**Kaur, R. (2017)** in his study entitled “A Study of Human Resource Practices in BPO Sector” the study suggests and tests the hypotheses on the relationship between human resource practices, job satisfaction and organizational commitment. Responses are gathered from 165 employees. The outcome shows that suitability of general HR practices is seen to be distinctive by the administrative employees and HR practices. For improving motivation, job satisfaction and organizational commitment management should give rewards and recognition. Rewards may be financial or non-financial relying upon the presentation of the employees.

**Adhikari, S., N. Sachdeva and D. R. Prajapati (2017)** in their study on “Root Cause Analysis of Defects in Automobile Fuel Pumps: A Case Study” this paper shows the usage of quality control instruments for identification and elimination of the basic root causes responsible for failing of the fuel pump in customer’s cars. The study was done to determine seven quality control tools and 5-why analysis are significant

instruments so as to examine defects in quality of products of the organizations at customer operation levels. For the better results, to improve the quality, productivity, business continuous quality and procedure enhancement are required in the organization.

**Sarode, A. P., J. Patil and D. T. Patil (2016)** in their study entitled “A study of Green HRM and its Evaluation with Existing HR Practices in Industries within Pune Region” explored that human resource department perform important part in plan the methods to build green environment within the organization. The objective is to analyze current HRM practices in industry and compare with green HR practices. Study concluded that manufacturing industries employees are more aware regarding green HRM than IT industries.

**Das, V. T. and B. S. Reddy (2016)** in their study “Employee Perception towards Green HRM: An Investigative Study” stated that twenty-first century has been showing more interest in the environmental concerns all around the globe regardless of related fields be it politics, public or business. The objective is to study employee perceptions towards green HRM and associate the demographic factors with the perceptions of employees about green HRM in selected units. Major findings of the study showed that less educated and junior employees have no knowledge of GHRM.

**Slameto (2016)** in his study on “The Application of Fishbone Diagram Analysis to Improve School Quality” explained that with the guidelines of the national education system, the evaluation of the school quality was precise, national education system turned into a suggestion for school advancement program to boost the school quality. On the other hand the type of program that continues still in some problem, so there is a requirement of preparing decent design of the proposal. In actual situation school now have organized school advancement program. Findings revealed that in the management process planning, organizing, leading and controlling are functions which are very important and must be carried out in management process.

### **Research Gap:**

Most of the research studies are descriptive in nature and there are very few exploratory studies on Green HRM practices in IT industry. There are vast researches on Fish bone analysis and also on the IT sector. In this regard a gap is identified in the usage of fish bone analysis in IT industry. There is no in depth study on green HRM practice and IT industry in application with fish bone analysis. Hence gap is identified. Therefore the present study focus on fulfilling this gap in the current study “Application of Fish bone analysis in the implementation of Green Human Resource practices among the employees of IT industry”.

### **Objectives:**

1. To study the employee perception and awareness towards Green HRM practices.
2. To identify and assess the root causes in implementation of Green HRM practices.

3. To explore the green HR initiatives taken by selected IT companies.
4. To examine the impact of going green HR practices on Green Management in selected IT companies.
5. To offer suggestions to IT companies for implementation of Green HR practices.

### Hypothesis:

1.  $H_0$ : There is no significant association between employee perception and awareness towards Green HR practices.
2.  $H_0$ : There is no significant difference between the Green HR practices in selected IT industries.
3.  $H_0$ : There is no significant impact of going Green HR practices and digitalization on green management in selected IT industries.

### Research Questions:

1. What are the employee perceptions and awareness towards GHRM practices?
2. What are the root-causes in the implementation of Green HR practices?
3. What are the green initiatives that are taken by the selected IT companies?
4. Does going green with HR practices and digitalization shows any impact on IT companies?

### Methodology:

**Research design:** Descriptive and Explanatory research design

**Sampling technique:** Stratified random sampling

**Data collection:** Primary data (Structured Questionnaire) and Secondary data (Books and Articles).

### Statistical tools used:

1. **For checking reliability:** Cronbach's Alpha technique
2. **For testing validity:** KMO and Bartlett's test.
3. **Descriptive statistics:** Arithmetic mean, Standard Deviation and Rank analysis.
4. **Hypothesis testing:** ANOVA, t-test, Correlation and Regression analysis.
5. **Model used in the study:** Fish Bone analysis

Objectives	Hypothesis	Statistical tools used
Objectives:1	Hypothesis:1	Correlation analysis
Objectives:2	-----	Ranking analysis
Objectives:3	Hypothesis:2	Independent t-test
Objectives:4	Hypothesis:3	Regression test

### 6. Questionnaire format:

Part: 1: Demographic profile of the respondents.

Part: 2: Statements related to GHRM practices.

**Data analysis and Interpretations:**

- H<sub>0</sub>: There is no significant association between employee perception and awareness towards Green HR practices.**

**Correlation Analysis**

**Correlations**

		Green HRM Practices	Employee Perception
Green HRM Practices	Pearson Correlation	1	-.289
	Sig. (2-tailed)		.122
	N	30	30
Employee Perception	Pearson Correlation	-.289	1
	Sig. (2-tailed)	.122	
	N	30	30

The above table reveals that there is a negative correlation between Green HRM practices and Employee Perception. Here P Value is greater than 0.05; it reveals that there is a no significant association between employee perception and awareness towards Green HR Practices.

- 2. Root causes in the implementation of Green HRM Practices:**

**Ranking analysis**

S.NO	Factors	Average Score	Rank
1	Cost	50.665	6
2	Efficiency	52.28	3
3	Environmental aspects	70.39	1
4	Eco-friendly products	61.09	2
5	Recycling	51.145	4
6	Waste Disposal	50.675	5
7	Save electricity	37.045	9
8	Produce quality goods	41.465	7
9	Recognition and rewards	37.87	8

The above table reveals that the main root cause for implementation of Green HRM Practices is environmental aspects followed by eco-friendly products, efficiency, recycling, waste disposal, cost, production of quality goods, recognition and rewards and finally saving electricity.

**3. H<sub>0</sub>: There is no significant difference between the Green HR practices in selected IT industries.**

**Independent t-test**

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Microsoft	30	2.5333	1.04166	.19018
capgemini	30	2.7000	1.31700	.24045
Accenture	30	2.9000	1.47040	.26846
Deloitte	30	2.8667	1.30604	.23845
Amazon	30	2.8667	1.19578	.21832

**One-Sample Test**

	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Microsoft	13.321	30	.000	2.53333	2.1444	2.9223
Capgemini	11.229	30	.000	2.70000	2.2082	3.1918
Accenture	10.802	30	.000	2.90000	2.3509	3.4491
Deloitte	12.022	30	.000	2.86667	2.3790	3.3544
Amazon	13.131	30	.000	2.86667	2.4202	3.3132

Here P value is less than 0.05; it reveals that the Null Hypothesis is rejected. Therefore it indicates that there is a significant difference between different IT companies in the implementation of Green HRM Practices.

**4. H<sub>0</sub>: There is no significant impact of going Green HR practices and digitalization on green management in selected IT industries.**

**Regression test**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.405 <sup>a</sup>	.164	.134	1.26030

a. Predictors: (Constant), Green HRM Practices

**ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	8.726	1	8.726	5.494	.026 <sup>b</sup>

Residual	44.474	28	1.588	
Total	53.200	29		

a. Dependent Variable: Green Management

b. Predictors: (Constant), Green HRM Practices

Here P value is less than 0.05; it indicates that Null Hypothesis is rejected. Therefore it shows that there is a significant impact of going Green HR practices and digitalization on green management in selected IT industries.

### Conclusion:

By using the green HRM Practices in the organizations paper can be replaced with IT, preservation of energy can be done, social responsibility activities can be encouraged, the concepts of Green week, Green cafeteria and Green carpooling can be focused, and that decreases the environmental pollution. Proper waste disposal can be initiated that automatically helps in reduction of water pollution. By following Green HRM practices in organizations the environment can be protected to a maximum extent that helps in decreasing the cost of Human Resource Management activities and nature to a maximum extent.

### References:

1. Adhikari, S., N. Sachdeva and D. R. Prajapati. (2017). Green HRM practices in the Present day scenario. *International Journal of Mangement Research* , 3 (2), 21-28.
2. Das, V. T. and B. S. Reddy. (2016). Barriers to implementing the concept of Green Human resource management: The case of poland. *European research studies* (4), 66-81.
3. Kaur, R. (2017). Green HRM and Organizational review:An emperical review. *Kegees Journal of Social science* , 6 (1), 227-236.
4. Patil, J. and A. P. Sarode. (2018). Green HRM practices: Role of HRM to attain sustainabilty. *IJCRT* , 6 (1).
5. Saffa Shaban. Reviewing the concept of Green HRM and its application practices with suggested Research Agenda: A review of literature background and testing construction perspective. *International Business Research* , 12 (5), 86-94.
6. Sarode, A. P., J. Patil and D. T. Patil. (2016). A review of Green HRM practices and employee's green behaviour. *Indina Journal of Natural science* , 12 (5).
7. Slameto. (2016). Sustainable Green HRM: Importance and functioning of Green HRM. *International Journal of Applied management* , 2 (3), 96-105.

8. T.Rita Rebak and A.Madhu. Assessing Green HRM practices in Higher educational Institute. *International Journal of Applied research* , 3 (3), 47-52.
9. Yuliani Fauziah, Apirilla Susmitha, Ekalia yanasari Putri and Dina Rosdiana. (2021). A systematic Literature review of 5W1H in manufacturing and service industry. *3rd conference Mercu Buana conference on Industrial Engineering-2021*, (pp. 221-230).