

## Assessing Green Human Resource Management Practices in Higher Educational Institute

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Article Info Volume 82 Page Number: 221 - 240 Publication Issue: January - February 2020 *Abstract:* Since from the last few decades, many environmental issues are arising, the government of various nations has directed the industries and organizations to focus on an environmental management program along with their business operations. As tremendous exploitation of natural resources constantly degrading our environment, the government of different nations has come up with different Environment Protection policies ensuring that organizations and industries adopt those policies in their business process for sustainability goals. Green Human Resource Management is a new concept adopted by many organizations now a day. Many organizations all over the world today have incorporated Green HR policies as a part of HRM along with traditional CSR activities to make the employee aware of their responsibilities towards environmental management.

The academic institution has its own role in society and the environment. Many educational institutes have come up with green initiatives to help the students and employees responsible for the protection of the situation but the complete implementation of green HRM polices is not possible. This research paper will help to identify the standard green practices applied to higher educational institutes and to determine the level of Green HRM practices implemented in the academic institute. This will be beneficial to the higher education institute for being responsible for the protection of the environment.

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#### I. INTRODUCTION

For the last two decades, the rapid advancement of technology and industrial growth, pollution level has increased to that extent, which continues similarly; it will be difficult for our future *Published by: The Mattingley Publishing Co., Inc.*  generation to survive on this earth. We the humans and our unsuitable needs are constantly degrading our natural resources in the name of industrialization. The impact is seen every year as thousands of lives are taken away by the flood, 221



tsunamis, landslides, industrial smog etc. But the best thing is that in this 21st century, the researchers. environmentalists, activists, organization government, people etc. are aware of these harmful phenomena well in advance before making this earth unable to survive for our future generation. We cannot stop the industries or businesses as they are the suppliers of our unlimited wants. Therefore we have to take some alternative actions for protecting the planet earth and our future generations. It's essential to make people aware of being eco-friendly so that they take care of the environment, do the optimum utilization of natural resources, create a green environment and do not create pollution.

Organizations are not a separate entity. It's a part of society and should have some responsibility and concern for society and the environment along with the generation of profit. Government of all nations, specially developed and developing countries, have set up different Environmental Protection policies and laws ensuring that organizations and industries adopt those policies in their business process for sustainability. To cope up with this, organizations and enterprises are changing their strategies of doing business from being profit-centric to sustainable centric in terms of social, environmental and economic. The organizations realized that they should protect their people and environment by transforming their usual business practices or work culture. Such business practices should be environment friendly and should not have any negative impact towards the nature or the society. They set up environmental management goals along with their business goal so that it can reduce the effect of exploiting the environment. Human resource management team plays very central role in fulfilling environment management goals in the organization. Many organizations all over the world today have incorporated Green HR policies as a part of HRM along with traditional CSR activities to make employee aware of their

responsibilities towards environmental management.

## II. GREEN HUMAN RESOURCE MANAGEMENT

The term Green Human Resource Management (GreenHRM) was coined 10 years ago (Renwick, Redman and Maguire, 2008) [2] and is defined as "integration of environmental management program into human resource management system of an organization. It is the process of aligning HRM policies and practices strategically towards environmental friendly policies and practices. It aims to reducing carbon footprint of each employee working in the organization providing them with healthy and motivated work culture. Thus it has two elements:

a) Preservation of knowledge capital and

b) Environmental friendly practices.

The environmental aspects can be integrated in all HRM functions (entry to exit) archived from various literatures and summarized into following:-

## • Green Recruitment and Selection

It means paper free recruitment with minimum environmental impact (Berber and Aleksić, 2016) [3]. HRM team designs recruitment process so that it requires less cost, time and energy in hiring candidates. In a survey conducted in United Kingdom, many of the graduates from top colleges, while applying jobs, judge the quality of jobs based on the environmental performance and reputation of a company (Wehrmeyer, 1996)[4]. It can be said that being a green employer firm can build a brand image and can attract more candidates. The following are some of the green recruitment practices:-

- Online posting of jobs and online submission of applications
- Job advertisement should reflect environmental values and criteria.
- Interview through telephone or video conferencing.



- Job description should reflect sustainability agenda (Opatha, 2013) [1]
- While selecting candidate's environment related questions are asked to the candidates.
- Green Training and Development

The training program which is planned and implemented to make employees aware of their responsibilities towards protection and conservation of environment is known as green HR training and development program. It enhances the employees green skills, knowledge and attitude. Employees should appreciate the green policies and practices of the organization after joining (Mehta and Chugan, 2015) [5]. The following are some of the green Training and Development practices often found in the organizations:-

- Discussions of environmental issues in induction program.
- New employees should be made aware of company's environmental objectives
- Green Training need analysis should be conducted
- Employee should be given training on ecofriendly practices like carpooling, recycling etc.
- > Availability of training materials online.

## Green Performance Management

These processes involve setting of environmental goals and targets for the employees and measure their performance according to the set goals. Green goals and targets should be specified in the job description and should be linked with performance evaluation system (Mehta and Chugan, 2015) [5].

## • Green Compensation and Benefits

Green reward system (monetary and nonmonetary rewards) is designed to motivate employees who achieve their environmental goals and who have come with innovations to protect the environment with minimal use of resources. Recognition based awards for the candidates who have extraordinarily attained the green goals. This will increase employee's productivity, loyalty, improve satisfaction and motivation for work (Berber and Aleksić, 2016) [3].

## • Green Employee Relations

For better productivity, one of the most important things to be maintained is employee-employer relations or relations among the co-workers.

Employees should be making responsible to take decisions in Environment management system. Employee's participation will result into better green management. It is the responsibility of HR mangers to form a working environment where employees are free to come up with their ideas.

• Green Exit

The process through which an employee leaves an organization is called exit. Most of the organizations trying to modify their exit policies in terms of sustainability. Thus it can be termed as green exist. It includes:

- Resignation of employee through mail or online portals.
- Exit interview should also include discussion of achieving his/her green goals.(Nijhawan, 2014)
- Criticisms for those who have not achieved their green targets.
- Providing certificates for the employees who were very active in performing green activities during their tenure in the organization.

The green movement within the organizations, rejuvenates the organizational culture, motivate employees, increased workforce efficiency and productivity, and build a sense of confidence and responsibility in the organization. It builds a brand image for the employer and increased business opportunities building a competitive advantage in the business world.

## III. IMPLEMENTATION

Various research works have been done on Green HRM practices, adopted in product and service based industries. There is paucity of research to address the Green practices in academic institute



so further study is required in this sector so that it can be helpful for employees to empower themselves toward environmental protection and also to analyze the awareness level of Green HRM practices at an academic institute.

## IV. OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

- 1. To identify the best green practices at NIT Silchar.
- 2. Identify to what extent NIT Silchar uses green HRM practices.

## V. RESEARCH QUESTIONS

In order to achieve the research objectives as mentioned above, this study will address the following research questions (RQ), which will support this green HRM study in Academic institute:

- RQ1: What are the best green practices at NIT Silchar?
- RQ2: To what extent NIT Silchar use green HRM practices?

## VI. METHODOLOGY AND SAMPLE SELECTION CRITERIA

The proposed methodologies of the study are as follows:

## > Type of Research

The research involves surveys to collect data from the respondents with an objective to know the respondents opinion about the current state of affairs. Thus it is a descriptive research.

## > Targeted Institution

The study is carried out at National Institute of Technology (NIT), Silchar, Assam.

## > Sample Selection

The sample units for the study are permanent teaching and permanent administrative employees of NIT Silchar, Assam.

## > Sample Size

The sample size is calculated by utilizing sample calculator.

Following are the things required for the count of the sample size:

- a. Population Size: The total population size is taken as 206, (as of March 2019). The population includes all permanent faculties and permanent administrative staffs (Grade-A, Grade-B, Grade-C) of NIT Silchar.
- b. Margin of Error: 5% is taken as standard error.
- c. Confidence Level: 90%
- d. Source:

http://www.raosoft.com/samplesize.html The sample size is calculated in the Raosoft which depends on the following formula:

n = N X / ((N-1) E2 + x)

X=Z(c / 100)2 r (100 - r)

E = Sqrt [(N - n) X/n (N-1)]

Where,

- n = sample size,
- N= Population size,

r = fraction of responses that you are interested in,

c = confidence level,

Z(c/100) = critical value

The sample size is 118 respondents (calculated based on the above formula).

## Data Collection

The data collection is done from primary and secondary sources.

- a) **Primary Data:** Primary data is collected through structured questionnaire by conducting surveys among teaching and administrative employees of NIT Silchar, Assam.
- b) **Secondary Data:** Secondary data is collected from research paper, projects reports, journals, thesis and NIT's website.
- Sampling Technique

**Simple Random Sampling method** is used for the collection of data from the employees of NIT Silchar.



## VII. DATA ANALYSIS AND INTERPRETATION

The study was targeted at a sample size of **118** respondents. To collect responses, well designed questionnaires were distributed among the employees of NIT Silchar. **106** were completely filled and remaining **12** responses were not taken for analysis due to incomplete responses.

## VIII. DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

The case study analyzed the demographic characteristics of the participant's age, gender, marital status, educational qualification, work experiences of the respondents. This will basically help to understand the overall demographic profile of the employees of NIT Silchar.

#### A. Age Distribution of the Respondents

#### TABLE 1: Age Distribution of the Respondents

Age	No. of	Percentage
	Respondents	
20-30 years	20	18.9 %
31-40 years	48	45.3%
41- 50 years	26	24.5%
51-60 years	10	9.4%
60 years above	2	1.9%
Total	106	100

Source: Survey, N = 106 Respondents

The above Table 1 represents the age distribution of NIT Silchar. It is found that majority of the respondents, i.e., 45.3% of the respondents belong to age group of 31-40 years, 24.5% of the respondents belong to age group 41-50 years, 18.9% belong to age group 20-30 years, 9.4 % belong to age group 51-60 years and only 1.9% of the respondents are above 60 years.

#### **B.** Gender Distribution of the Respondents

#### TABLE 2: Gender Distribution of the Respondents

Gender	No. of Respondents	Percentage
Male	74	69.8%
Female	32	30.2%
Others		
Total	106	100%

Source: Survey, N = 106 Respondents

The above Table 2 represents the gender distribution of the respondents of NIT Silchar.

Majority of the participants are male which consists of 69.8 % of total participants and remaining 30.2% are female.

#### C. Marital Status of the respondents

TABLE 3: Marital Status of the Respondents		
arital	No. of Respondents	Percentag

Marital	No. of Respondents	Percentage
Status		
Married	79	73.6%
Unmarried	27	26.4%
Others		
Total	106	100%

Source: Survey, N = 106 Respondents

The above Table 3 represents the marital status of the respondents of NIT Silchar. 73.6% of the respondents i.e., majority of the respondents are married and only 26.4% are unmarried.

# D. Educational Qualification of the Respondents

TABLE 4: Educational Qualification of the
Respondents

Educational	No. of	Percentage
Qualification	Respondents	
10 <sup>th</sup>	2	1.9 %
12 <sup>th</sup>		
Graduation	13	12.3%
Post-	23	21.7%
Graduation		
Doctoral	67	63.2%



Others	1	0.9%
Total	106	100

Source: Survey, N = 106 Respondents

The above Table 4 represents the educational qualification of NIT Silchar. The majority of the respondents i.e., 63.2% of total respondents, have doctorate 21.3 % are postgraduates whereas 12.3% are graduates. Only 1.9% and 0.9 % are 10<sup>th</sup> pass and have others degrees.

#### E. Participant's Work Experience

Work Experience	No. of	Percentage
	Respondents	
Less than 2 years	24	22.6%
Less than 5 years	29	27.4%
but more than 2		
years		
Less than 10 years	27	25.5%
but more		
than 5 years		
Less than 15 years	9	8.5 %
but more		
than 10 years		
More than 15	17	16.7%
years		
Total	106	100

#### **TABLE 5:** Participant's Work Experience

Source: Survey, N = 106 Respondents

From the data displayed in the above Table 5 it is found that, 27.4% of the participants have worked for less than 5 years but more than 2 years followed by 25.5% participants who have worked for less than 10 years but more 5 years, further followed by 22.6% who have work experience of less than 2 years. 16.7 % have work experience than 15 years and only 8.5 % have work experience between 10 to 15 years. F. Awareness about green practices among employees

**TABLE 6: Employee's awareness of the**term green Practices

Particulars	No. of	Percentage
	Respondents	(%)
Yes	80	75.5
No	26	24.5
Total	106	100.0



**CHART 1: Awareness of Green Practices** 

From the above data (Table 6 and Chart 1) it can be interpreted that, 75.5 % of the respondents are aware of the term green practices and 24.5% of the respondents are not aware of the term green practices.

## G. Employees plant trees in their house or at work place at regular intervals



CHART 2: Planting trees at home or work place

ut regular moor var		
Particulars	No. of	Percentage
	Respondents	(%)
Yes	74	69.8
No	32	30.2
Total	106	100.0

 TABLE 7: Employee's Plant trees at home or office

 at regular interval

As per the response depicted in the above Table 7, it can be interpreted that 69.8% of them plant trees at home or at work place at regular interval and 30.2 % do not plant trees at home or work place regularly.

# H. Mode of transportation used by employees within the campus



**CHART 3: Mode of Transportation** 

TABLE 8: Mode of transportation within the	
Campus	

Campus		
Particulars	No. of	Percentage
	Respondents	(%)
Electric		
Vehicle	4	3.8
Own Vehicle	73	68.9
Bicycle	8	7.5
On Foot	21	19.8
Total	106	100.0

From the above Table 8 or Chart 3, it can be interpreted that 68.9% of the respondents have

their own vehicle, 19.8 % respondents walk, 7.5 % respondents use bicycle and only 3.8 % of the respondents use electric vehicle in the campus.

## IX. DESCRIPTIVE ANALYSIS

This section consists the description of basic features of data collected for the study. Here descriptive analysis is used to summarize the data regarding green practices, green recruitment and selection, green training and development, green performance appraisal management, green pay and reward, green employee participation and empowerment, management of green organizational culture and green exit.

## A. Reliability Test

Cronbach Alpha is a statistics to measure the reliability. It is an indicator to represent the internal consistency among the items of the research instruments. (Cronbach & Meehl, 1955) The first test done in this study is checking the reliability of the designed Questionnaire and thus the Cronbach's alpha method is used to test the consistency of the questionnaire. The following Table 9 shows the Cronbach's alpha statistics applied to the data collected gave the result of Cronbach's alpha  $\alpha = 0.93$  for 21 items, used to collect data for 1<sup>st</sup> objective and Cronbach's alpha  $\alpha = 0.968$  for 40 items used, to collect data for 2<sup>nd</sup> objective which indicates excellent consistency among the items and thus the questionnaire can be useful for data collection.

Reliability	Cronbach's	No. of
Statistics	Alpha	Items
Green Practices	.939	21
Green HRM	.968	40

The above Table 10 represents the Cronbach's alpha value for each of the constructs for which data has been collected. The items designed for each of the constructs are valid and can be used for the research as the Cronbach's Alpha for each of the construct is above 7.



Construct	No. of Items	Cronbach's Alpha	Internal		
			Consistency		
Green Recruitment and Selection	6	0.772	Acceptable		
Green Training and Development	6	0.863	Good		
Green Performance Appraisal Management	6	0.885	Good		
Green Pay and Reward Management	7	0.923	Excellent		
Green Employee Participation and Empowerment	6	0.924	Excellent		
Management of Green Organization Culture	5	0.893	Good		
Green Exit	4	0.905	Excellent		

#### **TABLE 10:** Cronbach's alpha for all Constructs

Source: Survey, N = 106 Respondents

## **B.** Analysis for 1<sup>st</sup> Objective

**Objective 1:-** To find the best green practices of NIT Silchar

<b>FABLE 11: Opera</b>	ational	Scale
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Mean Score	Usage
4-5	High
3- less than 4	Moderate
Less than 3	Low

The operational scale defined in above Table 4.11

is used to categorize means of the data collected for the first objective into three usage levels namely, high, low and moderate. Items secure mean score of 4 and above will be considered as high usage. Items securing mean score of 3 and above but less than 4 is considered as moderate. And finally items scoring mean score less than 3 is categorized in low usage category.

The statistical representations of data collected with references to green practices are shown below in the following table.

TABLE 12: Representation of mean and standard d	deviation of green practices
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Green Practices	Mean	Std. D	Rank
Planting and growing tress in the campus	4.2170	1.05112	1
Use of solar panels or any other renewable sources of Electricity	4.0849	1.08775	2
Availability and usage of dustbins at suitable locations	3.9528	1.18227	3
Using both sides of the paper when writing or printing or photo copying	3.9434	1.14501	4
Switching of lights, fans, desktop or any other machines when not in use	3.8208	1.28580	5
Use of computer database and systems for storing records	3.6226	1.43064	6
Use natural light when working	3.6226	1.29800	7
Working with a minimum number of bulbs which are on	3.5472	1.12235	8
Sharing of study material among students using IT tools	3.5189	1.31099	9
Use natural water rather than refrigerated water	3.4528	1.23545	11
Use of bicycle in the campus	3.3208	1.30601	12
Monitoring of sinks and toilets for leaks that waste water	3.3113	1.27513	13
No Smoking Zone in the campus	3.2736	1.72673	14
Report to a relevant team regarding damages, possible harms etc. to the	3.1509	1.34372	15
environment whenever noticed			
Use of electric vehicles in the campus	3.0943	1.50256	16
Online filling of application and other transactions within or outside departments	2.9906	1.41755	17



Seminars on green practices	2.9151	1.42841	18
Soft copy submissions of assignments by students	2.8962	1.35175	19
Use of organic pesticides in maintaining greenery around the campus	2.8491	1.64920	20
Recycling of water and waste	2.6415	1.49404	21
Use of jute bags or paper bags instead of ploy bags	2.5377	1.44864	22

From the above Table 12, the data can be interpreted below:

- The campus is full of trees and plants. Top Management, faculties, students, and visitors plant trees in various occasions organized in the campus. The management plays a vital role in maintaining greenery in the campus. This factor secured first rank with a mean score of 4.2170.
- Solar system and panels are installed at various places in the institute. This factor secured second rank with mean a score of 4.0849.
- Dustbins are available at suitable locations within the campus. This factor secured third rank with a mean score of 3.9528.
- Students and teachers uses both sides of papers when writing or printing or photo copying study materials and official documents. This factor secured fourth rank with a mean score of 3.9434.
- Switching of lights, fans, desktop or any other machines when not in use is considered one of the best green practices. This factor secured fifth rank with a mean score of 3.8208 and so on.

Among the above mentioned practices usage of jute bags are very low. Mostly poly bags are used even there is strict banned from the government for not using polybags but it is not implemented. The items secured lowest mean score of 2. 5377. With reference to Table 11 the items "Planting and growing tress in the campus" and "usage of solar panels or any other renewable sources of electricity" has high usage with a mean score above 4. Therefore these are considered as the best green practices of NIT Silchar.

## C. Analysis for 2<sup>nd</sup> objective

**Objective 2:-** Identify to what extent NIT Silchar use green HRM practices

To assess GHRM practices in NIT Silchar campus respondents were asked to rate potential practices on a five point scale (1- Not at all, 2- To a slight extent, 3- To a moderate extent, 4- To a large extent, and 5- To a very large extent), according to the degree of agreement about to what extent do their institute implement GHRM. The means of each practices is used for analysis. The extent is calculated by dividing the response range (i.e. 5 which corresponds to "a very large extent" minus 1 which corresponds to "not at all") by the number of levels (i.e. 5 levels) in the Likert scale used. This is represented by the formula: (5-1)/5= 0.8.

The following Table 13 represented the intervals and their extent of application used in the research.

Interval	Extent of Application
1.00-1.80	Very Low
> 1.80-2.60	Low
> 2.60-3.40	Moderate
> 3.40-4.20	High
> 4.20-5.00	Very High

 TABLE 13: Defined Scale

(Masri and Jaroon, 2016)

The above Table 13 is used throughout the study to identify the extent up to which NIT Silchar implements Green HRM practices.

Code	Green Recruitment and Selection	Mean	Extent
GRS1	Recruitment message include environmental awareness and commitment	2.4528	Low
	criteria.		
GRS2	Online submission of applications for applying jobs.	3.1792	Moderate
GRS3	33 Telephonic Interview and video conferencing.		Moderate
GRS4	S4 Environment-related questions during interviews.		Low
GRS5	S5Recruit candidates having green awareness and knowledge.		Low
GRS6	6 Jobs positions are designed which demand knowledge about environmental		Low
	management.		
	Total Green Recruitment and Selection	2.43	1Low.87

The above Table 14 summarizes the descriptive analysis of items under green recruitment and selection. Among the items, online submission of applications for applying jobs receives the highest mean score of 3.1792. But with reference to Table 13, the extent of it can be declared as moderate. The telephonic interview and video conferencing scores mean of 3.1792, which falls in moderate extent. The other items like recruitment message include environmental awareness and commitment criteria

scores 2.4528, environment-related questions during interviews scores mean of 1.9623, Recruit candidates having green awareness and knowledge scores mean of 2.1038 and Jobs positions are designed which demand knowledge about environmental management scores of 2.2075. All these are applied to low extent.

Based on the above discussion, the average mean score of 2.43 this indicates that the Green Recruitment and Selection in NIT Silchar is low.

Code	Green Training and Development	Mean	Extent
GTD1	Environmental issues are discussed in induction programs.	2.9811	Moderate
GTD2	Green Training need analyses is conducted	2.5189	Low
GTD3	3 Training programs to increase environmental awareness and skills of		Moderate
	employees.		
GTD4	D4 Availability of training materials online for employees.		Moderate
GTD5	D5 Environmental training is priority over other types of training.		Low
GTD6	6 Institute provides training on environmental friendly best practices.		Moderate
	Total Green Training and Development	2.73	Moderate

TABLE 15: Descriptive Analysis to understand the extent of Green Training and Development

The above Table 15, depicts the descriptive analysis of items under Green Training and Development. Among the items, Institute provides training on environmental friendly best practices scores mean of 3.0472. Environmental issues are discussed in induction programs receives the highest mean score of 2.9811. Availability of training materials online for employees scores mean of 2.7547. Training programs to increase

environmental awareness and skills of employees scores 2.7453. All this items falls under moderate category with reference to Table 13. The remaining items like Green Training need analyses with mean score of 2.5189 and Environmental training is priority over other types of training with mean score of 2.3585 indicating low level from the defined scale.



Based on the above interpretation the total implementation of Green Training and

Development in NIT Silchar is moderate as the average mean score is 2.73.

TABLE 16: Descriptive A	Analysis to understand	the degree of Green	Performance App	raisal Management:
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Code	Green Performance Appraisal Management		Extent
GPAM1	Top management sets green goals and assign responsibilities for every	2.6698	Moderate
	employees.		
GPAM2	Employees are aware of their green goals and responsibilities.	3.0566	Moderate
GPAM3	Employees get regular feedback for carrying out their responsibilities or for	2.5188	Low
	improving their environmental performance.		
GPAM4	Top management carry out environmental audits in the institute.	2.5566	Low
GPAM5	Environmental goals and contributions to environmental management are	2.2264	Low
	assessed and recorded in performance appraisal system.		
GPAM6	There are penalties or dis-benefits (fines) in the performance management	1.8679	Low
	system for not meeting green goals and responsibilities.		
<b>Total Gr</b>	Total Green Performance And Appraisal Management		

The above Table 16, summarizes the extent of items listed under Green Performance Appraisal Management. Items like employees are aware of their green goals and responsibilities and top management sets green goals and assign responsibilities for every employees score means of mean score of 3.0566 and 2.6698 respectively indicating moderate scale. The remaining items like top management carry out environmental audits in the institute, employees get regular feedback for carrying out their responsibilities or for improving their environmental performance,

Environmental goals and contributions to environmental management are assessed and recorded in performance appraisal system and there are penalties or dis-benefits (fines) in the performance management system for not meeting green goals and responsibilities scores mean of 2.5566, 2.5188, 2.2264 and 1.8679 respectively indicating low extent.

Based on the above analysis the total implementation of Green Performance appraisal management in NIT Silchar is low having average mean score of 2.48.

Code	Green Pay and Reward Management	Mean	Extent
GPR1	Institute provide tax incentives for environmental performance	2.0566	Low
GPR2	Institute link suggestion schemes into reward system by introducing	2.3302	Low
	rewards for innovative environmental initiative/ performance.		
GPR3	Institute provide recognition-based rewards to employees for good	2.1509	Low
	environmental performance		
GPR4	Institute provide monetary reward to employees for good environmental		Low
	performance.		
GPR5	5 Team excellence awards to teams for better environmental performance.		Low
GPR6	Employees are rewarded for green skills acquisition.	1.9056	Low
GPR7	Employees are negatively reinforced for underperformance in	1.7358	Very Low
	environmental goals.		
	Total Green Pay and Reward Management	2.00	Low



The above Table 17 represents the items under Green Pay and Reward Management. Items like institute link suggestion schemes into reward system by introducing rewards for innovative environmental initiative/ performance (mean score 2.3302). institute provide recognition-based rewards to employees for good environmental performance (mean score 2.1509), Institute for environmental provide tax incentives performance (mean score 2.0566). team excellence awards teams for better to environmental performance (mean score 2.0472), employees are rewarded for green skills

acquisition (mean score 1.9056), Institute provide monetary reward to employees for good environmental performance (mean score 1.8113) falls in low extent And item like employees are negatively reinforced for underperformance in environmental goals scores a mean of 1.7358 indicating very low extent according to the defined scale.

Based on the above analysis the total implementation of Green Pay and Reward Management in NIT Silchar is low having average score of 2.00 which represents low extent.

TABLE 18: Descriptive Analysis to understand the extent of Green Employee Participation and Empowerment

Code	Green Employee Participation And Empowerment	Mean	Extent
GEPE1	Employees feel responsible for protecting the environment.	3.5188	High
GEPE2	Involvement of employees in quality improvement and problem-solving for	3.1321	Moderate
	green issues.		
GEPE3	Institute offer workshops or forums for employees to improve their	2.9528	Moderate
	environmental behavior and exchange their experiences.		
GEPE4	Institute has a clear developmental vision to guide the employees' actions in	2.8585	Moderate
	environment management.		
GEPE5	Top management involves employee in formulating environmental strategy	2.9528	Moderate
	and plans.		
GEPE6	Top management uses teamwork to manage and spread awareness of the	2.9528	Moderate
	environmental issues.		
Total Green Employee Participation And Empowerment			Moderate

The above Table 18 outlines the items under Green Employee Participation and Empowerment. Employees feel responsible for protecting the environment scores highest (mean score 3.5188) falls in high extent. Items like Involvement of employees in quality improvement and problemsolving for green issues (mean score 3.1321) and institute offer workshops or forums for employees to improve their environmental behavior and exchange their experiences, top management involves employee in formulating environmental strategy and plans, top management uses teamwork to manage and spread awareness of the environmental issues of same mean score 2.9528 falls and Institute has a clear developmental vision to guide the employees' actions in environment management (mean score 2.8585). All this items falls in low extent.

Based on the above analysis the total overall means score of Green Employee Participation and Empowerment in NIT Silchar is score of 3.06 which represents moderate extent.



<b>TABLE 19: Descriptive</b>	Analysis to understan	d the extent of Manageme	ent of Green Organizational	l Culture

Code	Management of Green Organizational Culture	Mean	Degree
GOC1	Institute vision/ mission statements include environmental concerns.	2.7924	Moderate
GOC2	Top management clarifies information and values of environmental	2.7547	Moderate
	management throughout the organization.		
GOC3	Top management actively support environmental practices for maintaining	3.3301	Moderate
	eco-friendly culture in the institute.		
GOC4	4 Top management allocates budget for maintaining green environment in the		Moderate
	institute.		
GOC5	Top management and departmental head always motivates staffs and student	3.0943	Moderate
	to participate in green practices.		
Total Management of Green Organizational Culture		3.058	Moderate

The above Table 19 represents the items under Management of Green Organizational Culture. The items like institute vision/ mission statements include environmental concerns, top management clarifies information and values of environmental management throughout the organization, Top management actively support environmental practices for maintaining eco-friendly culture in the institute, top management allocates budget for maintaining green environment in the institute,

top management and departmental head always motivates staffs and student to participate in green practices with mean scores of 2.7924, 2.7547, 3.3301, 3.3208, 3.0943 respectively indicates moderate extent.

Based on the above analysis the total mean score of Management of Green Organizational Culture mean score of 3.058 which represents moderate extent.

Code	Green Exit	Mean	Extent
GE1	HOD ask employees if Green issues are reasons for resignations.	1.7547	Very Low
GE2	Environmentally unfriendly behaviour may be one of the cause for dismissal.	1.7830	Very Low
GE3	Exit interviews to measure employee's perception on organizations green	1.8207	Low
	practices.		
GE4	Staff de-briefings in environmental management in cases of dismissal.	1.7924	Very Low
	Total Green Exit	1.79	Very Low

Table 20: Descriptive Analysis to understand the degree of Green Exit

The above Table 20 outlines the statistical information of the data collected for the items under Green Exit. Items like Exit interviews to measure employee's perception on organizations green practices with mean score of 1.8207 indicating low extent. The other items like, Staff de-briefings in environmental management in cases of dismissal with mean score of 1.7924,

Environmentally unfriendly behavior may be one of the cause for dismissal with a mean score of 1.7924, HOD ask employees if Green issues are reasons for resignations with a mean score of 1.7547 represents low extent.

Based on the above analysis the total mean score of 1.79, Green Exit mean score of 3.058 which represents moderate very low.



Green HRM Practices	Mean	Extent	
Green Recruitment and Selection	2.43	Low	
Green Training and Development	2.73	Moderate	
Green Performance Appraisal Management	2.48	Low	
Green Pay and Reward	2.00	Low	
Green Employee Participation and Empowerment	3.06	Moderate	
Management of green organizational Culture	3.058	Moderate	
Green Exit	1.79	Very Low	
Overall Green HRM	2.51	Low	

 TABLE 21: The overall existence of Green HRM Practices in NIT Silchar

The above Table 21 outlines the Green HRM Practices and their corresponding average mean scores and categorized each of the practices based on the define table (Table no. 13). Green Recruitment and Selection scores 2.43 (Low), Green Training and Development score 2.73(Moderate), Green Performance Appraisal Management scores 2.48 (Low), Green Pay and Reward scores 2.00 (Low), Green Employee Participation scores 3.06 (Moderate), Management of Green organizational Culture scores 3.058 (Moderate), Green Exit scores 1.79 (Very Low).

Based on the data available in the above table the total implementation of Green HRM IN NIT Silchar is 2.51 which is considered as low extent with reference to the scale defined in Table 13.

#### X. RESEARCH FINDINGS

# A. Overview of Research Design and Methodology

This study is a descriptive research based on the primary data collected from the employees of NIT Silchar. A structured questionnaire was designed to collect data using valid factors and items archived from the existing literatures. Simple Random Technique is used to collect the data from different departments of NIT Silchar.

#### **B.** Overview of Analysis Process

The data collected is interpreted and analyzed using IBM's SPSS (V-20.0). A simple descriptive statistics is used to generate the means and relevant scale is defined and is used for interpreting the data.

## C. Overview of Respondents Demographic Characteristics

Demographic data of the respondents indicate that majority of the respondents are male belong to the age group of 31 to 50 years. Maximum of the respondents are married and have doctoral degree and have work experience more than two years but not more than 10 years.

#### **D.** Summary of Respondents Opinion

Majority of the respondents, around 80%, are aware of green practices. They plant trees at home and office regularly and most of them uses own vehicle for commuting within the campus. Very less number of respondent uses TOTO or bicycle for daily use.

# E. Summary of the findings from the data collected for 1<sup>st</sup> objective

In NIT Silchar, planting and growing trees is the best green practice practices in the campus and it is strongly supported by top management. The second best practice is the installation of solar panels for the source of power supply. These are basically used for lighting street lights and also used for fulfilling other departmental needs. In various locations dustbins are placed. Jute bags are used very less by the people, residing in the campus. Recycling of waste and water is not a common practice in the campus. A few of the students and employees use bicycle in the campus. NIT has smart class rooms and there is a practice



of sharing study material online but soft copy submissions of assignments is not very operational among the students. According to the respondents, natural water is used mostly by them rather than refrigerated water and uses both sides of paper while writing and printing. Majority of them feel responsible for switching off lights, fans, desktop, etc. when not in use. They mostly use natural light while working or if required they use very minimum number of bulbs. In some cases computer databases are used for storing records but still there is manual system of recording keeping exists. The entire NIT campus is no smoking zone as declared but still there is some loopholes to follow the rule. Very few departments organize seminars on green practices and even if it is organized not much seriousness is there among the employees to attend. Organic pesticides are not commonly used for maintaining greenery in the campus. Sinks and toilet are most often checked for leaks but not all the time. Relevant teams are being reported for any environmental damage but prompt actions are not taken.

# F. Summary of the findings from the data collected for $2^{nd}$ objective

## a) Green Recruitment and Selection

- The candidates applying for any post in NIT Silchar have to submit application both offline and online mode. There online application processing system is not so advanced. Therefore the candidates have to submit it offline also.
- There is no much provision for Telephonic Interview or video conferencing while interviewing candidates.
- Recruitment messages do not include any environmental awareness and criteria for selection. There is no much emphasis to recruit candidates who have green awareness and knowledge.

- Moreover jobs positions are also not designed to demand for knowledge at environmental management
- Further there is no much possibility of asking environmental related questions to the candidates during the selection procedures. In this case one of the respondents said that depending on the job positions, to some candidate environment related questions are asked but this is not taken as selection criteria.
- It can be determined that Green Recruitment in NIT Silchar is low.
- b) Green Training and Development
- Top management arranges training programs to increase environment awareness among employees but not given much importance as it is supposed to give.
- Environmental issues are sometimes discussed in induction programs and in other training programs.
- Training programs are available online but not in all cases. There is no common database for sharing the training materials among the NIT employees.
- The institute does not conduct any green training need analysis for understanding the requirement of the employees towards environmental training.
- There is no priority of environmental training over other type of training.
- It can be concluded that Green training and development exits at moderate level in NIT Silchar

## c) Green Performance Management

- It is found that employees are much aware of their environmental goals and responsibilities.
- It is found that top management set green goals and assign responsibilities to employees for performing green activities but to a moderate extent.
- Employees do not get regular feedback from their supervisor for carrying out environmental responsibilities.



- Top management carry out audits in the institute but audit related to environment is not given much importance by the top management.
- There is no penalties or dis-benefits in the performance management system for not meeting green goals and responsibilities.
- Employees green goals and achievements are not recorded in the performance appraisal system.
- It can be understood that Green Performance management is low in NIT Silchar.
- d) Green Pay and Reward Management
- Institute do not have any relevant policies to provide tax incentives, recognition based rewards, team excellence awards, monetary and non-monetary reward to the employees for environmental performance.
- Moreover there are no policies for negatively reinforcing employees for their underperformance in environmental goals.
- ➢ Green Pay and Reward Management is low.
- e) Green Employee Participation and Empowerment
- NIT employees feel highly responsible for protecting the environment. It means that employees understand that they should actively participate for protecting the environment.
- Top management involve employee in problem solving related to green issues to moderate extent.
- Institute offer workshops on environmental practices for employees to share experiences among participants to moderate extent.
- Top management uses team work to guide and spread awareness for environmental issues.
- Top management involves employee in formulating strategies and plans for environmental issues some times.
- So in this case it can be presumed that Green Employee Participation and Empowerment is not high but exists in moderate level.

## f) Management of green Organization Culture

- In NIT Silchar, top management actively support to maintain eco-friendly culture in the institute.
- Top management allocates budgets for maintaining green work culture.
- Top management and HOD often motivates staffs and students to participate in green practices.
- Institute vision/mission statements include environmental concerns but to a moderate concern.
- It can be conclude that the top management have participatory role in maintaining green culture in NIT Silchar which can be much better with a slight higher degree of effort.
- g) Green Exit
- Exit interviews are conducted for the employees leaving the organization but no discussion related to environmental performance.
- On the basis of data received the overall mean of green exit indicates very low extent. Thus can be inferred that there is no sign of green exit policies in NIT Silchar. To summarize, the overall presence of green HRM practices in NIT Silchar is low.

## h) Some Other Findings

Besides, the above mentioned practices, there is some other information about green practices of NIT campus. The below discussions is completely based on respondents point of view during data collection.

- One of the respondents commented that, in NIT campus, various parts of the campus is left undisturbed so that a natural ecosystem is formed within that area.
- Online management Software is required for green practices and green processing of work.
- > NIT has got beautiful lakes. Special attention



should be given to maintain and preserve those lakes.

- Green Vehicles (Toto), is available in the campus which is often use by students and employees for commuting within the campus.
- Paper work in administration activities is not a good sign in this computerized era, so this needs to be change.
- Authority has taken many initiatives to promote green energy in the campus in terms of Solar Panel and frequent plantation of green plants and trees at various places etc.
- It is a green campus. Whenever there is any uprooting of trees, replenishing with new one is done.
- Sewage Treatment Plant Installation, Setting up of innovation Lab and Eco-Club in the NIT Silchar are some of the initiatives taken by authority of NIT Silchar.
- In various occasions NIT Silchar is doing plantation Programme in the college campus, hostel premises by faculty members, students and other visiting delegates.
- Very good Children Green Park is maintained for walking and playing.
- > Initiatives are taken towards using LED lights.

## XI. CONCLUSIONS

As we see green HRM implementation in NIT Silchar is low, it is very important in current scenario to upgrade its HR practices aligned with environment friendly practices. NIT Silchar is nationally recognized academic institute and they have a very important role in society. Therefore the employees of NIT Silchar should be responsible enough to protect the environment and spread awareness among students regarding environmental practices. Top management of the institute should realize the importance of green HRM and implement it to a large extent. They should take initiatives to motivate students and teachers to follow green practices at work places as well as home. One of the issues observed is the awareness of employees about the green policies. It seems that even policies exist but employees are not aware of it. This indicates that there is lack of information sharing among employees from the top management.

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