Implications of Green Management Practices in the RMG Industries of Bangladesh- An Environmental Sustainability Perspective

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ABSTRACT
As of today the whole world is riddled with a major dilemma whether it goes with gigantic industrialization or ensuring environmental sustainability. At the cost of green environment, infrastructural development means no dependable future. Therefore, this study aims to examine the implications of green management practices in readymade garments industries of Bangladesh. The perspective of the study entails environmental sustainability in such a way that depicts the perception of employees towards green management practices. In order to conduct this study, 100 respondents have been selected and all of them are employees in similar type of RMG industry. For the analytical purpose, Henry Garret’s table rating scale has been utilized because it not only provides clear response from the selected respondents but also subjective judgment. The study explored four important impact factors that play vital role in the context of environmental sustainability such as development of green management practices, motivating employees towards green management practices, enabling participation in green opportunities and last but not the least continuous maintenance of green attitude. After substantial analysis, the study concluded that the investment in green management system development, recording and publicly disclosing green job performance, participatory involvement in green discussions and having specific code of conduct for green management are the most important ones arising from implications of green management practices.

Keywords: Green management practices, environmental sustainability, RMG industry and green job performance.

INTRODUCTION:
Green management practices in readymade garments industry has become a buzzword for the world economy. Environmental sustainability has made green HR a crucial aspect in day to day operations of the organizations. Environmental sustainability has become a very important concern over the recent years because of increasing threat towards the global environment due to huge expansion of industrial aspects. Environmental sustainability can be defined as the capability to fulfill the present demand of the population in such a way that protects the interest of the future generation. Global environment management has been obtaining global acceptance because people of this century are more aware, more knowledgeable about the effect global warming currently has. In environmental literature, green management for sustainable development has various implications (Saha et al., 2020).

There must be a balance between the industrial growth and safeguarding the natural environment. All over the world organizations are facing critical challenges that
ultimately influence the performance and sustainability of not just the business organization but also the society and community. Going green is not just a phrase; it is a crying need now (Rahman and Rahman, 2020). Going green would ensure adopting such means and methods that would not negatively influence the environment. But to prove that investing in green management practices and still be a profitable operation is quite a challenge. Therefore, business organizations are in a crying need to identify, implement and maintain green management practices which is of paramount importance to the researchers in this particular field. In Bangladesh RMG manufacturers usually focus on the international perspective. When these companies can display to the foreign regulatory bodies as well as international buyers that they are investing their commitment towards making the environment a safer one by following environmental protocol, they can enjoy a substantial increase in their market share. Offering environmentally safe products to the customers enable the companies to create demand in existing as well as new market. Green management approaches not only think about the betterment of the environment but also it assists the employee to work in safer surroundings. Establishing an interpolation of green management, employees green behaviors and environmental sustainability can be considered as a major challenge.

Objective of the study
The broad objective of the study is to examine the implications of green management practices in ready-made garments industries of Bangladesh. The perspective of the study entails environmental sustainability in such a way that depicts the perception of employees of readymade garments industries of Bangladesh towards green management practices. The specific objectives can be summarized as the followings:

a) To determine the effective ways how green management practices can enable the employees to act for promoting sustainable growth in the organization and environment.
b) To explore the extent of commitment of the ready-made garments industry owners to initiate and promote green environment for the employees.
c) To assess the impact of green management practices and employees' green behavior on environmental sustainability.

Literature review
Mesmer-Magnus et al. (2012) argued that environmental sustainability is not an isolate approach, all of the stakeholders of the company need to work together to promote green management practices in the organization. Daily and Huang, (2001) have emphasized that there must be a balance between the growth potentials and environmental perspective. Organizations are profit centered entity but for that motive sacrificing the environment is not a wise choice. Therefore the management must think long term and act according to protect and preserve the environment.

Murari and Bhandari, (2011) argued that a company might generate profit even after initiating and implementing green management practices. Investment in green management may not generate revenue instantly but they create a better chance of having a positive future environment for business. Harmon et al. (2010) claimed that in every organization human resource management department plays a crucial role to create, maintain and promote sustainability culture. Individual employee might be unaware about the environmental impact but if the organization emphasizes on the importance of it, the employees cannot feel reluctant to adhere to environmental practices.

Hines et al. (1987) represented that within organization if the employees have adequate knowledge about the environmental issues or the firm makes them knowledgeable about that then it is possible that a positive attitude towards environmental approach may evolve. Moreover, when an organization make it visible for the employee that it stands for sustainability and environmental commitment, then the employees also commit towards the same goals (Das & Kumar Singh, 2016; Grolleau et al. 2012; McWilliams & Siegel, 2001; Mesmer-Magnus et al., 2012). It was found that the brand image of an organization, culture, values and employee commitment can be positively reinforced by the environment friendly strategies (Grolleau et al., 2012).

While considering the recruitment process, the management must keep in mind the sustainability issue because if the new employees are acquainted with the green policies while starting their career then it will be longer lasting and more effective (Del Brío, et al.,
2007). Phillips, (2007) reported that specifying the number of environmental aspects in the job description will increase the acceptability of green management practices. Environmental training has been gaining mass acceptance all over the world because it nurtures environment friendly culture and values not just for the employees but also for the key stakeholders of the organization (Jabbour et al., 2013; Teixeira et al., 2012). Initiation and continuous monitoring through green HR is very effective tool in cases like carbon emission. When an organization incorporates its environmental performance with its business performance, they make sure that there must be protection against any damage done to the environment (Alfred & Adam, 2009; Epstein & Roy, 1997).

To make the sustainable behavior successful and effective in the organization there are some key elements like better industrial relations, supportive culture for decision making, involvement of the employees, and their empowerment (Clarke, 2008). After reviewing the literature regarding environmental sustainability and green management practices it appears to be a crucial fact that in developed countries, green management is a common and widely used phenomenon but in developing countries like Bangladesh, green management practices are still growing. In the specific case of green management practices in ready-made garments industries of Bangladesh, there is little literature available. Therefore this study advocates that there is a research gap in this field and the study is therefore found ground breaking. This approach intends to find out the prevailing situations regarding green management in Bangladesh, what are the thoughts of the employees and management perspective on environmental sustainability.

**METHODOLOGY:**

This study has been conducted considering theoretical as well as empirical concepts. A survey questionnaire with well-structured factor analysis has been implemented face to face to the selected employees of ready-made garments industries of Bangladesh. For the analytical purpose Henry Garret’s table rating scale has been utilized because it not only provides clear response from the selected respondents but also subjective judgment. In this analysis, different dimensions of green management practices have been included so that the respondents can clearly express their notion about the present condition of environmental sustainability in Bangladesh, especially in readymade garments Industries of Bangladesh. 100 employees have been surveyed in order to achieve their valuable perception about environmental sustainability. The highest priority has been assigned numeric 1 (One) and for lowest assigned numeric is 5 (Five), using an isolated column for organizing ranks. This study focused on 100 readymade garments industry employees currently working in Chattogram, Bangladesh. The well-structured survey questionnaire has been classified into four (04) important factors relevant to environmental sustainability as such: development of green management practices, motivating employees towards green management practices, enabling participation in green opportunities and last but not the least continuous maintenance of green attitude. Each factor has different relevant activities assigned with the numeric number on which readymade garments industry employees put their opinion marks. In order to use Henry Garret’s rating scale to examine how green management practices plays vital role in the promotion of environmental sustainability, the first step is to calculate the percentage score as given as:

\[ \text{Formulae of percentage score } = \frac{100 \times (R_{ij} - 0.5)}{N_j} \]

Whereas, \( R_{ij} \) is the rank provided for the \( i^{th} \) item and \( j^{th} \) individual and \( N_j \) is the number of items ranked by \( j^{th} \) individual.

| Ranking | \( \frac{100 \times (R_{ij} - 0.5)}{N_j} \) | % position | Garret Value |
|---------|---------------------------------|------------|-------------|
| 1       | \( 100 \times (1-0.5) / 5 \)  | 10%        | 75          |
| 2       | \( 100 \times (2-0.5) / 5 \)  | 30%        | 60          |
| 3       | \( 100 \times (3-0.5) / 5 \)  | 50%        | 50          |
| 4       | \( 100 \times (4-0.5) / 5 \)  | 70%        | 40          |
| 5       | \( 100 \times (5-0.5) / 5 \)  | 90%        | 24          |

By using Garret Table, scale value has been calculated after attaining the percentage score. It is mentionable that percentage value is obtained for all the items from “1” to “n”. All of the percentage value has been converted to scale value by taking into consideration of the Garret Value from Garret’s conversion table. Afterwards, total number of respondents has been multiplied by the score value. Then, entire scores are found by adding all of the score values of each rank of a parti-
cicular element. This process has been applied to every group of factors. Finally ranking is provided according to the comparison of numeric values like highest to lowest as already mentioned highest rank is assigned by 1 (One) and lowest rank is assigned by 5 (Five).

**Analysis and findings of the study**

After analyzing the structured questionnaire, the study finds the first impact factor as development of green management practices. The impact factor in Table 1 has been examined based upon the dimension of Application of green HR plan, Inclusion of green management practices in job description, Assessment of green training needs and offering environmental awareness training and Investment in green management system development. The response from 100 readymade garments industry employees are as following:

**Table 1:** Development of green management practices.

| Ranking & Impact Factors | 1  | 2  | 3  | 4  | 5  | Total | Total Garret score | Mean score | Rank |
|--------------------------|----|----|----|----|----|-------|-------------------|------------|------|
| Application of green HR plan | f  | 46 | 20 | 18 | 12 | 4     | 100               | 6126       | 2    |
|                          | fx | 3450 | 1200 | 900 | 480 | 96   |                   |            |      |
| Inclusion of green management practices in job description | f  | 42 | 26 | 18 | 10 | 4     | 100               | 6106       | 3    |
|                          | fx | 3150 | 1560 | 900 | 400 | 96   |                   |            |      |
| Assessment of green training needs and offering environmental awareness training | f  | 32 | 28 | 20 | 18 | 2     | 100               | 5848       | 4    |
|                          | fx | 2400 | 1680 | 1000 | 720 | 48   |                   |            |      |
| Investment in green management system development | f  | 52 | 30 | 12 | 4  | 2     | 100               | 6508       | 1    |
|                          | fx | 3900 | 1800 | 600 | 160 | 48   |                   |            |      |
| Garret table value       |    | 75  | 60  | 50  | 40  | 24   |                   |            |      |

Note: x = Value of Scale; f = Number of respondents

From Table 1, it can be observed that Investment in green management system development has been ranked first. Since the readymade garments industry is export oriented and the main market for the export product is Europe, the industry has to adhere by the rules established by the buyers overseas. In order to compete in the international market the organizations have to show to the foreign buyers that they think about the preservation of the environment, betterment of the employee and most importantly they want a world with sustainability and growth. Besides, there are government restrictions to maintain environmental consideration. In order to get incentives, service facilities and other financial as well as non-financial benefits from the government, industries intend to follow a particular protocol that ensures environmental sustainability. Assessment of green training needs and offering environmental awareness training is the least ranked impact factor. The employees of readymade garments industry do not get green training on a regular basis. To promote the environmental awareness and minimize industrial wastage, firms should make continuous efforts to let the employees know the best environmental practices. But in reality this is not the case. Many of the employees that have been surveyed never get the chance to attend a training program relevant to environmental awareness. 46% employees in this industry shows that they are continuously getting green HR facilities whereas only 3% employees knew about environmental sustainability while joining in the organization and working in a hazardous work environment.

The dimensions of impact factor 02 (Motivating employees towards green management practices) are Assessment of employee environmental performance, Recording and publicly disclosing green job performance, Offering rewards for excellent green performance and Offering green benefits and promoting green means. From Table 2 it is obvious that respondent employees of readymade garments industry has considered Recording and publicly disclosing green job performance as the most important. Due to govern-
ment policies and transparency to international community, garments industries have to keep record as well as disclose their green job performance so that participation in environmental approach can be easily tracked. Offering green benefits and promoting green means has been getting popularity over the recent years because to encourage the employee following environment friendly strategies and offering them the means of green job completion. From the survey it appears that 32% of the employees in readymade garments industry get benefits whereas only 4% employees do not enjoy such kind of benefits. Offering rewards for excellent green performance is still not common to many organizations in this industry because of lack of incentive by the management. That’s why it has been ranked as fourth. 42% of the employees never get any rewards or benefits for adhering to environmental guidelines. So sometimes that does not interest them to take extra precaution because they will not get any additional benefit. But 6% employees get rewards for participating in environment friendly strategy and operation and they become more invested towards sustainable environment.

Table 2: Motivating employees towards green management practices.

| Ranking & Impact Factors | 1 | 2 | 3 | 4 | 5 | Total | Total Garret score | Mean score | Rank |
|--------------------------|---|---|---|---|---|-------|-------------------|------------|------|
| Assessment of employee environmental performance | f | 34 | 24 | 20 | 8 | 14 | 100 | 5646 | 56.46 | 3 |
| | fx | 2550 | 1440 | 1000 | 320 | 336 |
| Recording and publicly disclosing green job performance | f | 62 | 26 | 8 | 2 | 0 | 100 | 6690 | 66.90 | 1 |
| | fx | 4650 | 1560 | 400 | 80 | 0 |
| Offering rewards for excellent green performance | f | 6 | 10 | 30 | 12 | 42 | 100 | 4038 | 40.38 | 4 |
| | fx | 450 | 600 | 1500 | 480 | 1008 |
| Offering green benefits and promoting green means | f | 32 | 26 | 22 | 16 | 4 | 100 | 5796 | 57.96 | 2 |
| | fx | 2400 | 1560 | 1100 | 640 | 96 |
| Garret table value | 75 | 60 | 50 | 40 | 24 |

Note: x = Value of Scale; f = Number of respondents

Table 3: Enabling participation in green opportunities.

| Ranking & Impact Factors | 1 | 2 | 3 | 4 | 5 | Total | Total Garret score | Mean score | Rank |
|--------------------------|---|---|---|---|---|-------|-------------------|------------|------|
| Participatory involvement in green discussions | f | 38 | 24 | 32 | 2 | 4 | 100 | 6066 | 60.66 | 1 |
| | fx | 2850 | 1440 | 1600 | 80 | 96 |
| Ensuring supportive managerial behaviors in green management | f | 22 | 18 | 42 | 12 | 6 | 100 | 5454 | 54.54 | 3 |
| | fx | 1650 | 1080 | 2100 | 480 | 144 |
| Introducing environmental management education program | f | 34 | 28 | 20 | 16 | 2 | 100 | 5918 | 59.18 | 2 |
| | fx | 2550 | 1680 | 1000 | 640 | 48 |
| Active presence and monitoring of a green team | f | 6 | 6 | 16 | 26 | 46 | 100 | 3754 | 37.54 | 4 |
| | fx | 450 | 360 | 800 | 104 | 110 | 4 |
| Garret table value | 75 | 60 | 50 | 40 | 24 |

Note: x = Value of Scale; f = Number of respondents
Table 3 clearly provides a picture of the ranking garments industry employees have provided. The dimensions of the impact factor have the highest ranking for Participatory involvement in green discussions. 38% of the surveyed employee has been given the opportunities to involve and participate in green discussion. But there is also the other side of the coin. 4% employee never attended any green discussion in their firms where they can participate and share their thoughts. So they just listen and there is no opportunity to provide feedback. Many organizations do not have any green team to monitor whether the green management practices are followed by them or not. That’s why only 6% employee has said that they have active green team who continuously monitors the environmental parameters and take necessary actions if required. Introducing environmental management education program is also getting popular since the present world is the world of technology. Enormous numbers of training and development tools are available now. RMG firms are recently more invested in ensuring supportive managerial behaviors in green management. Employees are highly encouraged and managerial behaviors are significantly reinforced to maintain a workplace where employees can feel safe, work safe and stay safe.

Table 4: Continuous maintenance of green attitude.

| Ranking & Impact Factors | 1   | 2   | 3   | 4   | 5   | Total | Total Garret score | Mean score | Rank |
|--------------------------|-----|-----|-----|-----|-----|-------|-------------------|------------|------|
| System of disciplinary action against violation of green practices | f   | 28  | 6   | 4   | 28  | 34    | 100               | 4596       | 4.96 | 4 |
| f x                      | 2100| 360 | 200 | 1120| 816 |       |                   |            |      |    |
| Ensuring a green workplace with environment friendly mechanism   | f   | 26  | 34  | 14  | 22  | 4     | 100               | 5666       | 56.66| 3 |
| f x                      | 1950| 2040| 700 | 880 | 96  |       |                   |            |      |    |
| Having specific code of conduct for green management            | f   | 48  | 32  | 18  | 2   | 0     | 100               | 6500       | 65.00| 1 |
| f x                      | 3600| 1920| 900 | 80  | 0   |       |                   |            |      |    |
| Implementation of electronic data management and knowledge sharing replacing paperwork | f   | 32  | 48  | 4   | 16  | 0     | 100               | 6120       | 61.20| 2 |
| f x                      | 2400| 2880| 200 | 640 | 0   |       |                   |            |      |    |

Note: x = Value of Scale; f = Number of respondents

Having specific code of conduct for green management relating to environmental management has been ranked first by the respondent RMG employees. 48% of them stated that their firm has established code of conduct in written format and they are made aware of this on a periodic basis. There were none who don’t have any code of conduct in their organizations. Implementation of electronic data management and knowledge sharing replacing paperwork has been ranked second. Many organizations are focusing more and more on electronic database and relying less on paperwork. Ensuring a green workplace with environment friendly mechanism and creating various initiatives to reduce employee stress and occupational disease caused by hazardous work environment are the third one in ranking impact factor. But it is also unfortunate that in 34% cases system of disciplinary action against violation of green practices is absent and ultimately that creates a chance of deviation from obtaining environmental sustainability goals.

Limitations and directions for future research
The major limitation of the study is the sample size. The employees of the RMG sectors are selected randomly so it cannot be said with utmost confidence that those firms represent the entire industry. More importantly the tenure of the work experience of the respondents surveyed matters in this study. Some of the employees are newly recruits so they are not fully accustomed to the organizational ins and outs. Some-
times it takes time to have a clear understanding of issues like environmental sustainability. Most of the employees taken as respondents for the study were from City Corporation. Urban area employees are not taken into consideration. In order to expand the future research insight, expansion of geographic range is highly advised. One of the major limitations of the study is that it is based on primary data. Qualitative judgment can be influenced by various extenuating factors. Only four factors of environmental sustainability have been considered in this study but there are others too.

**CONCLUSION:**
Since RMG sectors are the single most foreign currency earning sector in Bangladesh, it is crucial to maintain environmental sustainability and attract international buyers to Bangladesh. This study can help the policy makers to identify the key areas in which they should focus more. All the stakeholders are required to act in concerted effort in order to achieve environmental sustainability. Traditional management is still present in a lot of organizations. But accepting green management practices and make it integral to the organizational optimal goal achievement is not an easy task. Various obstacles will stand in the way but this is important to make sure for the managers, policy makers, researchers and community leaders that distinctive efforts will always take place and there will be no compromise in terms of environment.

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