

# Green Management in SMEs of Bangladesh: Present Scenario, Implementation Obstacles and Policy Options

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## Abstract

'Be green' is a global slogan today. It is necessary to protect our mother planet Earth from the unabated destructive economic activities that put everything here under the threat of extinction. Management of all organizations should be aware of 'Save the Earth' movement and be restrain from all activities damaging to the Earth. Small and Medium Enterprises (SMEs) in manufacturing and service industries occupy a major share of the economic activities in every country. In Bangladesh, SMEs account for about 45 percent of manufacturing value addition, about 80 percent of industrial employment, about 90 percent of total industrial units and about 25 percent of the labour force. The total forest in Bangladesh is 17.5% and the deforestation rate is 0.18%. Therefore, SME sector in Bangladesh should undertake the green management and measures to be green to contribute to the efforts of keeping the country green as well as keeping the Earth green. Unconcerned and reckless economic activities caused much damage to our water, forest, air, and other sides of human living and environment. The research is undertaken to know how far the owners/owner-managers of SMEs have executed green management issues, what obstacles they face and what policy and operational measures to be taken to implement green management. Green management refers to the production of goods or generation of services by using such strategies, technologies and workplace practices that aims at reducing industrial waste, minimizing pollution, recycling wastes, doing paperless operations, and producing environmental friendly products and services. The outcomes are obvious- preservation of the natural conditions of the Earth, protection of consumers /end users of the product and the employees of the firm from any kind of injuries caused by the process or by the products, and building image and economic gain for the organization.

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Green management is the continuous application of an integrated preventative environmental strategy in production and marketing processes to reduce risks to human and the environment. Under these circumstances, every productive organization shall have to take numerous measures to produce green products for the protection of people and the Earth from physical hazards. SME sector, being the largest productive sector in Bangladesh, shall perform its business operations maintaining sustainable green policies and actions. No study has so far been done in Bangladesh in this area of 'Green management in SMEs'. So, this would be the pioneer study. This is an exploratory research. The study is based on primary data. Primary data are collected by a set of questionnaire with dichotomous questions from the owner-managers /managers of 120 SMEs. Simple statistical methods have been used to analyze and interpret data. The result of the study shows that very small number of SMEs are becoming aware of and taking action to keep our Earth green. Therefore, positive motivational measures shall have to be taken to encourage them towards green management by the government and business owners as well as good business forum of Bangladesh.

**Keywords:** Green management; SMEs; Sustainable green policies and actions; Bangladesh.

## **1. Introduction**

'Be green' is a global slogan today. It is necessary to protect our mother planet Earth from the unabated destructive economic activities that put everything here under the threat of extinction. Management of all organizations should be aware of 'Save the Earth' movement and be restrain from all activities damaging to the Earth. Green management is a philosophy, a strategy and an action to this end. All organizations particularly business organizations shall undertake green management for running their operations to save the planet and the mankind by using various means of green management policies and techniques. New approaches and tools are developed to enrich green management operations. Therefore, a continual attempt is required to adopt with the newly invented techniques by acculturation and physical execution in the enterprise. This study is undertaken to find out the state of art of green management in the small and medium enterprises (SMEs) in Bangladesh as a part of making them partner of the world green movement to preserve our Earth and its environment.

## **2. Rationale of the Study**

Bangladesh economy like all other economies of the world is strongly supported by the small and medium enterprises (SMEs). SMEs are the backbone of the economy and they are the driver of the economic growth. "In a policy paper, the Government of Bangladesh in [1] stated that Small and Medium Enterprises (SMEs) are treated as the engines of growth and drivers of innovation worldwide. They play a significant role in driving economic growth and generating jobs. In Bangladesh, the sector is actually changing the face of the economy. SMEs are playing a vital role for the country's accelerated industrialization and economic growth, employment generation and reducing poverty. SMEs now occupy an important position in the national economy. They account for about 45 percent of manufacturing value addition, about 80 percent of industrial employment, about 90 percent of total industrial units and about 25 percent of the labor force. Their total contribution to export earnings varies from 75 percent to 80 percent. The industrial sector makes up 31 percent of the country's gross

domestic product (GDP), most of which is coming from SMEs. The total number of SMEs in Bangladesh is estimated to be 79,00,000 establishments. Of them, 93.6 percent are small and 6.4 percent are medium. The 2003 Private Sector Survey estimated that there are about 6 million micro, small and medium enterprises, with fewer than 100 employees. About 60 to 65 percent of all SMEs are located outside the metropolitan areas of Dhaka and Chittagong. The country's SME sector has created 15 lakh jobs between 2009 and June 2014". "The author in [2] mentioned that about 90 percent of all industrial units are SMEs generating about 25 percent of the GDP, employing about 31 million people and providing 75 percent of household incomes. He further noted that various categories of SMEs together contribute between 80 percent and 85 percent of industrial employment and 23 percent of total civilian employment in Bangladesh. Now, private and foreign banks disburse half of all farm loans and a third of these are going to SMEs. Every year about 2 3 million young people join the country's workforce. Half of them find jobs at home or abroad". So, it has become a challenge to create more jobs so that the rest can be employed. "The government of Bangladesh in [1] observed that SMEs can be an answer to the problem". "From the statistics in [3] it is observed that the unemployment rate of Bangladesh is 5.3 percent, of which urban unemployment rate is 1.56 percent and rural unemployment rate is 2.94 percent". Under these circumstances, small and medium enterprises (SMEs) would be the only discourse to engage people in the economic development for Bangladesh. It is found in [3] that the estimated population of Bangladesh is 169.81 millions of which 84.98m is male and 84.83 is female, the total forest in Bangladesh is 17.5% in 2019 and the deforestation rate is 0.18%.

Therefore, SME sector in Bangladesh should undertake the green management measures to be green to contribute to the efforts of keeping the country green as well as keeping the Earth green. Whatever, little resources we have, unconcerned and reckless economic activities caused much damage to our water, forest, air, and other sides of human living and environment. Keeping this in view, the research is undertaken to know how far the owners/owner-managers of SMEs have executed green management issues, what obstacles they face and what policy and operational measures to be taken to implement green management.

Green management refers to the production of goods or generation of services by using such strategies, technologies and workplace practices that aims at reducing industrial waste, minimizing pollution, recycling wastes, doing paperless operations, and producing environmental-friendly products and services. "The authors in [4] said that Green management is the practices that produce environmentally-friendly products and minimize the impact on the environment through green production, green research and development, and green marketing". The outcomes are obvious- preservation of the natural conditions of the Earth, protection of consumers /end users of the product and the employees of the firm from any kind of injuries caused by the process or by the products, and building image and economic gain for the organization. Green management is the continuous application of an integrated preventative environmental strategy to processes, products and services to increase efficiency and to reduce risks to human and the environment. It is also concerned with using energy, water, and natural resources efficiently and to prevent environmental degradation. Under these circumstances, every productive organization shall have to take numerous measures to produce green products for the protection of people and the Earth from physical hazards. SME sector, being the largest productive sector in Bangladesh, shall perform its business operations maintaining sustainable green policies and actions.

The extensive search of literatures, studies and articles on SMEs in Bangladesh did not reveal any single one on the green management issue. Therefore, it is understood that no study has so far been done in Bangladesh in this area of ‘Green management in SMEs ‘. So, this would be the pioneer study. Our study will center around the green management paradigm shown in the following diagram.



Figure

Green Management Model for SMEs designed and studied by the researchers

There are several laws relating to environment preservation directly or indirectly in Bangladesh and the bodies created by these laws are entrusted to regulate individual and organizational activities in Bangladesh to preserve and to augment the environmental conditions. The Environment Conservation Act 1995 [5] has created the Department of Environment to assess the impact of economic activities on the environment and to control those. The Environment Conservation Rules are laid out under the Act, outlining the standards of the air, water and other components of the environment. The Environment Court Act 2010 in [6] is aimed at disposing cases relating to environmental harm. The Forest Act 1927 in [7] conserves forest resources, regulate the transit of forest produce and penalizes violations of its provisions. The Wildlife (Conservation and Security) Act 2012 in [8] is aimed at conserving the biodiversity, wildlife and forests of the country. The Brick Manufacturing and Brick Kilns Establishment (Control) Act 2013 in [9] is aimed at regulating the brick manufacturing process, placing multiple restrictions and outlining the prohibitions regarding the use of raw materials from sources such as agricultural land, hill or hillock and the use of wood as fuel. The Bangladesh Biodiversity Act 2017 in [10] regulates access to biological resources and traditional knowledge and their lawful transfer. There are many other laws that indirectly address environmental concerns such as the Consumer Rights Protection Act of 2009 in [11] , The Bangladesh Water Act 2013 in [12], the Urban Planning Act 2007 in [13] and the Natural Reservoirs and Preservation Act 2000 in [14]. All types of industries come under these laws including SMEs in Bangladesh to refrain those from injuring environment.

This is an exploratory research. The study is based on primary data. Primary data are collected by a questionnaire with dichotomous questions from the owner-managers /managers of 120 SMEs. Simple statistical methods have been used along with SPSS to analyze and interpret data.

### **3. Definition of SME in Bangladesh**

SME in Bangladesh has been defined from three categories – small, medium and micro in three sectors- manufacturing, service and trading. “The Bangladesh Bank in [15] mentioned that the Medium industry in manufacturing sector will mean a business enterprise with the Value of the fixed assets excluding the value of the land and factory building with replacement cost between BDT 150 million to 500 million or with 121 – 300 employees but for the garment industry it would be maximum 1000 employees for Garment industry. Medium industry in service sector will mean a business enterprise with the Value of the fixed assets excluding the value of the land and factory building with replacement cost between BDT 20 million to BDT 300 million or with 51 to 120 employees. Small industry in manufacturing sector will mean a business enterprise with the Value of the fixed assets excluding the value of the land and factory building with replacement cost between BDT 7.5 million to BDT 150 million or with 31-120 employees. Small industry in service sector will mean a business enterprise with the Value of the fixed assets excluding the value of the land and factory building with replacement cost between BDT 1 million to BDT 20 million or with 16-50 employees. Small industry in trading sector will mean a business enterprise with the Value of the fixed assets excluding the value of the land and factory building with replacement cost between BDT 1 million to 20 million or with 16-50 employees. Micro industry in trading sector will mean a business enterprise with the Value of the fixed assets excluding the value of the land and factory building with replacement cost Less than DBT 1 million or with maximum 15 employees”.

### **4. Discussion**

The study is made on 120 respondents from 40 manufacturing and 80 service SMEs. It is found that only 42 percent respondents heard about green management but they did not have any understanding about green management. It is further revealed that only 33 percent respondents know about the meaning of green management. So, It is safely said that least number of SMEs are knowledgeable about green management.

It is found that 90 percent SMEs do not have any green management strategy and policy. Only 10 percent made it formally in somewhat shallow written form and they are following it in their manufacturing enterprises. They take piece meal decisions to meet the immediate needs only. None of the service SMEs has green strategy and policy to go green. We know that a green strategy and policy are long-term targets that an organization wants to create positive impacts on the environment.

Green Human Resources Management (GHRM) is defined in [16] as the set of policies, practices, and systems that stimulate a green behavior of a company's employees in order to create an environmentally sensitive, resource efficient and socially responsible workplace and overall organization ( <https://e-csr.net> ). “The authors in [17] considered that HRM might contribute to environmental management in companies if they:

- a) recruit and select people committed to the environment;
- b) train and evaluate employees' performance based on environmental criteria;
- c) implement ways of rewarding individual and collective environmental performance is remunerated and non-remunerated ways;
- d) stimulate continuous education in environmental management;
- e) treat environmental aspects as values of corporate culture; and
- f) promote interaction between teams in order to deal with environmental problems and strive for continuous improvement of environmental management activities”.

The study revealed that none of the SMEs is using green human resource management formally but sporadically they use e-mail, website for giving and receiving employment information. They all use traditional paper method for human resource management practices.

Green production is a production strategy using technologies and workplace practices that aims at reducing industrial waste, minimizing pollution, recycling wastes, and producing environmentally friendly products and services. It also tries to reduce injuries to the internal employees due to occupational hazards. It is found that all SMEs (100%) are concerned about consumer/user injury from the product but none of them has any knowledge or practice about green production. They are running on traditional manner though many of them (30%) have shown their concern for the necessity of green production.

Green marketing is the marketing of environmentally friendly products and services. Green marketing can involve a number of different things, such as creating an eco-friendly product, using eco-friendly packaging, adopting sustainable business practices, or focusing marketing efforts on messages that communicate a product's green benefits. “It is mentioned in [18] that beyond making an environmentally friendly product, business owners can do other things as part of their green marketing efforts. The following can all be part of a green marketing strategy:

- Using eco-friendly paper and inks for print marketing materials
- Skipping the printed materials altogether and option for electronic marketing
- Having a recycling program and responsible waste disposal practices
- Using eco-friendly product packaging
- Using efficient packing and shipping methods
- Using eco-friendly power sources
- Taking steps to offset environmental impact”

It is found from the study that 95 percent SMEs do not use any of the green marketing effort but 5 percent SMEs , all are in manufacturing sector, is trying green marketing practices in a narrow scope. They are using cotton

made or jute made gunny bags for delivering goods to the customers at the shop instead of plastic bags. This is a very significant change as it shows that they are mentally shifted to a new paradigm of using natural fiber bags instead of harmful synthetic bags. It is also making customers educated about green concept. It is also found that customers are happily paying extra charge the green and environmental friendly bags. There is another technique they follow. Shop keepers are giving cash back if customers bring back used bags which are reused further for giving delivery.

It is observed during the study that even if owner-managers/manager did not know about green management but all of them using green management actions without knowing that it is an act of green management. Such as all of the respondents use energy saving bulbs, turning lights on time/at the time of closing the enterprise, use paper made bags besides polythene bags, a few manufacturing concerns using solar panel for electricity besides regular oil based electricity, using computers for preparing vouchers etc but keeping hard copy in paper, sending mails and placing orders and doing all other correspondence through e-mail and also using cash register. They are doing these practices to reduce cost, not for making the enterprise green.

Green controlling is a process of ensuring that green standards, policies, rules and guidelines are rightly followed in action and trying to ensure conformity of actual performance with the standard. It is found from the study that only a few manufacturing SMEs ( 10%) have green policies and practices but not in black and white form. They are highly informal about it. So, green control does not have any scope to act.

### **5. Obstructions to make SMEs green**

It is understood from the study that almost all respondents felt that problems like unaware about green management, lack of motivation of managers to implement green management, lack of knowledge about green management tools and techniques of managers and employees, concerned about cost for implementing green management i.e. establishing ETP and other operational cost , no legal and social pressure, no incentive from the government for doing green management practice etc. are the obstructions in the way of implementing green management in SMEs in Bangladesh. In all, green awareness development, support services for executing green measures and bearing cost of initiating and maintaining green environment are the primary concerns to them. SMEs are not financially strong and therefore, they are afraid of financial burden involved with implementing and maintaining the green environment. Lack of financial and non-financial support from the government and incentives for following green management are other significant reasons respondents put forward as the strong obstructions in the way of making their SMEs green and to practice the green management.

### **6. Policy options for green management**

In order to make SMEs green in Bangladesh, the respondents said about what shall be done to make SMEs green and make green management a success. They all pointed out the following actions to be taken : (i) Provide fund at zero interest to the SMEs for establishing green management tools and techniques (ii) Provide technical help to implement green management tools and techniques; (iii) Train owner-managers/managers about green management tools and techniques free of cost; (iv) Give cash and kind incentives to the SMEs

practicing green management; (v) Set green management standards for both manufacturing and services SMEs in the form of law and educate SME managers /owners about the law; (vi) Publicity of green management to educate customers to be concerned about green management and its impact on society and environment; (vii) Monitoring and supervision of the green management practices from in-house and from the government. These suggestions are consistent with

## 7. Conclusion

SMEs in Bangladesh are not concerned for green management, but they have a feeling that the green management is needed to make the environment livable for the mankind. So, we can use their goodwill by providing necessary support and assistance as it is revealed in the study to make them green. This study would be the benchmark for the future studies with broader scope and that will provide us more comprehensive guidelines to make green management a success. SMEs are the largest sector in Bangladesh. Therefore, if they are aware of and committed to the green management, we hope that Bangladesh would be one day 'be green'.

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