



## SUSTAINABLE DEVELOPMENT OF RMG SECTOR THROUGH GREEN FACTORIES

<sup>1</sup>Md Babul Mia\*, <sup>2</sup>Ishrat Jahan and <sup>3</sup>Sultan Mahmud Shahan

<sup>1</sup>Department of Apparel Manufacture & Technology, BGMEA University of Fashion and Technology, Bangladesh.

<sup>2</sup>Assistant Professor, Department of Apparel Manufacture & Technology, BGMEA University of Fashion and Technology, Bangladesh.

<sup>3</sup>Department of Apparel Manufacture & Technology, BGMEA University of Fashion and Technology, Bangladesh.

Article Received on 05/06/2018

Article Revised on 26/06/2018

Article Accepted on 17/07/2018

### \*Corresponding Author

**Md Babul Mia**

Department of Apparel  
Manufacture & Technology,  
BGMEA University of  
Fashion and Technology,  
Bangladesh.

[babulbuft1994@gmail.com](mailto:babulbuft1994@gmail.com)

### ABSTRACT

Now a days RMG sector is the backbone of Bangladesh because of its economic growth in the last couple of decades. The main earning sector in Bangladesh is ready made garments (RMG) sector. Sustainable development on RMG sector through green factory is creating a vital impact around the world. Green factory concepts is a very new concepts in Bangladesh. But in recent years it has started to become quite popular. Since the concept of Green Factory is being

widely introduced in our garment industry, its excellent impressionable impact has begun in the whole economy. In recent years there are lots of challenge faced Bangladesh RMG sector. Compliance issue is the first challenge in this sector. Lots of factory never fulfill buyers required compliance issue. World most reputed buyers are always required 100% compliance in factory. Compliance ensures many social and environment standards organization like ISO. In green factory there are every requirement have totally fulfill as per buyers need. Environment safety, work efficiency increase, use natural elements, natural light, natural power, all are green factories benefits. If sustainable development in RMG sector in every sector like Economic, Environment, or something else then establish every factory in green. Whatever green factory establishment cost is so high and need lots amount of land,

equipment. But this wages are achieve world respect, increase huge amount order, save lots of natural elements, use unlimited solar power, increase productivity, save environment pollution, make profit and more. So RMG industries sustainable development only possible on green factory establishment.

**KEYWORDS:** Green factory, LEED certification, Sustainable readymade garments industries, sustainable environment development, Bangladesh.

## INTRODUCTION

Green Factory, the idea is new in our country. But in recent years it has started to become quite popular. Since the concept of Green Factory is being widely introduced in our garment industry, its excellent adolescence impact has begun in the whole economy. Rapid development of green factory concepts has made everyone feel confident in the proper implementation of the \$ 50 billion dollar income from this garment sector.



There is no doubt that Green Factory will add new dimensions to the country's economy. In this, foreign buyers will be attracted to emphasize. The quantum of export will increase multiplied. Those who are currently setting up new factories, they are establishing a factory in the light of the experience of the last few years, it is necessary to say that. Because they have realized that if foreign workers do not already have a factory, foreign buyers will not order them. So entrepreneurs are operating their business in accordance with the laws of business as well as the laws of the country. If not fully compliant, then no new factory is approved from BGMEA. After the devastating fire in Rana Plaza collapse or Tazreen garment factory in Savar, the garment industry of Bangladesh was hit by a major setback, which led to the fall in this sector. Foreign buyers were also in the crisis of confidence. The garment industry of Bangladesh started to turn around after a big push. In order to establish

an environmentally sustainable factory or factory, a lot of competition started in the entrepreneurs.

Through this, there have been numerous environmental friendly Green Factories being developed in the country. In future, the process of bringing more garment factories under greenery.

The prospects of RMG sector, however, in Bangladesh not only depend on availability of cheap labor and government's liberal policy but also depend on compliance with codes of conduct. RMG sector of Bangladesh needs to improve the factory working environment and various social issues related to the industry. International buyers are very particular about compliance with codes of conduct before placing any import order etc. Poor housekeeping, storage system, ineffective monitoring and controlling system, disorganized production layout, lack of team-based work, rented factory premises, narrow staircases, closed environment, insufficient light and air, clean drinking water, separate wash room for male and female, etc. are common practices in most of the RMG factories in Bangladesh.

So it is very important to making green factory for sustainable development on Bangladeshi RMG sector for bright future and environmental friendly.

### **OBJECTIVE OF THE STUDY**

The purpose of the study is sustainable development of RMG industry through green factory. Additionally this will focus the development of their sustainability as well as environmental friendly operation existence. And way to sustain with competitive global RMG industry and also describe the present situation of Green RMG industry and finding the sustainable development of RMG sector of Bangladesh.

### **LITERATURE REVIEW**

The term 'green industry' comes from a concept green economy, a pathway towards sustainability that is followed by organizations such as the World Bank and United Nations Environment Programme (UNEP) (Barbier, 2012).

Strategies, policies, and programs give the rise of a green industry that focuses on the development of production. Green industry has been defined by United Nations Industrial Development Organization (UNIDO) as 'A pathway of sustainable growth by undertaking

green public investments and implementing public policy initiatives that encourage environmentally responsible private investments.’(UNIDO, 2011).

A green industry is one which is environmentally friendly in all aspects. This industry is not harmful to the environment as traditional industries. A green industry does not put industrial production above and all at the expense of the natural environment and human health (Hall and Dickson, 2011). A green industry aims to build an industry that intertwines environmental and social consideration with economic considerations. Showed that a green industry can make big improvements in a country’s socio-economic development and provides a favorable condition for a sustainable industrial development. This study assessed the current green industry conditions in China and the results show that about 8% contribution was done to the socio-economic conditions by a green industry. The number is quite small and even big though improvements are being done; there is a substantial scope for improvement (Chen et al, 2017).

This paper states that about 45% of the industry has been adopted with green technology followed by service industry 65%, agriculture industry 55%, manufacturing industry 24%. This study also revealed that green industry growth is associated with the national economic development of China, as it increased the annual growth rate of exported green product. This study also revealed that if there was a 1% increase in green product exports, an increased in 0.04% gross domestic product in China (Chen et al.2017).

Additionally, economic profit is not something that should be an issue when it comes to implementation of a green industry as the future yields are substantial in terms of profit, enhanced environmental performance and in general human wellbeing (Hashim et al., 2015). This can be further seen as a study by Hoque and Clarke in 2013 shows that realizing the potential pollution prevention initiatives in Bangladesh reduces environmental degradation, and in turn, saves cost (Hoque and Clarke, 2013). Bangladesh Bank is already underway facilitating green industries and argues that a better future can be made by changing our mindset about environmental issues in a preventive manner (Ullah, 2013).

A journal discussed that sustainable development should be ensured through the resource-constrained process of industry. For this purpose, natural resources including water, minerals, fossil fuel, and environmental resources usage should be reduced, thus, environmentally sound product usage and reducing the consumption of resources help towards ensuring long

run sustainability. Ali et al. (2016) investigated the understandings and green initiatives in the construction industry in Kota Kinabalu, Malaysia. Their findings included economic development activities which were fostered with the aid of using green technology. It should also be noted that a focus on green technology solely is not sufficient for a sustainable development. To incur effective change and raising awareness, proper education and broad trainings are also required. This will move towards a more sustainable development. Jia et al. (2017).

Ito (2016) investigates the association between CO<sub>2</sub> emissions, renewable and non-renewable energy consumption, and economic development of 31 developed countries. Energy consumption policy has a negative impact on the economic growth but renewable energy uses has significantly reduced the carbon emission of those countries. Ge and Zhi (2016) demonstrated that there is a complex relationship between the green economy and employment generation in both developed and developing countries. They found that green economy, in general, has a positive effect on employment generation in both developed and developing countries, but it should be noted that it has negative effects on employment generation in Spain. Hashim et al. (2014) discussed that by green practicing, environmental harmful effects can be reduced and energy saving would be ensured. The authors developed an assignment tool named Green Industrial Performance Scorecard (GIPS) to understand the performance of a green industry. Five essential components namely, energy, water, waste, soil management and air are included in their assignment tool.

Deng and Liu (2011) included seven components as green raw material, green exploitation, green store, green transportation, green sale, green consumption, green return, green recycling and green disposal a green supply chain for the oil industry in China. Negulescu and Doval (2014) explored the managers' position against risk, uncertainty and efficiency within the green industry. The authors found that majority of the companies have implemented and in progressed in environmental standard. Their study also reveals that there are strong correlation between environmental protection investment and company's risk management efficiency.

Transition of adopting green principles come up with certain advantages that not only benefit the world environmentally but economically and socially as well.

According to the Inter-Governmental Panel on Climate Change (IPCC) in 2014, Bangladesh has been categorized as a high-risk country from climate change due to erratic climate events, which will, in turn, threaten the country's food and livelihood security (Hijioka et al., 2016). Adopting green principles are a definite way to start mitigation methods and ensure that no further damage has been done to the climate.

Bangladesh's overall branding as well as the RMG sector is negative. We cannot just say that Bangladesh is a country of green buildings," Fazlul Haque, managing director of Plummy Fashions, a platinum certified factory. "It is time to say and brand Bangladesh, as well," he adds. "Sustainability is no more an option, it is a need, and it should be inclusive. In South Asia, Bangladesh has taken the lead in green initiatives," said Gopalakrishnan P., Managing Director of GBCI in Asia Pacific and Middle East Markets. "We are pleased to recognize this important achievement and to express our deep appreciation for the support of our efforts to transform the built environment in Bangladesh region, said Gopala. "In recent years a silent revolution has taken place in the RMG industry of Bangladesh. The world's highest rated LEED Platinum Denim factory, Knit factory, Washing Plant and Textile mill all are situated in Bangladesh," BGMEA president Md. Siddiquir Rahman said. "The entrepreneurs of our RMG sector are the architects of this achievement in green industrialization. The LEED Green Factory Award is for them to recognize their efforts and achievement," he added. Speaking of wages, the minister said there will be no dispute between the workers and owners, if the wages is set based on the needs of workers, and the capacity of industry. He also urged the sector people to take initiative so that it can enjoy the present trade benefits after its graduation to middle income levels.

Green growth means low carbon growth (i.e. tolerable amount of carbon emission), and reduction of greenhouse gasses during the production. According to London School of Economics and Political Science (LSE), the widespread use of the term 'green', is a broad consensus about what it means. It is very often treated as a synonym for or an aspect of sustainable development. However, in contrast to conventional growth, it is generally understood that industrial growth is a green one when it uses natural resources in a sustainable manner by taking into consideration of its scarcity while ensuring minimum effects on the natural environment and thus trying to make the world a better and liveable place. (<http://www.theindependentbd.com/home/printnews/120448>).



According to an article in Forbes, the apparel industry with a global market size of \$3 trillion is annually accountable for 10 percent of global carbon emission, and remains the second-largest industrial polluter just after the oil industry. Currently, the global apparel sector is in a dilemma in terms of continuing its production on the one hand and minimising its production-related environmentally harmful effects on the other hand. Against this backdrop, it is the hour of need to produce textile and apparel goods in a sustainable or eco-friendly ways so as to achieve green growth. It is encouraging to note that major global leading fashion players such as H&M, Hugo Boss, Nike, Levis Strauss, and Adidas are now conscious about reducing carbon and other emission related to the production of apparels. Indeed, their consciousness and steps in this regard are giving a new shape to the trend of the global apparel business in recent years. When it comes to global consumers, particularly who have the knowledge or are concerned about the environment are willing to pay more for the green apparel clothing. A number of available studies, reports, and surveys have revealed the fact that in the global context, environmentally conscious consumers are increasing day by day. They are ready to make personal scarifies in terms of money or willing to pay more for the socially responsible or eco-friendly consumer products.

And most importantly, low-carbon economy and green growth in manufacturing industry has been highly emphasised in several national and international and organisational efforts, strategies, and policies over the years. Among them the efforts of UNIDO, UNEP, UNESCAP, Green Peace, World Bank, Agenda 2030 SDGs, and Green growth efforts in the USA, India, China, Malaysia, Singapore, and South Korea are notable. Installing “green building” in manufacturing firm is considered as one of the crucial parts of “Going Green” approach as it is designed in such a way that has a lot of attributes in terms of making efficient use of resources, particularly water and energy, protecting indoor health safety, minimising surrounding negative environmental impacts and maintaining environmental amenities. The acceptance of green industry continues to rise globally. Currently, the registered projects for LEED around the world are 1, 20,549, while the certified projects are 61,507. It is stunning to note that between the years 2000-2002 there were 30 certified green building from USGBC (US green building council) but the number has reached to 22,721 between the years 2015-2017. <http://rmg-study.cpd.org.bd/green-industrialisation-taking-bangladesh-rmg-sector/>.

The green building movement as a sustainable development strategy is fast becoming a necessity (Prakash, 2005). Kibert (2007) defines Green Building as a healthy facility, built in a resource efficient manner using ecologically based principles. According to LEED-EB Reference Guide (2006), “Green” has become a shorthand term applied in building construction industry to denote high performance buildings innovated with the objective of to be environmentally responsible, economically profitable and healthy place to work and live.

According to a study done in the United States, buildings annually consume more than 30 percent of the total energy and more than 60 percent of the total electricity. Green building practice can substantially reduce negative environmental impacts through high performance, energy saving, and market leading design, construction and operations practices. The added benefits of green operations and management include reduced operating costs, enhanced building marketability, increased workers’ productivity, and reduced potential liability resulting from indoor air quality problems (LEED-EB Reference Guide, 2006).

Increased, it was very important to have an assessment system for green buildings. The most often building environment assessment schemes that are used today include Building Research Establishment Environmental Assessment Method – BREEAM, Comprehensive Assessment System for Building Environment Efficiency – CASBEE, Green Star, and Leadership in Energy and Environmental Design – LEED (Prakash, 2005).

BREEAM scheme is the most widely used building environmental rating scheme in the UK, which was voluntarily started in 1988. It assesses the building impact on the environment including management, health and wellbeing, energy, transport, water, materials, waste, land use, ecology, and pollution and gives credits up to maximum of 102 under each category (Roderick, et al, 2010).

CASBEE was started in 2001 that can be applied for many types of buildings, such as offices, schools, retail stores, restaurants, halls, hospitals, hotels and apartments under various categories such as planning, design, completion, operation and renovation (Endo et al, 2007).

## **METHODOLOGY**

That aims at understanding the motivations of those factories that have at least applied for LEED certification. It was carried out primary research to collect data to give an overview of sustainable development in industries and factories in Bangladesh and it is analyzed



quantitatively using descriptive and approximate statistics some methods are followed during preparation of this report.

- A list was collected and 5 factory and BGMEA leadership was contacted.
- We visited some factory and collect information about green factory and we also discuss about how we can sustain and developed RMG sector. Ten employees were responded to our request for In-depth interviews out of 15 employees.
- In this study we tried to collect information from factory compliance officer also HR and various source. To collect those data, we had to arrange some personal interview and telephone interview.
- Data was also collected from interviewing the business leaders including the potentials authority of BGMEA office.
- Our visited Factories were divided into three categories are Small, medium and large.

## FINDINGS

The country's readymade garment sector is changing. The living standard of the workers is going to change. Global quality green plant or green factory is becoming popular. Green Revolution is being created with export growth. Through this environment-friendly revolution, the garment sector of the country is expected to reach a new height, which will attract foreign buyers freshly. And workers will get international quality facilities. The factory will have all the latest technologies, open environment; there will be various facilities including all security facilities. In whole world, Only Bangladesh RMG sector have been 67 eco-friendly manufacturing green buildings. And it is the highest number in the world. And this sector is more than \$28 billion industry. Not only this , in the case of environment-friendly factories, the best 7 of the world's top 10 have been developed in Bangladesh. More than 280 factories will be added to the list. The list of construction of such type of factories in different areas is going up every month. In addition to the efforts of the garment sector, the organizers of Green Factory or Green Factories in the country, with the idea from the United States Green Building Council, from the United States. Now the country's clothing sector has started a new journey with the council's certificate. The objective of setting up such factories is to make labor-intensive work-workers in the workplace. Keeping industry safe from accident, which can guarantee only the Green Factory. The USA-based organization LEED, which has selected green factories in green industries, has recognized the factories of Bangladesh in the survey of various categories. The full name of 'LEED' is the Leadership in Energy and Environmental Design. The project is a US Green Building Council (USGBC).

To get green fictitious titles, organizers of the country's garment sector have been competing in this unthinkable task by meeting the factories with the USGBC and fulfilling all the costly requirements.

### **Establish policies of green factory**

To establish a green factory, there are some policies to follow. The best places needed for the establishment of a green factory. Implementation of green-factory concepts in a limited range is not possible in the environments. According to the international norm, half of the factory will be released on the land, for greening. Where there are green gardens. There will be plenty of open space around the factory. And there will be open spaces within the factory. Work environment of the workers will also be beautiful. The distance from one worker to another is quite different. Everything will also be done in automation. All the machinery will be sophisticated. There will be 70 percent power saving facilities. There will be solar panels, LED lights and water recycling. According to the international standards, workers' employees will get all kinds of facilities. There will be opportunities for their residence in the factory separately. There will be special facilities for workers to travel. There will be a rationing system with treatment. Lifestyle center for workers, day care center for children and dining room for the food, mosque or seminar and special training classes should be there. With the establishment of an environmentally friendly green factory, 24 percent of the fuel is saved. On the other hand, less than 50 percent of the water is wasted.

### **LEED Certificate**

Leadership in Energy and Environmental Design 'LEED' is one of the most popular green building certification. Getting Lead Certificate is not easy. It is not only invested, it is considered to be one of the best qualifications of the monitoring organization. In order to maximal, the entrepreneur has to follow 8 conditions.

To get recognition of Green Factories, a project has to be protected from the USGBC's supervision, from the construction to the highest quality. Applications can be made even after the construction is completed or renovated old buildings. However, whatever is important is the process of application, for this entrepreneur has to maintain 100% international standards in order to manage the system until the plant is rolled up or destroyed from the beginning of production.

An LEED certificate requires factories to meet its nine requirements where each chunk has separate points.

1. Integrative Process (IP), contains 1 point.
2. Location and Transportation (LT), contains 16 point.
3. Sustainable Sites (SS), contains 10 point.
4. Water Efficiency (WE), contains 11 point.
5. Energy and Atmosphere (EA), contains 33 point.
6. Materials and Resources (MR), contains 13 point.
7. Indoor Environment Quality (IEQ), contains 16 point.
8. Innovation in Design (ID), contains 6 point.
9. Priority (RP), contains 4 point.

### **Investment**

Entrepreneurs say that there is a lot of investment required for green factories. According to the size of the factory, the minimum investment is from 300 crores to one and a half thousand crores. In addition, the land also takes 3 to 10 bighas. Most of the entrepreneurs who have won green factories in the country have so far invested between Tk 500 crore and Tk 1.1 billion. To get recognition of Green Factories, a project has to maintain the highest standards in various subjects from the construction to the production under the supervision of the USGBC. Applications can be made even after the construction of the building is finished or renovated old buildings. In this case, the important thing is that the entrepreneur has to maintain international standards in operating the activities until the factories are knit-down or destroyed since the beginning of production for such a green factory project. A recent survey of the Lead Certificate US Green Building Council (USGBC) found that seven of the world's top ten green factories were found in the world's top ten factories. Apart from Vintage Denim Studios, the seven ready-made garment factories in Bangladesh include Remi Holdings Ltd, Tarashima Apparels Ltd, Plummy Fashion Ltd, Vintage Denim Studio Ltd, Columbia Washing Plant Ltd, Ecotex Ltd, SQ Celsius Unit 2 Ltd, Kaniz Fashions Ltd, Genesis Washing Ltd, Genesis Fashions Ltd, SQ Birichina Ltd, SQ Colblanc Ltd and Envoy Textile.

### **Benefits of the Green Factory**

In Bangladeshi RMG sector green factories are very beneficial and its very help to sustain our RMG sector. The country's readymade garment sector is changing. The living standard of the workers is going to change. Global quality green plant or green factory is becoming popular. Green Revolution is being created with export growth. Through this environment-friendly revolution, the garment sector of the country is expected to reach a new height, which will

attract foreign buyers freshly. And workers will get international quality facilities. The factory will have all the latest technologies, open environment; there will be various facilities including all security facilities. Although this type of factory is expensive, it is profitable and positive for the garment industry. As a result, industry entrepreneurs are thinking that the life of the workers will change as well as the economy. A significant feature of the Green Factory concept is the protection of the environment. Although it is considered a difficult challenge to continue the production process in environmentally friendly, electricity, water and gas-saving, health-conscious environments, it is possible to deal with this challenge through the implementation of green factory concept. Worldwide, now everyone needs to pay attention to environmental protection. Garment goods and buyer countries and international organizations, groups now enforce environment-friendly, labor-friendly conditions in the garment manufacturing process. The foreign buyers have played an important role in the growing popularity of green factory ideas. If the introduction of green factories in the garment sector in Bangladesh, foreign buyers will be more vulnerable to the purchasing of ready-made garments in the country. Millions of garment workers in this country will change their lives. Currently, the challenges we face in our garment industry are possible through green factories.

### **Sustainable Environment development**

A significant feature of the Green Factory concept is the protection of the environment. Although it is considered a difficult challenge to continue the production process in environmentally friendly, electricity, water and gas-saving, health-conscious environments, it is possible to deal with this challenge through the implementation of green factory concept. Worldwide, now everyone needs to pay attention to environmental protection. Garment goods and buyer countries and international organizations, groups now enforce environment-friendly, labor-friendly conditions in the garment manufacturing process. The foreign buyers have played an important role in the growing popularity of green factory ideas.

Another harmful effect of the garment industry on the environment is that the water used by the factory becomes river, canal bill, haor etc. These toxic chemicals and color mixing water in the garment factories are severely contaminated by the rivers, canal water. As a result, fish in the river canal fish are dying, there is obstruction in cultivation. It has adverse effects on agricultural production. If these factories are able to save one-fourth of the use of water with the help of modern technology, then it will be possible to reduce the level of chemical usage

significantly. Gas is used to heat fabric (cloth) for finishing and darning. In this case, the amount of water used in the field is to use high amount of gas to apply the heat. So reduce the use of water if possible, the precious natural gas will be saved. According to a study by the International Finance Corporation (IFC), Bangladesh's garment factories cost about 1,500 crore liters of water per year in dyeing and dyeing and washing. It is surprising, however, that it is possible to keep 6 million Olympic swimming pools filled with so much water. The equivalent water can meet the needs of 8,000 people in a year. Generally, when a large quantity of water is collected from the underground source, there is a great vacuum there. In this way, the vulnerability will be created and the risk of going down the land will be created. For this reason, the water level of most areas including the capital Dhaka is not in convenient and safe position.

Taking special initiative interested in various aspects of Green Factory Concepts. In the meantime, some organizations have taken positive measures to save water and gas. One of Bangladesh's most prominent garment industries used 1200 tons of fabric dyeing and washing water for 25 million liters of water annually Now not only this factory ,in Bangladesh lots of Garment factory follow the green factory theory and establish their factory green. Factories are setup Effluent treatment plant (ETP) for convert waste water which water is no longer needed for its most recent use. Into an effluent that can be either returned to the water cycle with minimal environmental issues or reused. And at result if all factory setup ETP in their factory then we can save billion billion liter water for our future use.

### **Sustainable Economic Development**

In Bangladesh, RMG industries is a very strong and very fast growing and strong economical industries. After the Rana Plaza collapse and the Tazreen Garment fire accident, many negative talks were talked about our garment industry. After completing the renovation work according to the Accord and the Alliance's prescription, the factories got a secure certificate. Now the accidents have decreased. A positive image has emerged in the garment sector. To retain the achievement, timely action will be taken more. After the tragic events of Rana Plaza and Tazreen Garments, awareness among the entrepreneurs about various issues has increased in our garment industry. Since then our garment industry has been moving forward through various reforms, changes and transformations. Recent countries like India, Vietnam, Cambodia, Myanmar etc are giving various incentives to increase their garment exports. In the context of this, the challenge of survival in Bangladesh's competition has become

challenging. In this case, the development of green factory ideas in Bangladesh's garment industry has made a good start.

In the financial year 2016-2017 the RMG industry generated US\$28.14 billion, which was 80.7% of the total export earnings in exports and 12.36% of the GDP; the industry was also taking on green manufacturing practices.

The development of green banking concepts in the financial sector has become a demand for time. Now that has become very popular. Various steps have been taken following the idea of sustainable economics by following the green banking concept. Whose excellent results have become increasingly evident in the economy. Likewise, the full development of green factory ideas in garments industry will take Bangladesh forward in the international arena - firm belief in us. In order to give special incentives to the green factories, commercial banks are expected to generate excellent speed in this case.

### **Sustainable development goals**

1. Green factories can improve people's health & wellbeing.
2. Green factories can use renewable energy becoming cheaper to run.
3. Building green infrastructure creates jobs and boots the economy.
4. Green buildings design can super innovation & contribute resilient infrastructure.
5. Green buildings are the fabric of sustainable communities & cities.
6. Green factories use circular principles where resources aren't wasted.
7. Green factories produce fewer emissions, helping to combat climate change.
8. Green factory can improve biodiversity save water resources & help to protect forests, through building green we create strong, global partnerships.

### **RESULTS**

As a result we can save our natural resources and efficient use of raw materials to maximize our production. And most importantly, low-carbon economy and green growth in manufacturing industry has been highly emphasized in several national and international and organizational efforts, strategies, and policies over the years. And also we can make strong our economic strength and RMG sector will sustainable develop through green industries.

### **RECOMMENDATION**



- At first in Bangladesh perspective we should be initialized an effective and efficient green financing.
- Bank loan interest is a major obstructive to set up green industry in Bangladesh which is highest 9% at present. To exhort the growth of green factories, reduction of interest rate against bank loan is urgently needed.
- In Bangladeshi perspective, the cost price regarding the establishment of green industries is expensive. Bangladesh government should offer every entrepreneurs duty free import of diverse machinery and equipment for setting up export oriented green factories.
- If the government offer free cost of lands and provides huge utility service through economic zone or eco-friendly zone, then I think it would help to increase the number of green factories across the country and it would help make another achievement in this industry.
- Every factories must should be setup central effluent treatment plants (ETP) for considering the environmental safety
- A establish concord standard for green industry needs to be formulated in a policy based structure so that the industry growth nationally through national guidelines.
- If Bangladesh government want make strong and develop economic strength, then government should take every helpful steps for ever green industries entrepreneur.  
If government give helping hand for every entrepreneur for making green industries then hopefully I want to say, Bangladesh RMG sector will sustainable develop through green factory.

## CONCLUSION

This paper discussed the sustainable development on RMG sector through green industry focusing on a Bangladeshi perspective. The consensus is that the Bangladeshi green industry framework is adopted from principles of green building due to the incentives that are in place by Bangladesh Bank. The green building principles that are widely accepted in this region are mainly the LEED certification by USGBC, and the factors that grant this certification mainly dictate the terms of the current green industry. It should be noted that these incentives are not enough to cause a fruitful green industrial development as the sector of this growth is very small. The major export industries in Bangladesh face major challenges of environmental sustainability because of water depletion, resource inefficient production processes, unavailability of natural gas, lack of waste management. If we sustainable develop RMG sector in Bangladesh through green factory then we should follow green industries

requirements, rules, activities and every equipment and machinery setup on every RMG factory.

#### **REFERENCES**

1. <https://www.textiletoday.com.bd/green-green-factories/>.
2. <https://www.dhakatribune.com/business/2018/03/02/bangladesh-green-rmg-factories/>.
3. [https://en.wikipedia.org/wiki/Bangladesh\\_textil](https://en.wikipedia.org/wiki/Bangladesh_textil).
4. [https://en.wikipedia.org/wiki/U.S.\\_Green\\_Building\\_Council](https://en.wikipedia.org/wiki/U.S._Green_Building_Council).
5. <http://rmg-study.cpd.org.bd/green-industrialisation-taking-bangladesh-rmg-sector/>.