

Research

Internal and external environment of Bangladesh textile industry strategy

Md Motaher Hossain*

College of Economics and Management, Zhongyuan University of Technology, China

Abstract: Bangladesh's textile industry is a vital part of the Country's Economy. It's the world's second exporter of apparel behind China, with a rapidly growing readymade western wear garment industry. Because of its vast population, high garment machinery, extended area, low labor cost, and government policy. The country maintains its position as the second-largest readymade apparel cloth exporter. For many years, various researchers have also adopted different methods and approaches to their research. This analysis can help you better understand your organization's environment. The research examined how information is perceived and used as a strategic resource for successful company performance and competitive advantage in Bangladesh's high-performance textile sector. Finally, this study sheds light on the possibility of addressing issues and enhancing Bangladesh's textile industry.

Keywords: Development Strategy, Readymade garments (RMG), Internal and external environment, Textile industry

*Corresponding Author

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Introduction

Research Background and Significant.

Research Background.

In Bangladesh's fast-rising Economy, the textile and garment sectors constitute a single source of growth. [1] Bengal Subah, under Mughal authority from the 16th to the 18th century, was a crossroads for the world's silk and muslin trades. Bengal seemed to be the central hub for cotton production during the Mughal Empire, notably in and around Dhaka, the capital city. This kind of as Central Asia led to muslin being called "daka" in distant market segments. Bengal also exported silk and cotton fabrics to Indonesia, Japan, and Europe. For example, Bengal produced about 50% of all textiles, and the Dutch purchased around 80% of all silks from Asia.

Bangladesh's gross domestic product (GDP) was estimated at US\$6.29 billion by the World Bank in 1972, and it expanded to \$173.82 billion by 2014, with exports accounting for \$31.2 billion of that, with readymade clothes accounting for 82 percent. [2] As of 2016, Bangladesh held 2nd place in producing garments, just after China.[3] Western fast fashion companies are the world's second-largest garment exports from Bangladesh. About 60% of western brands' export contracts are with European buyers, thirty percent with American buyers, and ten percent with foreign buyers. [3] Only 5% of textile plants are held by foreign investors, with local owners controlling most production.[4] The RMG industry produced US\$28.14 billion in the fiscal year 2016–2017, contributing for 12.36% of GDP and 80.7% of all export

revenue. The industry also adopted green manufacturing techniques. [5] Textile and garment exports are the primary sources of foreign exchange earnings. According to a World Bank report (2019), Bangladesh's gross domestic product (GDP) increased from \$6.29 billion to \$286 billion between 1972 and 2019, with \$41 billion generated by exporting, with a surprising 84 percent coming from textile and garment goods; aside from generating employment for 4.4 million people, 80 percent of whom are women.[6] The government had control over 85 percent of the total capacity. After government seizures, the textile factories were returned to their rightful owners in 1982, resulting in privatization. When compared to other Southeast Asian textile producers, Bangladesh's textile sector attracts individuals because of its mix of inexpensive labor, low product pricing, and shorter lead times [7]. The minimum salary for workers in Bangladesh's textile industry increased by 51% in December 2018. Each year, an additional 6.2 million bales of cotton are needed to sustain the overall production activities. USDA (United States Department of Agriculture). Bangladesh's textile sector receives around \$400 million in FDI each year

Table 1: Important goals of the Bangladesh Readymade garment industry.

1970-1980	Early period of growth
1982-1985	Boom days
1985	Imposition of quota restriction
1990	The knitwear sector developed significantly
1993	Child labor issue and its solution
2003	Withdrawal of Canadian quota restriction
2005	Phase-out of quota restriction
2006	Riots and strike by garments labor
2007-2008	Stable growth
2008-2015	Continuous growth
2016-2021	Sustainable Growth

Source: BGMEA, EPB, Bangladesh

This industry's expansion is still fueled by low-cost labor. However, there are significant positives to consider here as well, as the pay, while poor in comparison to Western standards, has altered the lives of many Bangladeshi women. Growth will always be vital because of these unique structures within this industry. It is up to the international community to hold the industry accountable for worker safety to ensure it continues to meet global demands ethically. This industry's growth will always be robust due to its distinctive architecture. It is up to the worldwide community to hold the industry accountable for worker safety to ensure that global demands are met ethically.

The purpose of the research.

The research main objective to guide action, acquire evidence, and contribute to knowledge development by shedding light on future chances for overcoming challenges and improving Bangladesh's textile sector.

The four main research questions are:

- What is the current situation for the textile sector in Bangladesh?
- What are the measures in place, such as policies (national level) and international initiatives that mainly focus on developing in textile manufacturing phase to manage/enhance the situation?
- What are the internal factors strength and weaknesses and external factors threats and opportunities?
- From this research analysis, what are the recommendations to overcome the factors and the strategies for textile sector?

Research methodology.

Data regarding the completion of this report are collected from both primary and secondary sources.

Primary Source

Through direct conversation with the respective officers of the Textile companies.

Secondary Sources

- Internet browsing through websites searching online databases
- Digital libraries, books, journals, conference papers, etc.
- Annual report of various organizations such as BKMEA, BGMEA, Bangladesh bank, Export Promotion Bureau, BTMC, etc.
- Extensive SCM of textile industry research papers of academicians and practitioners evolved from renowned international journals, namely Elsevier, Science Direct, research gate, etc.

2.1.3 Current research conditions and trends in Bangladesh

The textile sector in Bangladesh earns more than \$3 billion per year in export earnings, with garment sales accounting for 83 percent of overall revenue [9]. Exports to the conventional market were stable in the fiscal year 2018-19. Canada and the non-traditional markets registered the highest growth at 22.44% and 21.77% respectively in FY 2018-19. However, in the last six months, both of these markets have experienced negative growth, with -12.18 % and -5.13 %, respectively. Due to the coronavirus epidemic, it will be complicated to offset this unfavorable row. Due to a Chinese import seizure, many export orders will be suspended or delayed. [10]

Table 2: An export growth chart to different markets

Market	% Of Total Export	Exports Growth %, 2018-19	Export Growth July- January, 2019-20
EU	61.91	7.66	-6.18
USA	17.97	14.66	-3.41
CANADA	3.45	22.44	-12.18
Non-traditional	16.66	21.77	-5.13
Overall		16.6325	-6.725

Source: BGMEA stats and personal research

Export growth was negative to sluggish in the previous fiscal year. For the first time ever, export growth decreased during a four-month period. However, according to the World Bank and other economic models, Bangladesh is expected to remain stable in 2020, with garment exports expected to increase.

The utilization of waste heat is immensely disregarded in textile industries of developing countries. In Bangladesh, natural gas is the primary source of energy. The industrial sector receives at least 25% of Bangladesh's total natural gas production.[11]. The Country has already encountered a shortage of natural gas and daily production lacks 11% of the demand some waste-heat recovery systems have been effectively applied in a few textile industries of Bangladesh [12]. Limited use of waste-heat and inefficient energy use adversely affect the textile production cost. [13]

Bangladesh's textile manufacturing industry is the Country's most extensive industrial water usage. Despite their significant economic benefits, Bangladesh's textile industry is responsible for various environmental issues, the most serious of which is the contamination of water resources.[14]. Textile wastewater contains multiple chemicals such as grease, oil, Glauber salt (Na₂SO₄), caustic soda (NaOH), lead (Pb), ammonia (NH₃), and sulfide (S²⁻), heavy metals, and other substances [15]. Textile wastewater in large quantities may alter the aquatic environment's physical, chemical, and biological aspects, posing a risk to public health, livestock, wildlife, fish, and other biodiversity.[16]

The textile and apparel (T&A) industry is one of the most crucial customer merchandise industries with a long supply chain [17]. It is also regarded as one of the world's most polluting industries [18]. Fabric manufacture, for example, consumes tremendous amounts of energy and water in the apparel industry. Another initial issue in the T&A business is pollution. Wet process wastewater contains dangerous chemical substances that can cause substantial ecological damage by polluting waste gas, wastewater, and the fabric itself if not properly treated before disposal.[19]. The problems outlined above are common in the T&A supply chain across domains including design, source procurement, fiber and clothing production, packing and delivery, usage and restoration, and waste management [20]. The input and output of the fashion industry's "textile product life cycle," according to Boscacci (2018), had an impact on the environment, but the magnitude of the impact was astounding. [21]. Furthermore, the Ellen MacArthur Foundation (2017) produced a paper demonstrating that T&A production emits more greenhouse gases than international air and ocean transport combined. By 2050, it is estimated that the T&A industry will account for a quarter of global carbon emissions if current trends continue. [22]. This Demonstrates the difficulties in adjusting the circularity of the T&A supply chain through sustainable innovation, which is worthy of study. The Country's RMG sector has also experienced important restructuring and upgrading with regard to production processes, capabilities, and backward linkages, which reinforced Bangladesh's competitive position [23]. On April 8, Benevolent Textile Services, an internationally renowned textile trade firm with extensive experience in digital and conventional textile fabric printing and screen and placement printing, partnered with Textile Today Innovation Hub.[24]

The internal environment of the Bangladesh textile industry's strengths and weaknesses

The internal environment of the Bangladesh textile industry is strength

In operation are approximately 1430 textile mills. It has a total annual capacity of 2100 million kg of yarn manufacturing. The capacity for fabric production is 2800 million meters per year. Bangladesh's ability to produce cotton-based yarn and fabric has substantially improved during the previous several years.

Low labor cost

Bangladesh is an appealing place to do business because of cheap labor alongside expertise in clothing manufacture. According to the Bangladeshi government, the legal minimum salary for garment workers is 8,000 taka (\$96) per month, which is somewhat less than the amount reported by the Guardian to be received by workers interviewed.

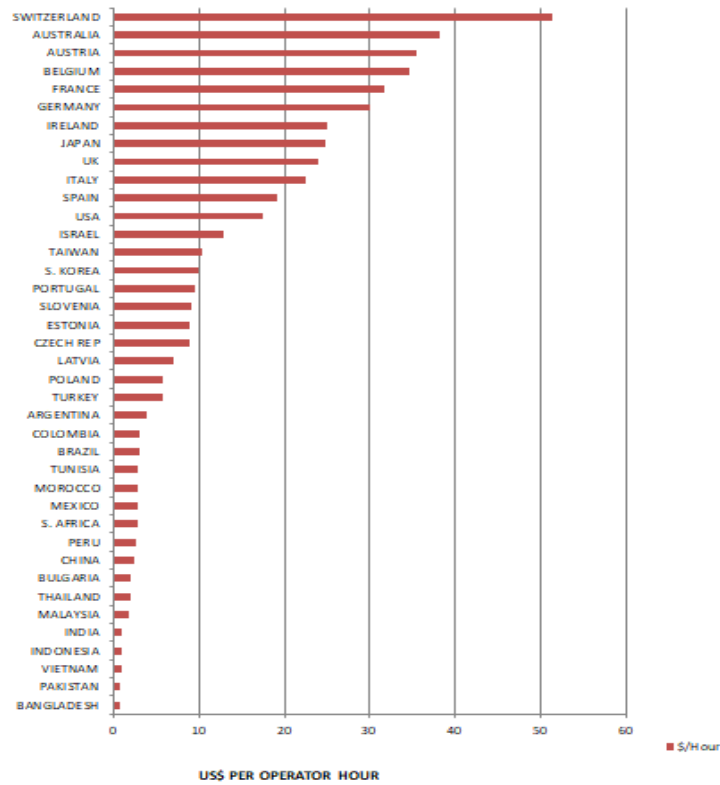


Figure 1: Textile Industry Labor Cost 2014 Werner International

It was discovered in 2014 by the Werner International Labor Cost Comparison Report that labor cost differences internationally across textile industries remained significant. In Switzerland (\$51.36/hour), the most expensive of the 40 nations covered by the research in 2014, labor expenses were 82 times higher than labor costs in Bangladesh and Pakistan (\$0.62/hour), the least expensive of the 40 countries covered by the report. In Switzerland (\$51.36/hour), the most expensive of the 40 nations covered by the research in 2014, labor expenses were 82 times higher than labor costs in Bangladesh and Pakistan (\$0.62/hour), the least expensive of the 40 countries covered by the report.

Legally permission of FDI

Foreign Direct Investment (FDI) in Bangladesh's textile sector increased dramatically last year as a result of government attempts to attract foreign businesses. According to data from the Bangladesh Bank (BB), the country's textile and apparel industry generated \$421.68 million in foreign investment in calendar 2017, up 15.70 percent from \$364.44 million in the same period the year before.

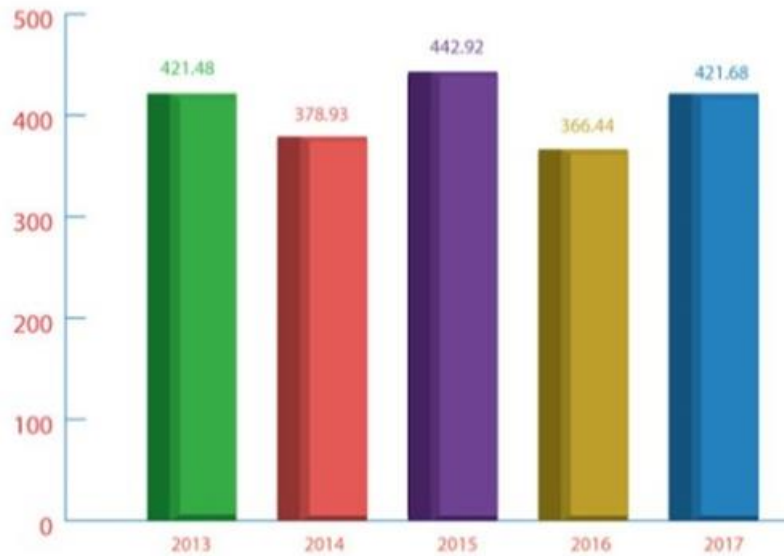


Figure 2: FDI trends in Bangladesh's textile industry (in \$Millions)

Consequently, the total average imports of foreign direct investment into Bangladesh fell by 8.42% from \$2.33 billion to \$2.15 billion in 2017, down from \$2.33 billion the year before. It's anticipated that it would export at least \$50 billion worth of clothing. One of the primary factors fueling the expansion of Bangladesh's textile and apparel sector is the increase in foreign direct investment. Increasing investment in Bangladesh's textile and garment industries is driven by the Country's inexpensive textile workforce, its ideal location in the Asia-Pacific region, and the government's encouragement.

Reduced bank interest rates for export funding

In response to a recent surge in Covid infection cases, the Bangladesh Bank reduced the interest rate on pre-shipment refinance plan loans for export-oriented firms from 10 percent to 5 percent on April 25, 2021. Before this, the scheme's loans carried an interest rate of 6 percent. Export Development Fund (EDF) loan limits for garment and textile industries have been increased from \$25 million to \$30 million by the Bangladesh Bank, up from the previous ceiling of \$25 million. Members of the BGMEA and BTMA stand to gain the most from extending the reach of the agreement as far as possible. The upgraded segment, which will be in place for disbursements until December 31, 2020, will be assessed on a case-by-case basis by foreign currency dealer banks (Ads), based on the real needs of the factories concerned the regulations. Exporters will be able to obtain loans from the European Development Fund (EDF) at a rate of 2 percent interest on their raw material imports. [27]

Reasonably open Economy, especially in the Bangladesh Export Processing Zones:

EPZs in Bangladesh play a major role in attracting foreign direct investment furthermore as involving local investment, which jointly contributes to an overall increase in the Country's volume of exports and in its earnings of interchange. Foreign exchange earned by EPZ firms through exports helps to reduce deficits in the Country's balance of payments. A portion of it is converted to local money and utilized to make purchases from the neighborhood economy. There are around 230,000 Bangladeshi labourers employed by the EPZs. Since each home only has one wage earner due to the average family size in the nation being six people, these 230,000 employees support the livelihoods of over 1.5 million people. Foreign investment in EPZs often focuses on high technology and offers local people the chance to gain new skills. The quick transmission of technology is also made possible by trained people.

The Bangladesh Garment Manufacturers and Exporters Association (BGMEA)

The BGME is one of the largest trade groups in the Country, representing the readymade garment industry, particularly the woven garments, knitwear, and sweater sub-sectors. Since its inception in 1983, the BGMEA has been responsible

for a sector that is the backbone of Bangladesh's Economy. Since its founding, The BGMEA has been committed to promoting and facilitating the textile industry by supporting government policies, offering members services, and protecting workers' welfare and freedom compliance in factories. To help Bangladesh's textile sector expand, BGMEA collaborates with national and international participants including brands and development partners. BGMEA now has roughly 4000 registered clothing factories.

The convenience of a duty-free custom bonded warehouse

To diversify the country's export base, it is important to make it easier for non-RMG sectors to access secured warehouse profits and the opportunity to certify the exempt import of raw materials for export items. Under the bonded warehouse arrangement, the National Board of Revenue (NBR) gives duty-free import profit to exporters, benefiting textile exporters. Readymade clothes accounted for around 84% of Bangladesh's \$40.5 billion export basket in the fiscal year 2018-19, while the other 16% did not fully benefit from the bonded warehouse privilege. Lack of readiness of the revenue authority to produce similar treatment to all export sectors.

Worldwide Demand

Bangladesh's textile exports have increased by 15 percent as the global market for garments has rebounded. The requirement for clothing goods is among the most fundamental human needs. Everyone wants to purchase high-quality products at a fair price. In Bangladesh, you may find decent clothing at a low price. This is the primary reason why Bangladesh receives a large number of purchasers.

Building Forward Linkage, Strong Backward

Over the years, policy formulations of the Bangladesh Government and facilities given by the banks for the purchase of raw materials have included to the advantage of the Country's textile industry. Supporting businesses have been formed, and the majority of the raw materials required for production are readily available, implying that the need for obtaining or sourcing raw materials from other nations is reduced to a bare minimum. According to the World Textile Conference in Mumbai (India) in September 2016, Bangladesh is meeting 85 percent of global knitted fabric demand through local sourcing. China and a good number of other countries are seeking to invest in fiber, fabric and other industries in Bangladesh that is expected to build further on the backward linkage.

Big Internal, External Markets

By 2020, the global clothing market is anticipated to reach US \$ 650 billion. As China (which currently holds the No. 1 position) shifts its focus away from garment manufacturing, Bangladesh's continued apparel export growth is creating opportunities for the Country to become a global leader in the export of garments. This fact is bolstering the hopes of apparel manufacturers and exporters (the profit of which is explained in the 8th point). According to the Bangladesh Government's Ministry of Commerce and Industry, the Country's RMG export is growing year after year, with the market share increasing by 5.1 percent, 5.9 percent, and 6.3 percent over the last three years, indicating a bright future for the Country, which has recently begun exporting to 130 countries around the world. When it comes down to the domestic market, The Bangladesh government allows clothing firms located within Export Processing Zones (EPZs), which are areas where foreign investment is encouraged, to sell their products to the domestic market. Taking advantage of the growing demand in the Country's local market and increasing their net profit margins in this region of the world is a profitable opportunity for the enterprises involved.

Bangladesh's textile industry's internal environment flaws

The most significant hurdles to the growth of readymade clothes include low net exports, low-value addition, low quality and standard, low productivity, the elimination of quotas and GSP, strong rivalry, a lack of backward linkage sectors, and so on. adhere to the requirements established by the nations that import the products The following are the weaknesses of the Bangladeshi manufacturing industry:

Long-term environmental instability

Lead time refers to the period of time between receiving an order and delivering any goods to the designated location. The normal delivery time in Bangladesh is 90–120 days, which is rather long when compared to rival nations like China, Vietnam, and so on. Issues such as labor unrest, political instability, low productivity, and inadequate production planning, among others, contribute to the extension of this time frame. Readymade garment manufacturers are increasingly concerned with shortening their production lead times. Fashion tastes of customers have changed dramatically since the introduction of the notion of fast fashion. In an age of instant communication, consumers' fashion preferences have changed even faster. The fashion seasons are getting to be shorter and shorter. The clothing retailers want to put new products on the shelf every other week. The Bangladesh textile industry must import materials from other nations, requiring a lengthy lead time. Importing fabric is a time-consuming process that also involves client clearance. As a result, lead time is a significant issue for the Bangladesh textile industry.

Infrastructure flaws

The garment industry has recently been hampered by a lack of utilities such as gas and electricity and a lack of infrastructure. Gas is a significant source of energy for the textile and apparel industries. Bangladesh is in desperate need of tax revenue. The infrastructure of the nation displays the outcomes. Even though Chittagong is only 150 miles away and Dhaka is only 150 miles away, shipping a goods there might take up to 24 hours. Even though it is only 150 miles away, transporting a product from Dhaka to its main port and second city, Chittagong, can take 24 hours. This is a primary constraint to diversification development in east Asian trade driven by intermediate products, where products are assembled in one country using parts from another.

Inadequate training for industrial workers, managers, and supervisors

Bangladesh textile industry employees should have a medium or average position compared to foreign employees on communication skills, motivational skills, managerial skills, accounting skills, networking skills, negotiation skills, and IT skills. Experts claim that because local workers fall short of international workers in key areas like English proficiency, presentation skills, leadership, and decision-making, foreign workers are more qualified and have access to better job opportunities in Bangladesh's textile and apparel industries.

Table 3:level of agreement among different industry experts interviewed about the skills of local employees versus those of foreign employees.

Skills of Local Employees	Low (1)	Medium (2)	High (3)
English Proficiency	1		
Communication skill		2	
Motivational Skill	2		
Presentation Skill		1	
Leadership Skill	1		
Managerial Skill		2	
Decision-making Skill	1		
Networking Skill		2	
Accounting Skill		2	
Negotiation Skill		2	
IT Skill		2	

Source: Saiful Islam & Tasneem Nabila Islam [26]

Time-consuming custom clearance

It takes at least 30 days for the Chattogram Custom House (CCH) and Chattogram Port Authority (CPA) to discharge imported goods from the ports. Although the authorities have made significant improvements in recent times, textile

exporters face delays and higher costs while complying with customs documentation at ports. Data from the customs and port authorities show that 50% of the time, it might take up to 72 hours to release imported products. However, in 38% of cases, importers must spend 72 to 150 hours on documentation compliance. According to the data, completing documentary compliance for exports can take up to 24 hours, while crossing the border can take up to 22 hours.

Automation system Increase unemployment

Because to textile automated processes, the labour has decreased by between 70 and 80 percent on various levels, which implies that a certain number of employees are losing their employment. The country's unemployment rate will go up as a result of this. By 2041, it is anticipated that the RMG sector would have lost up to 60% of its jobs, which will leave almost two out of every five workers unemployed. The country's garment sector is primarily dependent on automation, hence investing in automation is vital in order to thrive in the present market. As a result, to keep up with the developed countries, we must ensure that automation is implemented in our industries. Only in this way will our garment industry be able to move forward.

Problem and prospect of the textile industry in Bangladesh

As of 2000, garment entrepreneurs were known for bribery, evading customs duties, avoiding corporate taxes, making insufficient long-term investments in the industry, and avoiding social projects such as education, healthcare, and disaster relief that would benefit their workers and communities which they operate. Despite these failings, authors Quddus and Salim argue that the industry's success is largely attributable to these entrepreneurs [26]. Major foreign buyers looking for outsourcing require compliance-related norms and standards relating to a safe and healthy work environment, including fire-fighting equipment, evacuation protocols and mechanisms, and proper machine installation throughout the supply chain. Five sudden death incidents that occurred in Bangladesh between November 2012 and May 2013 brought to the world's attention worker safety and labor violations, putting pressure on major global clothing brands and retailers like Gap, Walmart, Joe Fresh, Calvin Klein, Primark, Loblaw, Nike, Tchibo, and Tommy Hilfiger to act by using their financial clout to enact change.

The external environment of the Bangladesh textile industry opportunities and threats

Opportunities in the Bangladesh textile industry's external environment

In the textile industry, Bangladesh has long been a country of opportunity. Bangladesh's textile sector has been a contentious issue in the trade against assistance debate. It is suggested that encouraging the apparel sector as an open trading system is a significantly more effective type of aid than foreign aid. Options are listed below.,

Education and training programs provided by both the government and non-government organizations

There are a lot of people who work in this field. Even though they have curiosity, they often lack the skills that are needed. As a result, these government and non-government education and training programs can assist them in broadening their skill set. This gives this sector the opportunity to improve.

Strong export growth creates significant opportunities

Bangladesh may keep up a significant development in apparel export to the world through the last many years. According to a BGMEA study, development was highest among competing countries for eight years from 2008 to 2015. While global industry growth was around 50%, Bangladesh could see growth close to 120 percent during the period. According to the table below, only Vietnam is comparable to Bangladesh in this regard.

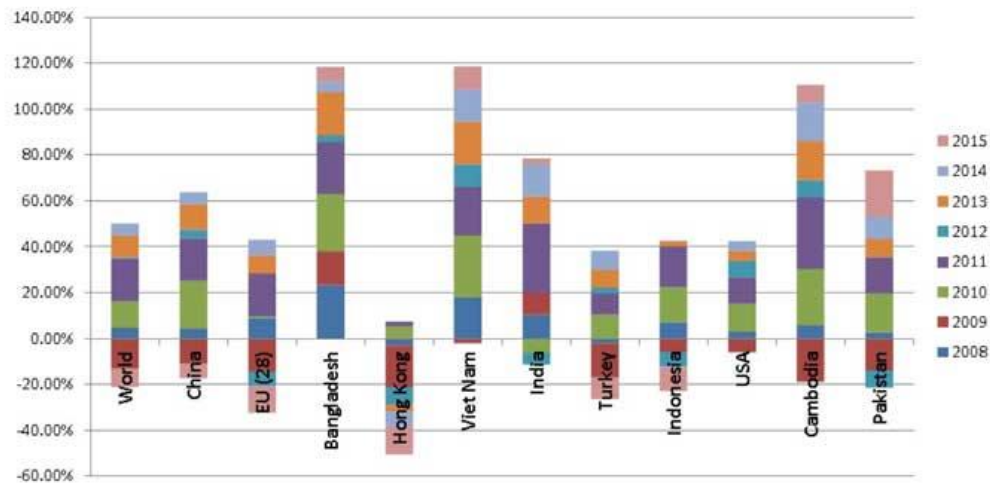


Figure 4: Year on Year export development percentage of major clothing supplying countries.

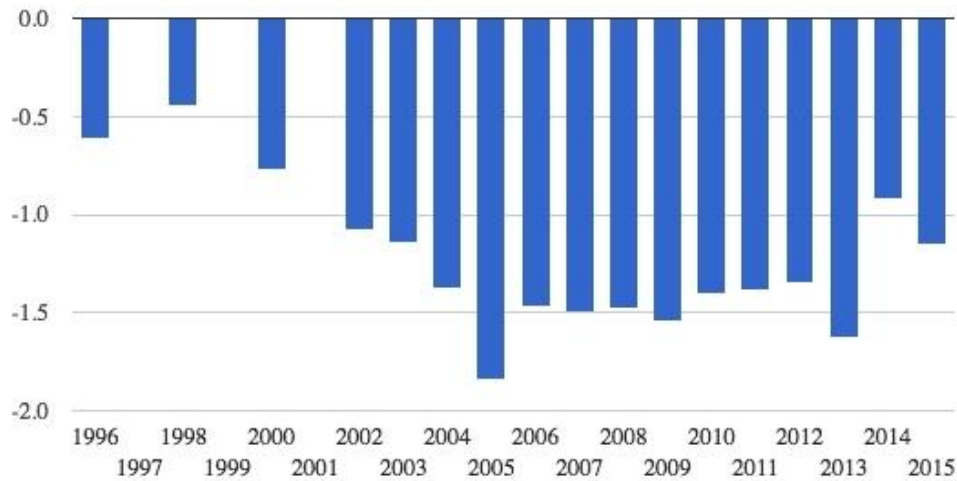
Although Bangladesh has seen significant progress over the preceding 10 years, the 2016–17 fiscal year was not good for the country's garment export development. Bangladesh continued to build its garment industry at a CAGR of 12.43% over this time. From 10.7 billion USD in FY 2007–2008, garment exports increased to 28.09 billion USD in the financial fiscal year 2015–2016. The export of clothes in 2016–17 was 28.15 billion USD, an increase of just 0.2% over the previous year. From the table above, Bangladesh may identify its top rivals in the export of apparel: India, Vietnam, and Cambodia.

Openness, flexibility, and willingness to accept suggestions for improvement

Bangladesh still has to increase the range of goods and markets it offers; it has only fully realized its potential in a small number of sectors. Bangladesh has become a haven for global brands due to its openness, flexibility, and willingness to accept buyers' improvement suggestions. 'Customer is first and alright' with these proverb companies and the people working in the industries. Buyers have complete access to the Bangladeshi textile and apparel industry's resources and information. And because of this open culture, Bangladesh has become a supplier's paradise. Buyers and manufacturers all work hand in hand to overcome supply chain uncertainties and risks. And because of this open culture, Bangladesh has become a place where suppliers, buyers, and manufacturers all work together to overcome supply chain uncertainties and risks. As a result, according to McKinsey & Company, Bangladesh is the most preferred destination for most purchasing managers of global brands.

The country's political condition is tumultuous

Political opposition parties frequently called strikes and other violent activities to alter the regime during the 2000s as a result of this political unrest. Foreign investment, therefore, reached a record low. Foreign investors, notably those from China, India, and Saudi Arabia, were interested in the country as of 2015 as the internal political situation started to calm. As can be seen, Bangladesh has improved its stability since 2005, but as the 2018 election approaches, the nation wants to make things better.



Source: TheGlobalEconomy.com, The World Bank

Figure 6: Bangladesh Political Stability Index, Weak (-2) to Strong (2)

Increase in the cost of raw materials

According to the Bangladesh Bureau of Statistics (BBS), production costs in 9 out of 10 sub-sectors of the Textile and garment sector – including spinning, cotton, silk, synthetic, jute, handloom, and knitwear – In fiscal 2020-21, revenues increased by 1% -58 % over the previous year. According to BBS, the cost of local producers increased by 68 % in FY21. Consumers are also suffering as the cost of producing this daily necessity rises.

Pollution poses a hazard to human survival

Bangladesh has the lowest prices in global markets in almost every category of the textile industry. In theory, this should boost competitiveness. However, the textile industry faces a number of issues concerning compliance, quality, dependability, and worker safety. All of these are obstacles to increased foreign investment. The business must also deal with the sometimes-overlooked problem of how textile production contributes to water contamination. In the Dhaka watershed, industrial pollution is responsible for 60% of corruption, with tanneries coming in second. According to IFC's best estimations, Dhaka's 719 finishing, dyeing, and washing discharge wastewater into rivers at a rate of up to 200 metric tons per ton of cloth. The water supply for Dhaka's 18 million inhabitants is in danger due to exceptionally high levels of pollution, despite the city being bordered by four rivers.

RMG factories are experiencing labor unrest

The readymade garments industry in Bangladesh has contributed significantly to the country's overall economic growth. Production has significantly decreased as a result of the labor unrest, and demonstrators have even vandalized some clothing factories. A number of workers have died while working, and several more have been hurt or jailed.

Recent wage increment

The recent wage increase will influence our apparel development in the RMG sector. There were a few unrest demand issues after the 51 percent wage increase, but they were resolved. From a minimum salary of 5300 takas 62\$ US (Gazette in 2013) for an assistant operator to 8000 takas 95\$ US (Gazette in 2019), there is a significant increase for approximately 4.4 million garment workers. With this direct cost increment, the companies' per-minute cost will also increase. It will rise product making cost & freight on board value. Foreign buyers will not pay a high price because of this. As a result, we may lose orders or occasionally need to conduct business at the breakeven point.

Discussion about the future of Bangladesh’s Textile and garments industry growth

Bangladesh's textile and garment industry has grown at an unprecedented rate over the last decade. Recently, however, pandemic pressure and shifts in global markets have posed significant challenges. To meet them, the sector will need to upgrade and diversify and innovate, focusing on sustainability, flexibility, worker welfare, and infrastructure. Despite the COVID-19 pandemic's setbacks, the South Asian nation is on track to become a middle-income country within the next few years. [31] Textile and readymade garment industries are at the heart of this economic success story: Bangladesh is now one of the world's largest garment exporters. The RMG department accounts for 84% of the Country's exports. This comes on the back of the sector's quick development and modernization over the past decade—as well as the strides it has made in developing conditions for the Country's around 4 million garment laborers. However, the pandemic has slowed the sector's progress at a critical juncture, just as global shifts in fashion sourcing threaten Bangladesh's position in industry supply chains.

6.1.1 Overcome longer lead time.

Bangladesh can shorten total lead time and improve the response of the textile industry's entire supply chain. To compete with China and India, Bangladesh must develop a backward linkage of textile mills and domestic fabric supply. Bangladesh Government has 2 selections to follow. The simplest and inevitable selection is to invest a lot of textile mills specifically to produce woven fabrics. The second option, which is the most likely and convenient, is to build a deep seaport in Chittagong, reducing import and export lead times for textile products and other commodities. Thus, for the time being, the best recommendation is to invest in textile mills to produce fabrics.

Weak infrastructure would be a blessing.

Implement maintenance policies and actions enclosed within the master plans grade maintenance over new construction. Base selections on capability enlargement on the integrated transport plan. Based on the analysis, develop various nodes and links throughout the transportation system to increase redundancy and resilience. Establish supply clusters with intermodal terminals in strategic locations. Construct the infrastructure needed to connect to neighboring countries' transportation networks. Build infrastructure to a minimum of the standards of the most effective performers within the regions. Bangladesh is making rapid progress in terms of infrastructure development. Bangladesh is on the verge of becoming a middle-income country. Hopefully, a lot of development work will be completed in the next few years. The government is also building the Krahulik River Tunnel to complement the significant progress in infrastructure development for roads and highways, such as the new completion date of the Padma Bridge, which is expected in June 2022. Such initiatives are critical for strengthening the Country's infrastructure.

The seaport issue going to solving

The Chattogram (Ctg) port, traditionally the Country's premier seaport, cannot always be overstated in terms of its facilitation of Bangladesh's outside trade. In order to keep up with the latest advancements in import and export, the amount of cargo handled by the port has increased significantly. The good news is that the Chattogram Port Authority (CPA) has learned to implement some measures, such as expanding the harbor's grass area, to increase the port's capacity for container storage. The Ctg port can currently accommodate almost 4 million Twenty-foot Equivalent Units (TEUs) of cargo annually, according to the CPA. The slot authority may also be in the process of importing brand-new equipment essential for the purpose in order to significantly improve the capacity. Given the Country's current rate of financial growth, the CPA will need to redouble its efforts to turn the Ctg port into one of the top-ranking seaports on Lloyd's global list.

Bangladesh Textiles is taking on a significant task

The textile and RMG industry in Bangladesh has made impressive strides in the previous ten years in overcoming expansion hurdles, notably in terms of growing customers and products, enhancing worker and supplier performance, and guaranteeing sustainability and compliance. While navigating brand-new pandemic concerns and a fluctuating global garment sourcing market, it is worthwhile to take a deeper look at the advancements achieved in each of these areas and determine what is necessary to expand on them.

For this research, I met with a number of sourcing executives who stressed the development of Bangladesh's textile industry in terms of distinguishing and upgrading product offers. For instance, there is no longer enough capacity to manufacture synthetic-fiber clothing to create more intricate goods like fitted clothing, outerwear, and lingerie as well as to offer fresh washes, laser finishing, and prints. Changes to the origin requirements for preferential trade with the EU, which allow for the use of imported textiles, have facilitated entry into these new sectors. Additionally, vertical supply chain integration has grown somewhat, allowing many suppliers to provide lead times less than the industry norm of 90 days.

Future for Bangladesh Textile hold top position for international retailers and brands

In a world survey, it was found that Bangladesh will continue to be the top apparel sourcing destination for international retailers and brands for at least the next five years due to competitive prices and China's diminishing market position in the garment industry. The biennial survey, conducted by McKinsey & Company, the world's most prominent management consulting firm, was based on interviews with Chief Purchasing Officers (CPOs) of the world's top 63 global garment retailers and brands, which purchase apparel goods worth \$137 billion annually.

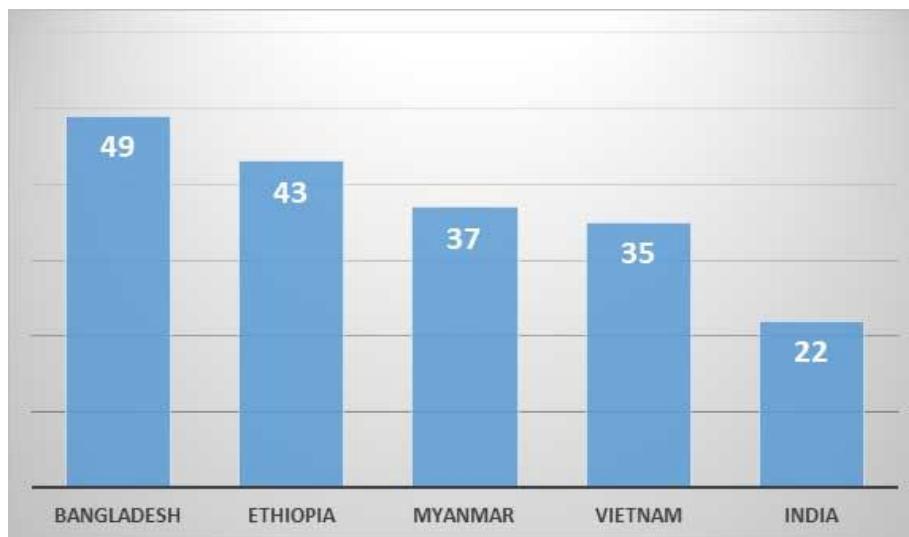


Figure 7: Bangladesh is potential for the 1st choice over the next five years as she remains on top of five apparel sourcing countries (figure in %), Source: Mckinsey Apparel CPO Survey 2017.

According to the graph, Bangladesh continues to be the most preferred location for respondents (49%), who were followed by respondents from Ethiopia (43%), Myanmar (37%), Vietnam (35%), and Bangladesh (22%). Exports from Bangladesh of garments totaled \$28.14 billion in the preceding fiscal year, a rise of 0.20 percent. Thanks to advancements in workplace safety and other compliance measures implemented by the textile and apparel sector in the wake of the closure of structural, electrical, and fire security vulnerabilities, Bangladesh will continue to be the top choice of international retailers and brands in the future. In this section, I'll try to point out that the biggest influences on the textile and apparel industries are the price of chemicals and raw materials, labor costs, currency exchange rates, modifications to trade agreements, changes in consumer purchasing power, and the price of transportation and financing.

Conclusions

By addressing the root issues, Bangladesh's textile industries may gain ground globally such as management-labor conflict, competent management practices, manager effectiveness, sustainable product delivery schedules, sound strategic plans, etc establishing a sound policy to safeguard the apparel industry, resolving the licensing issue, providing speedy loading facilities in the port, and establishing sound working environment and keeping the industry free of all political problems and biasness are all responsibilities of the government in order to improve the current situation. In order to improve the situation, the government must also implement effective policies to protect the apparel

industry, address license issues, provide quick loading facilities in ports, create a suitable work environment, and protect the sector from bias and all other forms of political interference. Credit must be provided when the industry falls in need. Bangladesh textile industries can enhance their place on the world map by addressing the root causes of their difficulties. Management labor dispute, correct management policy, the manager's efficiency, a product that can be delivered on time, and a proper strategic strategy are all examples of issues to consider. There is no way to be an upper position holder in the world Garments Sector except to follow the above recommendations. We hope by maintaining proper management and policy strategies our Country will take the apex position in the future need to move from here. There is no other method to achieve a higher place in the globe garments sector other than to follow the guidelines provided above. We think that by maintaining effective management and policy initiatives, our Country will be able to rise to the top of the global rankings in the future. Overall, it is clear that Bangladesh has had a somewhat turbulent past. However, with their political upturn and the positive effect this should have on the Economy, I would say that now is the perfect time to be looking at textiles in Bangladesh. In general, Bangladesh has had a problematic history in recent decades. However, given the Country's political resurgence and the expected good impact on the Economy, I believe that now is an excellent time to investigate the textile industry in Bangladesh.

Reference

- [1] "Reproductive Health and Rights is Fundamental for Sound Economic Development and Poverty Alleviation ," United Nations Population Fund. Retrieved 9 June 2009.
- [2] Latifee, Enamul Hafiz (2 February 2016). "RMG sector towards a thriving future" . The Daily Star.
- [3] Paul, Ruma; Quadir, Serajul (4 May 2013). "Bangladesh urges no harsh EU measures over factory deaths" . Reuters.
- [4] "Garment industries in Bangladesh and Mexico face an uncertain future" . Textiles Intelligence. 15 October 2003. Retrieved 7 August 2009.
- [5] Hossain, Latifee, Md. Sajib, Enamul Hafiz (6 August 2017). "Readymade garment industries going green" . The Financial Express. International Publications Limited.
- [6] "World Bank Report 2018-19"
- [7] Brandon Gaille, Jan 14, 2019 "21 Bangladesh Textile Industry Statistics and Trends". <https://brandongaille.com/21-bangladesh-textile-industry-statistics-and-trends>.
- [8] Stevenson, William J. Operations Management. Ninth edition. Tata McGraw-Hill Edition 2009
- [9] <https://brandongaille.com/21-bangladesh-textile-industry-statistics-and-trends>
- [10] <http://textilefocus.com/review-outlook-2020-bangladesh-garments-textile-industry/>
- [11] Khatun,F., Ahmad, M., 2018. Foreign direct investment in the energy and power sector in Bangladesh: implications for economic growth. *Renew. Sustain. Energy Rev.*52, 1369-1377.
- [12] Islam, M.T., Shahir, S.A., Uddin, T.M.I., Saifullah, A.Z.A., 2014. Current energy scenario and future prospect of renewable energy in Bangladesh, *Renew. Sustain. Energy Rev.* 39,1074-1088.
- [13] Rakib, M.I., Saidur, R., Mohamad, E.N.,2016. Waste-heat utilization-The sustainable technologies to minimize energy consumption in Bangladesh textile sector.
- [14] Ahmed, A., Tareq, S.M., 2008. Textile industries in Bangladesh: A rising environmental degradation down the drains. *Bangladesh textile today*. (Available at:([http:// www.textiletoday.com.bd/textile-industries-in-Bangladesh-arising-environmental-degradation/](http://www.textiletoday.com.bd/textile-industries-in-Bangladesh-arising-environmental-degradation/))). Retrieved 09 October 2015).
- [15] Islam, M., Chowdhury, M., Billah, M., Tusher, T., Sultana, N., 2012. Investigation of effluent quality discharged from the textile industry of Purbani group, Gazipur, Bangladesh and its management. *Bangladesh J. Environ. Sci.* 23, 123–130.
- [16] Sultana, M.S., Islam, M.S., Saha, R., Al-Mansur, M., 2009. Impact of the effluents of textile dyeing industries on the surface water quality inside DND embankment, Narayanganj. *Bangladesh J. Sci. Ind. Res.* 44, 65–80.

- [17] Euratex, 2017. *Prospering in the Circular Economy: The Case of European Textile & Apparel Manufacturing Industry* (Brussels, Belgium).
- [18] Fieldson, R., Ria, D., 2009. An assessment of carbon emissions from retails fit-out in the United Kingdom. *J. Retail Leisure Property* 8 (4), 757-769.
- [19] Alaya, E., Demirer, G.N., 2014. Sustainable textile production: a case study from a woven fabric manufacturing mill in Turkey. *J. Clean. Prod.* 65, 595-603.
- [20] Lorek, S., Spangenberg, J.H., 2014. Sustainable consumption within a sustainable economy-beyond green growth and green economies. *J. Clean. Prod.* 63, 33-44.
- [21] Boscacci, E., 2018. *Circular Economy in the Fashion Industry: Turning waste into resources*. Doctoral dissertation. <http://hdl.handle.net/10400.14/25917>.
- [22] Ellen McArthur Foundation, 2017. *Beyond Plastic Waste*. P. 842. Ellen MacArthur Foundation. Available at: <https://science.sciencemag.org/content/sci/358/6365/843.full.pdf>.
- [23] Lopez-Acevedo, G. and R. Robertson, 2012. *Sewing success Employment, wages, and poverty following the end of the multi-fibre arrangement*. Washington, DC: The World Bank.
- [24]. Sanjoy Saha April 21, 2021 "Benevolent Textile Services allies with Textile Today Innovation Hub to bring innovations in textile industry". <https://www.textiletoday.com.bd/benevolent-textile-services-allies-with-textile-today-innovation-hub-to-bring-innovations-in-textile-industry/>
- [25]. *Business Recorder Bangladesh –Special report (2010)*
- [26] Quddus, Munir; Rashid, Salim (2000). *Entrepreneurs and Economic Development: The Remarkable Story of Garment Exports from Bangladesh*. Dhaka: The University Press Limited. pp. 106–110. ISBN 978-984-05-1501-1.
- [27] Saiful Islam & Tasneem Nabila Islam; *Insights into the Skill Development Issues of Management Jobs: A Study on RMG and Textile Sectors of Bangladesh-2018 Asian Social* [22] www.fashionatingworld.com Published: MONDAY, 18 MAY 2020 11:58.
- [28] Leiva Van Langenhove, Carla Hertleer, (2004) "Smart clothing: a new life", *International Journal of Clothing Science and Technology*, Vol. 16 Issue: 1/2, pp.63-72
- [29] K. Cherenack and L. van Pieteron, "Smart textiles: Challenges and opportunities," *J. Appl. Phys.*, vol. 112, no. 9, p. 091301, Nov. 2012.
- [30] L. V. Langenhove and C. Hertleer, "Smart clothing: a new life," *Int. J. Cloth. Sci. Technol.*, vol. 16, no. 1/2, pp. 63–72, Feb. 2004.
- [31] Tazreena Sajjad, "Bangladesh at 50: A nation created in violence and still bearing scars of a troubled birth," *The Conversation*, March 12, 2021. <https://theconversation.com/bangladesh-at-50-a-nation-created-in-violence-and-still-bearing-scars-of-a-troubled-birth-153846>.

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Md Motaher Hossain

Student of Zhongyuan University of Technology, Zhengzhou, Henan, China.

