

Skill Development of the Youth in RMG: An Analysis of the Existing Training System

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Abstract

In this research the necessity of skill development of the youth in RMG sector of Bangladesh has been analysed based on the existing training system. In this regard, primary data and literature have been collected which provide a clear idea of many important aspects of the competitive readymade garment industry. China, the world's largest exporter of apparel sector is slowly losing its export pace and it is good for Bangladesh; as this sector expands its export day by day. In order to continue the trend of rising export growth, the specific area of this study has been selected as the necessity of training in apparel sector is obvious. As RMG is a vital sector for the socio-economic development of the country, it is verified throughout the study that the management of this sector for continuous export earnings will be increased by improving the skills of the garment workers through need-based training. Therefore, by analyzing the open literature and the preliminary data collected in this study, it is found that the sector is running with inadequately training workers. However, the data collected from the workers engaged in the garment industry of Bangladesh shows that only 68 percent of the workers received training before joining the job of which 44 percent received only one day training. After joining almost half of them are taking apprentice training resulting 84% of the workers informed about facing problem due to inadequate training. Thus, the existing training scenario in RMG sector is not satisfactory. At the same time, there is a lack of coordination among the organizations engaged in providing training to the workers. Overall scenario of RMG sector has been analyzed under the heading of this research and specific recommendations against the critical issues of this sector have been proposed which would be very helpful for further development of the sector as well as the sustainable growth of our economy.

CHAPTER 1

Background

1.1 Current Economical Condition of Bangladesh

Bangladesh in recent years is doing remarkably well in its economic front, particularly with a higher yet sustainable economic growth, a stable inflation rate, soaring foreign currency reserves, increasing inflow of remittance, and higher participation of female in paid employments, among others [1]. Maintaining an average GDP growth rate over six percent for the last one and half decades despite global economic recession and internal political turmoil is surely a great achievement. With a per capita annual income of USD 2,554 in the FY2020-21, now the country is enjoying the status of a lower-middle income and celebrates the golden jubilee of its independence and the birth centenary of the father of the nation Banghabandhu Sheikh Mujibur Rahman. The country now has a very moderate rate of inflation, 5.98 percent (point to point) (BSS), while its treasury continues to enjoy some newer heights in foreign currency reserve, which now stands at USD 42.9 billion. With higher inflow of remittance and increasing export earnings, country's balance of payment (BoP) was recorded with a surplus of US\$4,373 million in the FY2014-15 (World Bank, 2016).

Today Bangladesh is considered to be a country of global economic interests by business communities and investors. Its high economic potentialities and enormous possibilities have been recognized by global communities [2,3]. A number of international ratings and rankings have placed the country as an 'interesting case' and 'an economy worth watching' in the years to come. Bangladesh is placed as a highly potential and emerging economy by the

Bloomberg Businessweek, while Moody's rated Bangladesh highly in its recent report. Goldman Sachs included Bangladesh in the "next 11" emerging countries to watch following the BRIC (Brazil, Russia, Indian and China). Similarly, JPMorgan Chase & Co. listed Bangladesh among the "frontier Five" emerging economies in which it is worth investing [4]. All these indicate the increasing importance of Bangladesh's economy and the higher attention by the global community, which are expected to increase further with time. Among the few sectors that have contributed making Bangladesh an 'economy worth watching', the ready-made garments (RMG) sector continues to play a pivotal role.

1.2 Growth of RMG sector and its contribution in economy

RMG in Bangladesh is a key export-oriented manufacturing sector that started to grow since the middle of 1980s, although the great success stories are mostly recent in nature [5]. The sector enjoys favourable environment with cheap and smooth supply of labour and increasing global market demand. Currently, it mostly produces low value addition apparel products, which are labour intensive, but adds little value in the international markets. Major apparel items Bangladesh specializes are: shirts, trousers, jackets, T-shirts and sweaters. The sector with over 5,400 units/factories currently employs about 4.4 million labours, out of which at least 3.6 million are female of rural origins. RMG export earnings in FY2014-15 stood for US\$25.49 billion. It envisages in achieving a milestone of RMG export earnings of U\$50 billion by 2021, the year the country will celebrate the golden jubilee of its independence. During the July-January period of FY 2021-22, earnings from Bangladesh RMG exports grew by 30.3% to \$23.98 billion, shows data from Export Promotion Bureau. The sector now contributes 81 percent of Bangladesh's total export earnings, while its contribution to the GDP of the country is about 10 percent.

Bangladesh's share in global apparel industry stood at 4.6 percent in 2012 (UNSD, 2014). The country is currently the second largest apparel exporter only after China, which is now slowly moving towards high value addition products [6]. This expects to create a huge possibility of expanding Bangladesh's RMG exports to the international markets in the years to come. With newer market possibilities (e.g. Turkey, India and China in Asia or South American countries) in one hand and lower production cost in the other, this sector has a huge possibility in the coming years if Bangladesh takes necessary steps in reaping this benefit.

Studies indicate that growth of RMG sector in Bangladesh has contributed significantly both in the front of its economic and social betterment. Employment of over three and half million female laborers in this sector also means their empowerment in family decision-making and socio-political life forms. RMG has contributed in poverty alleviation, enrolling more girl children in schools, while incidences of child marriages have reduced among the families having female members working in this sector.

1.3 RMG Sector and Skill Shortage in Bangladesh

Bangladesh's RMG sector in recent years also went through many challenges. These included number of large accidents, issues concerning compliance, workplace safety, labour rights and trade union related issues, which sometimes plagued the sector. Further, the removing of MFA on Bangladeshi RMG products since 2004 was indeed another serious challenge, which not only the sector has successfully been able to overcome but also exhibited a rapid increase from the time period. It is now more competitive. Even during the recent global recession years, the sector continued to register positive growth. Its resilience against such global turbulences has indeed increased with time.

Yet, there are also issues that need to be given more importance by Bangladeshi RMG sector, particularly on compliance issues, labour safety and welfare related concerns, issues related to sexual and other forms of employee harassments, shortage in skilled and professional labours, etc. Of the most important challenges, McKinsey (2011) identifies skill/capacity gap as a major challenge [7]. According to McKinsey, Bangladesh's apparel export will increase by 7 to 9 percent through 2020. But it also mentions that sector's productivity needs to be increased, not only to mitigate rising wage, but also to close the existing productivity gap in comparison to other sourcing countries.

1.4 Educational institutions for skills are very limited or nonexistent

The RMG industry's image is not attractive enough to interest young top employees and graduates. Importing middle management from abroad creates several problems, such as cultural issues and the lack of incentives for local workers to pursue internal training or development as well as increased costs.

According to McKinsey, there is currently a shortage of about one quarter of the total skilled labours in Bangladesh's RMG sector. Besides highly skilled and professional workers, the sector also lacks behind properly trained manpower even at the lower-to-lower middle positions. For example, an unskilled and untrained female worker from rural area who comes to work in a garment unit faces number of challenges, such as: lack of required skills to work in RMG. It takes several months or even a few years for an unskilled worker to get a starting position to work as an operator.

Most female workers having limited education and awareness also lack in labour or female rights and thus face workplace or other forms of discriminations, including sexual harassment, etc. The issue of female hygiene and cleanliness issues, although might not be

directly related to workers' wage earning, but have a clear bearing on their health and health related direct and indirect expenditures.

As most garments do not encourage recreational and other social activities, which can help new comers to get adjusted with their workplace and also build some bondage with their coworkers, many workers face homesickness and depressions. These too have bearings on their productivity and earnings.

On the other hand, every year around 22 million youths join the labour force, while many do not have the right kind of education and training to be absorbed by the market. Further, female's participation in the traditional job markets has certain inherent limitations in our society. This becomes even more serious if a worker in question is a less educated or unskilled one. Against this backdrop, skill development for such workers can greatly help them to be absorbed by labour market, even in the dynamic and productive sectors like RMGs.

RMG industry in Bangladesh is changing fast and the demand for trained and skilled manpower is increasing with time. Considering many global key competitors of RMG exports are gradually moving up the value chain into higher value addition goods or even moving out of the apparel industry because of higher wage rate and other production costs, the demand for skilled and trained labour in Bangladesh in the years to come will only increase with time. According to the World Bank [8] (2016), countries of South Asia, including Bangladesh needs to create good quality jobs for a rapidly expanding youth population and bring more women into the labour force. Considering over 80 percent of the total labour force in the RMG sector is female, who mostly work lowly paid jobs, the need for skill development and training is essential to make them prepared for facing the increasing skill demanding RMG sector in Bangladesh. This will not only make them finding

suitable jobs in the RMG sector, but also help to earn more income. This will help families to eradicate poverty, ensure better female empowerment and generate other socioeconomic benefits.

In this study it is considered carefully that how the huge number of youths of Bangladesh can play a potential role by making them skilled manpower of RMG sector of Bangladesh as well as the rising growth of this sector is continuing beyond the imagination. To get that research finding it is necessary to find out the existing demand and supply of the workforce of RMG sector of Bangladesh as well as role of government and industry people should think about the facts involved with the expected growth. It is believed that the study the youth who are the key performers and the important contributor in achieving economic growth in Bangladesh will be benefitted. The number of youth was 44 million in 2017 which is expected to be increased to 48 million in 2026. Among the total number of youth, only 20 million (44 Percent) was employed in the labor market, of which 17.9 million (89.5 percent) was fully active in development activities [9]. The main employments of youth in Bangladesh are readymade garments, industries, agriculture, service sectors and in abroad (BBS, 2017). Therefore, this significant number of highly active workforce (youths) will get a proper guideline to make them confident by preparing themselves with appropriate training.

1.5 Problem Statement

The readymade garments industry in Bangladesh is facing many challenges ranging from institutional policy support, capable training institutions, skill managers, trainers, emerging technologies, which are creating threat to global competition in terms of efficiency, productivity and innovative technologies. To meet the challenges, it has been revealed that increasing capacities, knowledge and skills of the workforce working in the industry is essential. The readymade garments as a labor-intensive export-oriented industry, which needs

emergent skills for the workers for its survival in the global market. It has been revealed that skills development opportunities for the unemployed people who are interested in garment sector job are inadequate. Moreover, the skill they obtained through training program does not serve the purpose of using modern technologies and do not match with the industry need. The training quality, qualified trainers and outdated qualifications of the trainers, curricula, training materials and methods all inhibit the quality of training. These play a crucial role to produce the higher value, higher quality garment product and services so that the industry can grow more capacities to run in the market and grow capability for more export in abroad.

In the context of rapid technological changes like automation, digital technology, reform and innovation, for which the industry needs a policy support, changing training curricula, skill trainers, coordination which is the key elements of the national training system. It is revealed that there is a wide coordination gap among the actors and service providers such as Ministries, Departments, agencies, private sector organizations; NGOs, employers and workers are involved in skill development. Their efforts often overlap and are not well coordinated in Bangladesh. Thus weakness in linking skills supply and demand also limits positive impact on employment and productivity in the readymade garments. A national skill development system covering sound policies, equipped training institutions, quality and skilled trainers, producing skill workers in line with the industry needs are clearly an important policy issue for Bangladesh. Modern and contemporary training program needs to be available and accessible for the garment's workers for their skill development, which is a critical factor in determining comparative advantage and ensuring sustainability in the modern competitive global market.

It has been estimated that 2.1 million people in Bangladesh will enter the labour force every year during the period 2013-2023 (World Bank, 2013). This implies that if approximately 1.3

million jobs are created per year (BBS, 2018), there will still be 800,000 newly unemployed people every year. Considering the prevailing situation, it is required to take appropriate policy measures to employ the youth in garment sector jobs, suitable organization or as self-employed through appropriate training program. An effective training system will enhance the skill of the youth and that will create the opportunity for more employment and more export earnings in Bangladesh.

1.6 Research Question

The study adopts the following research question:

To what extent the contemporary skills needed for the Readymade Garments (RMG) Sector, in the changing context, are being effectively delivered by the existing training system in Bangladesh?

Components of the research question

The research question based on the Readymade Garments (RMG) Sector can be translated into following four major components:

a. The existing training system in Bangladesh

This covers the Ministries, Divisions, responsible government organizations, policy supports, training institutions, trainers, technology used, training deliveries and employment opportunities.

b. The changing context in the industry

This covers global competition, efficiency and cost-effectiveness for the survival of the industry.

c. The needs of the contemporary or modern skill development training

The new training design, curriculum, modern equipments, automation and 4th IR and relevant technology required for the garments industry.

d. Effective training delivery system

This covers training institutions, curriculum design, skilled trainers, develop skilled workers and employment.

1.7 Objectives of the Research:

Based on the research question, the research will carry out the following specific objectives:

- 1. To analyze the working conditions, emphasizing the training experience of the workers of RMG in Bangladesh.
- 2. To explore the contemporary training curriculum and technological knowledge in the RMG sector for improving workers skill.
- 3. To identify the gaps of training opportunities of RMG workers; to minimize this gap and creating better scope of incentives for the workers.

1.8 The research will study the following three hypotheses:

Hypothesis One:

National RMG related policies are adequately supported to develop the contemporary skills, in the changing management and technology context, of the youth to fulfill the needs of the industry.

Hypothesis Two:

The training curriculum and training delivery system are being periodically updated by the public training institutions due to the rapid changes in management and technology needed for enhancing capacity of the RMG industry in Bangladesh.

Hypothesis Three:

Public training institutions are sufficiently capable to impart the management and technology-based training to enhance the skill of the youth required by the RMG industry in Bangladesh.

1.9 Significance of the Study

Technological innovation and automation are rapidly changing the nature and context of work for the young people in Bangladesh. Advances in ICT have greatly increased the opportunities and productivity of workers and enabled the creation of new jobs and industries. The study findings will contribute in three ways. First, it will give a picture of the contemporary training as need for the employment generation of the youth. Second, it will suggest a set of actions of the new training curriculum and entrepreneurship development program for the public sector training program in Bangladesh. Third, the study will provide the idea of new policy directives that need to be incorporated for improvement of the existing training program as well as revisiting the youth development training policy in Bangladesh. Finally the research findings will create the employment opportunities of the youth and lead income generation, which further contribute to achieve the Vision 2041.

CHAPTER 2

Literature Review

In general, this chapter will review the available literatures in open sources related with the existing training programs on RMG sector of Bangladesh. Firstly, it is highlighted to figure out the market structure and workforce involved within this sector. Afterwards, the subsequent sections deal with the current approaches of workers to work there, required skills of them based on the international competitiveness of RMG export market. In the third sections, the ongoing training programmes from government and non-government organizations for improving knowledge and skills of the workers to enhance their productivity of the sector as well to meet the export target. In addition, due to COVID-19 pandemic situation the reality of the sector and how it tries to face this critical time with their own potential as well the government supports. Not only that the preparedness of the sector for facing 4IR but also the competitiveness analysis among the countries like China, Vietnam and training experience in Australian workers will be focused to get the enough lessons for the continuous development and strategic policy development.

2.1 Impact of RMG sector in the workforce of Bangladesh

Apart from agriculture, the country is much concerned about the growth of export division.

Bangladesh has accelerated and changed her exports substantially from time to time. After

Bangladesh came into being, jute and tea were the most export-oriented industries. But with

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the continual perils of flood, failing jute fiber prices and a considerable decline in world demand, the role of the jute sector to the country's economy has deteriorated. The RMG industry is the only multi-billion-dollar manufacturing and export industry in Bangladesh. Whereas the industry contributed only 0.001 percent to the country's total export earnings in 1976, its share increased to about 76 percent of those earnings in 2005 and 83 percent still now. Bangladesh exported garments worth the equivalent of \$6.9 billion in 2005, which was about 2.5 percent of the global total value (\$276 billion) of garment exports. The country's RMG industry grew by more than 15 percent per annum on average during the last 15 years. The foreign exchange earnings and employment generation of the RMG sector have been increasing at double-digit rates from year to year.

It is observed that the RMG sector has been able to bring a tremendous success in the employment of the poor and low literate men and women in Bangladesh. At present over 4 million people are working in the garment industries of whom two-third are women. The demand for skilled garment workers is increasing day by day. It is predicted that the unskilled, underemployed, socially, economically and physically handicapped adolescent and youths would be able to develop their living and social status throughout the RMG sector [10].

2.2 Skills Development Initiatives for the RMG Sector in Bangladesh

To address the increasing demand for skilled and trained manpower in country's RMG sector, the Government of Bangladesh in association with international donor agencies and RMG producers' associations (e.g. BGMEA) have taken certain initiatives in recent years to fill the skills gap. The formation of the National Skills Development Council (NSDC, 2012) and addressing the issue in the National Industrial Policy 2015 by the Government of Bangladesh are some praiseworthy initiatives. National skills development initiatives are thus built on 12 | Page

other related policies such as the National Industrial Policy 2015, National Education Policy 2010, and Non–formal Education Policy 2006, Youth Policy 2003, National Training Policy 2008 and National Skills Development Council Action Plan 2013.

Despite these initiatives, which are mostly at limited scale and have not started yet in full swing, an overwhelming number of female garment workers continue to be either unskilled or lowly skilled and thus have limited productive capacity and also earn very meager amount. The situation in the coming years could be very challenging for such workers. Against this backdrop, Manusher Jonno Foundation (MJF), a non–governmental organization working for the betterment of the most marginalized and excluded members of the society such as the landless poor, persons with disability, religious and ethnic minorities, sex workers, fisher folks, vulnerable workers and working children and women victims of violence, has introduced RMG skill development program for potential female workers for garment sector from June 2012. The training institute is located at Mawna (Gazipur), which is closer to the industrial clusters around Gazipur, Dhaka, Narsingdi, Tangail and Mymensingh districts.

The RMG skill development-training programme provided by MJF is a two-month long residential training program meant for prospective, unskilled and unemployed females from rural backgrounds. Currently, about 30 participants are selected for each batch and only after successful completion of a batch, another new batch is taken. After completion of each batch of training, MJF arranges job placement for the successful trainees in the garment factories, which provide wage and other benefits to the new appointees as per the existing laws.

Up to 2016 MJF has provided skill-enhancing training to a total of 505 women participants, who were fully unskilled and marginalized females and girl workers. Out of them, 362 women have completed the skill training successfully and are now employed in the industry.

The skill-training program is perceived to be very useful for those successfully completed 13 | Page

workers both in terms of getting suitable employment and better remuneration. Besides, they are also assumed to have produce higher level of employer satisfaction and more aware about their rights and duties as a worker to RMG industry.

2.3 Knowledge Sharing Working Atmosphere in RMG Sector

Knowledge sharing behaviour of managers could contribute to the development of employee relationships, dissemination of information throughout organizational internal stakeholders, reduction of employee turnover, increase of organizational productivity and reduction of employee turbulences. However, knowledge sharing does not come from the managers or other individuals naturally. Individuals with experience or qualifications in organizations fear of losing knowledge power if they share their knowledge with colleagues. Mansor and Saparudin (2015) identified the failures of many well-organized knowledge management efforts caused by the non-supportive beliefs among employees in many organizations [11]. Therefore, it is urgent for the management of organizations to identify the best antecedents, which could impact the knowledge sharing behaviour of managers positively to share their knowledge with colleagues and others in their organizations. According to Islam et al.; 2018, there is a lack of empirical research that evaluates and presents the impact of motivational factors such as intrinsic and extrinsic motivational factors on the knowledge sharing behaviour of the employees specially managers in organizations [12]. Therefore, most of the organizations are not able to maximize the use of knowledge created in the organizations and to be able to enhance both efficiency and productivity of both employees and organizations.

However, many studies have been done relating to the motivational factors and knowledge sharing behaviour of managers but most of them completed with relation to western and other countries. Thus, the impact of motivational factors on the managers' behaviour to share their knowledge with internal stakeholders in the RMG industry of Bangladesh has not been 14 | P a g e

empirically tested. Bangladesh is one of the Next Eleven (N-11) countries with high potential to become one of the major economies in the 21st century within 2041 due to its promising outlook for investment and growth. In this country, RMG industry is the highest earner of foreign currency through the export of produced cloths. It earned more than \$28 billion in 2016 while it aims to earn more than \$50 billion by 2021. However, the country is going under a rapid economic, technological and social transformation along with global and domestic business challenges. These challenges have placed increased pressure on the business planners and owners of the industry to build an excellent relationship with employees and maintain their organizations to remain productive in the hyper-competitive business world. Therefore, the phenomenon of knowledge sharing behaviour of managers in the RMG organizations in Bangladesh is very significant to research. This would help to identify the most effective motivational factor to inspire managers to share their knowledge with colleagues for greater individual and organizational benefits.

2.4 Product Varieties in RMG sector of Bangladesh

Currently, there are more than 4,000 RMG firms in Bangladesh. More than 95 percent of those firms are locally owned with the exception of a few foreign firms located in export processing zones. Shirts, T-shirts and trousers are the main woven products and undergarments, socks; stockings, T-shirts, sweaters and other casual and soft garments are the main knit products. Woven garment products still dominate the garment export earnings of the country. The share of knit garment products has been increasing since the early 1990s; such products currently account for more than 40 percent of the country's total RMG export earnings (BGMEA website). Although various types of garments are manufactured in the country, only a few categories, such as shirts, T-shirts, trousers, jackets and sweaters, constitute the major production-share (BGMEA website). Economies of scale for large-scale

production and export-quota holdings in the corresponding categories are the principal reasons for such a narrow product concentration.

2. 5 Current context of RMG sector during COVID-19

The primary initiative government took to address spread of novel COVID-19 was declaring a general holiday, which compelled the garments factories to close down immediately on March 24, 2020. The government has requested the owners not to terminate workers. By the end of March 2020, government announced the stimulus package of BDT500 billion (equivalent USD 6.25 billion) to help the industry to minimize the impacts from sudden shut down and cancellation of orders. This financial support was intended for the continuation of wages for labors for up to three months. Factory owners are supposed to use this benefit of funding from the stimulus package at the annual rate of two percent. The precondition for availing the fund also included payment of salaries and wages made either to a bank or mobile phone account directly by the government involving Bangladesh Bank, the central bank. In doing so, the manufacturer has to provide the evidence with the salary sheet, workers list and the account number to the disbursing authority. The factory gets six-months of grace period where repayment would start from the seventh month of receiving the money. There were some private initiatives as well, for instance HSBC Bangladesh announced a short-term loan up to one year with a principal moratorium for four months for the owner of the garments, which could be used to support miscellaneous payments. Since HSBC does not allow the moratorium period for more than four months. It is clients do not mandatory for the clients to make payment any installment within the time and during the crisis moment. The central bank has urged other commercial banks to come up with similar support. Besides, government has also sought USD one billion from the International Monetary Fund (IMF)

and the World Bank. The Industrial Bangladesh Council (IBC) has ensured government about workers payment and safety against COVID-19. Government, BGMEA and on regards supply chain resilience, COVID-19 has put supply chains in a vulnerable situation [13].

2.6 Current Status of Garment Workers

At present there are 5,400 factories in the country and over four million workers (BGMEA, Members' Directory 2013-2014). Garment factories in Bangladesh are expanded mainly on the easy availability of labor especially of the female labor accessibility. The RMG industry created employment opportunities i.e. especially for female workers and now this sector is considered as one of the main sources of employment for female workers of Bangladesh. This industry has provided the largest employment opportunities for women in the industrial sector where more than 85 percent of the production workers are women.

The majority of women workers rated their access to employment in the garment factories in positive terms because of its improvement on what life had been like before. Ahmed and Rayhan, 2014, mentioned that the physical and mental health status of garment workers and how problem affect labour productivity, competitiveness of the garment industry in the world market and the working life of the workers, particularly of female workers [14]. However, employers prefer female workers not only because they are cheaper and abundantly available, but also because they are more vulnerable, docile and manageable than male workers. They accept without protest the flexible terms of employment and are also seen less likely to be organized and susceptible to "anti-management propaganda" from outside.

One of the most important factors that caused the rapid development of RMG industry in Bangladesh is the population. The populace has appeared to be the blessing for Bangladesh as it is the driving force behind success of RMG industry, which requires a good number of

workforces. The demographic profile of Bangladesh's population has helped the apparel industry to thrive. Most of the female workers are very young & their average is below 30 years. The vibrant and young population of this country is the major strength of RMG sector. Garments & textile workers are the lifeblood of our apparel industry. So, after some recent unfortunate accidents in our RMG sector, several initiatives have been taken to improve working conditions in garment factories. Both national and international organizations are making concerted efforts to improve working conditions in garment factories and significant progress has been made in this regard. Also, present government improve their salary to improve their living standard, their children now can go to school.

2.7 Market Competitions:

There are different sorts of garments manufactured in this country, but RMG can be divided into two large groups. One of them is a woven product and the second one is knitted products. The first category includes pants, shirts, trousers etc. whereas the second category works on t-shirts and polo shirts, sweaters, socks, undergarments, and some other. Exporting the products mentioned above, Bangladesh is earning foreign currency and meeting its internal demand of money. The growth, which Bangladesh has achieved so far, has been much easier because of the quota system. But there is an alarming piece of news about that Bangladesh is going to lose its quota opportunity as it is getting out of the LDC status. As a result, Bangladesh has to compete with other countries that are dominating the RMG sector. The Bangladesh RMG sector has also not been that successful in exerting benefits from US-China trade war. The Rana Plaza collapse and Tazreen Fashions fire explosion have been two of the most tragic events in Bangladesh RMG history. The consequences demanded a real change in the RMG sector of Bangladesh.

2.7.1 Competition with China

One reason of decline in China's RMG export in recent years is that the economy is moving faster towards high-technology production. The wages of Chinese garment workers have been doubled, resulting in higher costs of production. The Chinese labor force has stepped up on productivity and skill level to compete in other industries. Garment manufacturing is a low-skilled, labor-intensive industry, which is no longer with the wheel as per statistics of recent years.

Rahman and Siddiqui (2015) presented several crucial factors like gradual reduction in China's bulk production due to labor shortages and higher wages that have been playing an important role in facilitating the growth of the sector. The potency for the emerging garment industry is becoming more prospectuses. Consulting with the Chief Purchasing Officers (CPO) of 5 leading apparel companies in Europe and the US (who cover the 66 percent apparel export of Bangladesh to Europe and US), the report state that buyers see Bangladesh as the next destination for major apparel sourcing after China. Due to the increased labor cost and capacity constraints in China and other markets, the declining profit margin is the key issue to divert buyer's preferred attention to Bangladesh [15]. The potential for Bangladesh to assert its cheap labor based competitive advantage circumscribed by the low-cost share of labor in RMG products. "Many labor-intensive Chinese industries had already shifted to Southeast Asian countries," said Zhang Jianping, a senior researcher at the Institute for International Economic Research under the National Development and Reform Commission. "The labor costs there are four to five times cheaper than in China." Martin (2009) stated that the export barriers under Multi Fibre Agreement were a particularly big problem for countries such as China that had quotas despite having productive potential [15].

Two factors such as cheap labor force and captive market under the quota system that facilitated the development of RMG industry in Bangladesh. A report of World Bank focused

some prerequisites to improve e.g. productivity, product quality and lead times to win the competitive race with China and other emerging exporters so that Bangladesh could position itself as an indomitable supplier of clothing. The current RMG manufacturers of Bangladesh are importing most of the required woven fabrics from China, India, Pakistan, and Indonesia. As a result, the total lead-time is becoming longer, putting a negative edge on competitiveness. Domestic supply of fabrics can mitigate the cost of production. The net value addition of RMG export is not very lucrative because of the weak backward linkage and high amount import of raw materials. The first challenge of China's clothing industry is the lack of technology equipment for which procrastination occurs to develop the products. Hence, the producers face long product development cycle.

Another problem was that few factories emphasis on the priority of style, not the quality of garments. They are also reluctant to protect the environment. Expansion of export development fund with simplification of export procedures can accelerate the onward role of Bangladesh in competition with China and other exporters.

China's garment industry is concentrated in the coastal areas of the country. According to Fair Wear Foundation report, the top five regions of China's garment production in terms of export value are Zhejiang (32.06 billion value, 11.68% growth rate), Jiangsu (24.79 billion value, 4.46% growth rate), Guangdong (33.31 billion value, 5.51% growth rate), Fujian (16.88 billion value, 19.26% growth rate), and Shandong Provinces (11.4 billion value, 7.47% growth rate). Uddin (2014) revealed the fact that any political violence, strike in Bangladesh interrupts the whole garment transportation system through the shipment because of the centralization of this industry near Dhaka. Qiu (2005) found that, with the improving living standard of the Chinese people, local demand for high-quality textile and apparel goods continued to rise, which brought another wave for, changes in the industry of China.

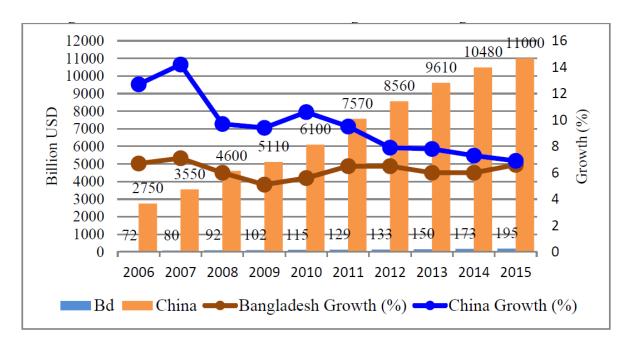


Figure 2.1: Annual GDP and growth percent of Bangladesh and China (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

According to the graph as shown in figure 2.1, the recent performance of RMG sector of Bangladesh for the years 2006 to 2015. There has been presented the data of the last five years. Though there can be found some ups and downs in this graph, the damage has been recovered in the immediate year. In this study, it is seen that the amount of RMG export was 28149.8 million dollars in 2016. 30614.7 and 35724.3 million US dollar was the export of RMG in 2017 and 2018 respectively. But in 2019, the amount has decreased to 33402.8 million US dollar though after the year 2020, this sector has continued its growth as it was before.

Focusing on the statistics of the RMG industry, the increment of the number of the RMG industry can be identified. Though the rise of the number of industries is not enormous, it is positive to see that at least the number is going up gradually. The graph in Figure 2.2 tells that around 300 factories have increased in 2020 compared to 2016. It can be found that the

number of RMG industry was 4482 in 2016 whereas it has risen to 4764 in 2020 and this was not sudden at all. The years between 2016 and 2020 have continued their rise.

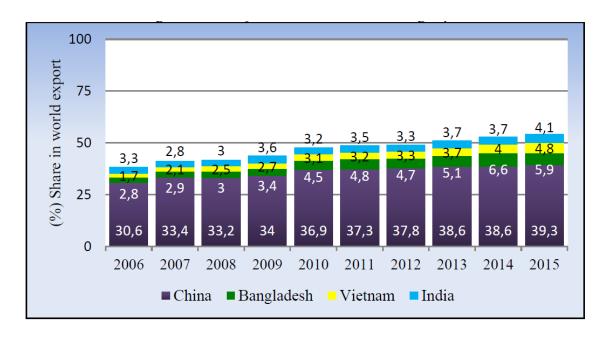


Figure 2.2: Country's Share in World's clothing export (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

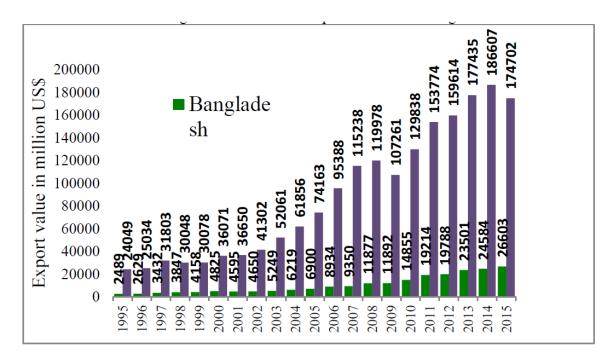


Figure 2.3: Annual total export value of clothing (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

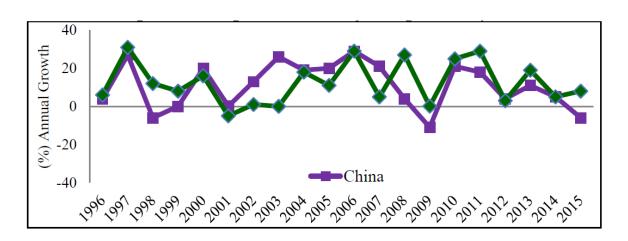


Figure 2.4: Annual growth rate of Ready-made garments export (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

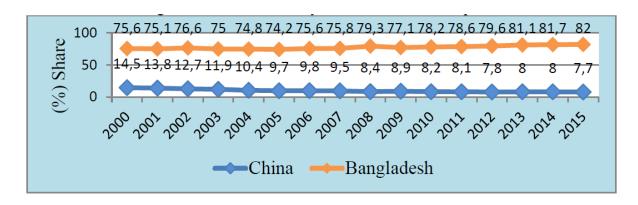


Figure 2.5: Share in economy's total merchandise exports (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431)

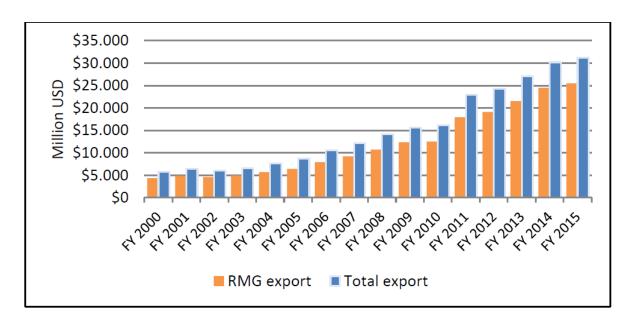


Figure 2.6: RMG export value VS Total export value of Bangladesh (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

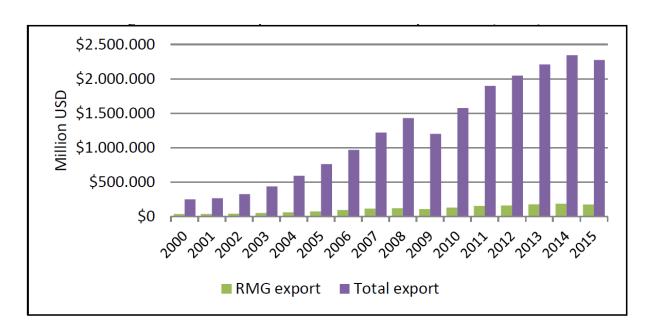


Figure 2.7: RMG export value VS Total export value of China (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

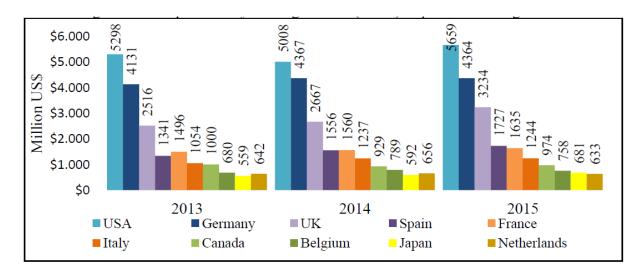


Figure 2.8 (a): Top 10 Ready-made garments (RMG) importers from Bangladesh (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

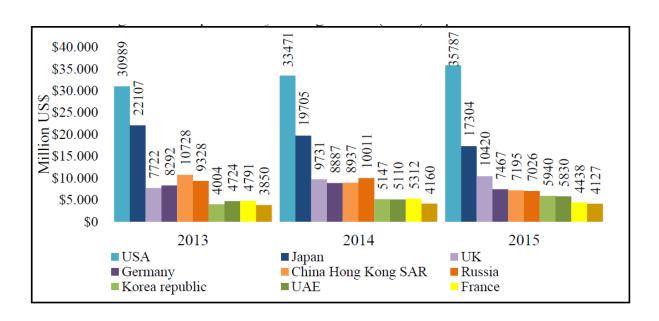


Figure 2.8 (b): Top 10 Ready-made garments (RMG) importers from Bangladesh (https://www.fibre2fashion.com/industry-article/8558/apparel-4-0-is-revolutionising-bangladesh-rmg-sector)

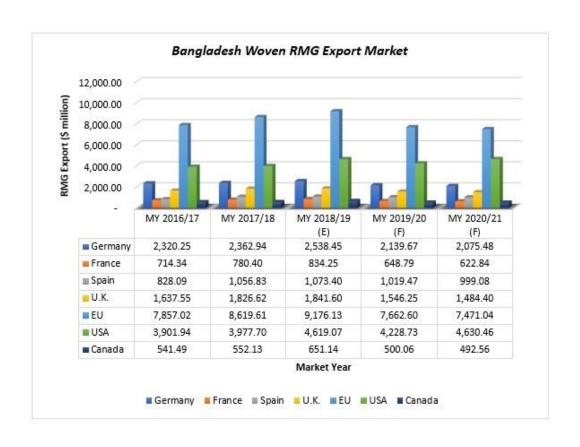


Figure 2.9: Top 10 Ready-made garments (RMG) importers from China (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

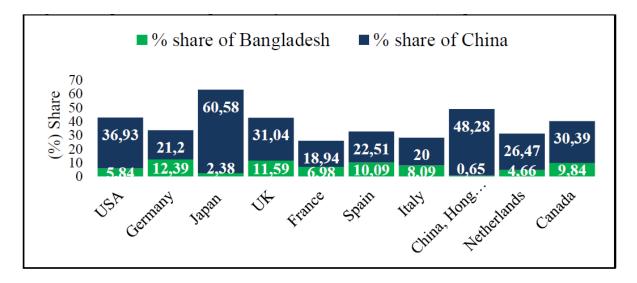


Figure 2.10: Export shares in top 10 Ready-made Garments (RMG) importers of world in 2015 (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

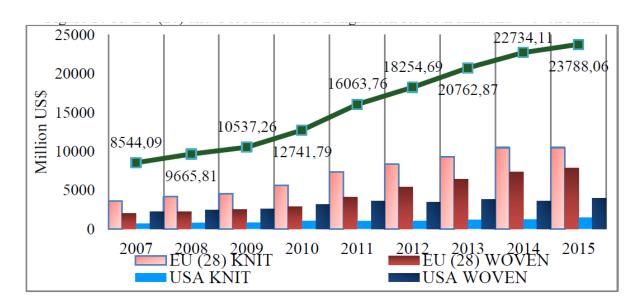


Figure 2.11: EU (28) and USA market for Bangladesh for both Knit and Woven items (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

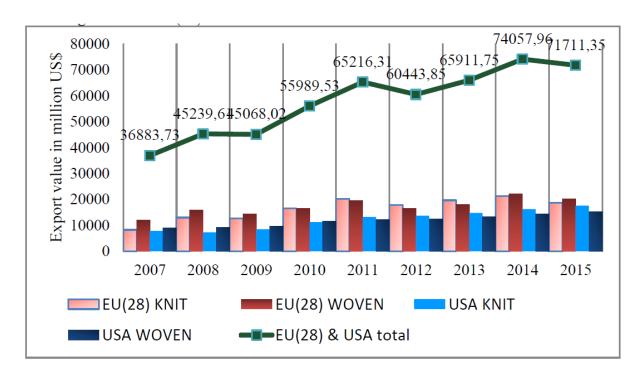


Figure 2.12: EU (28) and USA market for China for both Knit and Woven items (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)

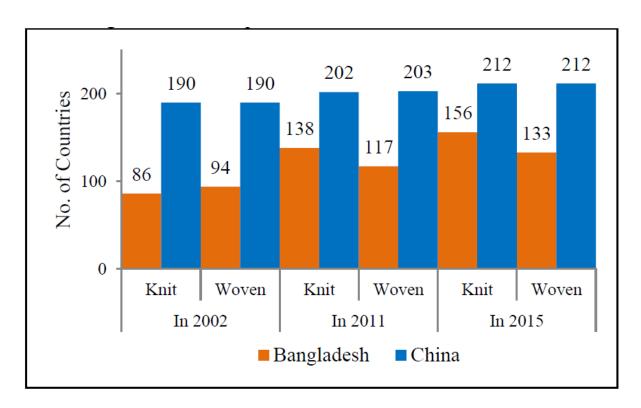


Figure 2.13: No of export markets for Knit and Woven items (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431)

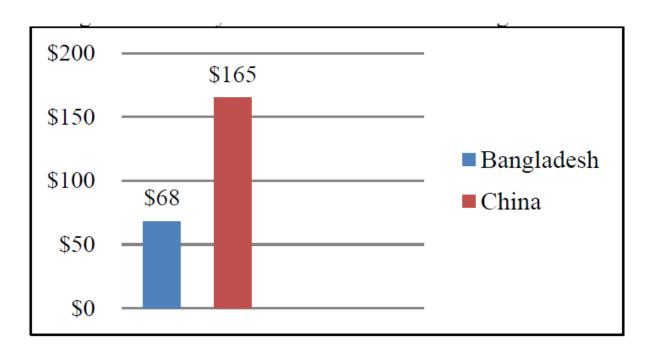


Figure 2.14: Ready-made Garments worker wage in 2015 (European Scientific Journal October 2017 edition Vol.13, No.28 ISSN: 1857 – 7881 (Print) e - ISSN 1857-7431)



Figure 2.15: Minimum monthly wages of the workers (Source: International Journal of Social, Political and Economic Research, Volume 8, Issue 1, 2021, 198-215)

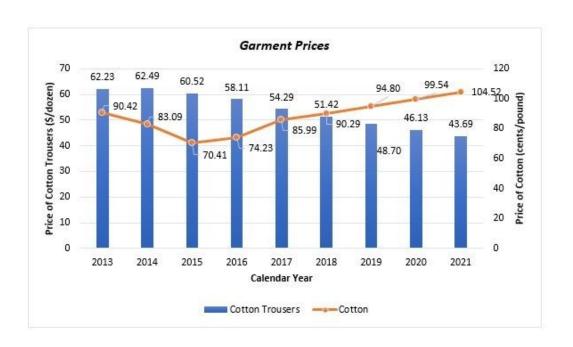
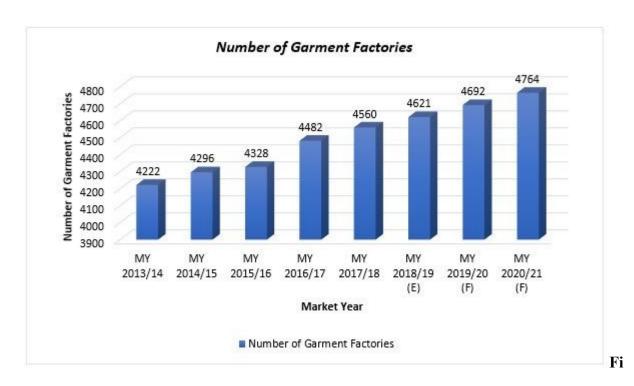


Figure 2.16: Bangladeshi RMG Products price (Approximately 90 percent of the total Bangladeshi garment exports are cotton based) (https://www.fibre2fashion.com/industry-article/8558/apparel-4-0-is-revolutionising-bangladesh-rmg-sector)



gure 2.17: Number of Garments Factories in Bangladesh (Source:

https://www.fibre2fashion.com/industry-article/8558/apparel-4-0-is-revolutionising-bangladesh-rmg-sector)

2.7.2 Competition with Vietnam and Other countries

Market competition in the global RMG sector is getting intensified and potential competitors like Vietnam are closing the gap in global RMG market share. Vietnam overtook Bangladesh in the global apparel market and became the second-largest global ready-made garment (RMG) exporter. Bangladesh now stands in the third position, with China holding its first position. According to the World Trade Statistical Review 2021 released by World Trade Organization (WTO), Bangladesh's share in the global apparel market dropped to 6.3% in 2020 from 6.8% a year earlier. The market value for Bangladesh was \$28 billion in the year 2020. Meanwhile, the share of Vietnam in global RMG exports stood at 6.4% in 2020, up from 6.2% a year earlier. Apparel manufacturers and economists said that Bangladesh has lost its position to Vietnam amid the latest trend of decline in apparel export, which was further tapered by the pandemic. Moreover, Bangladesh's RMG export has been declining significantly due to the closure of a number of small RMG factories over the last few years as they failed to maintain strict compliance set by the international retailers and brands and also for the offering of lower prices by the international buyers. In addition, Vietnam has diversified goods at a competitive price, which Bangladesh cannot afford. "Vietnam has attained Bangladesh's position as the world's second-largest apparel supplier by concentrating on product diversification," they also said. Economists said that Vietnam and the European Union (EU) signed the Free Trade Agreement (FTA) in June 2019, which allowed Vietnam to enjoy the zero-duty benefit to this largest trading bloc of the world. Since Vietnam has an FTA with the EU, Bangladesh has been facing a challenge from Vietnam as both countries have been producing the same kinds of products, they added. Moreover, Vietnam has a lot of Chinese investment, which is a big plus point for this country and has been playing a vital role in the progress in exports of the country.

Globally, Bangladesh is a popular destination for low-end manufacturing items at the cheapest rate while Vietnam produces high-end apparel with a strong backward linkage industry and educated workforce. Although Bangladesh and Vietnam had been holding the second and third positions respectively in the apparel export, the business dynamics and environment are quite different in the two competing countries, said the exporters and economists. Experts think that Bangladesh should diversify its export basket including within the RMG sector.

Prof Mustafizur Rahman, a distinguished fellow of the CPD said that the situation could only be defined as a transaction period as Bangladesh and Vietnam have been competing closely for decades. "Last year, the pandemic's condition was relatively good in Vietnam, while Bangladesh's garments were closed for a significant time due to the pandemic," he added. He also said that now Bangladesh is getting a lot of purchase orders and the orders are shifting to Bangladesh from China, India and even Vietnam. "So, I think Bangladesh will be able to regain its position soon," he said. However, Covid-19 cannot be blamed for everything as Bangladesh has many weaknesses, he also said.

"Vietnam is far ahead in labour productivity, capital productivity and diversification. We need to improve these. We need to increase skills, move from low end to high end, increase value addition, product basket diversification, and reduce lead time," he added. Vietnam's market value stood at \$29 billion at the end of 2020. To put it into perspective, the share of Vietnam in the global export market was 2,9% back in the year 2010 while Bangladesh's share in the global apparel export market was 4.2%, which was 85.5% more than Vietnam's. Shahidullah Azim, vice-president of the BGMEA, said that Vietnam's export growth 34 | Page

remained unhurt during March-May of the last while Bangladesh's exports steeply nosedived during the time. "We need to focus on products that add value. Our number of exporters is more than Vietnam, but they are ahead of us in value addition," he added. He also said that, although synthetic fibre is the future of the export-oriented garment sector, Bangladesh lagged behind in producing synthetic fibre-made garments. "We demanded a 10% cash incentive for man-made fibre-based products in the current fiscal year. But it ultimately went unaddressed. Government should approve it and the import of man-made fibre also needs to be duty-free," he added. Moreover, the manufacturers also said that they need loan facilities as well as easy access to cash assistance to maintain their position in the global RMG market.

2.7.3 Challenges of Bangladesh RMG Sector

Although the epic growth of RMG industry of Bangladesh, challenges are still there. However, challenges can become opportunities if they are addressed with higher concern from government and policy makers. Limitation lies in every vital stage of this industry. Some major limitations are discussed in this section. Low prize of apparel products is one of the reasons of sourcing from Bangladesh. It is often seen that RMG suppliers competes with each other to decrease the prize with a view to grab the order which eventually impacts on lower export income. Due to the homogeneity of garment industry products, competitions among the suppliers are intense.

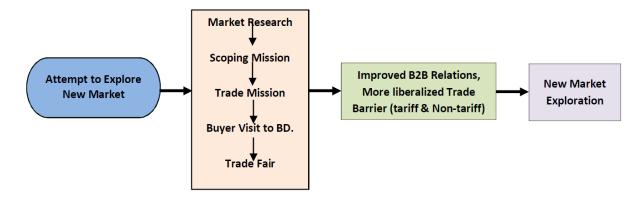
Another limitation is, still the textile industries of Bangladesh are not capable of producing high standard fabrics. Shortage of capital necessary to develop local sources for quality fabrics/yarn is a major weakness. The local textile can fulfill only 20 percent of domestic demand for woven fabrics. However, there is ample scope of textile industry to grow as it has a big domestic market for fabrics. Unlike past Bangladesh government, employers and the owners of garments sector are giving priority to workplace safety, compliance-related issues and non-hazardous working conditions to prevent accidents. But the crises similar to Rana plaza and Tazrin Fashions can change the whole scenario of this rising sector if happens again. These would adversely affect the growth of RMG sector and can lead to a downward slope of Country's export value to world.

Several authors have analyzed aspects of the garment industry in Bangladesh. Of the various aspects of the industry, the problems and the working conditions of workers have received the greatest attention. In previous decades, this industry relied on low wages and minimum standards in working conditions, However, low labour costs are not the prime driver of the sourcing decisions. In recent years customers are increasingly prioritizing productivity and reliability of supply. Hence, they are also emphasizing to minimize reputational risks of poor working conditions.

The goods laden vehicles have to stand for hours in the traffic jam on the way to sea-port from the center of country. Many garment exporters complained that they couldn't meet the strict lead-time set by the international buyers for delayed shipment in Chittagong port due to poor road condition. Moreover, the centralization of garment industries in the middle of the country made this situation more critical. So, political stabilization is the utmost need for garment sector. Because of shortage of power and gas, the supply is not continuous which lead the industries to use generators for uninterrupted production, resulting in the increasing cost of productions. Many composite garment units are failing to start production only for the lack of gas connections in the factories.

2.7.4 Market Diversification

The Market Diversification strategy contributes to sustain a country's export earnings slowly but surely ensuring a wider market as well as bucket of varieties of merchandise. Nevertheless, its spillover effect is beyond the mere nominal export earnings, contributing employment (and factory) generation. The recent trade statistics of Bangladesh has validated the statement, as RMG export value has gone up by 176.5 percent, whereas employment and the number of factories has increased by 118.38 percent and 70.75 percent respectively during 2005-2011. The employment opportunity in apparel sector is generally for women (about 75% of total employment) which overhand previous male dominated GDP into more equal sharing one. The market diversification initiatives for RMG sector in Bangladesh have been conducted apparently since 2007 even though the attempt for diversification was initiated first in 1980s. The initiatives make the clothing sector more promising to the economy, as recent research findings state that the country would export about US\$ 44.66 billion by 2020 if the new opportunities were properly utilized. Bangladesh's RMG exports will strengthen the country's position and are likely to grow – double by 2015 and nearly triple by 2020. Other markets in Southeast Asia will increase their exports too, but would not be able to replace- at least in the near future- Bangladesh as viable RMG sourcing hub.



Scheme 2.1: Flow chart for exploring newer destination for RMG of Bangladesh

Table 2.1: Activities of BKMEA for Market Diversification During 2007 to 2012

Targeted Country	Intervention Time/Period	Types of Activity	Immediate Outcome	
	October, 2012	Trade Fair	Improved Business to	
Australia	October, 2008	Market research & informing Exporters accordingly	Business (B2B) Relations • Exporters find export potentiality in the market	
Brazil	December, 2011	Market research & informing Exporters accordingly	Exporters become intended to export to the prospective Market	
CI.	December, 2012	Signing MoU with China	Mutual understanding for further cooperation.	
China	June, 2012	A delegation from Chinese Trade Association to Bangladesh		
	November, 2008	Market research	Essa Assass Essilidias for	
Germany	February, 2008	Trade Mission	Free Access Facilities for Panaladash Apparal	
	November, 2005	Trade Mission	Bangladesh Apparel.	
	October, 2011	Multi sectorial Business people's visit to Bangladesh		
Hong Kong	December, 2010	Market research	Improved Bilateral Trade	
Tiong Kong	July, 2009	Scoping Mission for Trade Expansion	Relations	

However, the Market Diversification strategy was not enough at all to boost up RMG exports. Rather several internal and external factors strengthened the external earnings bigger. GSP schemes in many developed countries allowed Bangladeshi apparel exporters to export more clothing products at less or no duty. The recent adopted "Lean Manufacturing Technique" increased both the labor productivity as well as factory performance significantly. Moreover, Government's stimulus package of 5% of export value (awarded to those who exports more than US\$3.5million) to minimize adverse effects of global recession and another 5% of export value (awarded to small and medium exporters) to export to new markets are considered as one of the most significant initiatives to diversify export destination and stabilize export earnings. Yet the recent climate of global competitiveness in apparel market urges to strengthen "Image Building Champaign" of Bangladesh on social and environmental grounds for further market expansion.

Table 2.2: Impact of Activities of BKMEA for Market Diversification During 2007 to 2012

The Effects of Market Diversification Activities on Bangladesh RMG Export

	January, 2012	Trade Fair	
	December, 2011	A delegation of Japanese Trade Association to Bangladesh	Relaxation of Rules of Origin Business to Business Relation
Japan	November, 2011	Market research	improvement
	October, 2010	Trade Mission	 Relaxation of other Minor
	September, 2009	Scoping Mission	Trade Barriers
	September, 2008	Market research	
	September, 2012	Trade Fair	Improvement in the relaxation
Russia	September, 2011	Market research	of Double Tariff Barrier
Russia	October, 2011	Scoping Mission	Improved Inter- country Banking Transaction.
South	June, 2012	A delegation of South African Trade Association to Bangladesh	Improved Bilateral Trade Relations
Africa	December, 2010	Market research	Tariff Barrier is Subject to be
	October,2009	Scoping Mission	Relaxed
Spain	November, 2007	Trade Mission	Improved B2B Relations
Tourism	May, 2011	Trade Negotiation	Relaxation in Anti-dumping
Turkey	June, 2008	Trade Mission	tariff Barrier

Source: Report of BKMEA's Trade Promotional Activities.

Table 2.3: Performance of Diversified Markets During 2002 to 2011

		_	_				,			
Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Australia	2.19	2.15	5.50	7.91	8.21	14.43	26.87	74.02	105.28	248.19
Brazil	0.23	0.07	0.31	0.68	2.83	9.41	31.90	41.41	61.18	123.62
China	0.24	0.62	1.87	1.68	5.24	6.96	7.96	16.11	38.09	82.38
Hong Kong	6.44	7.71	8.01	7.77	12.79	14.69	19.02	21.28	26.40	473.79
Japan	14.8	14.6	16.8	14.28	16.60	22.28	36.65	111.13	186.72	345.55
S. Korea	3.09	3.22	5.50	4.66	5.04	9.16	10.42	20.54	44.52	93.51
Mexico	7.52	12.	15.6	20.35	33.35	53.43	99.43	86.70	89.50	92.81
Russia	1.00	1.12	1.95	4.11	6.17	10.13	46.63	43.65	87.97	66.91
S. Africa	0.66	1.49	2.26	3.97	6.01	19.48	37.89	39.34	37.89	55.00
Turkey	0.25	2.51	10.3	24.62	52.69	91.09	301.86	370.42	595.21	471.61

Source: ITC Trade Map & EPB Bangladesh

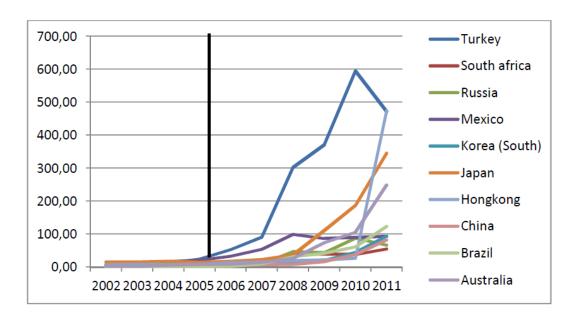


Figure 2.18: Apparel export scenario of Bangladesh to emerging markets

2.7.5 Training system

In RMG sector, very few workers receive training before joining their services. The training system is still very poor. To achieve higher prize with maximum quality of product, the skilled manpower should be one of the major concerns for upcoming future of RMG. In this context, Government of Bangladesh has taken an initiative to increase skill manpower mainly in garments sector. The program called SEIP (Skill for Employment Investment Program). Currently, Bangladesh is not enjoying the zero-duty benefits under the Generalized System of Preferences (GSP) from USA because of the massive collapse of "Rana Plaza" in 2013. Bangladesh supplied 6.57% of the readymade garments (RMG) in the US market last year. In the first 7 months of 2017, it decreased to 6.41%. But the competition has increased the market in Vietnam and India. However, it is expected that there will be no major fall. Some other major limitation of Bangladesh in RMG industry is high dependency on imported raw materials, higher interest of bank loan, poor logistics and shipping facilities rely upon foreign engineering services for maintenance of machine and utilities service etc.

i. Training programme for Skill Development

Government has initiated training programme for approximately 15 lakh RMG workers in order to ensure sustainable development of the sector with the challenges of automation.

A "Training Conducting Committee" has been appointed with 8 members, headed by the director general of EPB. The other members of the committee are the textile cell of the Commerce Ministry, the Department of Labour, Labour and Employment Ministry, Department of Textile, BEPZA, BGMEA, BKMEA, and deputy director (compliance and monitoring cell) of the EPB.

Approximately, there are 40-lakh workers in Bangladesh's RMG sector and there is immense scope to employ more skilled workforce. According to industry insiders, the skill enhancement of the workforce can enable the sector to reach the targeted revenue of \$50 billion

According to the Centre for Policy Dialogue (CPD)- a leading institution for in-depth research and dialogue to promote inclusive policy making in Bangladesh, and strengthen regional and global economic integration, around 13 percent of the country's garment factories hired experts from overseas in the top-level management who remit over \$500 crore from Bangladesh every year. In merchandising, design, marketing and operation of sophisticated machines, the country needs experts from outside to fill in the gap.

ii. Multi-modal Transport System

In order to solve the problems in transportation, government has planned a multi-modal transport system, which is yet to be implemented. Multimodal Transport is the combination of different means of transport to facilitate the cargo movement. It will be the centralization of the responsibility to one transport operator. It will increase the economies of scale in 42 | Page

transport negotiations. It will ensure better use of available infrastructure and reduction of indirect costs.

3) The government provides 4 percent cash incentive to garment manufacturers which was set in 2018. Henceforth they have started to explore new destinations and markets.

2.8 Bangladesh RMG industry and 'Apparel 4.0'

The RMG industry in Bangladesh is adopting the 'Apparel 4.0' and undergoing a revolution, which includes the digitization of apparel production processes ranging from concept to post-retail. This revolution will enable the manufacturers to monitor and automate the entire production process with complete supply chain transparency.

Apparel 4.0 has major applications in smart clothing, robotics, simulation, industrial IOT, augmented reality, Machine-to-Machine (M2M) communication in knitting machines, smart factory, 3D printing, smart fabrics and AI-infused Industrial ERP (enterprise resource planning) etc.

Neighboring countries of Bangladesh such as India, China and Vietnam are also rapidly implementing the Apparel 4.0 technologies in their factories. Raymond from India has started using the sewbot technology. Chinese garment manufacturers are introducing the smart clothing, augmented reality, and 3D printing in their factories. Vietnam has significantly developed Radio Frequency Identification Device (RFID), additive manufacturing and ERP.

This technology will enable the country to make the garment production cost effective and efficient. But it may cause a heavy job loss in the future, as machines will replace humans. According to the McKinsey Global Institute, approximately 800 million jobs could be lost worldwide due to automation by 2030. The garment sector of Bangladesh will be the most

affected by Industry 4.0. A study by Government of Bangladesh predicts that around 60 percent (5 million) of jobs will be lost in the next 15 years.

It is considered as the nature of Readymade Garments' trade-off due to the potential transformation of the Fourth Industrial Revolution. The five major sectors including RMG and textile, furniture, leather, Agro-food processing, and leather. Among them, the textile and RMG sector is 60 percent, which is a high probability of automation (A2i, 2020). For this reason, most of the textile and apparel industry researchers have concentrated on integration and communication skills to establish relationships between various supply chain parties and synchronize activities to gain a comparative advantage (Zhao et al. 2008). In the modern history of the world, technological advancement has been the main engine of economic development. Rosyadi (2018) states that from the early 20th century technologies and machinery are being rapidly developed which have controlled the production process automatically. Garment industries use Programmable Logic Controllers (PLCs) and computer-based automated systems rather than controlled by human hands, which help to reduce the production costs and advances the information technology. This time is considered as the fourth industrial revolution or 4.0, which basically promotes the automation system to replace humans.

Increases in demand introduced by new technologies have been more than enough to offset the laborsaving impact of technology at the macro-level (Vashisht, 2019). Buxey 2005; Lambert & Pohlen 2001; Nuruzzaman et al., 2010; Doukidis, 2007 explained that to enhance comparative advantage and performance, the industries need to implement the different technological applications such as robots replace of labors, ICT, e-commerce, EDI execution that led to time reduction and supply chain cooperation. Mokyr et al (2015) have also clarified that industrial automation can increase efficiency and productivity, which helps to

reduce production prices, increases demand, and also creates new jobs to meet this demand in those industries.

Rumi et al (2020) describes that in Bangladesh, the fourth industrial will create new jobs and business opportunities after adopting introduced and advanced new technologies in different sectors like RMG, textile, and software business. Further added that it will turn into a digital landscape where the consumers can order original products without uncertainty. After integrating the automation in garment industries in Bangladesh, productivity increases from 72.57 percent to 72.78 percent, and Standard Minute Value (SMV) of productivity is increased from 73.81 to 83.1 and productivity increases from 21.42 to 24.19 which accounts for around 12.93 percent (Ansari et al., 2019). Besides, due to the comprehensive practice of automation processes in industries, mass unemployment over the next few decades is expected to pose a major problem (Arntz et al., 2016; Autor, 2015; Furman, 2016). Moreover, to install the new technologies of this revolution, Bangladesh has faced some difficulties such as poor infrastructure, unskilled and available labors, expensive installation of new technologies, lack of proper technical knowledge, and so on (Islam et al., 2018).

Zervoudi (2019) recommends that the government would act to reduce the risk of employees being exposed to automation by investing in learning and education for unskilled jobs to adapt better to advanced technologies and digitization. The government of Bangladesh has been attempting to be digitalized through the application of new technologies of 4.0 successfully (Islam et al., 2018). However, previous literature has explained limited discussions on the new path of RMG trade due to the emergence or transformation of new technologies of industrial revolution 4.0.

2.9 Obstacles on Labour Productivity

Productivity is the main concern of efficient use of limited resources, which can be regarded as input used to produce something, which is regarded as output. Labour productivity is the ratio of total output and labour input. The easiest formula of productivity is output/input. It is considered that though Bangladesh is the second largest RMG exporter, However, the country is still struggling to get the expected productivity from its labour, and it is a matter of sorrow that Bangladesh lags behind most other Asian competitors. The value of hourly productivity of Bangladesh is \$3.4 whereas China, the largest RMG exporter, is calculating \$11.1 hourly productivity. Moreover, Sri Lanka is considered to be the most productive country in Asia the rate is \$15.9 and then comes the name of Indonesia, which is \$12.3. Similarly, the countries like India, Vietnam, Myanmar, and Philippines also exceed Bangladesh in terms of hourly labour productivity. As a part of mega plan of our government, the target of increasing hourly productivity has set by 5.6% per year before 2030 (The Business Standard, 2020). In recent days more productivity demands more investment for example, to get a certain amount of output, there needs to be invested a certain amount of money. The ratio of incremental capital output of Bangladesh in FY2020, The Incremental Capital Output Ratio (ICOR) was 6.06 whereas it can be noticed that same output was 3.87 in FY2019 (CPD, 2020).

2.10 Demographic Dividend in RMG Sector

It is considered that Bangladesh has a key advantage causing a huge benefit for the past few years, which is low labor cost. Though there was a matter of labor unrest, now it is on the way to diminish from the last few years. The matter like labor uprising is gradually becoming stable. But though Bangladesh has an immense advantage in regard to labor cost, still there is a problem of not being able to get proper technological advancement. In this competitive 46 l P a g e

world, it will be really challenging to continue the existence without being technologically developed.

The impactful advantage of Bangladesh is the use of a huge number of young populations that is a catalyst for low labour cost as well as giving high productivity and benefits. But to get the best outcome, it is inevitable to make them skilled. If it is possible to utilize this over population through proper training, this huge number of people will be a blessing for Bangladesh. Otherwise, it can be a curse and can create a burden for the country.

The export earnings of Bangladesh are mainly coming from a certain group of countries, and this is a major problem that should be addressed for the long run. The main three sources of Bangladesh's export earnings are United States, Germany and Great Britain. Among them, the United States is the single largest destination. These three countries bought goods of approximately 15.15 billion USD in total in FY20, which is about 44% of the total export earnings of Bangladesh. The European Union is the source of about 62% of country's total textile and garment export earnings (ADB, 2021).

Apart from the United States, the UK and Germany, Spain, France, Italy, Netherlands, and Poland are the top markets, where Bangladesh supplies over billions of dollars of RMG items every year. According to the Financial Express (2021) in the first 10 months of FY21, export earnings from the United States increased by 8.54% and from the European countries by about 7%. In this period (FY 2020-21), the RMG industry raised \$26 billion of export earnings, which represented an 8.74% increment. However, the objective set for the time was missed by 6.16% (The Financial Express, 2021).

Despite the profit, Bangladesh is actually losing market to Vietnam. Vietnam is targeting \$39 billion export earnings in 2021 from apparel and readymade garment sector (VIR, 2021).

According to Vietnam National Textile and Garment Group, their export from garment and clothing sector was worth \$35 billion in 2020 as COVID-19, US-China trade war, Brexit caused huge disruption in their market.

Not withstanding the pandemic and decrease in global demand, their growth in export earning was 22% and with this they surpassed Bangladesh and obtained the second place in top RMG exporters list (RMG Bangladesh, 2020a). A recent study has revealed that work orders from Bangladesh met more countermanding or deferral by the buyers from US than that of Vietnam. This study was conducted over top executives, retailers, importers, and wholesalers from US-based leading fashion brands recently. Vietnam is considered to be the "Next China" for apparel sourcing, and as such, top buyers from US seemed to be more "careful" about calling off the orders from them. COVID-19 pandemic has hit Bangladesh's export earning severely as the whole industry was closed during the lockdown situation. But Vietnam did not hold back their production, overtakes Bangladesh and has been rewarded by the significant rise in RMG export (Dhaka Tribune, 2020a).

2.11 National Skills Development Authority (NSDA)

The Authority was established under the National Skills Development Authority (NSDA) Act 2018. It started its journey from February 2019 and has a broad-based membership in its Governing Body that includes almost all the government ministries delivering skills training and selected representatives from the private sector and organizations of employers and employees. The NSDA Act 2018 empowers this new Authority with a wide-ranging responsibilities and tasks with regard to coordination, quality assurance and certification.

2.12 Industry Skills Councils (ISCs)

The ISCs have been established to ensure industry collaboration in skills development. ISC will establish Centre of Excellence (CoE), which will practice and promote the best model of skills in the industry sector. It will also be a research hub for conducting research and survey to provide information on skills demand, priority occupations, technological transformation and scope of job opportunities. Furthermore, ISCs will help in strengthening industry linkage, apprenticeship program, up-skilling and re- skilling, RPL, standard and curriculum development, assessment of trainees, trainers and assessors. To this effect, separate guidelines will be developed for implementations.

2.13 National Skills Development Policy (NSDP)-2011

NSDP articulates that skills, knowledge and innovation are important driving forces of economic growth and social development in any country. The National Skills Development Policy- 2011, Ministry of Education of Bangladesh provides the vision and direction for skills development over coming years as it sets out the major commitments and key reforms that government will implement in partnership with industry, workers and civil society (Ministry of Education, 2011). The skills development system in Bangladesh can be classified into five main segments:

- (1) Public (delivered to varying degrees by numerous ministries);
- (2) Private (receive some form of government subsidy e.g. MPO and grants),
- (3) Private (commercial training institutions including madrashas);
- (4) NGOs (non-for-profit institutions); and

(5) Industry based (institutions managed by industry and training delivered in the workplace, including apprenticeships) (Ministry of Education, 2011).

The skills development system must be responsive to the present and future industry needs and will move to implement a competency based training and assessment (CBT&A) system to achieve that end (Ministry of Education, 2011). All instructors and trainers will be provided with adequate training so they can develop and implement CBT&A programs. Considerable investments will also be made to upgrade the facilities and equipment of select training institutes so they can deliver the new industry endorsed qualifications. (Ministry of Education, 2011). It is important that TVET and skills training institutions are aware of the skill needs in industry and understand the latest employment and technology trends. Without this knowledge, the skills produced by institutions will not meet the needs of industry. The government will also work with industry to ensure that mechanisms are put in place to support a 'return to industry' program that allows current instructors and trainers to update their technical skills in the workplace. Arrangements will also be trialed in pilot sectors to develop short course intensive skills upgrading programs to develop the technical skills of trainers (Ministry of Education, 2011).

2.14 National Skills Development Policy, 2020 (Draft) (NSDP 2020)

According to the NSDP (2020), expanding the outreach and improving access of skills training are two important areas of focus of this policy. It will strengthen the institutional capacity for increasing access and coordinate with local and community-level organizations for delivery of skills training. Specifically, these may include interventions in the following are as:

- a. Expansion of workplace-based skills training, like apprenticeship, on-the-job training and industry attachments;
- b. Support to the existing training providers or establishment of new ones, which will work to improve access to the marginalized groups, and to reach out to the people of geographically isolated communities;
- c. Increasing the outreach of the skills system to remote areas and under- served communities;
- d. Providing necessary support to STPs through need assessment;
- e. Working with the various government agencies, which expands network of training at the district or upazila levels for example, DTE, Department of Youth, Department of Women Affairs and Department of Social Services as well as local NGOs and private sector training providers;
- f. Strengthening capacity of the existing training following appropriate curriculum and learning materials; and
- g. Support to the area-based skills demand data collection and deliver skills training focusing on the needs of the marginalized communities.

2.15 Textile Policy 2017

The policy guidelines of the readymade garments Industry is provided by the Ministry of Textile and Jute. The sector is playing an important role in industrialization, employment creation and growth of export, human resource development and thus contributing to the overall economic development of the country. In order to ensure improved and quality

textiles goods production emphasizes should be given to the skilled manpower for textiles, weaving, and jute sector.

Textile Vocational Institutes, Textile Diploma Institutes and Textile Engineering Institutes have been playing important role in creating skilled manpower in textile sector. Diploma-in-Textile degree has been awarding to develop efficient manpower in textile and handloom sector. Trainings have also provided in jute sectors for upgrading the skill of farmers. It would be possible to retain the existing markets of silk, textiles, jute and jute goods, and their market expansion through increasing production and quality. Training is imperative to increase production and quality as well. The policy articulates that there is shortage skilled manpower in the sector for which production cost is higher comparative to other countries in Asia. However, the Textile Policy 2017 states the following subjects for creating skill manpower in the sector.

- a. Formulate long, medium and short-term policy measures for creating skill manpower in the garments sectors
- b. Modern and technology-based training will be provided to the unemployed people to fulfill the skill gaps in the industry.
- c. Training manpower will be supplied through establishment of Bangladesh Textile University under Ministry of Education, Textile Engineering College under Directorate of Textile, Textile Diploma Institute and Textile Vocational Institute.
- d. Government will provide necessity support to create the capacity to the private sector textile training institutes in Bangladesh.
- e. In order to crate modern international standard Textile University in Bangladesh, strategic and collaborative actions will be undertaken.

- f. Necessary steps will be taken for modern curriculum, quality and skilled teachers to meet the industry need.
- g. The capacity of the existing Trainer Training Center (TTC) will be enhanced so that skill trainer can be supplied to meet the industry need.

2.16 National Information and Communication Technology Policy- 2018

'The National ICT Policy 2018' was prepared by the ICT Division keeping a provision to implement eight strategic issues including digital government, digital security, social equity and universal access to education, research and innovation, skill development and employment generation, strengthening domestic capacity to cope with the change of emerging technologies, said a media release. The policy is aimed to bring a structural change of the previous National ICT Policy 2015 incorporating a 48-action plan in a separate annexure. The policy aimed to fourth industrial revolution, which will remain untouched up to 10 years. The policy should be emphasized on policy ownership and monitoring of the initiatives to be taken in line with the implementation of digital Bangladesh.

Moreover, the policy addresses the followings aspects:

- 1. Institutional capacity building for the ICT professionals.
- 2. Skill development training on ICT for the peoples of Bangladesh.
- 3. Policy support to attract foreign investment
- 4. Capacity building of the local market
- 5. Strong marketing and branding for the ICT products and services

2.17 Conceptualization of the concepts of 'training' and 'skill'

According to the NSDA Act 2018 of Bangladesh, the concept skill is defined as the knowledge and technique acquired for doing any specific work, or the capability and ability to produce goods and services as per required standard of industrial and professional demand of national and international markets. Two dimensions of training are: soft dimension and hard dimension. According to this author, the soft skills include effective allocation of time and money, teamwork, leadership, relationship management, and acquiring and assimilating information. This suggests that the soft skills learned by trainees were communicated to workers on their production lines, which helped to transfer improved outcomes of nonparticipants as well. In contrast, for "hard" dimensions such as improved production timelines and communication about deadlines and target outputs, training the indirect supervisor mattered most. The effect is smaller immediately after training but grows stronger starting in month three. Indirect supervisors are responsible for setting work targets and overtime hours, so it is unsurprising that training these supervisors has led to this result. According to Lioyd Byar 2003 'training is learning process that involves the acquisition of skills, concepts rules and attitudes to enhance the performance of the employee'. According to W.G Torpey 'Training is the process of developing skill, habit, knowledge and attitudes in employees for the purpose of increasing the effectiveness of employees in their present government position as well as preparing employee for future government position. According to Chambri, there cannot be an efficient performance of a job without a proper training of the employee'. That is why training has been considered the keynote of staff efficiency. According to Beach, Training is the organization procedure by which the people learn knowledge and skills for a definite purpose (Ahmed, Yeasmine, 2006). Training is not an event but a continuous process. Training is combination of practical and theoretical knowledge that increasing the personal and professional qualification it focused by the proficiency of service delivery mechanisms.

2.17.1 Different Types of Training and skills for workers especially in Australia

Training can also be divided into two categories- (i) Formal Training and (ii) Informal Training. The authors further describe that formal training refers to correction of the employee errors by giving practical working experience as they can flourish their hidden qualities. Formal training divided into two types on the job training, off the job training. On the job training refers to methods that are applied in the work place while the employees are actually working. While informal training conducted on the basis of two types, one is individual and group based other is seminar, symposium and workshop based. The other one is individual and group training would be long and short term on the basis of its purpose.

Non-formal workshops or classes

Non-formal learning is also highly structured with specific aims and objectives. Completion of non-formal learning programs may initiate individuals into the next stage of a desired life path. In industry, non-formal learning (often delivered away from the actual job or in industry training rooms or spaces) may be used to induct new employees into the culture of the company, develop the technical and inter-personal skills of experienced workers, and hone the skills of managers and supervisors.

For all workers, non-formal training (that is, in-house training or its equivalent) is the most common form of training after informal on-the-job training. The majority of small-to-medium sized companies in their study were involved in substantial amounts of unaccredited, structured and semi-structured workshops and seminars. Semi-structured training was often provided by product suppliers and equipment manufacturers conducted at the work site. This

type of training was found to be especially valued, particularly for all workers below AQF III level, and for long-term casual staff. It was valued because it was immediately relevant and could be put into practice.

Typically workers will move off the job to attend workshops or classes either delivered externally by commercial training companies or internally by in-house trainers or external consultants. The aim of such sessions is to develop some knowledge or skill that is generally required for the performance of their job or for further development of attributes required for better interpersonal interaction (such as team work, management and supervisory training, conflict negotiation and resolution). Although workers may be involved in formal courses, their participation in non-formal learning occupies them most.

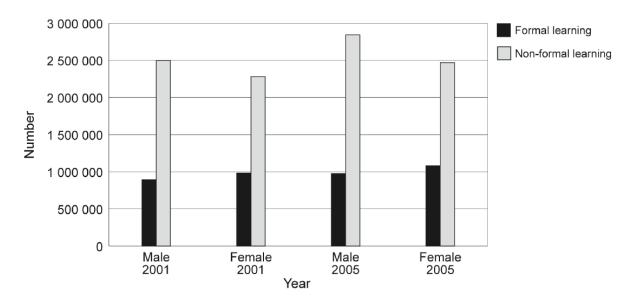


Figure 2.19 Participation in formal learning and non-formal learning, 2001 and 2005 (Source: Australian Bureau of Statistics (2005) Survey of Education and Training, cat.no.6278.0.)

Informal learning

By contrast informal learning is not formally structured and generally, on its own, does not lead to a formal qualification. It is generally acquired through speaking with, listening to, or observing more knowledgeable or skilled individuals (including artists, musicians, actors) either at work or in the community. Special arrangements for informal learning can also be driven by organizations. Job-redesign and job rotation, coaching and mentoring, quality circles, and learning partnerships all enable individuals to engage in informal learning. Informal learning also refers to learning acquired independently through reading books, newspapers and journals, online articles or entries, trial and error strategies, and extended practice.

A renewed interest in informal workplace learning has been fuelled by a variety of changes in the way organizations have restructured and adapted to 'shifting environments and advances in technology and global communication.

Although the aim of informal learning at the time it is being acquired is not to gain formal qualifications, it may be used to acquire full, or components of, formal qualifications in secondary, VET and higher education sectors. There are some cases, generally in the VET sector, where informal learning acquired throughout work and life in general has been recognized through formal recognition of prior learning (RPL) assessments to gain whole qualifications.

Of the three forms of learning it is informal learning, which is the most prevalent, especially for workers. This is because in one way or another almost all workers (including apprentices and trainees, as well as managers and supervisors) are involved in some type of informal

training and learning. The United States Department of Labor estimates that 70% of all learning for adults is acquired informally.

Participation in employer-sponsored informal, non-formal and formal learning

On-the-job learning is the main form of learning that applies to both males and females, and workers of all age groups and education and language backgrounds in Australian companies (Richardson 2004). This is supported by a survey reported in the Ai Group 'World Class Skills' report (The Allen Consulting Group 2006) which notes that the most prevalent types of learning opportunities provided for workers in Australian companies are informal learning experiences, followed by non-formal short courses and in-house training.

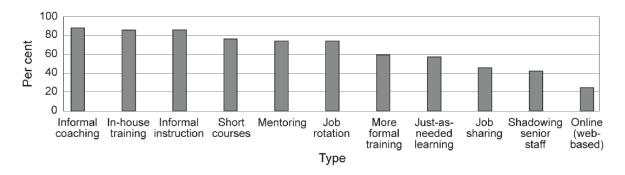


Figure 2.20 Learning experiences for workers in Australian companies, 2005 (Source: Noonan (2007), Skilling the existing workforce: Background research report, p.13.)

Employees in small-sized firms needed to develop the skills, attributes and flexibility to cover for each other when required. This ability was perceived to be best developed through observation, information sharing, questioning, and supervised practice on the job, using the company's own plant and equipment, or through job rotation.

Nevertheless, access to on-the-job training is not uniformly available to all groups of workers. Richardson & Liu (2008) remind us that access to on-the-job training across 58 | Page

industries is restricted for different groups of workers, namely casual workers. Noting that employment growth for 20 to 30-year-olds was mainly in casual work for men, and that earning rewards for formal and informal learning was strongest for men in these age groups, Richardson & Liu warn us about the risk of removing informal pathways to skill development especially for those who are marginalized by low skills and education. Casual employees (generally employed on a long-term basis) had the same access to informal and product-related training as other permanent employees, especially if these came at no cost to employers. Employers generally did not spend money on formal structured training for casual staff.

Blurred boundaries

Although we have separately described the general characteristics of the three forms of learning, there is a blurring of the boundaries between formal, non-formal and informal processes of learning. For example, students can help each other to learn more about the best way to use computer applications (informal learning) so that they can put these to good use in preparing for assignments or examinations (formal learning). Informal learning can also include teaching oneself about any sort of thing through making a conscious decision to learn about a specific skill and then using a variety of strategies to acquire the required information and practicing the required skill. The total hours of employer-sponsored training decreased by 27% for casual workers in comparison with a 15% reduction for permanent employees.

This may include asking friends, family, work colleagues or other experts who already know how to apply a particular skill. The knowledge gained in these ways can then be used in assessments aimed at recognizing prior learning, which can lead to progression through formal courses of study.

Formal training and learning can also happen in spaces associated with informal learning. For example, workplace supervisors can take some time during work time to sit down with students to explain the theory behind a particular technique or process. Such explanations can also help students to complete assignments required for the completion of formal courses.

The skills acquired in non-formal programs can also be used in formal and informal learning. For example, the team work, problem-solving and leadership skills and attributes acquired in personal development programs (like senior levels of girl guides, air cadets, scouts, Duke of Edinburgh Awards) can be used in assessments for components of formal qualifications and informally to help work colleagues and family and friends solve relevant problems in difficult situations.

Although combining formal, non-formal and informal learning strategies makes sense in terms of providing a more coherent and holistic approach to workforce skills development, it is important to understand that the strategies that are most effective are those that fit the particular context of the organization and the particular nature of the skill involved. At times it will make sense to keep these approaches quite separate from each other. For example, when employees are being introduced to a skill or innovation that they have not encountered before it may be better to provide a more structured format with some opportunities for practice in non-formal learning programs away from the job itself. At other times, especially when individuals are applying this to their job, it will make sense to focus on on-the-job (or informal) independent or supported learning. This may include using online interactive methods for learning about applications.

However, skills and knowledge are acquired, they are of limited use if they cannot be used effectively later; that is, if they do not transfer easily to similar or different contexts. The characteristics of effective transfer emphasize the importance of context-specific information and experience, the effectiveness of initial learning, and the ability of individuals to apply what they have learnt to new contexts.

2.17.2 Combining informal, non-formal and formal learning for accelerated completion

A major way to combine learning that happens in informal, non-formal and formal contexts is through recognition pathways. That is, using the prior learning individuals gain through experience in work or in other daily activities (informal learning) or in work-based or community-based structured training programs (non-formal learning), to identify training or learning gaps that need to be addressed to acquire formal qualifications (formal learning). Such approaches are currently being used in programs for addressing national skill shortages in the traditional trades and community services programs. These go under the umbrella term of accelerated apprenticeship or traineeship programs. Combining off-the-job learning with that gained by extended periods in work is also used by professional associations in continuing development programs aimed at increasing the post-graduate qualifications and accreditations of professionals.

2.17.3 Different Training Programmes by BGMEA and BKMEA

	BGMEA Training project						
S.L	Name of Project	Training Partners	Training Duration	Curriculum/ Content	Training Instructor	Remarks	
1	BGMEA-ILO 1 day's Training on COVID-19 Awareness	ILO	1 Day	Learning Hub- ILO	Master trainer from BGMEA		
2	2 day's Training on OSH and infectious disease preparedness and response	ILO	2 Days	Learning Hub- ILO	Master trainer from BGMEA		
3	Labor Relations	ILO	2 Days	Learning Hub- ILO	Master trainer from (DoL)		
4	Training on Collective Bargaining	ILO	1 Day	Learning Hub- ILO	Master trainer from BGMEA		
5	Training on Grievance Handling Procedure	ILO	2 Days	Learning Hub- ILO	Master trainer from BGMEA & Trade Union Representative		
6	BGMEA-EPB Capacity Building Training for Workers-on Oven Machine Operator	EPB	5 Days	Developed by BTEB	Master trainer from BGMEA SDP Section		
7	BGMEA-EPB Capacity Building Training for Workers-on Knit Machine Operator	EPB	5 Days	Developed by BTEB	Master trainer from BGMEA SDP Section		
8	BGMEA-EPB Capacity Building Training for Workers-Sewing Machine Operator	EPB	5 Days	Developed by BTEB	Master trainer from BGMEA SDP Section		
9	BGMEA-EPB Capacity Building Training for Management-Production Planning and Management	EPB	5 Days	Developed by BTEB	Master trainer from BGMEA SDP Section		
10	BGMEA-EPB Capacity Building Training for Management-Quality norms	EPB	5 Days	Developed by BTEB	Master trainer from BGMEA SDP Section		
11	BGMEA-EPB Capacity Building Training for Management-Inventory Management & control	EPB	5 Days	Developed by BTEB	Master trainer from BGMEA SDP Section		
12	BGMEA-BUFT-EPB Post Graduate Diploma Program (PGD) in Garments Business Management	BUFT-EPB-BGMEA	6 Months	Developed by BUTEX	Master trainer from BUFT		
13	BGMEA-BUFT-EPB Post Graduate Diploma Program (PGD) in Industrial Engineering and Manufacturing System	BUFT-EPB-BGMEA	6 Months	Developed by BUTEX	Master trainer from BUFT		
14	BGMEA-BUFT-EPB BGMEA-BUFT-EPB Post Graduate Diploma Program (PGD) in Supply Chain Management	BUFT-EPB-BGMEA	6 Months	Developed by BUTEX	Master trainer from BUFT		
15	BGMEA -SEIP Project (Worker, Mid-level & Up skilling Training)	Ministry of Finance- ADB	1 Month, 2 Months & 3 Months	Developed by BTEB	Master trainer from BGMEA		

Date: 12 January 2022

Approved by A.K.M Mamunur Rashed Joint Secretary BGMEA

_	Operator Training Program (For new entrants at own and outsourced Training Institute)				
SN	Course Name	Duration	Instructors		
1	Sewing Machine Operator (Knit) (Own and Outsourced)	2 Month (240 Hours)	BKMEA & SEIP		
2	Sewing Machine Operator (Woven) (Outsourced)	2 Month (240 Hours)	BKMEA & SEIP		
3	Computerized Sweater Machine (Own)	2 Month (240 Hours)	BKMEA & SEIP		
Up S	Skilling Management Training Program				
SN	Course Name	Duration	Instructors		
1	Mid-Level Management (Factory based)	1.5 month (60 Hours)	BKMEA & SEIP		
2	Customs Bond & Documentation	1.5 month (60 Hours)	BKMEA & SEIP		

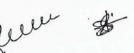
Up-	Up- Skilling (Operator Training Program) (Factory Based)					
SN	Course Name	Duration	Instructors			
1	Garments Quality Management for Worker	1.5 Month (60 Hours)	BKMEA & SEIP			
2	Social Compliance norms for Worker	1.5 Month (60 Hours)	BKMEA & SEIP			

Others Short time Training program of BKMEA:

SL	Training Title	Training Duration	Instructors
01	Covid-19 Awareness	2 Day (6 Hours)	BKMEA
02	OSH	2 Days (10 Hours)	BKMEA
03	Best HR Practices	2 Days(10 Hours)	BKMEA
04	Supervisory Skills	2 Days (10 Hours)	BKMEA, BEF
05	Collective Bargaining	2 Days (10 Hours)	BKMEA, WRC
06	Grievance Handling	2 Days (10 Hours)	BKMEA, WRC, BEF
	Procedures		

Gra	duate Training Program (for new entrants at own Institutes)		
1	Apparel Merchandising		
2	Social Compliance & Human Resource Management		
3	Safety Management for RMG Industry		
4	Industrial Engineering and Lean Manufacturing		
5	Production Planning & Supply Chain Management		
Op	erator Training Program (For new entrants at own and outsourced training institutes)		
6	Sewing Machine Operation (Knit) (Own and Outsourced)		
7	Sewing Machine Operation (Woven) (Outsourced)		
8	Computerized Sweater Machine Operation (Own)		
Up-	skilling (Management Training Program) (Factory based and Own Training Institutes)		
9	Mid-Level Management (Factory based)		
10	Customs Bond & Documentation (Own)		
Up-	skilling (Operator Training Program) (Factory based)		
11	Garments Quality Management for Worker		
12	Social Compliance Norms for Worker		

SN	Course Name	Duration (Months/ Hours)
Grad	duate Training Program (for new entrants at the o	wn Training Institutes)
1	Apparel Merchandising	Total Duration: 6 Months (500 Hours)
2	Social Compliance & Human Resource Management	Term-1: Classroom Training: 4 Months (180
3	Safety Management for RMG Industry	hours) (3 hours a day, 4 days in a week, total 60
4	Industrial Engineering and Lean Manufacturing	classes to be held at the own institutes Including
5	Production Planning & Supply Chain Management	1 Factory Visit) Term-2: Internship: 2 Months (320 hours) (8 hours a day, 5 days in a week, total 40 internship days to be held at industry)
Ope	rator Training Program (For new entrants at the	own and outsourced Training Institutes)
6.A	Sewing Machine Operation (Knit) (Own)	
6.B	Sewing Machine Operation (Knit) (Outsourced)	Duration: 2 Months (240 Hours)
7	Sewing Machine Operation (Woven) (Outsourced)	Total Classes: 48 (5 Hours per Class)
8	Computerized Sweater Machine Operation (Own)	
Up-s	killing (Management Training Program) (Factory	based and own Training Institutes)
9	Mid-Level Management (Factory based)	Duration: 1.5 Months (60 Hours)
10	Customs Bond & Documentation (Own)	Total Classes: 15 (4 Hours per Class)
Up-s	killing (Operator Training Program) (Factory based	sed)
11	Garments Quality Management for Worker	Duration: 1.5 Months (60 Hours)
12	Social Compliance Norms for Worker	Total Classes: 15 (4 Hours per Class)



6.3 Training Delivery (Daily Contact Hours, share of Theory & Practical Sessions)

BKMEA will maintain the practical and theoretical ratio outlined in the competency standards during training implementation process. Sequence of learning will also be followed when training is delivered. The detailed course-wise training allocation plan is shown below:

Table 12: Daily Contact hours with the allocation of theory and practical

Course Name	Ratio of Practical to Theoretical	Daily Contact Hour		
Graduate Training Program (for new entrants	at the own Train	ing Institutes)		
Apparel Merchandising		Total Duration: 6 Months (500 Hours)		
Social Compliance & Human Resource Management		Term-1: Classroom Training: 4 Months (180 hours) (3 hours a day, 4 days in a		
3. Safety Management for RMG Industry		week, total 60 classes to be held at the		
4. Industrial Engineering and Lean Manufacturing	Theory 35%,	own institutes Including 1 Factory Visit)		
5. Production Planning & Supply Chain Management	Practical 65%	Term-2: Internship: 2 Months (320 hours) (8 hours a day, 5 days in a week, total 40 internship days to be held at industry)		
Operator Training Program (For new entrants	at the own and o	utsourced Training Institutes)		
6.A Sewing Machine Operation (Knit) (Own)		114		
6.B Sewing Machine Operation (Knit) (Outsourced)	Theory 20%,	Duration: 2 Months (240 Hours) (5 hours a day, 6 days a Week)		
7. Sewing Machine Operation (Woven) (Outsourced)	Practical 80%			
8. Computerized Sweater Machine Operation (Own)				
Up-skilling (Management Training Program) (l	Factory based and	d own Training Institutes)		
9. Mid-Level Management (Factory based)	Theory 70%,	Duration: 1.5 Months		
10. Customs Bond & Documentation (Own)	Practical 30%	4 hours a day, 3 days in a Week		
Up-skilling (Operator Training Program) (Fact	ory based)			
11. Garments Quality Management for Worker	Theory 70%,	Duration: 1.5 Months		
12. Social Compliance Norms for Worker	Practical 30%	4 hours a day, 3 days a Week		

6.4 Selection of Training Centers

A total of 47 training institutes/centers/ factory-based training centers have been selected for Tranche-3 program based on their performances in Tranche-1, Tranche-2 and Tranche-2 (Additional) program. Before commencement of training, MoU between BKMEA and training centers/industry will be signed. Courses run in T1, T2 and T2 Additional to be offered in T3, status of available equipment, trainers and training environment are shown in Table 10.

Table 13: Training Institutes/ Centers (with capacity matrix) selected for Tranche-3

SN	Name of the Training Center	Courses run up to November 2020 (T1, T2 & Add. T2)	Courses to be offered in T3	Availability of Equipment/raw materials (T-3)	Availability of Trainers (T-3)	Training Environment
1	Institute of Apparel Research and Technology, Dhaka (Own Institute)	1.Apparel Merchandising (NE) 2.Social Compliance & Human Resource Management (NE) 3.Industrial Fire Safety Management (NE) 4.Industrial Engineering & Lean Manufacturing (NE) 5.Production Planning	Apparel Merchandising Social Compliance & Human Resource Management Safety Management for RMG Industry Industrial Engineering and Lean Manufacturing Production Planning & Supply Chain Management Customs Bond & Documentation	This institute has sufficient training facility to introduce the new two courses like Customs Bond & Documentation Market Analysis &	Trainers are available with sufficient experience. Two trainers will be engaged	Training environment is congenial to run courses.

Zeele



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2.17.4 Skill development through TVET

TEVT establishes a common understanding of skills required for specific occupations, in particular the need to match the requirements of the labour market through the links between TVET providers and industry. These are usually state controlled but involve employer-led organizations that monitor training and qualifications in specific economic sectors. The overarching objectives of SSCs are:

- 1. To reduce skills gaps and shortages and to provide advice on skills needed to the TVET system
- 2. To be involved in the development of standards
- 3. To improve productivity
- 4. To boost the skills of their sector workforces
- 5. To improve learning supply

2.18 Contribution of skills on performance and productivity

To increase productivity and efficiency, from both labour to management, it has been revealed that increase, qualified personnel are needed to make changes [16]. Yet skills gaps in management, technical and fashion skills—such as pattern masters, product developers, designers, textile engineers, production managers or merchandising and marketing professionals—have been noted across South and South-East Asia [16]. Weak capability of midlevel managers results in poor engineering and a poor understanding of optimal workflow. Managers are often unaware that proper implementation of controls, planning and engineering can have a strong, positive effect on productivity and the efficiency of operations. Middle management requires significant on-the-job and on-line training to understand management techniques (USAID 2005). The USAID 2005 explains that the most effective and lowest-cost strategy for raising labour productivity and quality in Cambodia's garment factories is training to address Cambodia's weaknesses in professional development, production controls and engineering, and organization of work.

2.19 Key Issues related to the training

According to the World Bank, 2017, the following key issues are required for training.

• Access and completion:

Across the world, investments in education and skills development—from preschool through post-secondary education to vocational training—have high returns. According to this view, many students who manage to enroll in education or training programs do not complete their studies and miss out on obtaining formal qualifications, which can dramatically reduce the return on the educational investments in terms of lifetime earning potential.

• Quality:

Many young people attend schools without acquiring basic literacy skills, leaving them unable to compete in the job market. For those who access technical and vocational training at secondary and post-secondary levels, returns can vary substantially by specialization and institution. In particular, technical and vocational training (TVET) systems in many countries face challenges related to quality assurance, resulting in perceptions of the vocational track being a second-best option compared to general secondary or tertiary education.

Relevance:

Technical and vocational education and training —which can last anywhere from six months to three years— can give young people, especially women, the skills to compete for better paying jobs. Nevertheless, more needs to be done in terms of engaging local employers to ensure that the curriculum and delivery of these programs responds to labor market needs.

• Efficiency:

Challenges related to governance, financing, and quality assurance also impact the efficiency of skills development programs. The resulting unnecessarily high costs can limit opportunities for disadvantaged youth and adults to access these programs.

2.20 Technology and skill situation in RMG Sector of Bangladesh

Islam, S. and Islam, T. N. (2018) pointed out that certain skills of domestic managers are quite poor like English proficiency, presentation skills, leadership skills, decision making skills. The RMG and textile firms send their employees to Germany, China, UK, USA, Japan and other countries for training but they encounter barriers like visa issues, breach of contract by the employees etc. in this attempt. Government, RMG and textile industries and various

trade bodies, educational and training institutions should step up to organize training, develop skill-oriented curriculum to eliminate the reasons of hiring expats Pye (2002) mentioned that lack of funding, high cost of training, government red tape, unwillingness of employees, high employee turnover is some of the barriers to reduce the skill gaps in the industry. Furthermore, Morris and Reed (2008) also pinpointed lack of training, absence of suitable courses, unwillingness of staffs as obstructions to maintaining a talented workforce. Educators said that they do not have the information that is required to devise better curricula to make the graduates employable indicating the fact that the young folks are not being prepared with the necessary skills and this is a critical hindrance to the growth of developed and particularly for developing countries which induced employers to seek labor from abroad.

2.21 Foreign Employees in the RMG Sector of Bangladesh

The study revealed that the Bangladesh garment industry is popular for having cheap labor, but now it is adopting automation to speed up productivity. Most of the RMG factories installed digital technologies and machinery and, each year, 100 new factories adopt modernization in our country. At present, 47% of large-scale factories and 25% of medium-scale factories of the Bangladesh Ready Made Garment sector use the advanced technology of automation (BGMEA, 2020; CPD, 2017). In addition to this, BGMEA is going to launch a 'Digital Wallet' system for the wage digitization of RMG workers (BGMEA, 2020). However, small-scale enterprises of the industry can't equip automation due to poor capital and lack of knowledge of digital technologies. One respondent from experts remarked that 'Bangladesh RMG industry includes few international standard factories who produce and export high-quality products by using the technology of 4IR. But the other factories are lagging and setting up automated factories is challenging and costly to them'.

Due to the lack of skilled manpower, the RMG industry of Bangladesh employs the greatest number of foreign skilled manpower particularly from India and Sri-Lanka (Mian, 2020). About 16% of RMG industries employ foreign workers and each of the employees has to be salaried on average 500,000 to 700,000 Tk monthly which made up a total of \$500 crore annually (BIDA, 2020; CPD, 2018). In line with this issue, the interviews pointed out that the foreigners are taking away a huge amount of our hard-earned remittance and our dependence on the foreign workforce is prohibiting the building our own skilled professionals.

2.22 Covid-19 and Trade war opportunities for the RMG sector

A Conversation of a Chinese RMG Supplier (on Google), Sulei, on May 23, 2021

The question was: Where can I find suppliers of clothing from China, at wholesale price?

"Actually, I am a supplier of clothing in Jiangsu, China and the company I am working for has been working for this industry for tens of years. In the past, we usually made clothes for some customers from Japan and Europe, and most of these customers are trading partners with us which has many years of cooperation experience. They used to come our company in China to make sure the clothing is just what they want.

However, in 2020 and 2021, due to the covid-19, it has been more and harder for them to come to China and therefore, which means it is hard for us to find new customers. Our life has been hard in the past one year. However, I'm still proud of my company. With the large-scale mechanized production, we can even produce 10 thousand of shirts in one week with really low cost. Such as the men's shirt below, we can make it with only \$4. It is quite amazing right?"

It is true that the fourth industrial revolution is creating profound opportunities for the Bangladesh RMG industry to enter into the extended global markets. The Bangladeshi RMG 70 | Page

has huge opportunities to find new markets and improve the business in the world market. Many scholars thought that the trade war between USA-China will create a great opportunity to grab the market for the Bangladesh RMG (Mian, 2020). Our industries can increase production at low cost and due time through the use of automation in the garment industries. This will attract international buyers, which will give a better position to the RMG sector compared to the other competitors.

However, the COVID-19 pandemic has created an unprecedented crisis for the RMG sector of our country. Order cancellation and destruction in exports has decreased the export volume up to 84 percent till April 2020 (Mian, 2020). A high-level strategic plan based on technological advancement can help to fight against these challenges. The automation will promote innovative and designed strategies for the industry. The Bangladesh government has already taken strategies to occupy the benefits of 4IR in the trade of readymade garments.

2.23 Forward and backward linkage for the RMG sector in Bangladesh

Supporting industries enable the main industry to obtain inputs efficiently and advantageously. In Bangladesh, local textile factories have the capability to fulfill the 90 percent demand for knitted yarn of 124 garments (BTMA, 2019). An approximate 1,476 textile-related factories and 1,683 trims and accessories-producing enterprises have established a strong base for this sector (BGAPMEA, 2017). Research has identified the growth of backward ties as a major strength for the advancement of the knitwear sector. One of the KIIs expressed, "Bangladesh has made remarkable progress in improving strong backward linkages in the knitted clothing sector" (Personal communication, Sep 10, 2020).

One of the KIIs opined, "Having capabilities in knitted sectors, it still lagging in assisting fabrics and woven industries" (Personal communication, Sep 12, 2020). Secondary

information also supports this statement. Bangladesh RMG sectors are dependent on foreign supply importing 90% woven and 60% fabrics from abroad [17].

Besides primitive industries, the forward linkage is also vital for the growth of RMG sectors in Bangladesh. Local demand for RMG items is very low, as people tend to buy low-cost fabrics and custom-made clothing. Therefore, the RMG sector is based entirely on international market demand for future growth and sustainable development. Research has shown that there are huge potentials for domestic consumer demand due to the quickest growing middle-class population in Bangladesh. According to the World Bank (2016), Bangladesh's middle-income population grew to 20% in 2015 compared to just 9% in 1992. So, the RMG industry should target this market and aim to boost demand from local people and then accelerate exports.

2.24 Overall Scenario of RMG Sector of Bangladesh based on the BGMEA President Column

The year 2021 is a significant one for Bangladesh as the country is celebrating its 50th year of independence. Our achievement as a nation in these years is remarkable and noteworthy. Bangladesh's extraordinary development surprised the world. Our advancements in socioeconomic development, human development indicators (HDI), and Millennium Development Goals (MDGs) have been widely praised across the globe.

Despite all the challenges and limitations, we were able to consistently maintain a GDP growth of more than 8 percent in the last few years, before Covid-19 hit the world. Although Covid-19's impact on the economy and growth is unavoidable, Bangladesh is doing better than any other Asian nation as far as the World Bank's economic growth projection is concerned. However, as laid out in the eighth Five-Year Plan, since the growth in the

upcoming days will be driven by the industrial sector, there is no alternative but to focus on "Investment" and "Employment" in order to achieve the GDP growth target of 8.51 percent. In its 40-year journey, the garments industry has consistently played a significant role in the country's economic development through its contribution to foreign currency earnings, job creation, women empowerment and poverty alleviation, which is driving Bangladesh toward a prosperous nation.

The sector generates employment for four million people, around 60 percent of who are women. But the upsetting factor is that even though we are the second largest garments exporter in the world right now, our export basket has always been concentrated and unexplored in terms of product, fiber, and market destination.

About 73 percent of our total exports are concentrated on five basic items. The prices of 80 percent of these exports are as high as \$15 per kilogram. Around 74.14 percent of our exports are concentrated on cotton while 80.67 percent of these shipments go to markets in the EU and North America. After the Multi Fibre Arrangement quota phase out, our manufacturers mostly focused on a volume driven growth strategy and as a result, the export basket has been limited to basic items. Although we have advanced a lot in safety and sustainability, Bangladesh's garment industry lacks diversification. To be competitive in the race of this fast fashion arena, we need to flag out market and product diversification as an immediate need. At this stage, while celebrating our impending graduation from the UN's list of least developed countries (LDCs) thanks to hard work and dedication, our strategic priority should concentrate on sustaining this growth momentum powered by innovation and diversification. Especially with Covid-19 exposing the vulnerabilities of over dependence has made the issue of market diversification more crucial than ever. Up till now, diversification in export items and export destinations has always been very narrow in case of the local garments industry.

Over the last few years, Bangladesh's apparel has started to become more diversified and tremendous progress has been achieved in terms of new market exploration.

The percentage of Bangladesh's apparel exports to non-traditional markets during fiscal 2008-09 was only 6.87 percent while it reached 16.16 percent in fiscal 2020-21, when the country's export revenue hit \$5.08 billion. Such growth in non-traditional markets was possible thanks to various policy support and initiatives taken by the government and private industry.

The Bangladesh Garment Manufacturers and Exporters Association (BGMEA) initiated several scoping missions to Brazil, Mexico and Chile to enter Latin American countries. There were no Bangladesh embassies in any of these countries before 2011, nor were there any embassies of Latin American countries in Bangladesh at the time either. The BGMEA organized several trade missions to Latin America in 2010 and 2011, and submitted reports to the government, requesting it open missions there. The government then opened an embassy in Brazil, which also opened its own embassy in Dhaka. So, the visa process and travel to the region has become easier. The BGMEA also organized trade missions to China, Japan and Russia. We have to re-launch those initiatives to keep the momentum of our export to new markets. Major markets such as Australia, Japan, Norway, New Zealand, Switzerland, South Korea, Russia, India and even middle-eastern countries like the UAE, Qatar, Kuwait, Kingdom of Saudi Arabia and Bahrain should also be considered as they are among the markets with high potential that remain largely untapped.

We need to organize more promotional campaigns and road shows to introduce "made in Bangladesh" products across the globe, as well as draw more foreign investment for our textiles and high-end fashion industry. And throughout the journey of diversification, commercial diplomacy will be vital for us to explore new markets since tariff is a major barrier that remains in almost all potential markets. Besides, we need to keep in mind that there are potentials to further penetrate existing markets in the EU and US.

A thorough market research to explore product and sourcing mix of the brands who are currently sourcing from Bangladesh, as well as those who are sourcing on limited scale will be helpful in this regard. There are also a huge number of brands in the EU and US that are still not sourcing from Bangladesh due to the product categories or volume they require that can also be tapped for huge additional growth in those markets. Since Bangladesh has graduated to a middle-income country, there will be inevitable changes in market access. While using the special dispensation of LDCs for the few remaining years, we must not lose sight of a long-term strategy of deepening the country's competitiveness as it prepares to graduate from LDC status.

We need to prepare a comprehensive National Export Strategy and align our trade policies accordingly to promote investments. In business and trade, backward and forward linkages play a vital role. A tactical investment campaign is needed to develop the capacity of these industry linkages, keeping in mind the requirement of double transformation in line with the Global Value Chain (GVC). At the same time, we should also prepare to follow the new global trend and continue seeking market access under the various bilateral and regional trade, and investment arrangements. Bangladesh is yet to have a fully operational bilateral free trade agreement (FTA) despite having signed a few preferential trade agreements and regional agreements like SAFTA, APTA, BIMSTEC and TPS-OIC. The government has received proposals for potential bilateral trade agreements from several countries including China, Malaysia, Singapore and Thailand in recent years. Besides, the government is also working on free trade and economic partnership agreements with countries like India, Sri Lanka, Indonesia, and so on.

In terms of increasing the share of our garment exports to these regions and building cooperation in technological transfer as well as attracting more Foreign Direct Investment (FDI), these regions can be a great hub for Bangladesh. Bangladesh is now passing through a

golden age in terms of population dividend. About 65 percent of our people are within 18 to 40 years of age. We have an active population of around six million people in Bangladesh and every year around 2 million more join the labor force.

A country usually does not possess such a young and vibrant population even in a century. We have to prioritize strategy for harnessing benefits from this young workforce by making them up skilled and tech-savvy with proper technical and market driven education programs. The country's prosperity and economic growth has evolved through the contribution of manufacturing sectors, especially garments. The stability of Bangladesh's economy is largely dependent on the apparel industry and to secure this sector, we need a planned strategy for future investment. The BGMEA is continuously working on areas regarding market access, backward linkage industries, and suggested the government should develop a virtual marketplace for local garment products.

The government's policy support in areas such as education and financial policies, free trade and regional trade agreements, and existing trade barriers such tariff and non-tariff barriers related to the garment industry is vital and crucial. Only with these supports will we be able to upgrade the sector, which has been acting as the pillar of Bangladesh's economy for a long time. (Source: Daily Star, On September 21, 2021: Market diversification key to RMG growth, the author is president of Bangladesh Garment Manufacturers and Exporters Association (BGMEA)).

CHAPTER 3

Methodology

3.1 Introduction

The major aim of this work is to assess the progress and find out future roadmap for the skill development of youth with the analysis of the ongoing training programmes of the readymade garment sector of Bangladesh. With this view, under this research a survey has been conducted on training of workers working at different levels in the RMG industry of Bangladesh. The developed questionnaire comprised of two sections these are: introductory questions about the respondents and the second part is related with the information about training and its impact in their service life.

3.2 Questionnaire

The first section is subdivided into five parts and the information are related with the respondents name, age, own district, name and address of garment factory and in what position they are working? Likewise, the second section is also subdivided into ten sub questions those are about the respondents training information. For instance,

- (i) Have the respondents received any training related to this job before entering this job?
- (ii) If they have any training then what training did they receive mentioning the name and duration of those training?
- (iii) Respondents are asked to mention the name and address / location of the training provider.

- (iv) What kind of training organization is it? Public / private?
- (v) Then they have asked about the information related with their in-service training like whether they have received any training in the workplace after entering in their job?
- (vi) Is the training a special training or a beginner training?
- (vii) What is the duration of special / individual training or on-the-job training (on the job)?
- (viii) Is there any problem in performing work without taking training?
- (ix) What kind of problem have you faced due to lack of training? Like the task is difficult to understand/that task cannot be performed properly/Lack of skills.
- (x) Do the respondents feel any need to take training?

The real format of the questionnaire on which the respondents respond was in Bengali language so that they can easily understand the tasks and also answer with correct understating. Herewith, the real format of the questionnaire is shown below:

তৈরী পোশাক শিল্পে (আরএমজি) বিভিন্ন পর্যায়ে কর্মরত শ্রমিকদের প্রশিক্ষণ গ্রহণ সংক্রান্ত সমীক্ষা

পরিচিতি মূলক প্রশ্নঃ

021	নাম	:	
०२।	বয়স	:	
00 I	নিজ জেলা	:	
081	গার্মেন্টস ফ্যাক্টরির নাম	:	

	ও ঠিকানা		
o& 	কি পজিশনে কাজ করেন	:	

প্রশিক্ষণ সংক্রন্ত প্রশ্নঃ

0)	এই চাকরিতে প্রবেশের পূর্বে আপনি এই চাকরি সংক্রান্ত কোন প্রশিক্ষণ গ্রহণ করেছেন কি?						
I	হাঁ	ता					
<i>०</i> २ ।	কি প্রশিক্ষণ গ্রহণ করেছেন? প্রশিক্ষণের নাম ও মেয়াদ উল্লেখ করুন।						
୦୦ 	প্রশিক্ষণ প্রদানকারী প্রতিষ্ঠানের নাম ও ঠিকানা/অবস্থান উল্লেখ করুন।						
08 I	প্রতিষ্ঠানটি কি ধরণের? সরকারি / বেসরকারি						
-	হাঁ	ता					
0 -	বর্তমান চাকরিতে প্রবেশের পরে কি আপনি কর্মস্থলে কোন প্রশিক্ষণ গ্রহণ করেছেন?						
•	হাঁ	ता					
৬ -	প্রশিক্ষণটি কি বিশেষ কোন প্রশিক্ষণ না শিক্ষা	নবিস প্রশিক্ষণ (on the job)?					
•	(ক) বিশেষ/পৃথক প্রশিক্ষণ	(খ) শিক্ষানবিস প্রশিক্ষণ (on the job)					
091	বিশেষ/পৃথক প্রশিক্ষণ বা শিক্ষানবিস প্রশিক্ষণ (on the job)-এর মেয়াদ কত দিন?						
оъ 1	প্রশিক্ষণ গ্রহণ ব্যতিরেকে কার্য সম্পাদনে কোন সমস্যা হয় কি না?						
ı	হাঁ	ता					
- ان	প্রশিক্ষণ গ্রহণ ব্যতিরেকে কাজ করতে কি ধরণের সমস্যা হয়?						
ı	• কাজটি বুঝতে সমস্যা হয়						

	 কাজটি সঠিকভাবে সম্পাদন করা যায় না 				
	■ দক্ষতার অভাব হয়				
20	প্রশিক্ষণ গ্রহণের কোন প্রয়োজনীয়তা অনুভব করে	বন কি না?			
'	হাঁ না				

3.3 Subjects

3.3.1 Identity

The research samples were RMG workers (N=50) in Bangladesh, aged 19 years and the maximum is 45 years and their average age is 27.06 years. The participants had been selected from five factories at Turag, Gazipur district of Bangladesh. To select the respondents, chain referral technique had been used with the help of manager (in charge of the factory workers), Law Officer of Legal Department and counselors of the respective factories, as the managers and law officers knew who were involved with what qualifications and skills. The information related to the subjects will be shown in Figure 4.1 in the next section.

3.3.2 Sample Selection Procedures

The selection of the respondents was done based on availability i.e., convenience of sampling. Primarily, 60 respondents joined the meeting to acquire some information about the skills and service such as demographic information, the length, and benefits, willingly to escape, brief description and risk to participate in the study. Afterwards, subjects were asked their willingness to join the study. Three subjects refused to participate as they were not interested to continue the study and another two informed that they were not fit in that time so all of them were excluded. Finally, total 50 (fifty) respondents agreed to participate in this study.

3.4 Consent Letter

Informed consent letter was distributed among the participants. All the selected subjects fulfilled the inclusion criteria, signed and then back the consent forms. The consent letter described the purpose, benefits and risk in participating and the options to withdraw from the study. It is also stated that the data got from the participants should be confidential and the participants can know the results of the study if they are interested.

CHAPTER 4

Result and Discussion

4.1 Introduction

This chapter is started with the analysis of primary data collected from the respondents through questionnaire. Basically, this study was performed with the analysis of measuring the Age of each respondent, percentage of respondents who took training (any type) before joining the job, duration of training and the percentage of respondents who received the duration of training before joining the job, percentage of respondents took training after joining the job, type of in service training, percentage of respondents faced problem due to lack of training in the beginning of the job. The obtained results are interrelated with the current perspectives of the growth of global RMG sector, which are functional with export earning of the country.

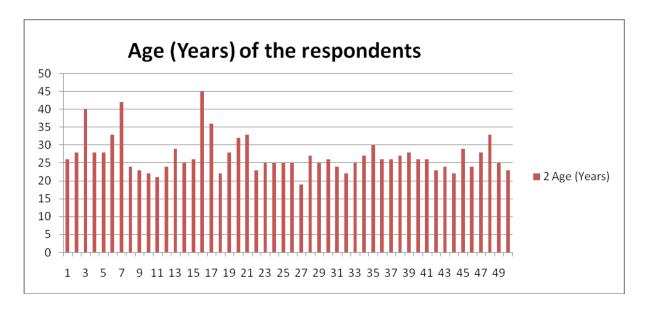


Figure 1: Age of each respondent

Figure 1 depicts the age of each individual respondent, where it is clear that the minimum age of the respondent is 19 years and the maximum is 45 years. Most of the respondents are under the age group of 25 to 30 years and their average age is 27.06 years.

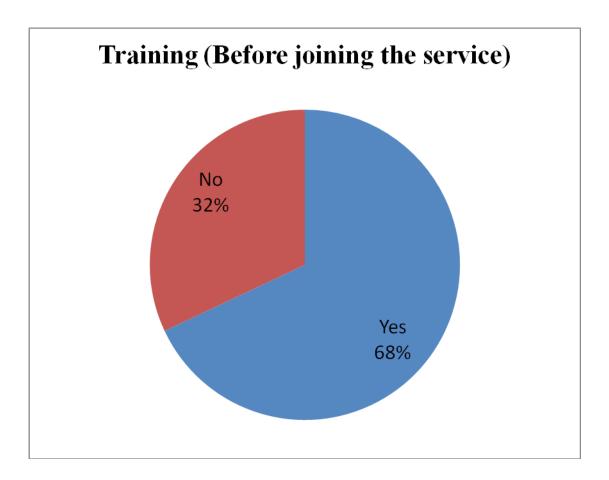


Figure 2: Percentage of respondents who received training (any type) before joining the job

Figure 2 reveals the percentage of respondents who received training (any type) before joining the job, where it is observed that 68% of the respondents received any kind of training before joining the job. This data indicates that at least two-third workers were planning to prepare themselves for RMG sector and with this view they took part in the training. On the other hand, it is much unexpected that around one-third of the respondents started their working-life in this sector without any prior knowledge and definitely with less productivity,

which was not comparable with the trained workers at the same time. Not only that they were also looser and earned less salary compare with the salary of trained workers who were joined with them.

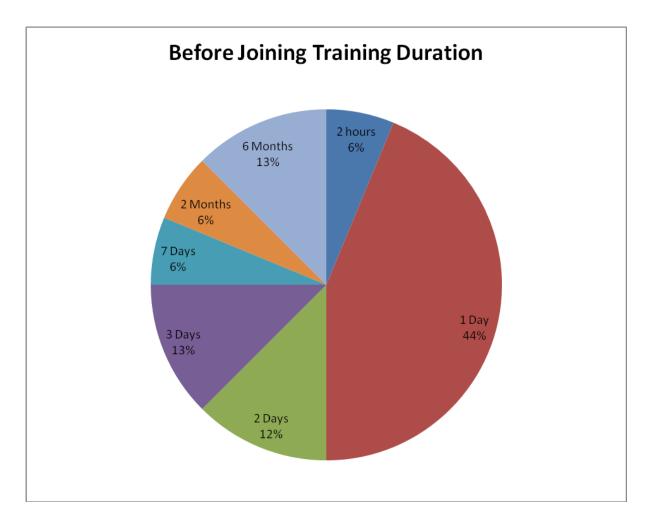


Figure 3: Duration of training and the percentage of respondents who took that much duration of training before joining the job

In the earlier section it is observed that 68% (as shown in Figure 2), of the respondents took any kind of training before joining the job in RMG sector and among the trained respondents the details duration of training is showing in this section. Figure 3 reveals the duration of training and the percentage of respondents who took different durations of training before joining the job. This data indicates that the training duration lays for a wide range like 2 hours to 6 months. Specifically, under this long-range of training duration 7 slots are there; those 84 | P a g e

are 2 hours, 1 day, 2 days, 3 days, 7 days, 2 months and 6 months. Among these durations most of the populations (44%) preferred day long slot for their training and 13% of the respondents choose both of the slots 3 days and 6 months and 12% of the respondents liked for 2 days and 6% of the respondents preferred the largest duration 6 months slot. It is very promising that two-third of the workers are going in the RMG sector with training However, the achieved training duration by most of the workers is not enough to get better productivity from them. In this study it is clear that most of trained workers (44%) took only day long training However, experts of this sector think that this duration will be logical if it is at least a week to a month for greatest number of workers then the sector might get huge productivity from the existing workforce as well as can reduce the lead time.

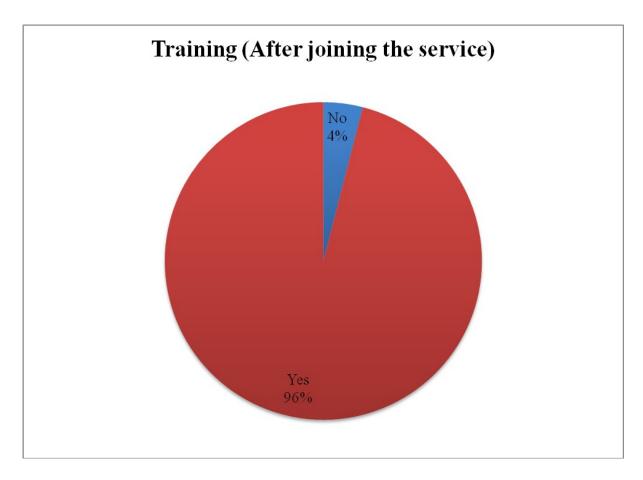


Figure 4: Percentage of respondents took training after joining the job

In Figure 2, it is reported that 32% of the respondents did not take training before joining the job in RMG sector and that large part of untrained RMG manpower's should involve under some training of this sector. Figure 4 exhibits the percentage of respondents who took training after joining the job. From this figure it is clear that 96% of the respondents came under training after joining the job though they were not aware about the working atmosphere of this sector. Such data is definitely promising for the growth of the sector as well as the workers of such technical, export oriented and growing industry of the country. However, it is a matter of fact that how the involved workforces continuously improve their skills and productivity with specialized training.

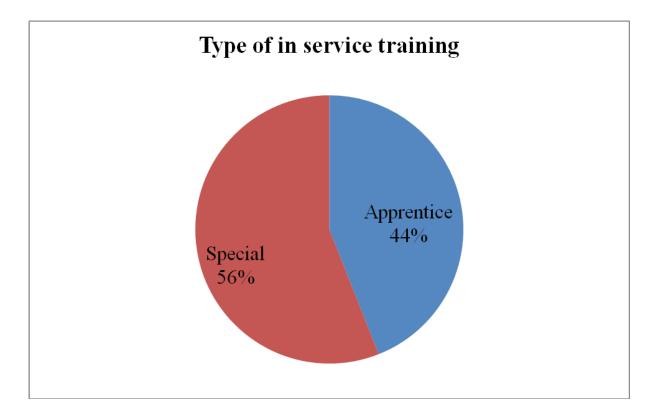


Figure 5: Type of in-service training

Figure 5 represents the type of in-service training of the workers involved in RMG sector who are the respondents of this study. The pie chart of Figure 5 reveals that most of the respondents (56%) took different categories of special training to improve their professional

skills and rest of the respondents (44%) took apprentices to introduce themselves with the profession. This finding is coincident with the previous results as it was shown in Figure 2 that two-third of the respondents were trained at the time of joining in the job so logically, after joining the sector when they got any scope of further training, they were considered for special training to improve their professional skills through specialized training. At the same time, recalling the finding as shown in Figure 2 that one-third of the respondents were not trained staff and they were considered for training after joining the job.

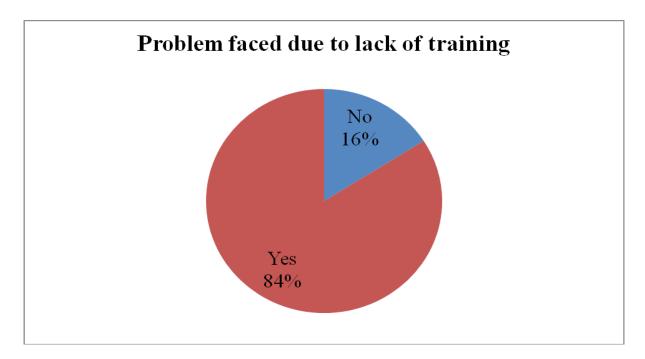


Figure 6: Percentage of respondents faced problem due to lack of training in the beginning of the job

Figure 6 reveals the percentage of respondents who faced problem due to lack of training in the beginning of the job. To make such graph the considered respondents are non-trained man powers as shown in Figure 2 where they are one-third or 32% category. After asking the question whether they faced or not any problem due to no training in the beginning of the job most of them (84%) answered 'Yes' that they faced problem. Such answer from the respondent is congruent with the fact that the sector is so technical and the workers should 87 | Page

familiar with the machinery and ingredients with them they have to deal but they were totally out of that world and so naturally they said 'Yes'.

With the connection of the above findings it is important to know about what sorts of problem faced by the respondents during the starting of their work. To reveal such facts the respondents were asked to disclose the category of problem specifically due to lack oftraining before joining the job. The response of the respondents is shown in Figure 7 which illustrates the types of problem faced due to lack of training at the beginning of the job. From this graph it is observed that 46% of the respondents replied that they 'couldn't perform the job' properly, 30% of them informed that they had lack of skills and rest of 24% informed that they had understanding problem. This finding is consistent with the previous findings like Figure 2 and Figure 6.

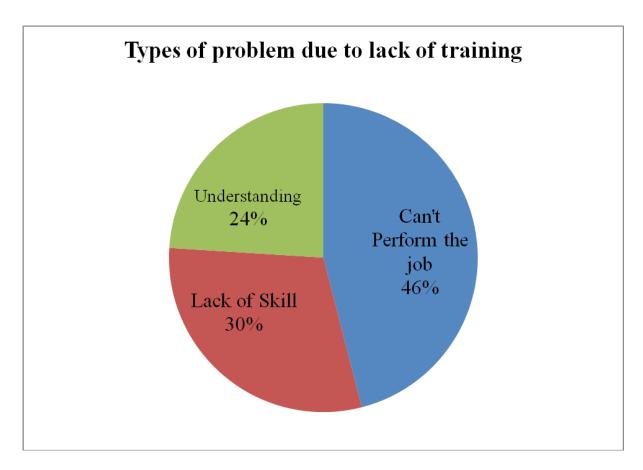


Figure 7: Types of problem faced due to lack of training in the beginning of the job

CHAPTER 5

Conclusion and Recommendation

The data and literature collected for this research provide a clear idea of many important aspects of the competitive readymade garment industry. In this regard, it can be said that China, the world's largest exporter of readymade garments is slowly losing its export pace; on the contrary Bangladesh is gaining as the degree of its export day by day. It is noteworthy that in the case of China, the declining trend in export earnings from this sector is not a matter of concern for them at all, as its contribution in the Chinese economy is not very significant which is around 6 percent only. On the other side of the coin, even after increasing the trend of export earnings from this sector, it is definitely a matter of serious concern for Bangladesh. The reason behind this fact is that the contribution for RMG sector export earnings of Bangladesh is 83 percent. Therefore, it is easily conceivable that if any kind of unintended disruption occurs, the economy of Bangladesh will be shaken off. Therefore, it is a valuable question whether proper attention is being paid to all the elements of this sector in order to continue the increasing trend of export growth which is linked to the socio-economic development of the country as well as to retain a sustainable condition of the emerging economy of Bangladesh. With this view the title of this study is selected and the findings of this study will answer such dubious questions which came into the mind of the researchers. As RMG is a vital sector for the socio-economic development of the country, it should be verified throughout the study that the management of this sector for continuous export earnings will be increased by improving the skills of the garment workers through need-based training.

1. Therefore, by analyzing the open literatures and the preliminary data collected in this study, it can be said that the sector is running without adequate training for the workers. One of the proofs of this observation is that so far most of the workers join this sector without any prior training. Even after joining this sector in-service training opportunities are very limited. However, the scenario of other industrially developed countries like Australia shows that there is an example of substantial increase in the opportunities for proper training of workers as about 80 percent. However, the data collected from the workers engaged in the garment industry of Bangladesh shows that only 68 percent of the workers received training before joining the job of which 44 percent received only day long training and after joining almost half of them are taking apprentice training resulting 84% of the workers informed about facing problem due to inadequate training. Thus, the existing training scenario in RMG sector is not satisfactory. At the same time, there is a lack of coordination among the organizations engaged in providing training to the workers. Sometimes BGMEA conducts a training (Training of Sewing Machine Operators (Oven)) for a period of five days but BKMEA conducts the same training for a period of 60 days. As a result, trainees are being misguided that they have training experience on the same subject but in real sense there is a wide range of differences in skills especially the productivity of the trainees.

Possible Recommendation 1.1

National Training Institutions for Garments Employee

The authors of this study suggest that government should establish a training institution in the name like National Training Institutions for Garments Employee (NTIGE) with a sole authority and uniform curriculum. There will be an authority in

the name of Authority of National Training Institutions for Garments Employee (ANTIGE) and the members of this authority will be the representatives from the concern ministries, A2i, EPB, BEPZA, BUTEX, BTEB, BGMEA, BKMEA, successful RMG exporters, etc. ANTIGE will develop a list of training programs suppose Training Program -1(TP#1) to TP#20 with standard curriculum. But the number of such training centers' will be adequate and all the centers will follow the same curriculum developed by ANTIGE for any of the training programme and all sorts of information regarding the training will be available on online and the factories too. In this context, Dhaka, Narayangani, Gazipur, Savar and Chottogram should be the suitable places for those training centers. As a result, those who are enthusiastic to work in this sector would prepare themselves by receiving training through these proposed training institutions. Although currently there is a "Training Conducting Committee" formed with 8 members, headed by the director general of EPB. In order to create more proactive trained workforce, it must be changed the entire existing training curriculum and bring the most modern textile and apparel manufacturing course to train the youth.

In addition, at present the major drawback involved in Bangladeshi RMG products is its quality compare with China and maintaining the lead-time to deliver the products to the buyers. To improve the quality of the product as well as the lead-time there is no alternative to improve the skills of the workers with time demanding training in proactive approach.

To improve the quality of the training centers and the performance of the trainee the high officials of most exporting factory personals will visit the training programmes quarterly and they will put their comments for further improvement. Finally, ANTIGE will analyze the feedback obtained from most exporting factory personals twice in a

year and make standard and up-to-date strategy to run the training centers under NTIGE.

Possible Recommendation 1.2

Development of online training program

Moreover, NTIGE should take effective measures to develop online training programs (like YouTube videos on different modules) for the new RMG workers. The workers will know any information related with RMG sector from online training program. If anyone thinks that his preparation is completed for a particular online course then he will seat for in person examination and after successful completion of those preliminary courses they will receive certificates. There might be an obligation that without any certificate of such training no one is eligible to join in RMG sector.

2. In addition, the main strength of the RMG sector of Bangladesh is the cheap labour force and captive market under the quota system. However, the competitors of Bangladesh and other international bodies may pressurize Bangladesh to increase the salary of the workers at any time. In Bangladesh, more than four million of people are working in this sector and for getting high salary they might be biased by the international agents. Then there might be unrest in this sector and it will be very tough to survive in the international market to overcome the upcoming challenge.

Recommendation-2.1:

Improve the Product Quality and Reduce the Lead Time

The government and factory owners should think seriously about the improvement of the professional knowledge and skills of the workers otherwise it is not possible to ensure the required productivity, product quality and lead times to win the competition with other emerging exporters. Therefore, throughout the proposed training program workers productivity will be improved significantly. It is also noteworthy that the average age of most of the workers is 27 years and if they are trained properly, they will serve for the factory as well as for the country with a prolonged duration of their service life.

Recommendation-2.2:

Enhance the Communication and Language Skills of Local Staffs with Training

Each year, foreign skilled manpower (Indian and Srilankan) is taking \$500 crore from RMG sector and to reduce the dependency on foreign skilled employee in this sector the government must envision an education system that increases communication and language skills and focuses on the internal creativity of the native employees. The ANTIGE, national skill development authority, ministry of education, ministry of commerce and ICT ministry should play a vital role to achieve this goal.

3. Longer lead time due to unskilled workers, importing most of the woven fabrics, inadequate transportation facility etc.

Recommendation-3.1:

Create Investment Friendly Atmosphere

Domestic supply should mitigate the dependency of fabric import; with this view government should create smooth investment atmosphere (ensure one stop service to deliver of all services from a single point to the investors). As a result, both domestic and foreign investors will be interested to setup new mills for fabric production in Bangladesh.

Recommendation-3.2

Evict Illegal Establishments from Footpaths and ensure Strict Traffic Rules

The average dwell time at Chattogram Port is four days for an export container and 11 days for an import container should be minimized with proper management of the port. The social cost of annual carbon dioxide emission from road freight transport in Bangladesh is equivalent to 1.2 percent of the GDP, with this almost 60 percent of the emission caused by congestion that should also be minimized by ensuring the countries traffic rules. The authors think that 50 percent of the traffic jam problem would be solved in the cities like Dhaka and Chottogram if illegal establishment from footpaths were evicted.

4. Diversification of products and export destinations is a great challenge in the current competitive market. In this regard government directly as well as the think tanks of this sector are continuously trying to diversify the market for this sector. Analyzing, different types of the activities done by BGMEA, BKMEA and the government it is possible to say that these initiatives significantly helped to increase number of export destinations. Besides authors recommends some additions with the current activities.

Recommendation-4.1

Invite Foreign Delegations and Buyers to Visit Bangladeshi RMG Factories

To scheme out the effective policies to diversify the export destinations authors got a key catalyst which is to visit Bangladesh by the delegation of different countries trade associations. For instance, the export destinations are increased significantly in some countries like Turkey, China, and Japan after visiting Bangladesh by the delegation of those countries trade associations.

Recommendation-4.2

Introduce on Arrival Visa for the Buyers from New Destinations

Moreover, government of Bangladesh should think about the on-arrival visa for the citizens of new export destinations instead of opening the embassy in those countries.

Recommendation-4.3

Introduce Effective Research & Development Cell under ANTIGE

There will be a national R&D cell under the direct supervision of ANTIGE for RMG sector and the duty of that cell will be to conduct the effective research which can provide the expert opinion and the required feedback for diversifying the RMG products, export destinations and the possible solutions in any critical situation arise in the sector.

Recommendation-4.4

Knowledge Sharing Visit with China through Diplomatic Channel

Bilateral agreement should be signed with China for sharing the knowledge to develop this sector; especially the top technical and managerial bodies of most exporting RMG factories of Bangladesh should visit the factories like China as their product quality is very high compare to the other exporting countries. As a result, efficiency of top officials from RMG factories in Bangladesh will be improved significantly, which can replace the foreigners who are taking away the huge amount of hard-earned remittance.

Recommendation-5

Utilize the Benefits of Covid-19 and USA-China Trade-War

In 2020 and 2021, due to the covid-19, it has been harder for the buyers to go to China and therefore, it is tough for some of the Chinese exporters to find new customers. At the same time, some buyers (who used to buy products from China) are also looking new options with easy access even in Covid-19 period. In this regard Bangladesh may be a better option instead of China.

Many scholars thought that the trade war between USA-China will create a great opportunity to grab the market for the Bangladesh RMG. The RMG industries of Bangladesh can increase production at low cost and due time, that will attract international buyers which will give a better position to the RMG sector compared to the other competitors.

Recommendation-6

Adjust with the Automation of 4IR

The unskilled labor force is a barrier to the growth of the RMG sector in the era of automation. As technology is developing rapidly and the labor cost is increasing, it is the better way to replace labor with automation that will promote trade, but at the same time, this will create huge unemployment within the country. Adjusting with the automation of 4IR to cope up with the international market will be another challenge for Bangladesh. For the lack of skilled manpower in the domestic arena, skilled manpower will be imported from other countries, which would create a foreign dependency of the country. 4IR may be a blessing for our country if the state authority responds timely to create a favorable environment for the automation adaptation.

Other Comments:

To attain a strong position in world apparel market, Bangladesh should differentiate their products, take advantage of the free trade, zero tariff scheme agreement and integrate the industrial chain vertically and horizontally to make the pipeline more effective and hence enjoy cost savings. In light of the changes in market and fashion trends, Bangladesh should pay more attention to non-cost factors such as one-package buying, the application of Information and Communications Technology (ICT) in design and pattern making, speed up the supply of samples, providing a variety of products and services, and enhance credit. The ongoing rise in Chinese wage and currency has made Bangladesh a favorable investment destination for largest clothing exporters of the world. Supply capacity to produce cost effective but quality RMG products with over 4500 factories, Bangladesh is clearly ahead than other suppliers in this respect where Indonesia has about 2450 factories, Vietnam 2000 and Cambodia 260 factories (BKMEA). Favorable trade agreements: EU-GSP everything but arms rules on duty-free imports of garments from Bangladesh has made sourcing from Bangladesh more attractive. Another key prospect for growth of Bangladesh's garment industry involved with the size of the global apparel market, which is following an augmentative path. Therefore, there is a great opportunity in front to further penetrate the global apparel market and boost export earnings of Bangladesh. Proper planning should implement to boost up the RMG export. There should be separate garments industrial zone to simplify the transportation though shipments without barriers. Bangladesh has huge potentials if opportunities could be grabbed and used in a timely manner.

References

- https://unb.com.bd/category/Special/bangladeshs-forex-reserve-expected-to-thrive-on-increased-remittance-inflow/83195.
- Lewis, D. (2011). Bangladesh: politics, economy and civil society. Cambridge University Press.
- 3. https://www.worldbank.org/en/country/bangladesh/overview#1
- 4. Rahman, S. S. (2019). Accountability in Global Fashion Industry Supply Chains: An Investigation of Post Rana Plaza Regulatory Initiatives in Bangladesh. The University of Manchester (United Kingdom).
- 5. Islam, M. S., Rakib, M. A., & Adnan, A. T. M. (2016). Ready-made garments sector of Bangladesh: Its contribution and challenges towards development. Stud, 5(2).
- 6. https://www.thedailystar.net/country/bangladesh-remains-second-largest-garments-exporter-against-all-odds-1255084
- 7. Berg, A., Herich, S., Kempf, S., & Tochtermann, T. McKinsey.(2011). Bangladesh ready-made garment landscape.
- 8. https://www.worldbank.org/en/country/bangladesh/overview#1
- 9. https://oldweb.lged.gov.bd/UploadedDocument/UnitPublication/1/1166/8FYP.pdf
- 10. https://www.ahsaniamission.org.bd/rvtcs-jamalpur/
- 11. Mansor, Z. D., & Saparudin, I. N. (2015). Motivational factors for academicians in private universities to participate in knowledge-sharing activities. Pertanika Journal of Social Sciences and Humanities, 23, 101-116.

- 12. Islam, M. A., Jantan, A. H., Khan, A. M., Rahman, M. H., & Monshi, O. (2018).
 Impact of motivational factors on knowledge sharing behaviour of managers in Ready
 Made Garments (RMG) Industry of Bangladesh. Journal of Business and Retail
 Management Research (JBRMR), 13(1).
- 13. The Industrial Bangladesh Council (IBC) has ensured government about workers payment and safety against COVID-19. Government, BGMEA and on regards supply chain resilience, COVID-19 has put supply chains in a vulnerable situation.
- 14. Ahmed, S., & Raihan, M. Z. (2014). Health status of the female workers in the garment sector of Bangladesh. J Faculty Econom Administr Sci, 4(1), 43-58.
- 15. Khan, A. N., & Ullah, M. R. (2017). Export scenario between Bangladesh and China: Opportunities of Bangladesh in RMG Sector. Eur Sci J, 13(28), 299-320.
- 16. Chang, J. F. (2016). Business process management systems: strategy and implementation. Auerbach Publications.
- 17. Rumi, M. H., Bala, S., Shah, A. M., Sayem, M. A., & Abedin, M. M. (2021). Future Tradeoff under Fourth Industrial Revolution in Bangladesh: A Study on RMG Sector. International Journal of Social, Political and Economic Research, 8(1), 198-215.