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Unboxing the Ready Made Garments (RMG) sector of Bangladesh

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ABSTRACT

The ready-made garments (RMG) sector of Bangladesh has developed immensely under the broad radar of the export market, and its size is beyond imagination. Unfortunately, there has been no study that explores the whole universe of the RMG sector of Bangladesh rather the story of the RMG sector often involves the export market only. The discussion of this paper intends to explore the methodology of unboxing the whole universe of the RMG sector of Bangladesh that includes small and medium-sized manufacturing and processing units that are often involved with subcontracting for other factories (producing for the export market as well as domestic market), are suppliers of the domestic market, are producers of accessories, and are providing backward linkages and associated services. The discussion addresses that along with export-oriented RMG factories there exists an unexplored and unboxed universe of manufacturing and processing units associated with the RMG sector of Bangladesh that contributes to investment, employment, trade, export, and the economy as a whole, all of which remains unaccounted for.

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Introduction

The ready-made garments (RMG) sector of Bangladesh has experienced unprecedented growth while reaching to a position to contribute 80 percent of total export of country's economy. However, due to underlying knowledge gap on the sector, previous studies could not clarify how big the sector actually is (in terms of the types of factories, firms and enterprises involved in the sector). As a result, the scenarios/situations/context and types of the factories, exporters and manufacturers remain unexplored. The discussion of this paper aims to address these issues leveraging the research activities of the 'Mapped in Bangladesh' (MiB) project.

Centre for Entrepreneurship Development (CED) of Brac University is implementing the Mapped in Bangladesh (MiB) project since April, 2017, with the coordination of BRAC and funding from the Laudes Foundation and the Embassy of the Kingdom of Netherlands (EKN). The current paper is a product of the above-mentioned project.

This paper explores the approximate universe of the RMG sector of Bangladesh and provides an idea of what the sector consists of and what could be done to bring them under one umbrella for easy policy and governance purpose. This paper relies on the raw field experience from the initial census based on which desegregation on the type of RMG manufacturers, exporters, producers and subcontractors are presented. This part of the discussion also draws attention on the technological transformation of the sector. The second part of the discussion delves into the qualitative exploration considering Keraniganj as a case while the third part forwards a

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number of policy recommendations. The discussion will appear in this paper after a short literature review on the RMG sector of Bangladesh followed by a detailed methodology of these two studies.

Literature Review

The garment industry has been classified as those establishments which cut and/ or stitch/make up garments out of woven or knitted fabrics without being involved in the manufacture of fabrics (Siddiqi, 2004). The RMG industry in Bangladesh evolved and gradually developed in the late 1970's primarily due to cheap labour, and therefore, low production cost. Pioneer of the RMG industry in Bangladesh was late Nurool Quader Khan, who with a vision to transform the country, in 1978 sent 130 trainees to South Korea to learn how to produce readymade garments. Upon receiving training, the first ever export oriented readymade garments factory – *Desh Garments* was set up. Many other entrepreneurs also joined the industry after this initiative. Since then the industry has grown and is what it is today. Over the years, the industry faced many challenges, which it overcame with pride. One such example is making the industry child labour free in 1995 (About the Garments Industry of Bangladesh, 2020).

The lift of quota in 1995 paved the way for increased demand for cheaper manufacturing from the developing and lesser developed nations. The demand of competitive pricing and maximizing profits from the apparel brands in developed nations in turn drove down wages, ignoring safety standards, and cutting costs to provide those pricings the brands were looking for in order to gain tenders (Khan, Rodrigues, and Balasubramanian, 2016).

The readymade garments industry acts as the backbone of the country's economy, while the tag "*Made in Bangladesh*" has brought glory for the country. The RMG sector of Bangladesh grew at a rate of 55 percent from 2002 to 2012, making it one of the fastest growing sectors of the country's economy (Uddin 2014). The RMG export accounted for 80 percent of the country's total exports in 2012, which increased to 81.13 percent in 2014. For the 2018 Fiscal Year, the apparel sector grew at 8.76 percent with total earnings of \$30.61 billion, which is 83.66 percent of the country's total export earnings (Ovi, 2018).

Although Bangladesh has become the second largest garments exporters in the world, getting complete supply chain information for the apparel brands retailing from Bangladesh is a challenge as the RMG sector of Bangladesh lacks basic credible information of the RMG factories. For example, there has been a huge debate on the actual number of RMG factories in Bangladesh. According to a report "*Beyond the Tip of the Iceberg: Bangladesh's Forgotten Apparel Workers*", released by The Stern Center for Business and Human Rights at New York University, estimated more than 7,000 factories producing for the export market in Bangladesh, divided between direct and indirect sourcing factories (Labowitz and Bauman-Polly, 2015). However, the report has been criticized by a research brief from the Center for Global Workers Rights (CGWR) of the Pennsylvania State University which estimated that Stern's database of 7,165 export factories is inflated by at least two thousand factories which were closed, duplicate or domestic factories and thus the report supports the existing estimate which range between 3,500 and 5,000 factories (Anner and Bair, 2016). In the recent labor inspection report, Department of Inspection for Factories and Establishments (DIFE) under the Ministry of Labour and Employment of Bangladesh reported 5,146 RMG factories (Department of Inspection for Factories and Establishments 2021). It has not specified on the report how many among these 5,146 factories are export oriented and how many are manufacturing for domestic market. Two apex trade associations of Bangladesh RMG industry, Bangladesh Garments Manufacturers and Exporters Association (BGMEA) and Bangladesh Knit Manufacturers and Exporters Association (BKMEA) have also listed their member factories which tend to be export oriented RMG factories. However, the information of subcontracting factories have remained unknown as none of the databases listed subcontracting factories separately or indicated which factories were subcontracting factories.

While the full focus of the RMG industry has always been on those associated with the export market, a little or no focus has been given to those associated with the local or domestic market. Over the years with the growth of RMG factories focused on exporting, there also emerged entrepreneurs who focused on the domestic market. However, there is little or no literature on these factories associated with the local/domestic market. Statistics about the number of RMG factories associated with the export and domestic market, number of workers in this sector, investment in the sector, information on the difficulties and challenges faced are crucial for both policy and governance purpose. Without the knowledge on the exact number of factories along with the subcontracting factories for both the domestic and export market, the supply chain transparency of RMG products in Bangladesh will not be possible; neither would it be possible to undertake corrective policy as well as governance measures to keep this industry sustainable. Centre for Entrepreneurship Development (CED) of BRAC University is implementing the Mapped in Bangladesh (MiB) project (Formerly known as Digital RMG Factory Mapping in Bangladesh (DRFM-B) project) since April, 2018, with the coordination of BRAC and lead funding from the C&A Foundation. The current paper is a product of the above mentioned project. The current study explores the approximate universe of the RMG sector of Bangladesh and provides an idea of what the sector consists of and what could be done to bring them under one umbrella for easy policy and governance purpose.

Methodology and Data Collection

As the primary objective of the MiB initial census was to explore the RMG sector of Bangladesh, it was thought that Census method would be most appropriate without making any sampling of RMG factories. However, as the data collection was progressed, it was found that the snowball sampling is required to locate the factories in those districts which are not RMG intensive. Census method was followed for Dhaka, Gazipur, Chittagong, Narayanganj and Mymensingh districts of Bangladesh where RMG factories are

concentrated. Very basic data were collected for the study. The selected data points were factory name, address and GPS location of the factories. ODK platform was used to design data collection form/questionnaire. The field officers (FOs) collected the required data from any possible RMG and RMG related factories/ processing units according to their perception developed while communicating with local people and factory officials to locate factories and processing units. To conduct the census, 25 male Field Officers were recruited. Five teams were formed. Each of the teams was headed by one Field Supervisor (FS) and consisted five Field Officers. The Field Supervisors and Field Officers reported directly to the Field Coordinator. Each of the teams were designated a particular field area. The field coordinator through discussion with the project management and based on the progress of the teams decided which team would move to which area further. In case of metropolitan areas, the survey teams worked on areas as specified under the jurisdiction of a Police Station. For the non-metropolitan areas, the survey teams worked on areas under a Union. Factory location information were collected and categorized by Police Station, Upazila and District. If the area turned out to be an RMG factory concentrated area, then the FOs walked each and every road/lane of the area that the designated Police Station covers to map all RMG and related factories. If the area was not an RMG concentrated area, the FOs and FSs collected information based on snowball method, where Government officials, representatives and authorities (UNO, Chairman, Police Station, etc) were approached.

The Field Officers identified/located a factory in the following manner:

- i. Enters into his designated area;
- ii. Asks local people (shopkeepers, building owners, etc.) or administrative people (UNO office or DC Office) about possible locations in the area where factories are located;
- iii. Walks street by street and also the locations suggested by local people;
- iv. If the located factory is an RMG factory or a factory/ processing unit related to RMG, field officer collects the data from outside the factory gate. General source of data recorded were: signboard, factory banner, factory vehicle (covered van, truck), visiting card (business card) of the factory officials, challan (receipts), security guard, security in-charge and information desk.

If collecting information from outside the factory gate was not possible, for example in case of absence of factory signboard or banner, then field officer enters into the factory and try to communicate with any designated factory officials. Data collection period was from December 30, 2017 to April, 2018. In addition to this, the authors carried out a qualitative study in Keraniganj. The primary objective was to understand and explore how the manufacturing units operate. Key Informant Interviews (KII) and In-dept Interviews (IDI) were conducted with factory and shop owners, labours, representatives of Garments Business and Shop Owners Co-operative (Garments Babosayee and Dokan Malik Samabyay Samity), representatives of Keraniganj Small Garment Workers Welfare Union (Keraniganj Khudro Garments Sromik Kollyan Union), banks who provide loans to the factories in Keraniganj and some workers of the factories in Keraniganj. Total 15 interviews were conducted.

Discussion on Factory Census

As stated earlier that we did not provide any specific factory definition to the Field Officers, they collected data of any or manufacturing unit that they assumed and confirmed were to be associated with the production of garments. Therefore, the collected data included:

- i. RMG factories producing for the export market
- ii. RMG factories producing for the domestic market
- iii. RMG factories producing as subcontractors for the export market
- iv. RMG factories producing as subcontractors for the domestic market
- v. RMG factories performing only one of the production process
- vi. Textile factories
- vii. Spinning mills
- viii. Accessories manufacturers
- ix. Label manufactures
- x. Embroidery factories
- xi. Carton manufacturers
- xii. Poly bag manufacturers
- xiii. Packaging factories
- xiv. Printing factories
- xv. Boutique shops and tailors
- xvi. Finishing centers
- xvii. Washing factories
- xviii. Dyeing factories

The authors of this paper also made frequent field visits and often informally talked to the owners and/ or workers of the factory/ processing unit. From the data as well as the informal discussion with the owners and staffs, it was found that there are factories that export directly. All the factories of this group are not necessarily members of BGMEA and/or BKMEA; there are non-member

factories that are directly exporting. While most of the member factories export directly to traditional market (US and European Union countries), the non-members mostly export to non-traditional market which includes countries such as India, Bhutan, Nepal, Singapore, Malaysia, Brazil, South Africa, Chile, etc. The non-member factories usually cannot export to traditional market directly. This is because the Government of Bangladesh has trade agreement with countries of traditional market. The factories, therefore, require EPB enlistment, bond license, and meet certain compliance requirements to export to these countries among many other requirements, which are often difficult for non-member factories to obtain. Instead, these factories simply obtain ERC (Export Registration Certificate) and IRC (Import Registration Certificate) from the concerned authority and directly export to the non-traditional countries. These non-member factories receive orders from buyers directly or through an agent. They receive payment from the buyers through the legal channels including L/C (Letter of Credit) and TT (Telegraphic Transfer).

There are a large number of factories producing for the local/domestic market. With an estimated population of 164.7 million, the Bangladeshi domestic market is quite large, and these factories have been meeting the domestic demand for quite some time now. This is evident if we look at the local markets, such as Nurjahan Market near Dhaka College, the roadside vans selling garment items at any part of the metropolitan cities, and clothing markets all over the country, to compare the quality of the products available now and that were available 5-10 years back. Garment products sold at these shops were mostly rejected stock-lot items and of inferior quality. However, at present the products sold are of good quality and are mostly not rejected stock-lot items. The fabrics used are of good quality and the finishing are of good standard. If we look closely, we notice that these sellers used to say “*Good quality*”, “*Import quality*”, “*Export*” or “*Export Market*” product 10-15 years back; but now they say “*Exported*” or “*Export Quality*” product (indicating that the quality of the product is comparable to that of those exported). This transformation is primarily because earlier they used to sell stock-lot or rejected products that they bought from export-oriented factories. At present they purchase garments from factories that use good quality fabrics (at times same as that of exported garments) and manufacture maintaining good quality finishing (almost same standard as that of exported garments), and these resellers refer their product to as “*Export Quality*” product. In one hand demand for good quality products at cheaper price has risen, and on the other good quality products at low price are being supplied by these factories.

There are hundreds of small manufacturing units (small factories with one or two machineries employing as low as one or two workers) in Keraniganj that produce garments for the domestic market. These products are sold in wholesale basis from the factory premises as well as nearby markets in Keraniganj. Another hub of small manufacturing units is Mirpur. There are hundreds of small manufacturing units operating in these areas. A manufacturing unit can be as small as with one machine and one to two workers. These factories generally offer cutting and sewing processes. These manufacturing units at times also produce in small quantity for individuals who carry them abroad through their luggage. Further to it, there are factories that are suppliers of the domestic brands, such as Dorji Bari, Westecs, Pretex, Cats Eye, etc. It is worth mentioning that a large number of sweater factories have gradually evolved in some areas. These factories have as low as 5 – 8 jacquard machines and 6-10 workers and perform only the knitting process. These factories often produce as subcontract, directly export to non-traditional countries, and also produce for the domestic market. Therefore, we see a notable transfer of technology in terms of sweater factories. In these factories, only knitting is performed, while the other processes are carried out/ subcontracted out to other factories. Interestingly, there are factories that perform subcontract for both the exporting factories as well as for those producing for the domestic market. Among these subcontracting factories, some are part of mother factory that exports directly (in other words have all the required documents for both bonded and non-bonded export). It is intuitive that the operating costs of directly exporting factories are high. Therefore, they tend to setup another factory that do not meet all the compliance issues/ requirements, and transfer their order to these factories to cut down their cost of production. There is another group of subcontracting factories that are not part of any mother factory, but perform subcontract for other direct exporting factories. There is a group of factories that perform subcontract for factories producing for the domestic market.

Table 1: Factory Market Matrix

	Traditional Export Market (US, Canada, UK and Countries part of European Union)
	Non Traditional Export Market (Countries not part of Traditional Export Market)
	Domestic Market
Factory	Subcontract for Export Market
	Subcontract for Non Traditional Export Market
	Subcontract for Domestic Market
	Export Market (Non-traditional) + Domestic Market
	Subcontract for Export Market+ Domestic Market

Under the umbrella of these RMG factories producing for both the export and domestic market, another group of manufacturers evolved. Approximate size of this particular group is also considerably large; and how large is still unknown. This group includes

accessories manufacturers, label manufactures, embroidery factories, printing factories, carton manufacturers, poly bag manufacturers, packaging factories and finishing centers among others. The accessories manufacturers produce many items including - hanger, hangtag, collar stand, size tag, tissue paper, backboard, neck board, paper band, pin/clip, tag pin, carton sticker, safety sticker, arrow sticker, elastic bag, mini poly bag, gum tape, scotch tape, p.p band, inner carton, outer carton, iron seal, both side tape, plastic staple, barcode, upc, ball chain, carton pad, size stickers, numbering stickers, defect indicator, safety pin, brass pin, size clip and master carton among others. Previously these accessories were imported. At present all these accessories are produced in Bangladesh and are used by factories producing for both the export as well as domestic market meeting 90 percent of the demand (Rahman, 2018). There are factories that concentrate on producing and supplying only labels to RMG factories.

Technology Transformation from Manual Machines to Jacquard Machines

We observed a transformative stage of Sweater factories triggered by the increasing usage of Jacquard machines in Sweater factories. There has been a transformation from using manual machines for producing sweaters to using jacquard machines. One operator can operate one manual machine and can produce a maximum of five pieces per day. On the other hand, four Jacquard machines, operated by a single operator, can produce about 120 pieces a day. Thus, many sweater factory owners have opted for those expensive Jacquard machines to remain cost-competitive in the long run. An added advantage is that these Jacquard knitting machines can operate in two shifts. There are cases where factories that used to export directly with manual machines, now keeping all the processes such as winding, linking, mending, finishing in the factory, except knitting which is subcontracted to other factories that have jacquard machines to perform the knitting. This shift of business not only saved these factories from huge investment but also avoided workers' hassle. A number of factories only do finish part as subcontract for exporting factories. There are factories that only perform linking as subcontract. It is interesting to observe that sweater factories outsource most of its processes when required, and based on this demand, many business entities emerged to cater to this need. With further investigation, we found that most of the factories that use jacquard machines are members of either BGMEA or BKMEA, and are direct exporters. However, factories that use jacquard machines and are not members of any associations, mostly work as subcontract for direct exporters. These factories that use jacquard machines, however, do not cater to the local markets.

Discussion on Keraniganj

Keraniganj is an Upazila of the Dhaka district, located on the southern edge of Dhaka city, and flanked by rivers on three sides with Buriganga on the North, and Dhaleshwari on the South and East. It has been reported that the land filled areas of Keraniganj increased by 1052 percent from 1990 to 2015 (Hassan and Southworth 2018). A study on Keraniganj (Hassan et al., 2019) revealed that out of the six major sectors of manufacturing industries¹ as per International Standard of Industry Classification (ISIC) and Bangladesh Standard of Industry Classification (BSCI), clothing and textiles manufacturing is the most prevalent in Keraniganj. This sector accounts for approximately 60 percent of the manufacturing sector located in Keraniganj.

While the export-oriented garment factories operate on a large-scale employing hundreds to thousands of workers, the factories located in Keraniganj operate on a smaller scale and employs 5-50 workers. Similar results have also been reported by Hassan et al. (2019). The garments sector in Keraniganj therefore grew very quietly, primarily cashing in the waste rags of the export-oriented factories and meeting the domestic ready-made garments demand. Linked industries including woolen textiles, dyeing, bleaching and finishing textiles, embroidery, printing and jute textiles also grew in Keraniganj. The Economic Census 2013 (BBS 2013) reported that an estimated 71.03 percent of the products produced in Keraniganj are for local sale, while 19.70 percent are for export, and only 1.06 percent are for both local and export market.

Manufacturing Units and Their Owners

In Keraniganj there are about 3,500 garments manufacturing units. Most of these manufacturing units in Keraniganj are self-owned and self-managed. These owners came to this profession after being influenced by their friends, relatives and acquaintances, for example someone they know from their village. There are owners who previously used to work in garments factories, from where they thought of setting up their own manufacturing unit. These people saved money from their salaries or sold their land and other assets at their village or borrowed money from their relatives/friends and invested the money to setup a manufacturing unit. These manufacturing unit owners mostly purchase second hand machineries through the help of middlemen or brokers from factories that closed down or about to close down. However, when they reinvest and need to buy more machineries, they tend to buy new machineries. There are owners who started new manufacturing units with new machineries as well. Some of the owners have been doing business for the past 30-35 years, while new entrepreneurs are also entering the market on a regular basis. On average these manufacturing units have 2 – 20 sewing machines. One interesting finding is that all of these manufacturing units have Trade License and the license is always updated on time.

Most of these factories are located in multistoried buildings and in each of the floors there are several small manufacturing units. On average these manufacturing units have 3-50 workers. The size of these manufacturing units range between 400 - 600 square feet, and the rent varies from BDT 4,000 to BDT 15,000. Majority of these manufacturers also have a warehouse nearby and also a shop

¹ The six broad sectors are: (i) food processing and related industry, (ii) clothing and textiles, (iii) brick manufacturing, (iv) machinery and equipment, (v) basic metal and other non-metallic mineral products, and (vi) rubber and plastics.

in the nearby market from where their products are sold. Approximate size of the warehouse ranges between 300 – 800 square feet, and shop ranges between 50 – 300 square feet. The rent of the warehouse is on average BDT 4,000 – 20,000, and rent of the shop on average is 5,000 – 20,000. While taking the shop on rent, they have to pay/deposit BDT 50,000 – 300,000 depending on the size of the shop to the original shop owner. The largest manufacturing unit in Keraniganj is 'Sheikh Saadi Garments'. The manufacturing unit occupies two floors of a multistoried building and is the employer of 600 workers.

Generally, these factories produce Knit and Woven products. Interestingly, these units produce complete product – starting from cutting to sewing to packing and finishing. Processes such as printing, embroidery and washing are subcontracted out in other factories located in Sadarghat and Narayanganj. They mostly produce non-branded products and copy products. The products produced are stocked in their own warehouse and also stored in their own shop from where the wholesalers purchase the product. These manufacturers usually do not manufacture on demand; that is they do not produce products as per specification of their customers; rather they produce on their own and directly sell them to their customers from their shop. These wholesalers come from all over the country to purchase garments and sell them in the domestic markets.

While most of these manufacturing units remain operational round the year, the pressure (and therefore production) tends to be low during the winter season, while the pressure (or production) tends to be very high during the two Eid's. During IDI, one of the respondents said that he usually produces denim pants for 8 months of the year, and during the remaining 4 months he produces jackets using the same machinery by just changing the needle. He also said that there are other manufacturers who use this technique as well.

These manufacturers buy fabrics from dealers located in Keraniganj, Sadarghat and Baghabari. Accessories are also purchased from nearby shops in Keraniganj. One of the major findings is that the whole business in Keraniganj runs on credit. These manufacturing units purchase raw materials on credit, as well as sell their goods on credit. Workers are also not paid full amount. They receive a portion of their salary every month, and the dues are cleared during Eid, before they leave for holiday. The whole value chain runs on credit. The owners commented that if they do not allow sales on credit, they would not be able to do business.

The whole Keraniganj has electricity connectivity. Factories in the south part of the area are connected via pre-paid meter, while factories at the west have postpaid meter. Most of the factories and shops on the west part of Keraniganj have individual sub-meter associated with a master meter to correctly identify their electricity usage. On average, these manufacturing units have to pay BDT 800 – 2,000 per month for electricity. The area, however, is not connected to supply water. Each of the buildings are connected to a tube-well or deep tube-well. An electric motor connected to the well and is used to extract water and store in water tank. This motor is connected to a sub-meter and each of the manufacturing units are charged equal proportion of the total bill for the meter. On average, each of the manufacturing units have to pay BDT 200 – 800 per month as water bill.

The respondents reported that their profit margin is very low, however, sufficient to pay their necessary cost of production. The margin increases during Eid season, and that is the only time of the year they are able to make large amount of profit. At times, they even have to sell at a very low price just to cover their variable cost of production; otherwise, they would have to incur huge expenditure/ loss. Therefore, these small-scale manufacturing units also practice minimizing loss strategy.

The owners said that there is no presence of NGOs or any activities by NGOs of any sort in Keraniganj. There are no health, education, micro-finance or training activities in the locality. They do, however, get support from the banks. Several banks provide short term loan amounting from BDT 5 lacs to 47 lacs.

Owners of these manufacturing units and shops feel that they have been able to become economically solvent and achieved better life style by doing business in Keraniganj. While majority of the respondents said that they are financially better off by doing business in Keraniganj in way that they have paid off their initial debt (loan) that they incurred while starting their business, they are not able to afford schooling and education for their children, some also reported that they have been able to build and/ or purchase lands and houses in Dhaka as well as in their village. They believe this would not have been possible if they had not entered into this business.

The manufacturing unit and shop owners are protected of their interest by Garments Babosayee and Dokan Malik Samabyay Samity. The cooperative looks into the interest of the manufacturing unit and its shop's and takes necessary actions and steps as and when necessary. Shop and manufacturing unit owners said that they do not have to pay any sort of illegal subscription money to the local goons. The owners' cooperative is quite strong in the area, and it prevents them from such situations. The cooperative also offers loan to their members at 2 percent interest rate from its own funds. The cooperative also employs their own security guards to protect the businesses and shops in the locality.

They also opined that not only are they better off by doing garments business, the workers as well as the society as a whole have benefited from this. While they are injecting money in the economy, they are ensuring a living for the workers who are also able to feed their families. They feel that if such opportunities would not have existed, these workers would have no where to work, and therefore would have been involved in unsocial activities including theft, looting and prostitution. Most of the manufacturing units and associated shops are self-managed. Some are also family-run, specifically with support from son and/ or brother. They also feel that they would have been able to prosper to a greater extent if they had more support from the banks and if the business was mostly run on cash. Without support from banks, they are often unable to take loans and expand their business or use the money as their

working capital. Furthermore, since the whole business runs on credit, they do not know when actually they are going to get the payment, and hence are always in shortage of liquid money to run the business.

Workers of the Manufacturing Units

Workers mostly come from village areas. They primarily use the channel of their friends, relatives and acquaintances who already work in Keraniganj. These workers join as inexperienced workers, and therefore they are assigned to work under an experienced worker for a period of 6-24 months. During this period, they do not get any salary or wage. They work on the basis of food and shelter. They start to get their pay as they become experienced and independent. These workers do not have any fixed salary; rather they are paid on piece-rate basis. These workers work for 8 – 12 hours per day and depending on production per day, on the wage per month ranges between BDT 4,000 – 10,000. The male workers tend to work more hours since they also get to stay in the factory premises, while the female workers are not allowed to stay. The female workers have to stay at nearby areas. Male workers are more in numbers compared to female workers in these manufacturing units. Depending on production per day, on the wage per month ranges between BDT 4,000 – 10,000.

These workers do not get their full months' salary at the end of the month. Rather, a portion is paid to them at the end of the month, and the remainder is kept due. The total dues are paid during Eid. This is done primarily to restrict these workers from switching jobs. Thus, these workers generally switch jobs after Eid holidays, when they have been cleared of all their dues. When a worker falls ill or is injured, the hospital expenses are instantly paid by the factory owner. However, the expense is later adjusted with the workers dues.

The female workers said that their cost of living is higher than their male counterparts. This is because the male workers have the advantage to stay at the factory premises and are also often provided food, thus their cost of food and accommodation is low, while the female workers have to stay elsewhere at rented place, and thus have to incur housing cost. Again, since the male workers can stay at the factory, they can work for longer hours and therefore, their per day production is higher compared to their female counterparts. Thus the male workers are in a more advantageous position than the female workers. The married female workers stay nearby with their families, while those who are not married stay with fellow female workers in slums or small rooms in nearby buildings. A Female garments worker:

"I used to live in my village with my family comprising of husband and two daughters. I did not have any income of my own at that time. One day, all of a sudden, my husband left me and my daughters and went elsewhere. I had to struggle with my daughters, since I did not have any money, nor did I have any income. After few months, I came to know about factories in Keraniganj from one of my acquaintances. She brought me to Dhaka and managed a work for me at a factory in Keraniganj. I started working at the factory and used to live with other workers in nearby slum. After about one year, I brought my daughters to Dhaka and also managed work for them in factories in Keraniganj. After sometime, my husband heard about us and started communicating with us. He then insisted about reuniting hearing that we are now earning quite good amount of money. I forgave him for his mistake and we started to live together again in Dhaka and continued my work at the factory. After few years, I got my elder daughter married. My son-in-law also works at a nearby factory. We all live together and are happy now."

The workers opined that the salary that they get are just sufficient enough to pay for their food and accommodation. They are unable to save much money from what they earn. Even on tight budget, they tend to send their children to government schools. Furthermore, they do consult doctors at the local government hospitals in case they or any of their family members fall sick. These workers generally visit their village twice a year, particularly during Eid. This is because - (i) all their dues are cleared by the factory owners and therefore, they get a handsome amount of money, and (ii) the eid vacation is relatively longer for 7-9 days.

There is presence of a worker's union in Keraniganj named - Keraniganj Small Garment Workers Welfare Union (Keraniganj Khudro Garments Sromik Kollyan Union). The union works for the welfare of the workers in Keraniganj. The union started its operation in 2001 with 102 members, and at present there are over 2,000 members. The union assists the workers in case there is any dispute between any worker and the manufacturing unit and shop owners.

The Hidden Contribution and the Way Forward

While the factories those are directly exporting are accounted for in the national accounts and relevant statistics, factories those indirectly contribute to the export market, the sub-contracting manufacturers, the small manufacturing units, factories that perform activities such as printing, washing, dyeing, embroidery, label producers, carton manufacturers and finishing center among others are unaccounted for in the national statistics and accounts. These unboxed factories have significant contribution to the economy. A factory with even one machinery implies – capital invested (though small), employment of at least two workers, and a source of income for three families (one owner and two workers), and support for 12 family members². The smallest investment means that instead of remaining unemployed or seeking a job, that person turned himself/ herself into an entrepreneur and created job opportunity

² The average household size in Bangladesh as of December 2016 is 4.06 (<https://www.ceicdata.com/en/bangladesh/household-income-and-expenditure-survey-number-of-household-by-size/hies-average-household-size>). Therefore, employment of 3 persons implies supporting 12 family members (4 member per household * 3 persons employed).

for at least one or two persons. The contribution and opportunity for job increases with the size of investment and size of the factory/firm. Therefore, if cumulated, contribution of those RMG and RMG related factories and manufacturing units is immense. It is worth mentioning here that the society has also benefited in terms of lower social crimes with the employment of these workers. If these workers (both male and female) would not have been employed in the RMG sector, they would have been a burden to the society in one hand, and get involved in criminal activities on the other, since major portion would have remained unemployed.

It might be unappealing; however, the truth is that most of these factories are situated in congested locations and building, with no or limited ventilation. Workers of these factories are faced with different sorts of workplace hazards including health and safety issues. These workers often do not receive any training. They learn as they work.

Though Bangladesh is recognized as the second largest garments exporters in the world, a huge potential still exists to take the RMG sector of Bangladesh further. With proper policy, initiative and incentive, there is scope for factories talked about above to be improved and extend their contribution to the country's economy.

The apex apparel associations, namely BGMEA and BKMEA, along with the government could take the initiative and come forward to bring these small manufacturing units under an umbrella where incentives could be provided to help these manufacturing and processing units to improve their working condition, skill of the workers, gradually make them compliant (step by step), health and safety of the workers, and doing business. Formal training by the associations or the government will also allow these factories along with the bigger factories to have access to skilled workers. Proper policy and incentives would not only allow these manufacturing and supporting units to be sustainable, but also encourage more investment, and therefore, more employment in the sector. Policy measures to expose these factories formally to the export market could also be taken.

From the beginning, the RMG sector of Bangladesh has been in an advantageous position over cheap skilled labour. The fact remains the same as of today. However, these small manufacturing and processing units as well as small entrepreneurs operating printing, washing, dyeing, embroidery, label, carton factories and finishing centers lack access to finance. These factories or manufacturing units could be brought under the government radar and provide improvement measures in terms of working condition, training the workers and access to finance, as well as be provided incentives so that they can flourish and enhance their contribution to the economy as a whole.

Conclusion

According to Bangladesh Export Policy 2015-2018, industries exporting at least 80% of their products will be considered as export-oriented industries (Ministry of Commerce 2015). Following this definition, the digital map of Mapped in Bangladesh (MiB) has included almost 3500 export-oriented garment factories in Bangladesh with their basic information. As the MiB project aims to enable transparency and accountability in the RMG sector of Bangladesh by providing industry stakeholders updated factory information, the digital map of the project can be publicly accessible using the web address www.mappedinbangladesh.org. Thus, the RMG factories exporting less than 80% of its products, RMG factories only producing for domestic factories and the subcontractors of these factories are not part of the published information of Mapped in Bangladesh. However, the way that the project is identifying all the export oriented RMG factories through factory census, it can be said that other RMG factories not part of the purview of export orientation can also be located using factory census. Discussing the broader spectrum of Bangladesh RMG sector, the discussion of this paper provides a snapshot what type of factories will be identified if the sector gets unboxed. While there exists methodological limitations and practical challenges for such unboxing because of ill definition of factories, lack of literature and availability of secondary data; learnings of Mapped in Bangladesh (MiB) can be leveraged for the future research.

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