

Ready-Made Garment (RMG) Industry in Bangladesh: Economic Contribution and Potentiality

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Abstract

The Ready-Made Garment (RMG) industry of Bangladesh has a lion share in foreign exchange and became a potential financial player in the national Economy. Bangladesh is now the second largest apparel exporting country after China in the world. Although after the tragic collapse of Rana Plaza, Bangladesh's RMG sectors have lost their fame slightly to the buyers, trade unions and other garments related organizations temporarily, a more glittering future is waiting for the RMG garment industry of Bangladesh as hinted by facts and international surveys. This sector accounts for about 81% of the total export income and employs 4.4 million people directly and 20 million indirectly. Undoubtedly, RMG sector has a potentiality to play as a key driving force of Bangladesh's economy in future. The intention of this paper is to prepare a statistical database with these RMG related information to enhance the bright future of this sector and to forecast the total RMG export for FY 2020-2021.

Keywords: Ready-Made Garments, Economic Potentiality, Forecasting, Semi-Average Method.

1. Introduction

The Ready-Made Garment (RMG) sector has been the largest exporting industry in Bangladesh, which acts as the backbone of the national economy. The tremendous success of readymade garment exports from Bangladesh over the last two decades has surpassed the most optimistic expectations which have been expanded almost uninterruptedly since the late 1970s [7]. The percentage of RMG to total exports has increased considerably over last two decades in Bangladesh [2]. It increased from 12% in 1985 to over 80% in 2014, making it the most important sector for the Bangladesh economy. Its contribution to the economy of Bangladesh, and in providing employment, is indeed remarkable. As may be expected, the industry has faced numerous challenges in the growth process, which averaged more than 15% per year. Despite all the adverse publicity, RMG exports growth during the last fiscal year 2013-2014, was 13.8% [9]. The apparel exports of Bangladesh has been concentrated to two major destinations- EU and North America [8, 15]. It is encouraging to note that over the last five years, remarkable progress has been achieved in diversifying the RMG exports ton on- traditional markets [8]. This diversification of exports destination, with growing exports, is a healthy sign for RMG sectors. The simplification of GSP rules of origin are positive signs for this sector. That is why the RMG sector of Bangladesh is optimistic that the new wave of opportunities and the growth momentum will energize the RMG industry to add new success stories in the coming years [7]. The literature on the RMG industry is limited. Mohammad Ekramul Islam et al. [1] present the economic recession and its impact on the Bangladesh's economy with special references of RMG and remittance sectors. In this paper, they exploited the ways, concept and techniques which help them a lot to overcome the difficulties and able to stabilize their economic improvement. Ahsan Firoz [4] has carried out a research on the design of readymade garments industry for fire safety and explores the ways that how workplace can be taken free from any unexpected occurrences of Ready-Made Garments sectors. Ahmed et al. [5] presented that the workplace safety is not sufficient in RMG sectors in developing countries. Akhter et al. [6] showed that most of worker of garments industries in Bangladesh are female and there need more improvement for health and safety. In Dhaka apparel summit [7], it is estimated that Bangladesh RMG will reach to 2021- \$ 50 Billion on the 50th Anniversary of Bangladesh. With the estimation of the RMG export in FY 2020-2021 the present RMG export, present number of worker, the number of RMG industries, the present contribution and potentiality of RMG sector are explored in this apparel summit. The apparel story [8] explores the budget for FY 2014-15 and how this can be met. The objective of this paper is to explore the economic roles that the RMG sector has on the national economy of Bangladesh and finally forecasting the future of the Ready-Made Garments (RMG) sector in Bangladesh.

2. Methodology

This paper has basically used the data from Bangladesh Garments Manufacturer and Export Association (BGMEA) and Export Promotion Bureau (EPB). As an initial input, it has been prepared a detailed structure of the relevant areas in which export-oriented RMG sector of Bangladesh was contributing. Different Books, Journals, Newspapers, Magazines, Internet etc. has also been used for supporting this work. Personal interview may also be conducted with the important personalities of these sectors. Finally, semi-average method is used to forecast the total RMG export. The rest of this is organized as follows. Section 3 describes the growth of RMG sector in Bangladesh. In section 4, we analyze the statistical data and forecast the total RMG export up to fiscal year 2020-2021. Section 6 concludes the paper.

3. Growth of the RMG Industry

Could one have predicted the growth of the RMG industry in Bangladesh? After the liberation of Bangladesh it inherited a devastated economy with industrial production close to nil. The jute sector, which was the major foreign exchange earner, saw no further growth in the immediate aftermath of independence [7]. Following tables show that how the RMG sector gradually established a firm base from which to grow.

Table 1. Export of RMG sector in million US \$ contrasting the total export of Bangladesh

Fiscal Year (FY)	Total Export of RMG (Knitwear & Woven)	Total Export of Bangladesh	% of RMG's to Total Export
2004-2005	6417.67	8654.52	74.15
2005-2006	7900.80	10526.16	75.06
2006-2007	9211.23	12177.86	75.64
2007-2008	10699.80	14110.80	75.83
2008-2009	12347.77	15565.19	79.33
2009-2010	12496.72	16204.65	77.12
2010-2011	17914.46	22924.38	78.15
2011-2012	19089.73	24287.66	78.60
2012-2013	21515.73	27018.26	79.63
2013-2014	24491.88	30176.80	81.16

(Source: BGMEA Website, 2014)

The export of RMG increased exponentially from 1984 to 2014. This exponential increase can be accounted for by increase in demand in the Bangladeshi exports in EU and USA markets. Moreover, Bangladesh is also exporting RMG in the non-traditional markets in an attempt to increase its revenue and stance in the global market. The percentage of the contribution of RMG to total exports has increased considerably over the last two decades. It increased from 12% in 1985 to over 80% in 2014, making it the most important sector for the Bangladesh economy. It also provides employment to around 4.2 million Bangladeshis, mainly women from low income families which affect their social status [1]. It has by now become a huge industry, earning the lion's share of the country foreign exchange and created the largest job opportunities for our countrymen specially provided the largest formal employment for the women [7]. Of the estimated 4.2 million people employed in this sector, about 50 percent of them are women from rural areas [1]. In 2000, the industry consisting of some 3000 factories employed directly more than 1.5 million workers of whom almost 80% were female [1, 11, 12]. The number of workers in garments sectors is increased day by day. In 1985-86 the total workers were 20 million [1]. In 2007-08 the number of garments workers in Bangladesh is 2.50 million [1]. The number of garment factories increased almost 11 times from 1992 to 2014. Though the number of factories increased consistently from 1992 to 2013, the number of garments factories is decreased 19% from 2013 to 2014 which is shown in bracket in table 3. This percentage of decrement is resulted after the Tazreen fire and Rana Plaza incident. Despite all the potential on the demand side, the question remains that, will Bangladesh be able to take advantage of the increased opportunities? The ability of Bangladesh to supply is an equally important issue in the changed global sourcing scenario. A comparison of the infrastructure in selected countries is presented in table 4 for comparison.

Table 2. Cumulative Value of % growth of RMG Export in Bangladesh

Fiscal Year (FY)	Total Export of RMG (Knitwear & Woven) in million US \$	% Growth of Export of RMG	Cumulative Value of % growth of RMG Export
2004-2005	6417.67	11.40	11.40
2005-2006	7900.80	18.77	30.17
2006-2007	9211.23	14.27	44.44
2007-2008	10699.80	13.91	58.35
2008-2009	12347.77	13.35	71.7
2009-2010	12496.72	1.19	72.89
2010-2011	17914.46	30.24	103.13
2011-2012	19089.73	6.16	109.29
2012-2013	21515.73	11.28	120.57
2013-2014	24491.88	12.15	132.72

(Source: BGMEA Website, 2014)

Table 3. Year wise Number of Workers Employed in RMG Sectors (In Million) in Bangladesh and number of Garment Factories

Fiscal Year	Number of Garment Factories	% of growth	Employment In million Workers	% of growth
2004-2005	4107	3.65	2.00	0
2005-2006	4220	2.68	2.20	9.09
2006-2007	4490	6.01	2.40	8.33
2007-2008	4743	5.33	2.80	14.29
2008-2009	4925	3.70	3.50	20
2009-2010	5063	2.76	3.60	2.78
2010-2011	5150	1.69	3.60	0
2011-2012	5400	4.63	4.00	10
2012-2013	5600	3.57	4.00	0
2013-2014	4536	(19)	4.00	0

(Source: BGMEA website, 2014)

Table 4. Comparison of infrastructure quality 2014-2015

Country/Region	Country Ranking	Overall Infrastructure Score	Electricity	Roads	Railroads	Port
Bangladesh	109	2.8	2.5	2.9	2.4	3.7
India	71	3.7	3.4	3.8	4.2	4.0
China	28	4.4	5.2	4.6	4.8	4.6
Cambodia	95	3.4	3.0	3.4	1.6	3.6
Myanmar	134	2.3	2.8	2.4	1.8	2.6
Pakistan	129	3.3	2.1	3.8	2.5	4.4
Sri Lanka	73	5.0	4.8	5.1	3.7	4.2
Thailand	31	4.1	5.1	4.5	2.4	4.5

(Source: The global competitiveness report 2014-2015 (2014 world economic forum); Ranking among 144 countries. The rankings are in descending order with '1' as the best performer)

4. Analysis of Statistical Data and Findings

There are in total 5615 units in the RMG sector of Bangladesh [7]. Out of them, 2723 are woven factories, 1383 knit, 629 W/K, and 880 sweater factories. Consequently, woven factories make up 48%, knit 25%, W/K 11%, and sweater 16% of the factories in the industries [7]. Therefore, it can be seen that woven comprises of the highest unit with sweater the least producing unit. The main components of RMG are the woven and knit which comprises approximately the three-fourths of the total in terms of the factories.

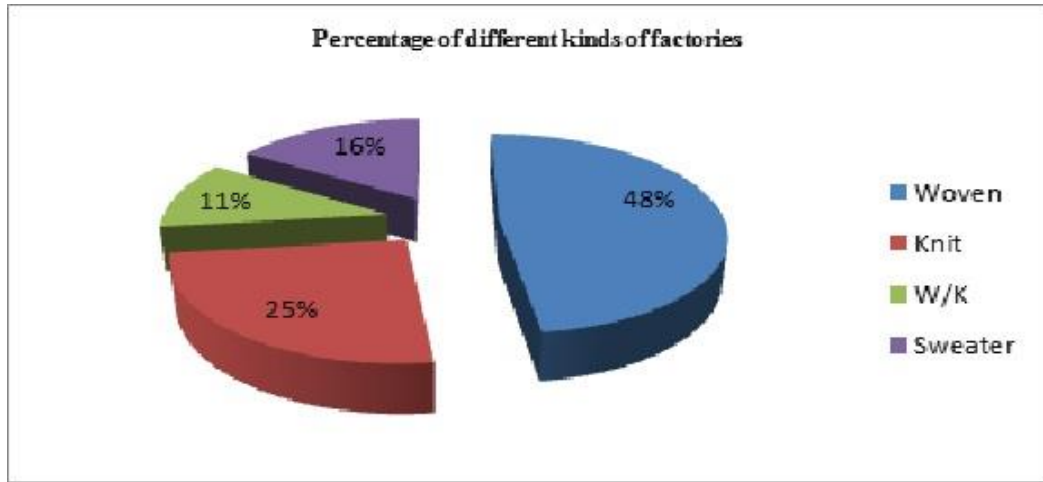


Fig. 1. Percentage of the different kinds of factories (Source: BGMEA website, 2014)

Figure 2 shows that the growth of the total export of RMG in FY 2013-2014 is comparatively smaller than the other fiscal years and this may be because of the Tazreen fire and Rana Plaza Tragedy but growth could have fallen tremendously although that had not happened which indicates that the RMG sector of Bangladesh has a bright future.

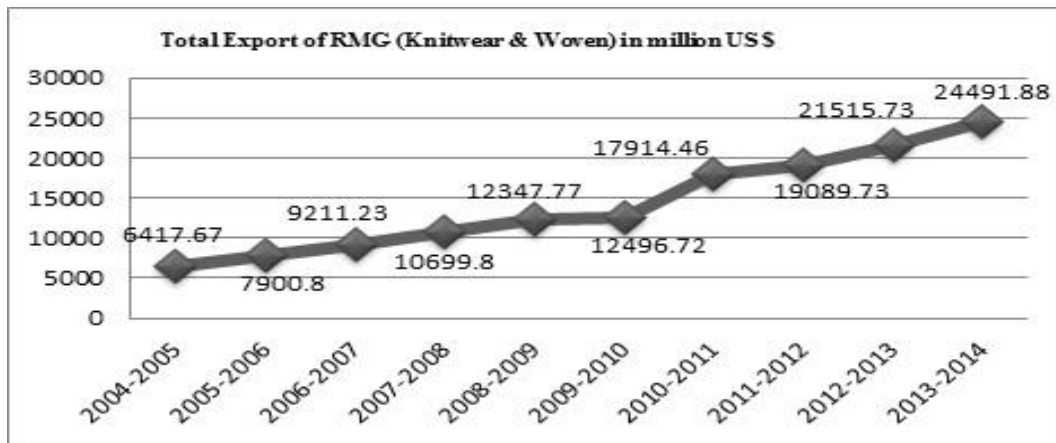


Fig. 2. Total export of RMG (Knitwear & Woven) in million US \$ (Source: BGMEA website, 2014)

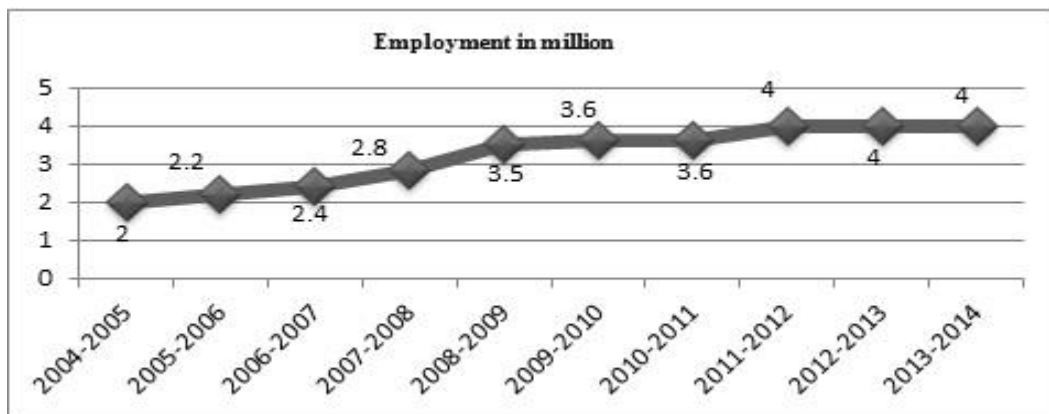


Fig. 3. Employment of RMG in Million Workers (Source: BGMEA website, 2014)

The number of RMG industries has been increasing dramatically since the late 1970s causing the tremendous growth of RMG employment [13]. Up to FY 2011-2012 the number of employment has increased but through last three FY RMG employments is approximately constant.

The total RMG export in FY 2004-2005 was 6417.67 million USD which increased to 24491.88 million USD in FY 2013-2014, shown in table 5. So the percentage increase is 73.8%. The total RMG export for the FY 2020-2021 can be calculated by the Semi-average forecasting method as-

$$B_f = \frac{[\text{Semi-average trend value of } X_{f-2}] - [\text{Semi-average trend value of } X_2]}{X_{f-2} - X_2} \quad (1)$$

Or

$$B_f = \frac{[S_{f-2}^f] - [S_2^f]}{X_{f-2} - X_2} \quad (2)$$

Total RMG export can be calculated by-

$$X_f(E) = S_2^f + B_f (X_f - X_2) \quad (3)$$

Where,

S_2^f and S_{f-2}^f = Semi-average trend value, $X_f(E)$ =RMG export , X_f = Fiscal year, f = Number of fiscal year

Table 5. RMG export data from 2004-2014

No of FY f	Fiscal year X_f $f=1,2,\dots,10$	RMG export in million USD $X_f(E)$	Semi-total	Semi-average trend value S_2^f or S_{f-2}^f
1	2004-2005	6417.67		
2	2005-2006	7900.80		
3	2006-2007	9211.23	46577.27	9315.45
4	2007-2008	10699.80		
5	2008-2009	12347.77		
6	2009-2010	12496.72		
7	2010-2011	17914.46		
8	2011-2012	19089.73	95508.52	*19101.70
9	2012-2013	21515.73		
10	2013-2014	24491.88		

(Source: BGMEA website, 2014)

Analyzing the total export data from table 5 by using the semi-average method it has been forecasted that the total export of RMG might be about 24815.36 million USD in Fiscal Year 2020-2021 as shown in table 6 if the trend of increasing the RMG exports remains as like as the export shown in table 1

Table 6. Forecasted RMG export in million USD up to FY 2020-2021

No. of FY f	Fiscal year X_f $f=11,12,\dots,17$	Semi-average trend value S_2^f	Semi-average trend value S_{f-2}^f	B_f	RMG export in million USD $X_f(E)$
11	2014-2015	9315.45	19101.70	1398.04	21897.78
12	2015-2016	9315.45	20981.92	1166.65	20981.92
13	2016-2017	9845.67	20981.92	1237.36	23456.63
14	2017-2018	9845.67	21905.61	1139.56	23520.39
15	2018-2019	10998.35	22136.29	1012.54	24161.38
16	2019-2020	10998.35	22860.82	988.54	24837.89
17	2020-2021	12009.77	23107.95	853.71	24815.36

The RMG industries can achieve better result than the forecasted export if it can be ensured the workplace safety, realistic solution of child labor issue with ILO, UNICEF & US Embassy, successfully faced global recession, and after all creating the opportunity using the strengths of RMG industries.

5. Conclusion

From the illustration above we can say that Bangladesh has repeatedly demonstrated its flexibility and ability to overcome all odds. Truly speaking, Ready-Made Garment sector is an excellent example of what the country can achieve. Despite all challenges, with accompanying global ups and down, the country has positioned itself as the second largest apparel exporter within just three decades and about one-fourth of the national earning is from the RMG sector. Therefore, we can evidently say that the vision 2021 for Bangladesh's RMG is attainable if the RMG sector can ensure the workplace safety, realistic solution of child labor issue with ILO, UNICEF & US Embassy, successfully faced global recession, and after all creating the opportunity using the strengths of RMG industries. After all, the RMG is a confidential sector that can exploit its potential in terms of the foreign exchange while overcoming the challenges it faces in upcoming years.

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