Forecast of Apparel Export for Year 2025

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Abstract

Bangladesh's Ready-Made Garment Industry (RMG) holds a larger foreign exchange market share and has emerged as a potential financial player in the national economy. This industry earns around 84% of Bangladesh's overall export and employs nearly 4.22 million workers. Bangladesh is currently the second-largest apparel exporter in the world after China. However, COVID-19, known as a pandemic, has recently been impacting the global economy. The RMG sector of Bangladesh was significantly affected by this phenomenon. Nonetheless, after the pandemic situation, RMG exports get a boost. The purpose of this article is to prepare a statistical database with information related to RMG to enhance the bright future of this sector and to forecast the total RMG export for 2025. In this study, data of previous RMG export is collected from the BGMEA website and forecasting is done with the linear regression method. The study shows that in 2025 RMG export will be nearly $70 billion. These results will help the stakeholders to take their due actions to meet the target.

Keywords: *Forecast, Apparel export, RMG, Bangladesh, 2025*

1. Introduction

The readymade industry has a significant role in the economic development of Bangladesh. The "Made in Bangladesh" label has also given prestige to the nation, elevating its status as a recognized brand throughout the world. Bangladesh is now second in RMG exports. This industry accounts for around 84 percent of Bangladesh's overall export value; RMG exports from Bangladesh have more than doubled, rising from $14.6 billion in 2011 to $33.1 billion in 2019, representing a 7 percent compound annual growth [BGMEA *Export Performance,* 2021]. During this time, Bangladesh's RMG industry grew its market share in world garment exports from 4.7 percent to 6.7 percent. Textile exports increased by 60 percent between 2011-2012 and 2017-2018, accounting for almost 85 percent of the country's total export [WTO Trade and tariff data, 2021]. The Export Promoting Bureau (EPB) reported an 8.76 percent increase in the apparel sector in FY18, with an export value of $32.92 billion, 1.51 percent greater than the aim [Textile Today, 2022].

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There was a sign of an economic slowdown, with negative growth in the second half of 2019 compared to 2018. Then, in 2020, COVID-19 struck, resulting in worldwide lockdowns, order reductions, cancellations, payment delays, and renegotiation of conditions. As the pandemic endangered Bangladeshi employees' lives and livelihoods, many smaller, less well-funded firms shuttered their doors, and competition for smaller orders grew. In the first year of the epidemic, the value of Bangladesh's RMG exports plummeted by 17 percent, implying revenue losses of up to $5.6 billion [BGMEA "*Export Performance,* 2022] As lockdown lifted, enterprises continued to experience supply-side restrictions, either due to a scarcity of labors as employees returned to their villages or difficultly acquiring intermediate inputs due to disruption in the value chain. Moreover, the COVID-19 epidemic has negatively influenced final consumption throughout the globe via the value chain process. Export orders from Europe and the United States have dropped dramatically [Gu *et al*. 2021]. The Bangladesh Export Promotion Bureau (EPB) had set a target to export $50.0 billion from readymade garment by 2021. But due to all the complications, it has just achieved $31.5 billion [The Financial Express, 2021]. Nevertheless, the RMG export has got back to its track, signaling a high growth.

Therefore, it is necessary to reset the target to manage progress so that all stakeholders, including manufacturers, buyers, and the government, can work in inline to attain the goal properly.

This paper has focused on fulfilling the following objectives:

1. To set the RMG export target by 2025.
2. To send a message to the players to meet the milestone.

2. Methodology

The data from secondary sources, such as the Export Promotion Bureau, BGMEA website, and other published papers and reports, is collected in this study.

For forecasting, the linear regression method is used on previous export records to predict apparel export for 2025.

First, based on actual exports, from 2011 to 2020, we have found the following linear equation.

$$Y = 1.3962X - 2787.6 \qquad (1)$$

The forecasted values made by equation (1) are presented in table1.

But due to the pandemic situation, overall exports stumbled down in 2020, exporting \$27.47073 billion. We, therefore, omitted the actual export of 2020 to get the result.

Finally, we found another regression formula based on actual data from 2011 to 2019, and forecasting is done by equation (2) and presented in table 2.

$$Y = 1.8393X - 3679.7 \qquad (2)$$

3. Results & Discussion

We attempted to find a forecast value for Bangladesh's apparel export in 2025 using linear regression. To generate the forecast, we used the actual RMG export values from 2011 to 2020. Using those prior numbers, we created estimates for the years 2021 through 2025.

Table 1. Forecasted values

Year	Actual value	Forecast value
2011	19.21447	***
2012	19.78814	***
2013	23.50098	***
2014	24.58396	***
2015	26.6027	***
2016	28.66829	***
2017	29.21293	***
2018	32.92688	***
2019	33.07238	***
2020	27.47073	***
2021	31.456.73	34.1202
2022		39.06804
2023		44.29512
2024		49.80144
2025		55.587

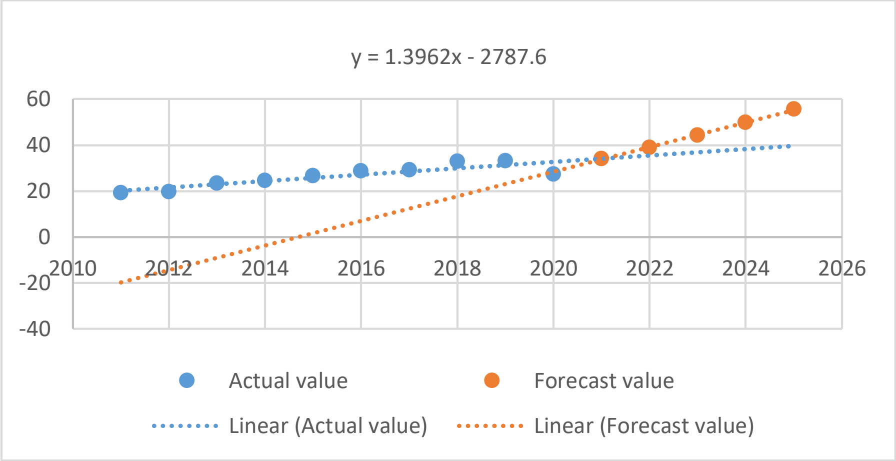

Fig. 1 Forecasted Export Graph of RMG of Bangladesh (Including 2020)

The figures show that export value in 2021 will be $ 34.1202 billion, and at the end of 2025 it will be nearly $ 56 billion, maintaining around 13% compound annual growth.

Table 2. Forecasted value

Year	Actual Value	Forecast Value
2011	19.21447	***
2012	19.78814	***
2013	23.50098	***
2014	24.58396	***
2015	26.6027	***
2016	28.66829	***
2017	29.21293	***
2018	32.92688	***
2019	33.07238	***
2020	27.47073	35.686
2021	31.456.73	39.401565
2022	27.497(July-Feb)	43.30106
2023		49.44468
2024		55.95616
2025		62.8355

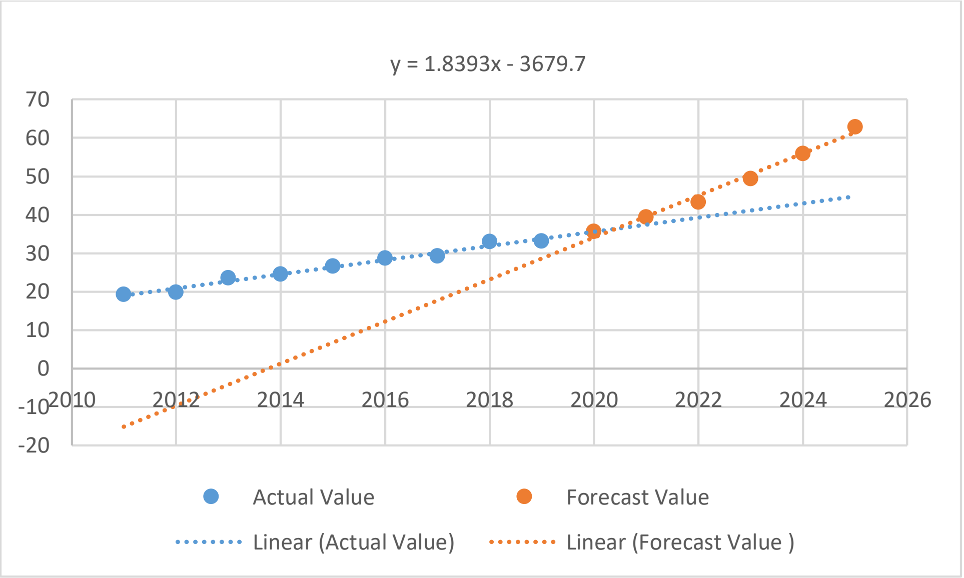

Fig. 2 Forecasted Export Graph of RMG of Bangladesh (Excluding 2020)

The data signals that in 2021, the overall export will jump to nearly $ 39.50 billion; this positive trend will continue up to 2025, trading around $ 63 billion. From 2021 to 2025, it will experience a 12 % compound annual growth rate**.**

Both tables and graphs display that the total export will rise; but due to the COVID-19 pandemic in 2020, it slightly dropped to $27.47073 billion. That happened due to the worldwide lockdowns, which canceled or reduced orders, and delayed payment by and large.

However, after the pandemic situation, the export found its path. Compared to 2020, in 2021, export increased to $31.456.73 billion, which is 12.55 % higher than last year's exports. Most importantly, this positive trend is escalating. The fact is, from July 2021 to February 2022, the export has already exceeded $ 27 billion, earning 30% growth. If this tendency continues, at the end of June 2022, the overall export will reach above $ 41 billion, which is very close to the forecasted value, $43.30106 billion, in 2022.

Due to this fluctuation in the data the estimated value for 2025 came out as $55.587 billion. Furthermore, the Compound Annual Growth Rate (CAGR) of RMG export during 2021-2025 is 12.98%.

Since COVID-19 is an unpredictable factor, we tried to exclude this factor and create another data table to compare with the previous data as well as find the possible data. Therefore, we removed the actual value of 2020 and then forecasted the values

This time the estimated value for 2025 climbed to $62.8355 billion and the CAGR during 2021-2025 is 15.19%. However, these are just statistical estimations, a lot of factors plays important roles in these values and sometimes these factors can have dramatical impact. A great example of factor we already mentioned is COVID-19. In table 2 our forecasted estimation of 2020 was $35.686 billion where we actually made $27.47 billion. Nonetheless, now that things are going back to normal there's a good chance that the numbers will go up by a fair amount. Other big factors that will affect positively towards our country's GDP is Padma Bridge, Metro Rail and Karnafuli Tunnel. According to State Minister for Planning Shamsul Alam, Bangladesh's gross domestic product (GDP) will increase by 1.5-2% when the Padma Multipurpose Bridge, Dhaka metro rail, and Karnafuli tunnel are completed [The Daily Star, 2022]. Expanding our market and trying diversified products with quality can also have significant impact in our GDP. Given that the United States and the European Union account for more than 80% of Bangladesh's apparel exports, experts believe that Japan, Australia, South Korea, Brazil, Mexico, Hong Kong, Taiwan, China, Singapore, Russia, and the United Arab Emirates could be new potential destinations for Bangladesh's apparel products if the country is able to diversify its product offerings while maintaining high quality and low production costs [BGMEA *Time to explore new markets for RMG,* 2022]. If we take these factors into account, we can make assumptions that by 2025 our RMG export value can grow up to $70 billion.

4. Conclusion

The Ready-Made Garments industry is a great illustration of what the country can accomplish. International trade is predicted to become more important to Bangladesh's economy in the next 20 years than it is now. The percentage of GDP accounted for by exports, particularly ready-made clothing, is likely to skyrocket. Our RMG sector have gone through many ups and downs such as Rana Plaza incident and most recently, the COVID-19 pandemic. The outbreak of COVID-19 and its impact on the garment sectors of Bangladesh has been stated. Things are returning to normal and businesses are slowly reopening after months of lockdown and other restrictions to prevent the virus from spreading. Nonetheless, despite all these challenges with global ups and downs, Bangladesh has repeatedly demonstrated its ability to overcome all odds and has positioned itself as the second largest apparel exporter. This study of ours shows the current stats as well as estimates the future stats of RMG exports of Bangladesh. These estimations can help us set a target and then work accordingly to reach it. If we can take the factors stated above into considerations, the RMG sector can surely increase our GDP by many folds.

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