# Applying the Growth Identification & Facilitation Framework for Bangladesh

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Abstract:- The growth identification and facilitation framework is a comprehensive approach that aims to identify and promote sectors with high growth potential in developing countries. In the case of Bangladesh, an integral aspect of this framework is the evaluation of the impact of currency devaluation on export performance. This paper aims to explore the potential benefits and challenges associated with currency devaluation as a strategy to enhance export performance within the context of Bangladesh. Currency devaluation can lead to increased competitiveness, as a depreciated domestic currency makes exports relatively cheaper for international buyers. This can result in a boost to export volumes and increased foreign exchange earnings for the country. An improvement in export performance due to currency devaluation can have a positive impact on the overall economic growth of the country. It can spur create development, industrial employment opportunities, and attract foreign direct investment. Currency devaluation can lead to increased import costs, as imported goods become more expensive in domestic markets. This can result in inflationary pressures, potentially impacting the purchasing power of the population and eroding the gains from export-led growth. Bangladesh relies on imported raw materials and intermediate goods for many export-oriented industries. A devalued currency may increase the cost of these inputs, potentially reducing profit margins and hindering export competitiveness. Currency devaluation alone may not be sufficient to address underlying structural challenges such as inadequate infrastructure, a lack of skilled labor, and bureaucratic hurdles. These bottlenecks could limit the potential benefits of devaluation on export performance. Focusing on product diversification and exploring new markets can help mitigate the risks associated with currency devaluation. By broadening the range of export goods and customer bases. Bangladesh can reduce its dependence on a few key industries or markets. Alongside currency devaluation, policymakers should prioritize promoting export-oriented industries by providing targeted incentives, improving infrastructure, and streamlining bureaucratic processes. This approach will strengthen the overall competitiveness of these industries and enhance their capacity to capitalize on a devalued currency. Small and medium-sized enterprises (SMEs) play a crucial role in export growth. Governments should focus on providing tailored support

to SMEs, including access to finance, business development services, and technology upgrades. This will help them adapt to changes in the currency value effectively and enhance their export more competitiveness. The identification growth and facilitation framework provides a comprehensive approach for Bangladesh to enhance its export performance. While currency devaluation can be a valuable tool, policymakers must carefully consider its potential impact on inflation, import costs, and structural bottlenecks. By implementing strategic policies and supporting the diversification and growth of export-oriented industries, Bangladesh can utilize currency devaluation effectively to drive sustainable economic growth and development.

*Keywords:-* Bangladesh; China; Human Resource Development; Readymade Garments; ICT, Finance.

# I. INTRODUCTION

Bangladesh, located in South Asia, holds a significant geo-economic and political position within the region. It is strategically located between South and Southeast Asia, providing it with access to regional markets. It shares borders with India and Myanmar, allowing for trade and connectivity opportunities. Bangladesh has two major ports, Chittagong and Mongla, which serve as vital gateways for international trade. These ports enable the country to connect with global markets and facilitate trade flows. Bangladesh boasts a substantial labor force, which plays a crucial role in its economic development. With a large population and relatively low labor costs, the country has become a prominent player in the global textile and garment industry.

Bangladesh operates under a democratic parliamentary system with stable governance. This political stability provides an enabling environment for economic growth and The government of Bangladesh investment. has implemented various policies and initiatives aimed at promoting economic growth, including infrastructure development, investment incentives, and export promotion schemes. Bangladesh actively participates in regional forums such as the South Asian Association for Regional Cooperation (SAARC) and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). These partnerships facilitate regional integration and cooperation, benefiting the country's economic prospects.

Bangladesh has experienced periods of currency devaluation, which can have both positive and negative effects on the economy. A devalued currency makes exports more competitive in international markets, potentially boosting export performance. Bangladesh heavily relies on exports, with the textile and garment industry accounting for a significant portion of its export earnings. Therefore, currency devaluation can play a crucial role in determining the export performance of the country. Devaluation of currency may lead to an improvement in the trade balance by reducing imports and increasing the competitiveness of exports. This, in turn, can strengthen the overall economy by increasing foreign exchange reserves and promoting economic growth. Currency devaluation can also result in increased costs for imported goods and raw materials, potentially impacting the overall cost of production. This could have both positive and negative implications for export-oriented industries.

The growth identification and facilitation framework is a useful tool for analyzing and promoting economic growth in Bangladesh. This paper will analyze the relationship between currency depreciation, changes in export volumes, trade balance, and the overall economic growth of the country. The study will draw on both quantitative data analysis and qualitative assessments to provide a comprehensive understanding of the dynamics at play. The findings will contribute to policy discussions and inform strategies for effectively utilizing currency devaluation as a tool for promoting export-led growth in Bangladesh.

The growth identification and facilitation framework offers a thorough analytical framework for comprehending the dynamics of economic growth and creating successful policy solutions. Bangladesh, a developing nation with a concentration on export-oriented growth, has had issues with its ability to compete internationally and the effectiveness of its exports. The effects of currency depreciation on a nation's export industry may be both favorable and unfavorable. On the one hand, a decline in the value of the currency might result in a relative decrease in the price of the nation's goods and services on foreign markets, improving export competitiveness. Devaluation, on the other side, may also drive up the price of imported inputs, thereby hurting total export performance.

We intend to give insights into the efficacy of currency devaluation as a strategy for encouraging export-led growth in Bangladesh by taking into account numerous aspects such as trade policy, productivity growth, and global market circumstances. Additionally, this study will throw light on Bangladesh's policy implications and offer suggestions that might improve the nation's export performance and competitiveness on the world market. The results of this study will not only add to the body of knowledge on growth identification and facilitation, but will also be helpful to policymakers, practitioners, and researchers who are trying to figure out how currency devaluation affects export performance in developing nations like Bangladesh.

Arayawuth et al. (2021) claim that Bangladesh is still developing, especially in terms of its economy and population. The same organization asserts that the country's successive governments have overcome long-standing obstacles to peace and stability, such as terrorism and extremism, intra-state conflicts, ethnic and religious hostility, confrontational political rivalries, violent crime, and problems with neighbors. Bangladesh's greatest comparative advantage is its labor force, which is currently underutilized. Bangladesh's per capita income in 2021 was \$2.503, according to World Bank data. According to a 2021 World Bank forecast, Bangladesh will no longer be a least developed country (LDC) by 2026. According to Hussain (2013), a recent World Bank study shows that Bangladesh could increase its trade by about 38% if it could raise the standard of its business climate to that of India. This shows that Bangladesh has tremendous potential that needs to be harnessed to move the country forward. Bangladesh also has an unemployment problem.

Bangladesh's natural resources, including forests, water, fisheries, mineral resources, land, marine resources, climate, energy and power resources from oil and gas, natural gas and oil, coal, rock and sand, and other resources, can be used to promote economic growth and development. Agriculture, fisheries, industry, finance, trade and transportation are some of the major economic sectors of Bangladesh. Bangladesh's major exports include ready-made garments, knitwear, frozen fish, jute, pharmaceuticals, tea, chemicals, and leather goods.

According to a forecast by the International Trade Ministry, ready-made garments (RMG) exports worth \$31.5 billion and workers' remittances from abroad, which reached a record \$24.8 billion in fiscal year 2020–21, will continue to be the main drivers of Bangladesh's economic growth in 2022. According to the International Monetary Fund (IMF), Bangladesh's GDP grew 6.94 percent annually to \$354.24 billion in fiscal year 2020–21. This alone shows the enormous development potential of our country.

While past theories promoted resource allocation based on market dynamics, we think a paradigm change is necessary. By fixing some governance issues, the Bangladeshi government must play a crucial role in modernizing the nation. Bangladesh has enjoyed a consistent development of its economy outside the petroleum industry since gaining independence (on March 26, 1971). All economic sectors have been impacted by the increase, but particularly the apparel sector. The International Trade Administration 2022 study states that from 2005 to 2019, Bangladesh's GDP grew steadily each year by more than 6%. Due to the COVID-19 pandemic in 2020, the economy slowed down. Bangladesh is endowed with both natural and human resources, thus a plan must be developed for the nation to get the most out of both.

## II. LITERATURE REVIEW

- Theoretical Framework
- Recent Economic Development in Bangladesh
- Economic growth in the past decade:

In its first 50 years of independence, Bangladesh has come a long way. Bangladesh has received accolades for its good economic performance over the last ten years, which has been made possible by careful macroeconomic management. Bangladesh's real GDP has increased at an annual pace of roughly 6.8% since FY 2011/12, reaching 8.2% in FY 2018/19 (WTO, 2019). An annual real GDP per capita growth rate of 5% has resulted in a sustained drop in poverty and increased access to healthcare and education. Several programs, including Vision 2021 and Vision 2041, the 7th and 8th Five-Year Plans, the National Industrial Policy 2016 and the Export Policy 2018–2021, have been implemented throughout Bangladesh (Bangladesh Planning Commission, 2020).

Bangladesh's economy has changed from being primarily agricultural to being more manufacturing-based, supported by a large pool of cheap labor. The ready-made garment (RMG) business has fostered economic growth. Additionally, a significant factor is the robust domestic demand. Approximately two thirds of Bangladesh's growth is attributable to private consumption. These all contributed on average to the GDP in the following ways: 28.42% for business, 22.42% for industry, and 49.33% for services. As a result, the service industries are mostly to blame for the expansion of the country's economy.

Bangladesh's 2015 passage over the World Bank's lower-middle-income country threshold was made possible by Bangladesh's robust GDP growth, which has also enabled the country to reduce poverty and improve other social indices.

More recently, in FY2020/21, Bangladesh's GDP increased by 3.5 percent due to a dramatic decline in exports, remittances, and imports caused by the COVID-19 epidemic as well as a nationwide lockdown that reduced domestic activity. A comeback in exports, which reflects the recovery of external demand from key trade partners and the strengthening RMG industry following the lockdowns caused by the pandemic, is expected to have helped growth boost up to 5 percent in FY2021/22 (World Bank,2022). Chart 1 presents historical sector-specific statistics, while Table 1 of the appendix provides a full analysis of sectoral contribution.



Chart - 1 Share of three Major Sectors in the Last More than three Decades Source: Bangladesh Economic Review, 2019

In terms of GDP structure, according to statistics from the World Bank, in 2020, Bangladesh's consumption, investment, and net exports accounted for 74.87%, 31.54%, and -6.40% of GDP, respectively. Agriculture, industry, and service industries accounted for 12.65%, 28.79%, and 54.63% of GDP, respectively.202 (World Bank). Table 2 displays the structural makeup as a proportion of GDP.

Sector	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Agriculture	17.38	16.77	16.5	16	15.35	14.74	14.23	13.6
Industry	28.08	29	29.55	30.42	31.54	32.42	33.66	35.14
Service	54.54	54.23	53.95	53.58	53.12	52.85	52.11	51.26

Table 1 Stru	cture of GDP	of Bangladesh (	As Percentage of	GDP, %)

Source: Bangladesh Economic Review, 2019

Production requires a variety of productive resources, including capital, as well as other productive resources. They are made up of both financial capital and physical capital, the latter of which is made up of both infrastructure and equipment (often utilized at the business or agricultural level) as well as machines. According to the decision of the UN General Assembly, which was held in November 2021, Bangladesh is planned to graduate from the group of least developed countries (LDCs) on November 24, 2026, around 50 years after it first entered this cohort of poor countries in December 1975.

Entrepreneurial competences are the skills, knowledge, and information that companies have. Technology, entrepreneurship, and entrepreneurial traits are among them. They include the vital skills required for production, investing, and establishing linkages at the firm/farm level. Chart 2 displays graduation-related indicators.



Chart - 2 Bangladesh's Graduation from LDC Status Source: Authors Calculation from UNCTAD Data

Productive resources, entrepreneurial capabilities, and production links are what UNCTAD has long referred to as "the productive resources, entrepreneurial capabilities, and production linkages, which together determine the capacity of a country to produce goods and services and enable it to grow and develop."Bangladesh's EVI score in 2021 was 33.6, which was below than the 39.1 points average for LDCs. These criteria assess a country's ability to sustain development and the associated aid needed to accomplish so. The index scores are displayed in table 1(a).

Table - 1(a	) Score status	s for	Graduation

Criteria	Threshold	Bangladesh Score		
GNI per capita (USD )	1,230 or above	1,274		
Economic Vulnerability Index (EVI)	32 or below	25.2		
Human Asset Index (HAI)	66 or above	73.2		

Source: Department of Economic and Social Affairs Economic Analysis, the UN.

In Bangladesh, agriculture has traditionally served as a driver of the nation's expansion and sustained progress. It is Bangladesh's main source of employment. The results of the first quarter of the Labour Force Survey 2023 show that there are now 73.69 million people working in Bangladesh, of which 48.25 million are men and 25.44 million are women. Broadly speaking, the sectors of agriculture, industry, and services held respective sectoral shares of 11.50 percent, 37.07 percent, and 51.44 percent in FY 2021–22, down from 12.07 percent, 36.01 percent, and 51.92 percent in the prior fiscal year. The sectoral makeup of the labor force is shown in Table 2.

Sector	LFS 1995-96	LFS 1999-00	LFS 2002-03	LFS 2005-06	LFS 2010	LFS 2013	LFS 2015-16	LFS 2016-17
Agriculture, forestry and fishery	48.85	50.77	51.69	48.1	47.33	45.1	42.7	40.62
Mining & quarrying	-	0.51	0.23	0.21	0.18	0.4	0.2	0.2
Manufacturing	10.06	9.49	9.71	10.97	12.34	16.4	14.4	14.43
Power, gas &water	0.29	0.26	0.23	0.21	0.18	0.2	0.3	0.2
Construction	2.87	2.82	3.39	3.16	4.79	3.7	5.6	5.58
Trade, hotel &restaurant	17.24	15.64	15.34	16.45	15.47	14.5	13.4	14.34
Transport, maintenance & communication	6.32	6.41	6.77	8.44	7.37	6.4	9.4	10.5
Finance , business & services	0.57	1.03	0.68	1.48	1.84	1.3	1.6	1.97
Commodities & personal services	13.8	13.07	5.64	5.49	6.26	6.2	6.2	6.08
Public administration and defense	-	-	6.32	5.49	4.24	5.8	6.2	6.08
Total	100	100	100	100	100	100	100	100

Table 2 Share of Em	ployed Labour Force	abova 15 Vaara	by Sector
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Source :BBS , Labour Force Survey , 1995-96,1999-00,2002-03,2005-06,2010,2013, 2015-16 & 2016-17.

According to ILO figures about labor and workforce, the unemployment rate increased from 4.2 percent in FY2018/19 to 5.3 percent in FY2019/20. The ILO estimates that in 2018, 26% of youth were not in employment, education, or training. Females are more affected than males, with a 44 percent to 9 percent difference. Bangladesh's foreign currency reserves peaked at 37.3 billion US dollars at the end of FY2019–20, placing it second only to India among South Asian nations (MOFCOM, 2021). In 2021, the agriculture sector employed 37.09 percent of Bangladeshi employees, followed by industry (21.71) and services (41.2).

## > Major Industries:

## • Ready-Made Garment Products:

The cornerstone of Bangladeshi manufacturing is the garment sector. This industry employs around 5 million individuals, more than 80% of them are women. The largest sector in Bangladesh that generates foreign cash is the apparel sector. Ready-made clothing exports totaled US\$27.94 billion in 2020, or 83% of the total export volume. Textile and apparel exports total 14.04 billion US dollars. More than 85% of these ready-made clothing items are sent to North America and Europe.

## • Jute and Jute Products:

With an annual production of more than 1 million tons, Bangladesh is the second-largest jute producer in the world. Of this amount, 65.0% is utilized for local manufacture and consumption and the remaining portion is exported. Bangladesh's second-largest export is jute and jute products. The jute sector has seen excellent growth in FY 2019/20. Jute and jute-related goods saw an 8.1% rise in export volume, going from US\$820 million in 2018-2019 to US\$880 million in FY2019/20.

## • Pharmaceutical Industry:

According to information provided by Bangladesh's Ministry of Finance, the pharmaceutical sector has grown quickly and the nation now produces 98% of the prescription pharmaceuticals it needs. There are 267 pharmaceutical plants in the country that create 26,910 different types of medications. At present, Bangladesh's drugs and pharmaceutical raw materials have been exported to 147 countries and regions, including the United States, the United Kingdom and other developed countries. Data from the Bangladesh Export Promotion Bureau show that the export of drugs brought in US \$136 million in fiscal year 2018–19, a rise of 4.49%.

## • Other Industries:

Bangladesh's industrial growth is often behind schedule, with a focus on labor-intensive light industries. Imports are a major source of revenue for the production of steel, non-ferrous metals, building supplies, cars, ships, and other goods. In Bangladesh, there are over 40,000 tiny light enterprises that produce almost 10,000 different items with an annual output value of roughly US\$120 million, including imported bicycles, small tools, toys, consumer goods, and consumer durables.

## • Foreign Direct Investment:

Bangladesh received \$2.564 billion in foreign direct investment in 2020, according to the United Nations Conference on Trade and Development's World Investment Report 2021. Bangladesh had drawn \$19.395 billion in FDI by the end of 2020. By the end of 2020, the United States (\$3.93 billion), the United Kingdom (\$2.52 billion), the Netherlands (\$1.61 billion), Singapore (\$1.52 billion), South Korea (\$1.18 billion), mainland China (\$990 million), and Hong Kong (\$940 million) were the top investment destinations.

Multinational companies actively invest in Bangladesh, including Unilever, Nestle, Chevron, Siemens, and British American Tobacco. China consistently encouraged the building of significant highway and power plant projects in Bangladesh in 2020. To make it easier for their businesses to invest in Bangladesh, China, Japan, and India have established industrial parks there. Foreign investors have taken notice of Bangladesh's strong promotion of the PPP model and introduction of international funding for infrastructure projects. The Manufacturing Sector's Volume and Growth Rate are displayed in Table 4 of the appendix.

# Bottleneck Problems:

Despite major advancements, inequality has increased, employment growth has slowed, and poverty reduction has been slower than in the preceding ten years. The biggest barrier to entering the formal workforce continues to be a lack of education and skills. Growth is being hampered by supply constraints, particularly in the transportation infrastructure.

# > The RCA Metrics

Revealed comparative advantage (RCA) is a notion built on the premise that trade patterns between countries are influenced by their relative productivity differences. Despite the difficulties of seeing such production fluctuations, an RCA metric that can "reveal" such disparities can be simply constructed from trade data. It should be noted that the RCA metric does not account for implemented national measures that have an impact on competitiveness, such as tariffs, nontariff measures, subsidies, and other factors, despite the fact that it can be used to provide a broad overview and initial approximation of a country's export competitiveness.

A country is considered to have a disclosed comparative advantage in a certain good if its exports of that commodity are a significant portion of its overall exports of all commodities.

That is,

$$RCA_{Ai} = \frac{\frac{X_{Ai}}{\sum_{i \in P} X_{Aj}}}{\frac{X_{wi}}{\sum_{i \in P} X_{wi}}} \ge 1$$

Where

*P* is the set of all products (with  $i \in P$ ), X<sub>Ai</sub> is the country A's exports of product *i*, X<sub>wi</sub> is the worlds's exports of product *i*,  $\Sigma_{j \in P} X_{Aj}$  is the country A's total exports (of all products *j* in *P*), and

 $\Sigma_{i \in P} X_{wi}$  is the world's total exports (of all products *j* in *P*).

When a nation has a revealed comparative advantage (RCA) for a specific good (RCA >1), it is assumed that it is a competitive producer and exporter of that good in comparison to a nation doing so at or below the global average. A nation is said to have a strong export position in a certain product if it has a significant comparative advantage in it. A country's export strength in product i is inversely correlated with the value of its RCA for that product.

Modern Bangladesh started economic reforms in the late 1970s to favor open markets and foreign direct investment. By the 1990s, the country's ready-made garment industry is prospering. Remittances from the huge Bangladeshi diaspora become a major source of foreign exchange reserves. Bangladesh's competitiveness index ranged from 14.77 points on average from 2007 to 2019, reaching a record high of 52.12 points in 2019 and a record low of 3.50 points in 2009. The ready-made garment (RMG) industry has been one of the main engines of the country's economy. It is the main source of export revenue and accounts for 84.21% of all export revenue generated by the country (BGMEA, 2020). In comparison to other manufacturing locations, Bangladesh provides inexpensive production costs, including reasonable labor expenses and competitive pay. Bangladesh has become a popular sourcing location as a result of the global garment companies and purchasers drawn by this cost advantage. Chart - 3 displays an example radar map of some items of readymade garments.

 RADAR Plot of Five Revealed Comparative Advantage Index In Readymade Garments Industry:
 Men's or boy's clothing, of textile, knitted, croche.
 Women's clothing, of textile, knitted or crocheted × Articles of apparel, of textile fabrics, n.e.s.
 Clothing accessories, of textile fabrics • Articles of apparel, clothing access., excluding textile



Chart - 3 Competitiveness Source: Authors Calculation from UNCTADStat

# • Lack of Skilled Workforce:

Bangladesh has a large demographic dividend and access to inexpensive labor. However, Bangladesh has a poor level of labor productivity. Given that a sizeable portion of Bangladesh's labor population is poorly skilled, skill mismatches provide a significant barrier to entry into the formal economy. For instance, in July 2017, the Bangladesh Labor Market and Technology Gap Report revealed that there would be a significant shortage of trained people in Bangladesh as the country's population would increase to 157 million by 2040 from 93 million in 2030. Bangladesh's biggest comparative advantage is its labor force, which is currently underutilized while being vast and growing. In order to accommodate the growing labor force and make better use of the pool of potential underemployed people, labor-intensive industries must be expanded.

• Power & Water :

Another barrier preventing Bangladesh's economic and social progress is a lack of water and power. About 5% of the population remains without access to power. Bangladesh suffers from severe water and electricity shortages, and power outages are frequent. In order to maintain their own power supply and to secure water supply, many foreign businesses in Bangladesh frequently opt to buy fuel oil and natural gas-powered generators.

# • Other Pressing Issues:

The government of Bangladesh must address issues like the vulnerability to climate change, efforts to improve worker safety, diversification of the economy, policies to encourage privatization, expansion of special economic zones, development of transportation infrastructure, regulatory guidelines for pharmaceuticals and medical devices, support for the textiles sector, development of the ICT sector, liberalization of trade in services, and difficulties facing the banking sector. In the interim, Bangladesh would need to continue with ongoing reforms that would strengthen the diversification of its economy and the competitiveness of its industries, as well as improve its business environment and fiscal conditions, in order to maintain the growth momentum and address post-LDC graduation challenges.

## • Empirical Studies with Economic Development Outlook:

This dynamic has been the subject of several studies, particularly when it comes to rising economies like Bangladesh. Khan (2015) is a significant research that covers this subject. With an emphasis on the depreciation of the currency and its effects on export performance, this extensive study analyses growth patterns and policy implications for Bangladesh. The author stresses the significance of a framework for identifying and facilitating growth, which enables a methodical examination of the elements affecting growth and the creation of useful policy recommendations.

Another study by Ahmed and Mahmood (2017) looks at the connection between Bangladesh's export performance and the depreciation of the currency. The authors examine the long-run and short-run relationships between these variables using a Vector Error Correction Model (VECM). The results demonstrate that currency depreciation has a beneficial impact on export growth, showing that it can

improve a country's competitiveness in global markets. To achieve sustained export performance, the research also emphasizes the significance of overcoming supply-side restrictions and raising productivity.

The effect of currency depreciation on the ready-made garments (RMG) export performance of Bangladesh is examined by Chowdhury (2019). To examine the impact of exchange rate variations on RMG exports, the study uses a gravity model and data on national exports. The results show that a currency depreciation benefits RMG exports, indicating that devaluation may be a useful tool to increase the sector's export competitiveness.

Furthermore, Raihan et al. (2014) investigate how Bangladesh's currency rate policy might support exportoriented growth. The authors underline the necessity for consistent and stable policy in this area while discussing the need of a competitive exchange rate to facilitate export development. The report also emphasizes how infrastructure upgrades and changes in trade policy work in tandem to increase export performance.

The body of research shows how important currency devaluation is in affecting export performance, particularly in developing nations like Bangladesh. The growth identification and facilitation framework, as used in several research, offers a thorough method for comprehending the relationship between currency depreciation and export performance. Overall, the study emphasizes the necessity for encouraging policies, dealing with supply-side restrictions, and improving productivity to achieve sustained export-led growth in Bangladesh.

Bangladesh Given the easing of pandemic-related economic disruptions and the continuance of supporting macroeconomic measures, GDP growth is anticipated to be resilient in the medium run. The forecasted inflation rate will stay higher than the desired level of 5.3%. Increasing global commodity prices and heightened uncertainty as a result of the hostilities in Ukraine will put a strain on the external and fiscal sustainability. Continued high commodity prices, which might aggravate inflation dynamics and affect the external balance, a decline in global demand for Bangladesh's exports, and the possibility of COVID-19 waves necessitating future additional containment measures are all negative concerns. (IMF, 2022)

The economic growth is anticipated to increase to 6.6 percent in FY2021/22, backed by a strong recovery in exports, continuing implementation of the stimulus packages, and accommodating monetary and fiscal policy, according to the IMF's 2021 Article IV Consultation Report of Bangladesh. The lockdown and limitations, moderate growth in private credit, and a low vaccination rate, however, all point to a sluggish rebound. Growth is anticipated to reach 7.1 percent in FY2022/23 as both the domestic immunization program and the external environment improve. In comparison to pre-pandemic forecasts, the output level is predicted to decline in the medium term as a result of the pandemic's effects.

The Gross Domestic Product (GDP) provides an economic snapshot of a country and may be used to estimate the size and growth rate of an economy. When computing GDP using the expenditure method, the sum of all final goods and services bought in an economy during a certain time period is taken into account. As of 2022, Bangladesh's nominal (current) Gross Domestic Product (GDP) is \$460,201,000,000 (USD). In 2022, Bangladesh's real GDP inflation-adjusted) amounted (constant, to \$222,726,000,000, 2022's GDP Growth Rate was 7.10%, an increase of 20,254,000,000 US Dollars from 2021's Real GDP of \$285,269,000,000. A graph of the GDP from 2000 to 2020 may be seen in Chat - 4.



Chart - 4 Gross domestic product: GDP by type of expenditure, VA by kind of economic activity, total and shares, annual (US dollars at current prices in millions) Source: Authors calculation from UNCTADStat

## III. RESEARCH METHODS

This study uses the Growth Identification and Facilitation Framework (GIFF) as its theoretical underpinning to examine the link between currency depreciation and export performance in Bangladesh. The research design, data collection, data analysis, and references used in this study are described in this methodology. To acquire a thorough understanding of the influence of currency depreciation on Bangladesh's export performance, this study takes a qualitative method. This study uses an exploratory research approach to look at the connection between export performance and currency devaluation.

The theoretical framework for this study is the Growth Identification and Facilitation Framework (GIF) suggested by Hausmann, Rodrik, and Sabel (2004). GIF offers a thorough framework for understanding and analyzing the variables influencing economic development, with an emphasis on the identification and facilitation of economic activities.

The research largely uses secondary data sources, such as articles from scholarly journals, publications from renowned organizations like the World Bank and the International Monetary Fund, the Bangladesh Bureau of Statistics, and central bank papers, as well as statistical data.

By analyzing historical exchange rate data and concentrating on changes in the value of the Bangladeshi Taka relative to major currencies, the variable Currency Devaluation will be evaluated. Data on exports, including total export value, export destinations, and sector-specific exports, will be gathered. To account for additional factors impacting export performance, some macroeconomic data will be incorporated, such as GDP growth, inflation rate, interest rates, and trade balance. The presentation of trends and patterns in currency depreciation, export performance, and macroeconomic indicators will be done using descriptive statistics. To investigate the connection between currency depreciation and export performance, correlation analysis will be used. Thematic analysis and other qualitative data analysis approaches will be used to examine and understand the qualitative data gathered from interviews with pertinent industry stakeholders, decision-makers, and specialists. The qualitative research will shed further light on how important players perceive and interact with the effects of currency depreciation on export performance.

## *The Growth Identification and Facilitation Framework*

A specific recommendation of New Structural Economics is that modern economic growth entails a number of technology-driven innovations, industry diversification and upgrading, infrastructure development, and the establishment of various institutions whose primary duties are business maximization and profit generation. The unique structure of the country's endowments controls the factor price and the finer structure of the industries during the process of economic evolution. It consists of a good deal of everything that a nation produces in plenty throughout time. In this regard, Bangladesh, a middle-income nation, is blessed with an abundance of human capital and natural resources. Aparico and Muzzini (2013)

In addition, 69% of Bangladesh's total population of 167 million people are in the productive age range of 15 to 64 years, which represents significant potential for the country's human capital. (UNFPA, 2022) This is a crucial element that may provide a comparative advantage and develop into a competitive advantage in labor-intensive industries both domestically and overseas. Economic development in labor-rich, resource-rich economies, Lin, 2011. As a result, achieving the optimum industrial structure would make Bangladesh a highly competitive state, which is appropriately determined by the structure of endowments, i.e., human capital in the form of labor resources.

The rate of technological advancement has a significant impact on the dynamic nature of the nation's endowment-structure. Any little change in the relative pricing may have an impact on the choice of industries since the type and category of industrial structure must be consistent with the country's underlying comparative advantage. The comparative advantage can only then be transformed into a national competitive advantage. Therefore, the wage level is crucial for directing a country's comparative advantage.

It is a reality that if the right circumstances and conditions exist, developing nations may manufacture the same good at a lower cost than wealthy nations. Bangladesh will have to adopt or learn technology-based intervention approaches as a result, which will cost money. For established new industries with their own endowment structures, this will undoubtedly help the nation as a latecomer. The benchmark would be the role model nation, whose example would be followed in the manner of the flying-geese strategy used by numerous countries to attain the aim of a successful economic behemoth over the course of many decades.

Estimates from the Bangladesh Bureau of Statistics (BBS) place the broad industrial sector's share of GDP at 34.74 percent in FY 2019–20 and 34.99 percent in FY 2020–21. The wide industrial sector of the GDP consists of four of the fifteen GDP sectors: mining and quarrying, manufacturing, electricity, gas, and water supply, and construction. The manufacturing industry makes up the largest portion of the GDP. The manufacturing sector's share of GDP grew from 23.59 percent in FY 2019–20 to 23.66 percent in FY 2020–21.

This new initiative of faster industrial growth is not entirely dependent on process regulation by the market. Despite operating in a sector of the economy where comparative advantage exists, the nation may face significant obstacles due to a lack of required infrastructure and input components. Because private businesses would not be able to make such investment decisions in the true spirit of intended efforts for industrial upgradation and diversification, the involvement of government becomes even more important for the sake of regulation and coordination in the involved areas.

Additionally, the method used to innovate and diversify the sectors is risk-oriented, which immediately puts the first-movers at risk in the aftermath of externalities. If the leading firms don't succeed in getting the desired outcome, it serves as a model for other businesses. However, if the early enterprises are successful, they serve as an example for others to follow when making decisions about the types and groups of industries that may be profitable in a given nation under a certain set of circumstances.

However, if other businesses take this endeavor, they could eliminate the potential of renting out space that a firstmover firm would typically have. In industrialized nations, prime moving companies may typically get patents and benefit from the rents accumulated following a successful industrial setup. However, no patent is available because a comparable system is already in use abroad in another industrialized nation. In this situation, the enterprises leading the industrial diversification initiative will benefit directly from government control and cooperation.

The GIFF proposes a new method whereby a certain industry is recognized as having a comparative advantage in that particular economy, and then assistance is given to the industrial enterprises of that nation in order to help them advance quickly by removing the underlying obstacles. Since private businesses are unable to handle the sectorspecific difficulties on their own, government must choose the winners. This is an inevitable process. The main danger in this situation is that the nation may choose an industry that is far more advanced and established than the nation's own prospective comparison. Another potential of choosing incorrectly is choosing an industry in which the concerned country no longer has a comparative advantage.

These policy ideas provide a collection of 6 methods for detecting and promoting the growth process. Selecting certain sectors is one of the three steps. Once the target industries have been identified, the value-chain analysis can provide light on the obstacles that are anticipated to arise when private sector companies enter and advance within these particular sectors.

The first stage in this approach is to identify specific items and services whose production and trade have grown over the previous three decades in the rapidly developing economies. Additionally, these nations must be endowed with a similar endowment structure and a per capita GDP that is between 100 and 300 percent higher than that of the host nation. In most cases, the quickly expanding economy that has produced products and services for around 20 years may start losing its comparative advantage in this specific sector since wage levels are likely to rise throughout the growth-related initiative. In this situation, Bangladesh's textile manufacturing industry is the best business endeavor since it allows for cautious interventions in a few carefully chosen regions through investments and government backing. The nation already has a large natural endowment of labor to assist the process. Long-term economic growth of the nation will result from the creation of successful new businesses as a result.

**Second,** it is the responsibility of the government to provide priority to the chosen industrial sectors, particularly those in which there aren't many independent private sector businesses. The obstacles faced by these businesses that prevent them from raising the bar and enhancing the value of their goods must be identified by the government. The government need to work to remove the barriers that keep new businesses from entering the manufacturing industry. The manufacturing industry also affords the government the flexibility to establish fair conditions for luring high-income nations' foreign direct investment.

Thirdly, after key industrial areas have been determined, the government must develop a plan to concentrate on and take into account the experiences of private companies that have been successful. The government need to provide them with assistance so they may modernize their manufacturing facilities.

In the parts that follow, this framework's specific applicability to Bangladesh is discussed.

## > Applying the GIFF: Comparative Value-Chain Analysis:

The World Bank's "The Textile-Clothing Value Chain in India and Bangladesh" report offers a value chain analysis of the Bangladeshi textile industry as well as policy recommendations for the government to help it identify the sector's bottlenecks and encourage investment, which will eventually help it trade its goods internationally to become even more competitive. The two nations covered by the report are Bangladesh and India. However, Bangladesh is the particular emphasis at this time since it is seen as a unique circumstance.

Some analysis highlights the policy issues by comparing India and Pakistan to the textile industry's primary obstacles and possibilities (Hossain & Baars, 2022). The goal of this comparison is to evaluate other comparable nations that are also significant exporters of goods connected to textiles on the global market in terms of competitiveness. While China has been selected as a benchmark country for comparison in order to suggest a framework for sector growth facilitation.

In one investigation, 40 different businesses participated in a firm-based survey. According to the findings, Bangladesh must create Special Economic Zones and Industrial Parks. Since the nation has a comparative edge in producing ready-made clothing during the previous few decades, there is plenty of room for it to see future expansion in this industry. To turn its comparative advantage in the textile and cotton-related sectors into a competitive advantage, the GIFF-based intervention in the chosen industry will provide outstanding outcomes. The proposed SEZs are not connected to the road or rail networks, which creates a bottleneck and poses a significant

policy difficulty. Therefore, the regions mentioned require significant government engagement and investment.

## IV. RESULTS AND DISCUSSION

## > Identifying Sectors for Growth:

Selecting Sector(s) for Prioritization: Selected Country with a Per Capita Income 100 - 300 Percent above Bangladesh's : China - Randomized Search at First Glimpse

Bangladesh, one of Asia's youngest nations, is wellpositioned to benefit from the long-awaited "demographic dividend" since a larger proportion of its population is of working age. Bangladesh's largest comparative advantage is labor, and the country currently underutilizes its large and expanding labor force. The increase of labor-intensive activities is necessary to absorb the expanding labor force and effectively utilize the current pool of underemployed individuals. And since domestic demand has few chances for specializing in labor-intensive industries, that implies increasing exports.

What opportunities exist to increase exports? Competitors of Bangladesh are becoming more costly locations to conduct business. It is anticipated that China would export less produced items that need a lot of work in the future years. It won't hold a third of the global market share for items including clothing, textiles, footwear, furniture, toys, electrical products, auto components, plastic, and kitchenware. Bangladesh's exports of manufactured goods would nearly quadruple if it were to capture only 1% of China's manufacturing export markets. Bangladesh is well into the third phase of demographic transition, having switched from a high mortality-high fertility regime to a low mortality-low fertility one, according to population trends. The population is split, with around 6% of people over 65 and about 29% of people under the age of 15. Due to the demographic dividend, which began in 2007 and is anticipated to last through 2040, this favorable age structure offers great potential for boosting our economy. Chart No. 5 compares the trend of the working-age population.



Chart - 5: Bangladesh Demographic Window

The pay in Bangladesh is only one-third of that in China or Indonesia and only half that in India. Other nations exporting clothing that are taking advantage of the exceptionally cheap labor costs include Cambodia, Pakistan, and Vietnam. Bangladesh can benefit from this inexpensive advantage over its rivals. If Bangladesh can overcome the infrastructural barrier and use its sizable labor pool of underemployed workers, it can become the "next China," with its labor-intensive manufactured exports expanding at double-digit rates each year. According to a recent World Bank research, Bangladesh could expand its commerce by roughly 38% if it could raise the standard of its business climate to that of India. Bangladesh must take action right away or else others will seize the markets that China is leaving.

To protect the economy from external shocks like the current global financial crisis and recession in the US and EU economies, export-product and market diversity is essential. Diversification of exports is seen to be linked to generally high economic performance, according on experience from other nations. There has been some development in this area. Bangladesh sold goods of \$1.2 billion, \$720 million, and \$634 million to members of the

Asian Clearing Union, the South Asia Association for Regional Cooperation, and the Organization of Islamic Countries, respectively, in fiscal year 2012. Japan continues to be a vast unexplored market with tremendous potential. The United States, Canada, the United Arab Emirates, and South Korea are among further developing import markets that Bangladesh may consider.

Bangladesh's development trajectory has to be improved with a fresh round of reforms. The country of Bangladesh may transition from a rural, agro-based economy to an urban, manufacturing one by deepening and diversifying its labor-embedded exports. at 2011, McKinsey & Company conducted an interview-based study of chief buying officers at European and American apparel firms. The results revealed a number of issues that, if not resolved, might prevent Bangladesh from luring away garment buyers who are leaving China. These include the following in regards to transportation: clogged highways, few options for interior transportation, a lack of deep-sea ports, utility supply, adherence to labor and social norms, Soaring risks and lengthy lead times, a productivity gap reflecting skill and technological shortcomings, corruption and political unrest.

Bangladesh may grab the chance to enter the vacuum created by China's transformation by confronting these challenges head-on. In contrast to many other nations, Bangladesh's private sector played a significant role in advancing the nation's growth. The private sector in Bangladesh has contributed significantly by providing basic banking services through microcredit and mobile financial services, or by employing over four million women throughout the 4,000 textile factories in Bangladesh.

This function will need to grow in importance over the next several years as the globe experiences an unprecedented transformation brought on by digital interconnection and the emergence of new technologies like blockchain, artificial intelligence (AI), and the Internet of Things (IoT). Countries, industries, organizations, and even people are changing in previously unheard-of ways as a result of the fourth industrial revolution. As platform business models like Uber gained popularity, others like Pathao in Bangladesh and Oyo Rooms in India developed. A growing entrepreneurial movement is supported by easy access to cash and cheap capital needs, which make it possible for any gifted person to start a business.

The use of social media is at an all-time high. However, technology is also bringing about a number of unexpected consequences, and if they are exploited incorrectly by the wrong parties or by the general public, they might have a destabilizing influence on the economy. The economies of many nations are dependent on a small number of sectors and, in certain circumstances, businesses. More and more nations are actively reshaping their policies to make them applicable to the brand-new world at the nexus of technology and society. Many nations are beginning to understand how crucial it is to adjust to this new environment. To position itself for hypergrowth and long-term success, the private sector in Bangladesh has to reevaluate its role in the country.

Many nations are progressively relocating their activities domestically as a result of the development of new technology like robots and the need to create domestic employment. Adidas recently revealed that starting in the next year, it would begin mass producing running shoes at a German plant that is mostly controlled by robots. Companies can cut their operational costs thanks to these new technologies, thus nations that engage in cost arbitrage need to be prepared to adapt to these developments. The solution to these types of developments is to look for methods to add more value, whether through high valueadded services or by using technology to increase productivity. The answer is not to lower employee compensation in order to maintain low costs. The structural makeup of the services sector as a share of the GDP is displayed in Table - 3.

Activity	FY1980	FY1980	FY1990	FY2010	FY2019
Trade	12.92	12.28	13.3	14	13.34
Transport	10.42	9.53	7.49	9.01	8.24
Tele communication	0.23	0.4	0.68	1.56	1.1
Financial Services	1.31	1.38 1.75		3.08	3.89
Real Estate	8.7	8.54 9.48		7.15	7.87
Public Administration	1.4	2.05	2.05 2.85		4.09
Education	1.98	1.88	2.43	2.4	3.02
Health	2.33	2.29	2.12	2.01	2.15
Hotels and Restaurants	0.57	0.59	0.6	0.92	1.04
Personal and Community Services	7.95	9.35	12.22	12.57	10.78
Total Services	47.81	48.28	52.91	56.05	55

Table 3 The Structure of Service Sector (% GDP) at Current Price

Source: Bangladesh Bureau of Statistics

Poland just became the first nation from the former Soviet Union to be classified as a "developed market," with its GDP having doubled in the previous 25 years. Regarding business development, it may serve as an intriguing example. In order to facilitate the development and successful execution of state policies linked to business, innovation, and staff adaptation in their goal to become an innovation-driven economy, Poland established the Polish Agency for Enterprise Development (PARP).

One of the things the Indian IT sector achieved was to make outcomes more predictable through effective procedures. An IT services provider is deemed to be capable of delivering a risk-free performance for the duration of a project if it has achieved SEI CMM Level 5 certification (Software Engineering Institute Capability Maturity Model). Gaining project owners' confidence in how risks are handled builds trust and positions the sector for long-term success.

With a test-and-learn mentality, the private sector needs to build confidence in implementing new technology. With full knowledge that this may succeed or fail, an Indian supplier to the automobile sector recently incorporated 3D printing for a minor portion of their manufacturing process. This kind of experimentation aids in the development of new organizational capacities and, more crucially, molds adaptable organizational attitudes.

Technologies like artificial intelligence (AI) have the potential to significantly enhance quality in Bangladesh's well-known readymade garments (RMG) industry. To assess textile grades, weed out recurring flaws, and even assess color, algorithms might be trained. Amazon and other shops already use AI to learn customer preferences. The RMG industry will not only develop new skills but also assist in moving up into high-value-added, technological services if it can assist its clients in translating these preferences. Due to its enormous population, the nation may be able to generate and use the massive datasets necessary for AI success. Only when the fundamental pillars are solid can all of the aforementioned occur.

The private sector may also make a contribution in the area of responsible use of digital and social media. Every citizen must act like a responsible statesman in the digital age. We all recall how, after watching a football game during the World Cup, videos of Japanese supporters cleaning the stadium went viral all over the world. It improved Japan's reputation and earned it respect across the world. Kindness and ethical behavior even in little doses may have a hugely good impact on our respective organizations, communities, and nations.

In addition to community development initiatives already started by the business sector, some CSR initiatives may focus on promoting ethical social media use, educating responsible online conduct, and eradicating fake news. Leaders from the business sector must also thoroughly document their ideas and activities related to responsibility. Most significantly, they must be disseminated on regional and international platforms in order to effectively establish brands in the eyes of both the general public and international decision-makers.

The argument for Bangladesh cannot be made globally by the public sector alone. It need the assistance and backing of business. The nation expanded by 7.28 percent. GDP has increased by more than 6% for the eighth year running. The private sector was essential to this expansion, and in order to go to the next stage of growth, it must go outside its own organizations and work to spark systemic change. They must encourage ecosystem growth, broaden the scope of their CSR initiatives, embrace an experimental attitude to develop new skills based on emerging technologies, and, most significantly, influence local as well as global industry and national agendas.

Bangladesh, a nation the size of Iowa that borders both India and Burma and is located in the northeastern part of the Indian subcontinent, is expected to have 165 million people living there by the year 2021, according to the World Bank. The seventh most populous and most densely inhabited nation outside of city states is Bangladesh. Bangladesh is a fantastic prospective market for American products. The net migration rate in Bangladesh fell by 2.18% from 2021 to 2022, to -2.113 per 1000 people. The net migration rate in Bangladesh fell by 2.17% from 2020 to 2021, to -2.160 per 1000 persons. Bangladesh's net migration rate fell by 2.08% from 2019 to 2020, to -2.208 per 1000 persons. According to the World Bank categorization, Bangladesh became a lower middle-income country (LMIC) in 2015, and the sector of labor migration has also contributed to the fast expansion of per capita GDP and gross national income (GNI) [GED, 2020, p. 28]. Chart - 6 shows the annual outflow of migration from Bangladesh.



Chart -6 Annual Outflow of Migrant Workers Source: Bureau of Manpower, Employment and Training (BMET)

According to a World Bank estimate, Bangladesh's Gross Domestic Product (GDP) per capita was \$2,503 in 2021, and the country announced in 2021 that it will leave the category of Least Developed Country (LDC) in 2026. Since 2005. Bangladesh has consistently seen yearly GDP growth of over 6%, with the exception of 2020, when the economy slowed due to the COVID-19 epidemic. The \$31.5 billion ready-made garment (RMG) sector and ongoing remittance inflows from foreign workers, which reached a record \$24.8 billion in fiscal year (FY) 2020-21, continue to be major drivers of Bangladesh's economic growth. (Remember that the fiscal year in Bangladesh runs from July 1 to June 30.) The International Monetary Fund (IMF) estimates that Bangladesh's GDP was \$354.24 billion. Despite this expansion, domestic resource mobilization will be a fiscal policy priority because, according to the Bangladesh Ministry of Finance, tax collections in the fiscal year 2020-21 were just 7.7 percent of GDP. The high ratio of non-performing loans (NPL) in state-controlled banks is a recurrent issue that the financial industry must address. The Government of Bangladesh (GoB) aggressively pursues foreign investment, especially in the infrastructure, agribusiness, light manufacturing, energy, and clothing industries. The government's industrial policy and export-oriented growth plan include a variety of investment incentives. Bangladesh experienced net inflows of \$2.9 billion in foreign direct investment (FDI) in 2021, according to the UNCTAD. The projected foreign exchange reserves of Bangladesh declined from \$44.96 billion in May 2021 to \$42.2 billion in June, according to the central bank.

RMG manufacturing dominates Bangladesh's export economy, while the majority of the population only lives in urban areas 38.2 percent of the time. Despite employing 40.6% of the workforce, the agriculture industry contributed just 13.6% of GDP in 2017 (BBS). 20.4 percent of the population is employed in the industrial sector, which makes up 35.1% of GDP and is mostly made up of RMG and light manufacturing. 39 percent of the population is employed by the services sector, which contributes 51.3 percent of the GDP.

• Comparison Table: Key Exports of China, India, Vietnam, and Indonesia:

The process of picking areas for growth is thoroughly explained in Table 6 in the appendix. We achieved parity with the major exporters from China, Vietnam, India, and Indonesia.

Sectoral Priority Setting Search:

# • Prioritization of Value Chains

More over 80% of Bangladesh's entire export revenue comes from the apparel and textile industry, making it the second-largest exporter in the world. There is a research vacuum on the impact of involvement and position of the garment and textile sector in the Global Value Chain (GVC), despite it having a crucial influence in policymaking in developing nations like Bangladesh.

Numerous articles use multiregional Input-Output to empirically analyze the involvement and position of Bangladesh's garment and textile sector in the GVC. They discovered that although this nation contributes significantly to the global apparel sector and has a competitive advantage in terms of low-cost manufacturing and specialization, it has not been able to completely integrate into the global production network. Additionally, they discovered that

Bangladesh's garment and textile industries are downstream in the GVC and have higher backward involvement than forward participation.

However, a sizable portion of commerce in this nation comes from the downstream stages. The results of those studies indicate that increasing Bangladesh's textile and apparel sector's GVC involvement might have a significant positive effect on the local industry. Local prerequisites, such as proper backward linkage for the manufacturing process, R&D for innovation, less regulatory limitations, a mature money market in international operation, and a welcoming climate for foreign investors, are necessary to increase capability. Despite global COVID-related worries, Bangladesh's export profits reached an all-time high of USD 52.08 billion in FY22. As usual, Readymade Garments (RMG) garnered the lion's share, garnering USD 42.61 billion. Exports of woven and knitted garments, clothing accessories, and home textiles collectively made for 86.55 percent of Bangladesh's \$41.721 billion in total exports from July through March of FY23. Bangladesh is the secondlargest exporter of garments as a whole, with \$45 billion in apparel exports in 2022, according to the WTO's World Statistical Review 2023. China continues to hold the top spot. Bangladesh ranked 56th in the world in terms of exports in 2021 with a total of \$51.8B. China made investments totaling 644.30 million USD (13.5% of all foreign direct investment in Bangladesh). Hong Kong made investments totaling 179.22 million USD (5.2%) during the period of July through June of FY22, and China made investments totaling 465.17 million USD (13.5%). Table 4 compares the data for the percentage of garment exports.

Table 4 Comparative Statement on H	Export of RMG and Total Export of Bangladesh
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Year	Export of RMG (in million US\$)	Total export of Bangladesh (in million US\$)	% of RMG's to total export		
2005-06	7900.80	10526.16	75.06		
2006-07	9211.23	12177.86	75.64		
2007-08	10699.80	14110.80	75.83		
2008-09	12347.77	15565.19	79.33		
2009-10	12496.72	16204.65	77.12		
2010-11	17914.46	22924.38	78.15		
2011-112	19089.69	24287.66	78.60		
2012-2013	21515.73	27027.36	79.61		
2013-2014	24491.88	30186.62	81.13		
2014-2015	25491.40	31208.94	81.68		

• Potential Business Sectors for Investment in Bangladesh: The Economist has praised the nation as the next Asian Tiger. And this is reflected in investment interest. According to the United Nations Conference on Trade and Development, it got \$3.61 billion in FDI last year, which is the greatest amount it has ever received. This rapid increase demonstrates the local market's untapped potential and the few FDI that Bangladesh has previously attracted. Bangladesh is undergoing growth changes like to those India underwent in recent years, and as a result, we think it may become one of the region's most powerful economies.

Bangladesh, which has the eighth-largest population in the world (nearly 165 million) and a territory the size of Iowa, is the most densely inhabited non-city-state nation in the world. Bangladesh shares a 247 km border with Burma and a 4,100 km border with India. It is located in the northeastern part of the Indian subcontinent. Despite the significant economic headwinds brought on by the global COVID-19 outbreak, Bangladesh is likely to continue to draw growing amounts of investment thanks to its long history of steady economic growth, a sizable, young, and hardworking labor force, strategic location between the sizable South and Southeast Asian markets, and a thriving private sector.

Over the past 10 years, Bangladesh has consistently had annual GDP growth of more than six percent, fueled by a young labor population and an expanding consumer base.

# • Agri-business Sector:

The Bangladesh Investment Development Authority (BIDA) estimates that domestic market sales would reach \$8 billion by 2025, making Bangladesh's agribusiness, which includes food processing and associated machinery manufacture, the country's most promising of eight developing industries. The majority of Bangladesh's agricultural output is classified as traditional subsistence farming. Bangladesh produces a wide range of agricultural goods, including dairy products, rice, wheat, corn, legumes, fruits, vegetables, meat, fish, and other seafood. The primary dietary component of Bangladeshis is rice.

## • Investment Areas:

From the 1970s through the 1990s, annual growth in agriculture was less than 2%; during the past two decades, it has climbed to 3.5%. Similar to this, the agriculture sector has been a significant contributor to the decline in poverty in Bangladesh, where it was responsible for 69% of all poverty reduction between 2005 and 2010. The sector with the fastest growth in Bangladesh is e-commerce. Rapid advancement is being made. Each day, on average, 50 new businesses launch their e-commerce operations. Only 1-3 percent of the companies in this category survive.

## • Garments & Textile Sector

With over 80% of all exports coming from the readymade garment sector, it is the largest and most important part of the Bangladesh textile industry. T-shirts, jeans, and skirts are just a few of the numerous clothes that Bangladesh is renowned for creating. The Readymade garment (RMG) industry. RMGs, which are the final textile products from apparel manufacturers, have seen one of the Bangladeshi economy's quickest development rates, with a growth rate of 55% between 2002 and 2012. Because of their continued brilliance since 1960, our export commerce and clothing industry have become major players in the global economy. In Bangladesh, there are nearly 5000 ready-made clothing industries.

# • ICT Sector

It is evident that Bangladesh's total economic progress will only be achievable if the nation makes the most of its enormous human and intellectual resources and cultivates "qualified labor" as opposed to the "cheap labor" for which it is known. Without this, it is our well-considered opinion that no amount of funding for economic growth initiatives will have a significant impact in this nation with a population of 135 million, a density of 900 people per square kilometer, and more than half of that population under the age of 30. With greater alternatives for e-HRD, Bangladesh has the ability to not only "staff" local sector development, boosting exports and adding employment, but also to export skilled labor in and of itself. A comprehensive ICT-focused educational program will allow Bangladesh to become a source of highly valued, talented ICT professionals, increasing remittance levels and opening up prospects for countless numbers of its population.

A focus on the development of a skilled, ICT workforce would allow Bangladesh to literally bank on one of its underutilized resources -- its enormous population -- given the local barriers to traditional industrial development at a level capable of supporting such a large population (135 million). IT directors in all sectors believe that there is a shortage of IT skills.

# • South Asia's IT Hub

In the fiscal year 2021–2022, according to recent statistics from the Export Promotion Bureau, Bangladesh earned \$592 million from exports of IT and information technology enabled services (ITES), including software, consulting, and equipment maintenance. Up till now, the ICT industry has generated about 300,000 job prospects. By 2025, it is anticipated that the nation's ICT exports would amount to \$5 billion USD. The government anticipates that the IT industry will contribute 7.28 percent to GDP growth by 2021 as Internet usage rises.

## • Current Tech Scenario:

Over 750,000 ICT specialists are employed by over 4,500 IT/ITES businesses in Bangladesh. Since 2013, export revenue has increased by 21% annually, surpassing USD 1 billion in 2019. There is a sizable pool of online employees, which further boosts the wages. Bangladesh is quickly emerging as a vibrant market. A sizable domestic consumer market, a fast growing middle and wealthy class, and an exceptional rate of digital adoption are the main drivers of this expansion.

## • Future Possibilities:

By 2025, Bangladesh's startup ecosystem might provide more than 1.5 million employment, significantly boosting the economy of the nation. The number of tech businesses in Bangladesh has increased dramatically over the past ten years, making the nation a hub for tech startups. Over the following five years, the Bangladesh ICT Market is anticipated to expand at a CAGR of 1.83%. The market is expanding rapidly as a result of Bangladesh's increasing focus on information technology, robotics, healthcare, artificial intelligence, and cyber security.

# • Electric & Electronic Sector:

Numerous consumer and commercial electronic devices make up the electronic and electrical equipment sector. The industry is made up of over 3,000 companies and employs about 1 million people. Mobile phones, household appliances such refrigerators, air conditioners, televisions, electric fans, radios, DVD and CD players, ovens, blenders, and other consumer goods are among the products that Bangladesh's electronics sector mostly manufactures. Accumulators, transformers, and diodes are only a few examples of electrical equipment that is produced and exported.

At the end of 2019, it was predicted that the market for electronics, which includes both industrial and consumer electronics, will be about USD 5.29 billion. By 2025, the sector is projected to develop at a 15% annual pace and reach around USD 12 billion. The consumer electronics industry is predicted to grow to a value of USD 10 billion by 2030, from an estimated USD 2.4 billion in 2020. The cell phone is the most popular consumer electronics item, followed by the refrigerator, television, and air conditioner. Additionally, the market for batteries and accumulators is expanding quickly.

# • Frozen Foods:

Frozen shrimp was the main export of the nation in 2020–2021. Frozen food export earnings reached USD 477.37 million in the fiscal year 2020–21, an increase of 4.65% over the USD 456.15 million realized in the prior

fiscal year. In 2020–21, shipments of frozen food made up 1.23% of the nation's total export earnings. The government is promoting semi-intensive shrimp farming According to the Bangladesh Bureau of Statistics' Economic Census, there were 246 medium-sized food processing businesses in Bangladesh, which employed 19% of the country's industrial manufacturing workforce and 8% of all manufacturing workers.

## • Health Care Sector:

The private sector dominates the healthcare sector, and tertiary hospitals and diagnostic facilities are expanding quickly. By the end of 2019, the Directorate General of Health Services (DGHS) has registered 255 public hospitals, 5,054 private hospitals and clinics, and 9,529 diagnostic centers. The delivery of healthcare is a difficult problem for Bangladesh's healthcare systems. The key issues affecting Bangladesh's health care delivery are examined using real data, including absenteeism, corruption, a lack of physicians and nurses, inefficiency, and poor management.

## • Medical Equipment Sector:

The market for medical devices and equipment is still in its infancy, with 85 percent of the items coming from outside. The Bangladeshi market was predicted to be worth USD 442 million in June 2020 and is anticipated to develop at a CAGR of 13% to reach over USD 820 million in 2025. Due to low bed density and changes in illness profiles, there is an unmet demand for tertiary & secondary hospital establishment. One of the key industries in the National Industrial Policy 2016 is "Healthcare & Clinic." Medical technology services Telehealthcare has a significant potential to reach the vast majority of people in both cities and small communities thanks to the over 93 million internet users worldwide. Local production of medical devices and equipment, such as consumables and surgical tools, ICU and OT equipment, diagnostic imaging equipment, and In Vitro Diagnostics (IVD) devices, has enormous potential. Bangladesh's privileged access to 52 nations can benefit device and equipment manufacturers.

• Automobile Sector:

One of the most promising markets for the growth of four-wheeled vehicles is Bangladesh. Since 2013, there has been a more than doubling in the number of cars registered each year; in 2019, there will be roughly 26,000 passenger vehicles and 37,000 commercial vehicles (excluding autorickshaws and people haulers).

• Power Sector:

As of June 2022, Bangladesh's utilities electrical industry has one nationwide grid with an installed capacity of 25,700 MW. Bangladesh's energy industry falls short of expectations. However, Bangladesh's per-capita energy consumption is thought to be larger than its output. Bangladesh has a lot of potential for deploying renewable energy. If suitable financial structures, such as green bonds, are set up, it is predicted that about 7,500MW of solar power may be quickly added to the energy mix.

#### • Pharmaceutical Industry:

Branded generic medications dominate the Bangladeshi medicine industry, making up over 80% of all domestically produced medications, with patented medications making up the remainder. Currently, the nation has enterprises manufacturing 271 allopathic, 205 avurvedic, 271 unani, 32 herbal, and 79 homeopathic drugs. About 257 licensed pharmaceutical factories are active in Bangladesh, of which 150 are functioning, according to the Bangladesh Association of Pharmaceutical Industries (BAPI) and Directorate General of Drug Administration (DGDA). Nearly 98% of the local demand is satisfied by these manufacturers.

## • Tourism Sector:

With more visitors visiting the nation, the tourism industry's significance is currently growing. The government would spend Tk 3,400 crore (more than twice as much as the previous fiscal year) on Biman Bangladesh and the Ministry of Tourism during the 2019–20 fiscal year.

The longest natural beach in the world, historical mosques and monuments, gorgeous landscapes, mountainous forests and fauna, rolling tea plantations, and many tribes are just a few of the tourism attractions Bangladesh has to offer. The diverse wildlife, lush vegetation, and vibrant tribal culture all captivate visitors .Bangladesh has always been a popular travel destination. But in terms of global tourism, her position is now insignificant. A nation may directly benefit from tourism by constructing the infrastructure required to support both the local population and visitors.

# • Ceramics Industry :

The ceramics industry was founded in 1958 and now employs around 65 people in the production of classic ceramics such heavy clay, tiles, sanitary ware, tableware, and insulators. In the fiscal year 2017–18, domestic demand for ceramic items totaled USD 660 million, and 96% of tableware, 77% of tiles, and 89% of sanitary ware are satisfied by local manufacture. The ceramics sector in Bangladesh has had multifaceted expansion during the past ten years, including increases in local and export markets (26% over the last three years), as well as a 200% increase in production capacity over the previous five years. Over 500,000 people are thought to be employed indirectly by the industry, in addition to the 48,000 persons employed directly.

# • Export-Import Status:

With total exports of 31,734,162.42 and total imports of 48,058,710.04, Bangladesh had a negative trade balance of -16,324,547.62 in US dollars. The Most Favored Nation (MFN) Weighted Average Tariff for Bangladesh is 12.32%, while the Effectively Applied Tariff Weighted Average (customs duty) is 11.82%. In contrast to a global growth rate of -6.30%, trade growth is just 2.98%. In current US dollars, Bangladesh's GDP is 416,264,802,185.17. In BoP, current US dollars, Bangladesh exports services worth \$7,474,532,386.43 while importing services worth \$10,866,010,472.68. The GDP share of Bangladesh's exports

of goods and services is 10.66%, while the GDP share of its imports of goods and services is 17.06%.

According to Bangladesh Bank, the overall value of products exported by Bangladesh in 2020–21 was \$33.9 billion, while the value of services was \$6.1 billion. Bangladesh, on the other hand, imported products and services totaling \$54.4 billion and \$7.2 billion, respectively.

Over the past ten years, Bangladesh's economy has expanded steadily. Due to the COVID-19, Bangladesh's GDP growth fell to 3.4% in 2020 from an average annual growth rate of 6.9% between 2011 and 2019. The country's GDP recovered in 2021 by 6.9%, and the IMF anticipated 7.2% growth in 2022. It has made strides in eliminating poverty and achieved lower-middle income status according to the World Bank in 2015.

## • Bangladesh's Top Imports:

Petroleum and oil make up the majority of Bangladesh's imports (11%) followed by textiles (10%) and food (9%) products. Other items include: yarn, plastic and rubber products, chemicals, edible oil, and iron and steel (7%) among others.

# • Bangladesh's Top 10 Imports:

The following product categories will account for the bulk of Bangladesh's import spending in 2022. The proportion of total imports into Bangladesh that each product category accounts for is also displayed.

Oil and other mineral fuels: \$11.5 billion (or 17.6% of all imports), Computers and related machinery: \$6.2 billion (9.4%), \$4.9 billion (7.5%) in cotton, Electrical equipment and machinery: \$4.3 billion (6.5%), Steel and iron: \$3.9 billion (6%), Fats, oils, and waxes from animals and plants: \$2.7 billion (4.2%), Materials made of plastic: \$2.5 billion (3.8%), Feed: \$2.2 billion (3.3%), Fabric made of yarn or hooks: \$2.14 billion (3.3%), \$2.09 billion (3.2%) in synthetic staple fibers

The top 10 imports into Bangladesh account for over two-thirds (64.7% of the total value of its product purchases from foreign nations).

Oil and other mineral fuels imported by Bangladesh, including gasoline, were the product category with the quickest growth.

• Bangladesh's Imports of Cotton and Related Products:

Bangladesh became the third-largest raw cotton importer in the world in 2021, bringing in \$2.8 billion. Raw cotton was Bangladesh's second-most imported item that year. India (\$1.38B), Brazil (\$430M), Benin (\$425M), the United States (\$311M), and Greece (\$74.4M) are the main countries from which Bangladesh receives raw cotton. In terms of raw cotton imports for Bangladesh between 2020 and 2021, India (\$678M), Brazil (\$116M), and Benin (\$107M) saw the strongest growth rates. • Bangladesh's Imports of Mineral Fuels and Related Products:

As the 46th largest importer of mineral fuels, mineral oils, and products of their distillation worldwide in 2021, Bangladesh brought in \$8.21 billion in mineral fuels, mineral oils, and products of their distillation. Mineral fuels, mineral oils, and products of their distillation were Bangladesh's second-most-imported goods in the same year. Mineral fuels, mineral oils, and products of their distillation are principally imported by Bangladesh from Singapore (\$1.65 billion), Malaysia (\$1.31 billion), China (\$1.28 billion), India (\$1.23 billion), and Qatar (\$1.18 billion). Qatar (\$1.18B), Malaysia (\$905M), and Singapore (\$748M) had the highest expanding import markets for mineral fuels, mineral oils, and products of their distillation for Bangladesh between 2020 and 2021.

• Bangladesh's Imports of Machinery Including Computers:

Bangladesh became the 52nd-largest machine importer in the world in 2021, bringing in \$11.9 billion. Machines were Bangladesh's second-most imported product that year. Bangladesh sources its machine imports mostly from China (\$4.95 billion), India (\$1.05 billion), Russia (\$944 million), Hong Kong (\$861 million), and Singapore (\$704 million). Between 2020 and 2021, China (\$1.6B), Japan (\$387M), and Hong Kong (\$260M) had the fastest growing import markets for machines for Bangladesh.

• Bangladesh's Imports of Electrical Items:

The following 10 subcategories of electronic equipment, including consumer electronics, saw the most spending by Bangladeshi imports in 2021. Smartphones and other phone gadgets cost US\$1.4 billion, up 13.8% from 2020. Electrical/optical circuit boards and panels increased by 229.1% to \$356 million. Electrical converters/power units increased by 21.5% to \$329.1 million. Insulated wire and cable increased by 51.0% to \$232.2 million. Unrecorded sound media increased by 9.8% to \$193.2 million. Electric generating sets and converters increased by 11.2% to \$184.8 million. Integrated circuits and microassemblies increased by 535.5% to \$179 million. From 2020 to 2021, Bangladesh's purchases of insulated wire or cable (up 51%), electrical and optical circuit boards and panels (up 229.1%). and integrated circuits or microassemblies (up 535.5%) expanded at the quickest rate. These figures, along with the percentage growth in brackets, make it evident where Bangladeshi consumers and enterprises have the most demand for various types of imported electronics.

## Bangladesh PESTLE Analysis 2021: Challenges and Potential:

(Political, Economic, Sociological, Technological, Legal and Environmental)

Bangladesh is a nation in Southeast Asia that is situated on the Bay of Bengal. We'll talk about Bangladesh's business prospects and whether or not there are good investment possibilities there. A fuller understanding of Bangladesh's general environment is provided in the following PESTLE study of the nation.

## • Political Factors:

A useful tool for examining the elements that contribute to economic progress is the progress Identification and Facilitation Framework (GIFF). Understanding the influence of political issues in the instance of Bangladesh, such as the depreciation of the currency and its impact on export performance, might offer useful information for policymakers. The effects of real effective exchange rate and export performance on economic growth of Bangladesh are the focus of a primary research on this topic by Akhtaruzzaman, Islam, and Siddique (2020). This study looks at the connections between changes in the value of the Bangladeshi Taka, export success, and general economic growth. The Taka's depreciation can affect export performance in both good and negative ways, according to Akhtaruzzaman et al. (2020).

By cutting prices, a depreciated currency may increase exporters' ability to compete on global markets. A boom in export volume results from this greater competitiveness, which eventually supports economic development. A discounted currency can also entice foreign investment, boost businesses that depend on exports, and improve the trade balance, supporting economic growth.

The researchers did add, though, that currency depreciation might not always be advantageous for export performance. They discovered that in some circumstances. devaluation may result in a drop in export revenues, particularly if the nation is highly dependent on imported inputs or if the export industry is not sufficiently diversified. This scenario may lead to higher production costs, interruptions in the supply chain, and decreased competitiveness, eventually impeding export growth and overall economic development. The paper suggests a number of policy recommendations to reduce the possible adverse impacts of currency depreciation on export performance. These include measures to encourage export diversification, lessen reliance on imported inputs, grow domestic industries, upgrade infrastructure, improve the business climate, and offer exporters support mechanisms. Policymakers may more effectively capitalize on the advantages of currency depreciation and assure long-term export development by putting these measures into place.p Policymakers in Bangladesh can comprehend how political variables affect economic growth by using the Growth Facilitation Framework (GIFF). Identification and

According to study by Akhtaruzzaman et al. (2020), currency devaluation has a significant impact on export performance. The paper underscores the significance of currency depreciation and illustrates the possible benefits and difficulties connected with it.

• Trade with India:

A thorough strategy for economic development, the Growth Identification and Facilitation (GIF) framework focuses on locating and supporting industries that have the potential to lead to sustainable growth. Policymakers may make wise choices to promote growth and improve Bangladesh's economic performance by having a thorough grasp of the variables affecting trade dynamics. A key factor in fostering an environment for economic growth is political stability. In the case of Bangladesh, diplomatic efforts and collaboration are needed to preserve a healthy trading relationship with India. Trade can be hampered by political unrest, which lowers export performance.

• Economic Factors:

# • GDP and Covid-19:

Currency depreciation can improve export performance by lowering the cost of the nation's goods for overseas consumers, increasing competitiveness. A calculated weakening of the Bangladeshi currency in relation to the Indian rupee can encourage exports to that country. To lessen reliance on a single market, export diversification must be encouraged. Bangladesh should look towards industries with a competitive edge where it can benefit from its inexpensive labor and resources, such textiles, medicines, and information technology. Ecologically sound techniques and adherence to environmental laws might improve the reputation and marketability of Bangladeshi goods in India. In order to boost export performance and adhere to international sustainability norms, Bangladesh should invest in eco-friendly technology, support renewable energy sources, and promote sustainable industrial methods.

In sectors focused on exports, adopting and integrating technology breakthroughs may considerably improve productivity, efficiency, and quality. To remain competitive in the Indian market, Bangladesh needs engage in R&D, innovation, and technical collaboration. Chart 7 displays an illustration of poverty decrease.



Chart - 7 Annual Percentage Point Decline in Poverty Source: GED Estimates Using HIES Data

## • Revenue Streams:

Remittances (5% of GDP \$16.4 billion in FY 19) and the export of clothing to foreign nations both provide significant income for Bangladesh. The majority of the foreign employees who send money home to Bangladesh are located in the Gulf States, which have been negatively impacted by the decline in oil prices. Despite the second wave of the terrible epidemic having a positive impact on remittances, the USA has canceled purchases worth billions of dollars.

# • Sectors Contributing to the Economy:

Bangladesh is the fourth-largest producer of rice, however due to frequent natural catastrophes, they occasionally have to import rice. Tea, jute, wheat, sugarcane, tobacco, spices, and fruits are examples of additional production. 13.1% of the GDP is attributed to agriculture. The largest industry in the nation is textile, which contributes 28.5% of the GDP to the industry. Even though the business contributes significantly to the economy, one of the biggest problems it faces is the enormous gap between client demand and real cotton availability. However, services (53.5%) are the sector that contributes the most to the GDP. Amazingly, Bangladesh is a major technology exporter.

## • Social Factors:

For businesses that are export-oriented, skilled labor is essential for boosting productivity and competitiveness. To enhance its workforce quality and boost export performance, Bangladesh must invest in education and skill development initiatives. Tailoring Bangladeshi products to Indian consumers' needs requires an understanding of the preferences, tastes, and cultural quirks of the Indian market. A higher potential for exports may result from this societal understanding.

# ✓ Legal Factors:

Preferential trade agreements and global trade agreements may have an impact on export performance. In order to promote better access to the Indian market by lowering trade obstacles, Bangladesh should actively participate in discussions and leverage accords like the South Asian Free Trade Area (SAFTA).

# ✓ Legal System:

The nation's legal system is the same one that the British utilized when they ruled the subcontinent. It started out as a combination of Mughal and English customs but has since developed. Both Hindus and Muslims are represented in their governance.

## ✓ Foreign Investment:

Although welcomed, foreign investment is not permitted in specific sectors, particularly those that are involved in mining, forestry plantations, and national defense. In reality, the government promotes foreign investment in local businesses to strengthen the infrastructure and economy.

# • Tax Exemption:

Bangladesh has been actively using the Growth Identification and Facilitation (GIF) framework to accelerate its economic growth as a result of its expanding economy and efforts toward sustainable development. The depreciation of the currency and its effects on export performance should be taken into account as part of the PESTLE study. Investigation of the connection between currency depreciation, export success, and tax exemptions in

the context of Bangladesh's economic expansion is required. Currency devaluation is the purposeful decline in the value of a nation's currency relative to other currencies. Making local goods and services more accessible and competitive on global markets can have a favorable influence on export success. But it's important to look at the key factors that contribute to the effectiveness of devaluation in promoting export growth.

First, by increasing price competitiveness, devaluation can improve export performance. According to a research by Kathuria and Rangarajan (2016), devaluation significantly increased export volumes in nations including South Korea, India, and Vietnam. A more competitive exchange rate increases export growth and boosts export demand by enabling international customers to acquire goods and services at comparatively cheaper rates.

Devaluation also aids in addressing the problem of trade imbalances. Bangladesh has been dealing with a trade

deficit, where imports are worth more than exports. Exportoriented industries may raise output as a result of devaluation in order to enhance their competitiveness. This promotes economic expansion and directly helps close the trade imbalance.

The decline in remittances has now established a regular trend due to more persons using hundi, an illegal channel, despite the fact that more Bangladeshis are travelling abroad for work. Overall remittances received from July through March of FY'23 totaled USD 16035.08 million, an increase of USD 15298.26 million over the corresponding period of FY'22. The average percentage of remittances to Bangladesh is 4.59 percent, ranging from a minimum of 0.19 percent in 1976 to a maximum of 10.59 percent in 2012. As of 2021, the latest recent percentage is 5.33 percent. The yearly trend of remittance inflow is seen in Chart 8.



Chart - 8 Inflow of Remittances 1990 - 2020 (% of GDP) Source: Author's Calculation from World Bank data

In order to support export-oriented industries and maintain their competitiveness on the global market, tax exemptions are essential. The government may encourage enterprises to invest in industries with the potential to generate export revenue by lowering the tax burden. Tax exemptions come in many different forms, such as tariff drawbacks, fiscal incentives, and export subsidies. By lowering manufacturing costs, raising profitability, and promoting innovation and market growth, these policies help exporters. In the case of Bangladesh, tax exemptions have been crucial in developing the ready-made garments (RMG) sector, which makes a sizable contribution to the nation's export revenues. To aid in the expansion of this industry, the government has provided a number of tax breaks, including exemption from value-added tax (VAT), decreased corporation tax rates, and duty-free imports of machinery. To ensure the efficiency of tax exemptions, it is crucial to maintain a balanced perspective. Overly generous exemptions may result in revenue loss and limit the government's ability to spend money on other crucial areas like social welfare and infrastructure improvement. Currency depreciation can improve export competitiveness and support Bangladesh's economic expansion. It becomes a potent export performance driver when coupled with sensible tax exemption rules. Policymakers may carefully coordinate devaluation measures and tax exemptions to promote sustainable economic development, minimize trade imbalances, and establish a climate that is advantageous for export-oriented sectors by utilizing the development Identification and Facilitation framework.

#### • *Climate and Weather:*

For developing nations like Bangladesh, the Growth Identification and Facilitation Framework (GIF) is a useful tool for identifying and prioritizing sectors with a high potential for long-term economic growth. The framework includes a thorough PESTLE study that enables policymakers to comprehend the numerous external forces influencing the nation's economy. A focus on the impact of climatic and meteorological elements is important. PESTLE analysis is a technique for assessing the political, economic, social, technical, legal, and environmental aspects that are present in a certain nation or area. Bangladesh's environment and weather have a huge impact on how the country's economy performs in terms of exports.

Bangladesh is situated in an area that is particularly vulnerable to climatic change and severe weather phenomena. The nation is faced with difficulties including cyclones, floods, and increasing sea levels, which pose serious hazards to its infrastructure, agricultural sector, and general economic stability. Exports are directly impacted by these climate-related issues, particularly in industries that primarily rely on agriculture and natural resources. Exports of agricultural goods, including rice, jute, and tea, make up a sizeable portion of Bangladesh's export profits. However, changes in the temperature and weather might affect agricultural productivity and export quantities. For instance, cyclones and regular floods can harm crops, resulting in decreased yields and a disruption of supply systems. These weather-related variables may lead to lower export rates and lower foreign exchange revenues.

Another important area in Bangladesh's export-based economy is the clothing and textile sector. Climate changes have a variety of effects on this business. First, lengthy rainy seasons or excessive heat might impede manufacturing, delaying the timely delivery of orders. Second, fluctuations in weather patterns may alter consumer demand for particular garment categories, which might have an effect on export quantities. Last but not least, a change in production procedures may be required as a result of rising temperatures, raising costs and reducing price competitiveness.

Export Performance and Currency depreciation: Export performance can be affected in two different ways by currency depreciation. On the one hand, it can increase exports' competitiveness by bringing down their prices on international marketplaces. Bangladeshi goods may become more competitive and hence significantly less expensive than those of their international competitors if their currency depreciates.

On the other side, currency depreciation can also raise the cost of imports, including raw materials for sectors that rely on exports. In the near run, this may result in greater manufacturing costs, thus offsetting the benefits of a lower currency. As a result, the effects of currency devaluation on export performance are complicated and dependent on a number of variables, such as the industries affected, the state of the market, and general macroeconomic stability.

Bangladesh has to carefully assess the possible effects of these factors on export performance, particularly in the agricultural and textile industries, given its vulnerability to climate change and extreme weather occurrences. Policymakers may benefit from the insights offered by the Growth Identification and Facilitation Framework and a thorough PESTLE study in order to manage difficulties and set priorities for sustainable economic growth initiatives. Although currency depreciation may improve export competitiveness, authorities must take wider sector-specific macroeconomic implications and vulnerabilities into account. In order to improve export performance and guarantee long-term economic resilience, Bangladesh must address climate-related issues and enact the necessary legislation.

• Pollution:

Bangladesh suffers from pollution, much as other developing nations. The nation was named the most polluted nation in the world in 2019 while Dhaka was named the second-most polluted city globally. Due to the lockdown enforced by the Covid-19 virus's advent, the air pollution did decrease to some extent. This in no way lessens the grave fact that air pollution poses a severe hazard to the nation. Despite the fact that the majority of people in Bangladesh have access to water, the quality of the water is not always suitable for drinking.

## Remarks on Bangladesh PESTLE Analysis

The GIF framework offers Bangladesh а comprehensive viewpoint to address the possibilities and problems in its trading relations with India. Bangladesh may evaluate its export performance and plan for sustainable growth by taking into account variables including currency labor. depreciation. export diversification, skilled technology improvements, legal agreements, and sustainable practices. The results of this PESTLE study should be used by decision-makers to guide their actions and adopt specific policies and programs that will allow Bangladesh to fully realize its economic potential in trade.

• *TVET* (*Technical and Vocational Education and Training*):

Bangladesh is one of the better-performing nations in South Asia and is placed 129th out of 191 countries on the UNDP's 2022 Human Development Index (HDI) (Liller, 2022). Skills development has to be connected to growing industries in order to accelerate economic growth. It is encouraged for traditional apprenticeships to create and accept training standards through trade groups, with the Bangladesh Standards and Testing Institute (BSTI) and Bangladesh Technical Education Board (BTEB) serving as facilitators.

## • Challenges:

## ➢ Key Constraints for Each Sector

In the pursuit of sustained economic growth, countries often face various constraints within their sectors that hinder progress. Bangladesh, a developing nation, has embarked on a growth identification and facilitation framework to address these constraints. One of the key binding constraints in Bangladesh's agriculture sector is the lack of modernization and technology adoption. There are many papers that highlight the importance of improving agricultural productivity through the introduction of advanced farming techniques, mechanization, and better irrigation systems. However, inadequate access to credit, limited knowledge transfer, and fragmented landholdings pose significant challenges to the sector's growth. The manufacturing sector in Bangladesh faces binding constraints such as limited access to finance, high energy costs, and inadequate infrastructure. Some papers emphasize the need for efficient regulatory policies, greater investment in infrastructure development, and skill enhancement programs to boost manufacturing productivity and competitiveness. Additionally, the devaluation of currency can directly impact the export performance of the manufacturing sector.

Devaluation of currency refers to a deliberate reduction in the value of a country's currency against other currencies. This can potentially impact a nation's export performance, as it influences the competitiveness of its goods and services in international markets. When a country's currency is devalued, its products become relatively cheaper in comparison to goods produced in countries with stronger currencies. This price advantage can potentially increase the demand for Bangladesh's exports, leading to enhanced export performance. Devaluation can enhance the competitiveness of export-oriented industries, such as readymade garments and textiles, which play a crucial role in the country's economy. Devaluation also presents certain challenges. Increased import costs, inflationary pressures, and concerns over the stability of the domestic economy can arise due to devaluation. Furthermore, devaluation alone may not be sufficient to improve export performance if other binding constraints, such as infrastructure deficiencies or ineffective trade policies, remain unaddressed.

This paper suggests that while devaluation may provide temporary relief, sustainable export performance requires a comprehensive approach. Strategies such as diversification of products, expanding market access, improved trade facilitation, and investment in research and development are vital to long-term export growth. Bangladesh faces key binding constraints in its agriculture and manufacturing sectors, which hinder economic growth. Many research papers on the growth identification and facilitation framework sheds light on these constraints and provides valuable insights. This paper emphasizes the importance of addressing these constraints, along with considering the impact of currency devaluation on export performance. While devaluation can have positive implications for export-oriented industries, it must be accompanied by other measures to ensure sustained and inclusive growth in Bangladesh.

Finding barriers to the expansion of economic sectors is a difficulty for the government, particularly in emerging nations. Transportation is a limitation that affects all sectors. As the primary strategy for tackling the transportation issues, it is crucial for the Bangladeshi government to invest in transportation infrastructure in industrial zones. With a few exceptions, such as issues obtaining finance, low productivity, dwindling land, etc., the food processing industry-which includes the production of rice, potatoes, oil seeds, pulses, maize, vegetables, and jute-has experienced rapid growth in recent years. By providing small farmers with access to financing and diversifying agricultural output with high-value crops, the government, through the regular "Five Year Plan", ensures assistance for farmers (General Economics Division, Bangladesh Planning Commission, 2020).

One of Bangladesh's largest and fastest-growing businesses, construction has the potential to generate job opportunities (Saba, 2019). Inadequate access to financing is the major challenge the construction sector must overcome. Other restrictions include a lack of skilled labor and sharp increases in land costs (Rahman, 2015). The government should allocate more money to the education sector and match skill-development initiatives with market demands. The assembly of domestic electronics (refrigerator, washing machine, TV, etc.), motorcycles, tractors, mobile phone sets, and other items is predicted to increase quickly. The key barrier is that a significant amount of components are imported as a result of local manufacturers' lack of backward linkage industry (Faruque, 2022; LightCastle Anslytics Wing; & Islam, 2022). For instance, 70% of the component parts used in the motorbike assembly sector are imported (LightCastle).

The computer assembly sector has expanded quickly in recent years. To help close the skills gap and cut costs. Lin (2012) suggests a cooperation between the public and commercial sectors. In addition, LightCastle Analytics Wing (2022) suggests that the government should work with the business sector to (i) support reforms in high-tech manufacturing, (ii) create sustainable supply chains, and (iii) keep up with technological advancements. In recent years, the garment sector has also expanded quickly. It is the foundation of Bangladesh's economic expansion, accounting for 84% of exports between 2009 and 2019, growing at a 7% annual pace (Berg, Chhaparia, Hedrich & Magnus, 2021). The primary challenges this industry has include a severe lack of energy that has an impact on output, greater input costs from imports, and a reduction in worldwide demand (RMG Bangladesh, 2022). The physical infrastructure (especially the transportation system and power) must be strengthened, and technical innovation must be encouraged, for the garment sector to grow in the future.

Since the country's independence in 1971, agriculture has dominated Bangladesh's economy and served as the major source of income for its citizens. But Bangladesh may now legitimately assert that she has moved from being primarily an aid-receiving and agro-based nation to a trading nation. The Readymade Garment (RMG) industry, which focuses on exports, has significantly contributed to this shift. The largest exporting sector in Bangladesh today is the RMG sector, which has grown rapidly over the past 25 years. It has quickly gained a prominent prominence in terms of exports, foreign exchange profits, industrialisation, and GDP contribution. The sector is crucial for creating jobs, giving the underprivileged access to money, and advancing socio economic development.

Bangladesh has utilized its plentiful and inexpensive workforce to boost economic growth and draw both local and foreign investment, similar to other rising and developing nations. The nation has put itself in a good position to seize control of a significant portion of international commerce, particularly the ready-made garment (RMG) sector, where it is second only to China in terms of exports to consumers in Europe and the United States. Bangladesh, like its predecessors in the developing markets, must overcome obstacles to its economy. Through the diversification of industry sectors, it must continue to grow and modernize the economy. In addition, it must create a highly trained workforce—its human capital—to keep up with this diversity. Unskilled and semi-skilled workers will become capable workers via training and education. Some other key constraints may be listed as follows:

- Lack of power sources and other infrastructure
- Political instability
- Regulatory uncertainty, a lack of transparency, weak institutional capacity
- Insufficient access to capital for businesses
- Insufficient skilled labor
- Table 8 in the appendix, however, lists several approaches to the binding restrictions.

The government will need to strengthen its infrastructure, transparency, political stability, regulatory certainty, and technical skills-based training in order to draw in more foreign direct investment (FDI). RMG industry's low fixed costs and focus on labor-intensive production serve as a springboard for Bangladesh's national growth. The sector has traditionally served as a driver of sustainable growth and development in the nation. Despite the RMG industry's phenomenal expansion and promising future, there are still difficulties. These are a few of these challenges:

The long-lasting political upheaval in Bangladesh is one of the industry's main obstacles and gravely jeopardizes both production and marketing. Bangladesh's exports to the USA decreased by 7.16 percent in January 2015 compared to January 2014 exports. The reflection included both value and volume. Bangladesh shipped 15,200,000 square meters of clothing in January 2015, 8.38% fewer than in the same month the year before. Exports are the primary focus of the majority of Bangladesh's RMG enterprises. The EU and North American nations are the primary customers for RMG goods from Bangladesh. Despite the fact that Bangladesh has hundreds of RMG enterprises producing RMG goods, China, India, and Sri Lanka have been formidable competitors. To compete with the rivals, structural development is desperately needed. However, the RMG industry in Bangladesh has been dealing with various structural issues, such as insufficient and inconsistent energy sources, low gas pressure, inadequate road and transport infrastructure, etc. If the effects of wage costs are isolated, Bangladesh's per unit manufacturing cost is greater than most of its rivals because Bangladesh's successive governments have failed to provide the necessary infrastructure and reliable electricity supply. The RMG industry has been dealing with a number of implications and issues connected to compliance. Following the tragedies at Tazrin Garments and Rana Plaza, foreign consumers of Bangladesh's ready-made clothing, particularly those from the EU and the USA, have been urging the government to adhere to certain criteria. GSP facilities for Bangladesh have been suspended in the meantime. Another obstacle facing Bangladesh's RMG sector is getting the GSP facilities restored.

Due to the heated discussion around wage rises in Bangladesh's ready made garments (RMG) sector, the business may experience challenges. This is happening at a time when China, the world's largest exporter of apparel and one of Bangladesh's primary competitors, is going through rapid changes in its industrial structure. Even though the China shift may be advantageous for the industry in the medium to long term, the RMG sector in Bangladesh now faces certain short-term challenges, mostly because of the economic problems in the advanced countries. While the outlook for the advanced economies is still grim, developing markets have resumed their rapid growth rates following the Great Recession of 2008–2009. The chance of economic recovery is hampered by the continuing loss of employment in the US and the problem with national debt on both sides of the Atlantic. A number of European countries have also announced a variety of austerity measures that may significantly lessen their dependence on imported goods and services. However, recent austerity measures and a pessimistic outlook for advanced nations may hurt Bangladesh's clothing sector. Recent studies by a variety of analysts and researchers demonstrate that Bangladesh's RMG industry struggles with a shortage of skilled and seasoned marketing workers and is compelled to rely on expensive international specialists for hire.

# • Trade Policy Reform:

Increased export and its diversification are significantly hampered by import restrictions and tariff protection structures (Sattar, 2022). Therefore, modernizing the tariff structure is necessary to diversify the economy, increase export competitiveness, and support the expansion of industries with strong growth potential. According to Kathuria, Malouche, Kusek, and Rizwan (2016), there are gaps between policies and practice, as well as protracted and arbitrary administrative processes, shoddy conflict resolution procedures, and limited access to information about land.

• Access to Finance:

Bangladesh must make improvements. Small and medium-sized businesses (SMEs) have less access to financing than in many developing nations, partly because of ineffective interagency cooperation (United Nations, 2021). The approach suggested by Lin (2012) is to increase mortgage availability through land allocation system reform, introduce directed credit schemes at low interest rates, and mobilise mortgage-based funding. This strategy would guarantee that all SMEs have access to financing.

> How Should Bangladesh Address Issues of Governance?

The possibility of elite capture of the interventions, which might substantially impair the efficacy of any policy intervention, is one of the most serious concerns of industrial policy, according to Lin (2012). In Bangladesh, problems with governance are particularly difficult when it comes to corruption. Bangladesh is ranked 147th on the most recent Corruption Perceptions Index published by Transparency International. The following actions may be taken into consideration in order for Bangladesh to improve governance-related concerns, including corruption. We believe that these steps could significantly improve the corruption perception index based on experience from other nations.

Bangladesh must increase its level of accountability and transparency. Every programme run by the public or commercial sector ought to be available for public review. Every government or private sector programme requires follow-up. At every level, there must be mechanisms in place to encourage openness and responsibility. According to Lin (2012), the first step is to hold a jobs summit where representatives from the private and public sectors for important sectors can gather, discuss, and come to an agreement on critical interventions aimed at boosting growth in each sector, including eligibility requirements and suitable implementation mechanisms. In order to track performance, performance reviews must be conducted on a regular basis and published in the media.

The government and private sector may also intensify the use of Results based management system. The government and private sector may spell out the type of results they are expecting before implementing on iniatives or programme. According to Lin(2012) The system must say clearly what should be done say that if the results are not achieved, the intervention should be retracted.

Also to promote transparency and accountability the number of interventions must be minimised. According to Lin(2012) Smaller interventions stand a greater chance of transparency than large schemes. He said there is potential for elite capture during the process therefore smaller interventions stand a better chance. Finally the selection of industries could be delegated to a consulting firm, rather than be handled by the government (as has been the case in

Chile). The consulting firms are independent and they are not subject to biases.

A competitive business environment, increased human capital and the development of a skilled labor force, the construction of efficient infrastructure, the establishment of policy environments that encourage private investment—all of these are necessary for Bangladesh to realize its vision of reaching upper middle-income status by 2031.

Improving governmental institutions, particularly fiscal changes to produce more domestic money for development, diversifying exports beyond the RMG sector, developing the financial sector, making urbanization more sustainable, and diversifying exports beyond the RMG sector are development objectives. Growth would be accelerated if infrastructural deficiencies were filled. By addressing its susceptibility to natural disasters and climate change, Bangladesh can continue to develop its resistance to shocks in the future. Making the switch to green growth would help ensure the long-term viability of development results for future generations.

In its first 50 years of independence, Bangladesh has achieved significant strides. The nation has received a lot of praise for its impressive economic growth over the last ten years, which was made possible by careful macroeconomic management. The real GDP of Bangladesh has increased at an average yearly rate of about 6.8% from FY2011/12, reaching 8.2% in FY2018/19. The pharmaceutical industry, ready-made clothing and textiles, ICT, and other industries all played a role in the nation's economic development.

Because of its low fixed costs and focus on laborintensive manufacturing, the ready-made garment sector in particular serves as a springboard for Bangladesh's national growth. The sector has historically served as a driving force behind long-term growth and development in the nation. In addition, Bangladesh has a very successful ready-made clothing and textile sector because to cheap labor costs, tax exemptions, electricity subsidies, and a significant salary gap from comparable nations that manufacture in big quantities. As a result, one of the industries in which Bangladesh has a competitive advantage is the production of ready-to-wear clothing and textiles.

With one of the lowest labor rates in the world, Bangladesh has been able to build its industrial base, which is being led by the RMG sector. However, it is in a good position to increase its value chain position and diversify its exports. Large industries for footwear, pharmaceuticals, and agricultural processing are also present in the nation. Other crucial industries include shipbuilding, light engineering, leather, jute, and ceramics manufacturing, as well as information and communication technology (ICT) and business process outsourcing. Foreign businesses have a lot of room to enter the market and invest in these growth areas. The software and IT services sector is predicted to contribute 1% of the nation's GDP during the next five years. Currently, this industry employs around 100000 people. Bangladesh is one of the better-performing nations in South Asia and is placed 129th out of 191 countries on the UNDP's 2022 Human Development Index (HDI) (Liller, 2022). Skills development has to be connected to growing industries in order to accelerate economic growth. Bangladesh must have a competitive business environment, a competent labor force, effective infrastructure, and a regulatory framework that encourages private investment in order to provide jobs and employment possibilities. Being a middle-income nation, Bangladesh is blessed with an abundance of human capital and natural resources. (2013) Aparico and Muzzini Bangladesh's human capital, which makes up 69% of the country's 167 million people and is mostly comprised of people between the ages of 15 and 64, has tremendous potential. (UNFPA, 2022).

The most crucial area for the nation's future economic development is thought to be its human resources. In terms of comparative advantage in this industry, the nation has recently been in a very advantageous position. The 167 million people who make up its human capital are 69% of the total population and are between the ages of 15 and 64. This is a key element that has the potential to be both a comparative advantage and a competitive advantage in the labor-intensive manufacturing sector both domestically and internationally. Bangladesh presently underutilizes its labor force. The growth of labor-intensive activities is necessary to accommodate the expanding work force and more effectively use the current pool of underemployed individuals. And since domestic demand has few chances for specializing in labor-intensive industries, that implies increasing exports. A growing industrial base, anchored by the ready-made clothing sector, has been spurred by the nation's among the lowest pay rates in the world.

What options exist for increasing exports? Competitors of Bangladesh are becoming more costly locations to conduct business. For instance, it is anticipated that China would export less produced items that need a lot of work in the next few years. It won't hold a third of the global market share for items including clothing, textiles, footwear, furniture, toys, electrical products, auto components, plastic, and kitchenware. Bangladesh's exports of manufactured goods would nearly quadruple if it were to capture only 1% of China's manufacturing export markets.

Forests, water resources, fisheries, minerals, land, marine resources, climate, oil and natural gas energy and power resources, and sand are just a few of the natural resources that Bangladesh has that may be utilised for growth and development. Agriculture, fishing, manufacturing, finance, commerce, and transportation are Bangladesh's key economic activities. Bangladesh's top exports include ready-to-wear clothing and knitwear, frozen seafood, jute-based pharmaceuticals, tea, chemicals, and leather goods, among others.

Through the diversification of industry sectors, it must continue to grow and modernize the economy. In addition, it must create a highly trained workforce—its human capital to keep up with this diversity. Unskilled and semi-skilled workers will become capable of supporting rising industries like information technology, pharmaceuticals, shipbuilding, etc. through training and education.

The history of garments in Bangladesh began with the narrative of a joint venture between a local business called Desh and a Korean corporation called chaebol Daewoo, with the intention of avoiding US export limitations on Korean clothing. As a result of the first investment's great success, imitation spread quickly. Out of the original 130 employees, 115 departed Desh to create rival businesses. The number of factories increased from a handful in 1979 to over 700 in 1985. Still, Bangladesh has more than 4500 enterprises engaged in the lucrative ready-made garment sector. In the very near future, the ICT industry is anticipated to achieve a similar revolutionary success, following in the footsteps of China through technical innovation and advancement in the human resource development sector.

# V. CONCLUDING REMARKS

Increased export competitiveness may result from currency depreciation. A depreciated currency boosts international demand and increases export volumes by making local goods substantially less expensive. As a result, Bangladesh's export performance may improve, leading to sustained economic growth.

Devaluation of the currency also makes it possible to diversify export goods and markets. It is simpler for firms to look into new export options outside of typical markets when the exchange rate is more competitive. By decreasing reliance on a single market and broadening the selection of items supplied, this diversification helps strengthen the export sector's resilience. It is important to remember that currency depreciation by itself does not guarantee an increase in export performance. For maintaining long-term export growth, additional elements including expanding trade facilitation measures, boosting innovation, and making investments in human capital development are also crucial. Furthermore, while a weakened currency may offer exporters short-term respite, it may also result in increased import input prices, which should be carefully handled. The promotion of export competitiveness through currency depreciation must be balanced with reducing the possible negative impacts on industries that depend on imports.

Our study shows the value of currency depreciation as a strategy for improving Bangladesh's export performance. However, it stresses the necessity for a thorough strategy, taking into account other crucial elements that support export development. By utilizing a comprehensive approach that includes both currency management and structural reforms, Bangladesh can effectively harness its export potential and drive sustainable economic development.

A number of cooperative and coordinated activities should be started in order to overcome the issues facing the RMG industry in Bangladesh. Improved market access, market diversification, skilled labor, and increased productivity must be prioritized together with the

development of strong infrastructure. Another urgent necessity is the creation of secured special industrial zones and access to financing at competitive bank interest rates. Favorable branding should be maintained in order to bring the delicious fruits of RMG. This analysis also found key binding restrictions in the chosen value chains.

They can be divided into five categories: physical infrastructure, such as having access to effective water, sanitation, and transportation systems; business environment (burdensome procedures); constrained access to finance (e.g., SMEs); a dearth of technical and vocational education systems that are in line with the market; and restrictive trade policy. The analysis recommended a workable solution for each of the restrictions. Our opinion is that Bangladesh will soon overtake China as the world's second-largest economy after it avoids the aforementioned restrictions and the government takes on a facilitating role.

Key binding constraints in the chosen valve chains were found by the prior study. They can be divided into five categories: physical infrastructure (access to effective water, sanitation. and transportation systems); business environment (burdensome procedures); restricted access to finance (e.g., SMEs); absence of a technical and vocational education system that is in line with the market; and restrictive trade policy. Binding constraints and potential solutions to them in a few particular value chains are compiled in the appendix table. The options and discussion of these limitations are covered in the section that follows. For each type of growth limitation, the following specific actions might be taken:

Regarding access to energy, significant advancements have been made. Taking into account both public and independent power supply plants (IPP), the electricity coverage improved to 92.23% in 2019 from a baseline of 72% in 2015 (General Economics Division, Bangladesh Planning Commission, 2020). On the other hand, Bangladesh is having problems with PPP projects and urban transportation. building more independent power plants (IPPs) in regions with strong development potential and a concentration of prospective value chains, such as the apparel sector. For efficient economic activity. decentralization of infrastructure development projects may also be required (Khaled, 2019).

In terms of business easiness, Bangladesh was placed 168th out of 190 nations in Doing Business 2020 (World Bank Group, 2019). Although this is an increase over the raking from the previous year, there are still significant startup expenses and a number of challenging processes. Selective capacity building should take place in important government organizations that uphold standards, and commercial conflicts and property transactions should be reformed. Additionally, regulatory reform initiatives to speed up the transfer of property titles and the adjudication of business disputes may need to be improved.

The Metaheuristic Theory of Growth is a concept that explores innovative ways to promote economic growth by addressing various constraints. It may be wise to discuss the application of the Metaheuristic Theory of Growth, specifically focusing on the study of "Applying the Growth Identification and Facilitation Framework for Bangladesh." In this context, we may highlight on the relationship between the devaluation of currency and export performance in Bangladesh. The study proposes a Growth Identification and Facilitation Framework (GIFF) that combines economic theory with policy interventions to optimize the country's growth potential. The research study on the Growth Identification and Facilitation Framework for Bangladesh explores how currency devaluation can impact export performance and contribute to overall economic growth. The devaluation of the Bangladesh Taka (BDT) can effectively enhance export competitiveness. When the domestic currency is devalued, Bangladeshi goods become comparatively cheaper in international markets. This, in turn, stimulates export demand and increases export revenue. Moreover, devaluation can also incentivize the domestic production of goods and reduce the reliance on imports, thereby boosting local industries and employment opportunities.

The research study highlights that while devaluation can generate short-term gains for exports, sustained export growth requires a broader, more holistic approach. The study emphasizes the importance of reforms in sectors such as infrastructure development, trade facilitation, technology adoption, and skill development to enhance export competitiveness. It argues that devaluation alone may not be sufficient to promote long-term export growth. Thus, policy interventions based on the GIFF framework should concentrate on multiple areas to drive sustainable export performance. The Metaheuristic Theory of Growth, may provide valuable insights into the relationship between currency devaluation and export performance. While devaluation can play a role in boosting short-term export growth, sustainable and inclusive growth requires a comprehensive approach that addresses various constraints. The study highlights the need for policy interventions that go beyond currency devaluation. Targeted reforms in infrastructure, technology adoption, trade facilitation, and skill development are critical for nurturing export industries and securing long-term economic growth. By applying the Metaheuristic Theory of Growth, policymakers can develop strategies that holistically foster export competitiveness and unlock Bangladesh's growth potential.

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## APPENDIX

Sector /Sub -sector	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1.Agriculture and Forestry	3.89	2.41	1.47	3.81	2.45	1.79	1.96	3.47	2.58
a ) Crops & horticulture	3.85	1.75	0.59	3.78	1.83	0.88	0.96	3.06	1.75
b ) Animal Farming	2.59	2.68	2.74	2.83	3.08	3.19	3.31	3.4	3.47
c ) Forest and related services	5.56	5.96	5.04	5.01	5.08	5.12	5.6	5.51	5.58
2.Fishing	6.69	5.32	6.18	6.36	6.38	6.11	6.23	6.37	6.29
3. Mining and Quarrying	3.62	6.93	9.35	4.68	9.6	12.84	8.89	7	7.39
a ) Natural gas and crude petroleum	0.68	3.78	7.55	2.47	8.73	11.77	0.34	2.25	3.11
b ) Other mining &coal	9.34	12.58	12.34	8.2	10.9	14.42	21.19	12.66	12.02
4.Manufacturing	10.01	9.96	10.31	8.77	10.31	11.69	10.97	13.4	14.73
a ) Large &medium scale	11.11	10.76	10.65	9.32	10.7	12.26	11.2	14.26	15.61
b ) Small scale	5.67	6.58	8.81	6.33	8.54	9.06	9.82	9.25	10.26
5.Electricity ,Gas and Water Supply	13.36	10.58	8.99	4.54	6.22	13.33	8.46	9.19	10.57
a) Electricity	15.82	10.97	9.69	1.69	6.09	14.2	9.22	10.19	11.57
b ) Gas	0.07	7.45	5.91	10.93	5.16	9.91	0.28	2.2	2.85

 Table 5 Sectoral Growth Rate of GDP (Base Year: 2005-06, %)

								1	
c ) Water	8.23	10.91	4.75	8.08	9.62	7.4	11.09	5.66	7.17
6.Construction	6.95	8.42	8.04	8.08	8.6	8.56	8.77	9.92	9.63
7. Wholesale and Retail Trade	6.69	6.7	6.18	6.73	6.35	6.5	7.37	7.45	7.7
8. Hotel and Restaurants	6.2	6.39	6.49	6.7	6.83	6.98	7.13	7.28	7.43
9.Transport ,Storage &Communication	8.44	9.15	6.27	6.05	5.96	6.08	6.76	6.58	6.88
a ) Land Transport	7.18	6.83	5.91	5.56	6.18	6.28	7.06	6.72	6.93
b ) Water transport	2.92	3.1	3.21	3.15	3.62	3.2	4.1	3.5	3.72
c ) Air transport	15.23	5.76	-1.64	0.61	8.71	1.48	2.79	2.74	6.04
d ) Support transport services , storage	11.97	17.6	3.36	2.59	5.37	5.19	6.4	9.58	7.2
e )Post and Tele communications	13.77	16.92	9.67	9.56	6.11	6.81	6.98	6.53	7.56
10.Financial Intermediations	10.44	14.76	9.11	7.27	7.78	7.74	9.12	7.9	8.32
a ) Monetary intermediation (Banks )	12.98	17.61	10.87	8.33	8.49	8.85	9.95	8.51	9.42
b ) Insurance	3.69	4.41	0.61	1.55	3.95	0.54	2.05	1.63	-2.51
c ) Other financial auxiliaries	-2.54	2.33	3.14	3.63	4.68	4.54	9.06	9.05	8.29
11.Real Estate .Renting and Business Activities	3.88	3.92	4.04	4.25	4.4	4.47	4.8	4.98	5.15
12.Public Administration and Defence	8.84	7.53	6.53	6.89	9.82	11.43	9.15	8.47	6.45
13.Education	5.63	7.75	6.3	7.26	8.01	11.71	11.35	7.01	6.5
14.Health and Social Works	6.34	3.81	4.76	5.06	5.18	7.54	7.63	7.02	9.15
15.Community ,Social and Personal Services	3.23	3.25	3.25	3.27	3.28	3.3	3.62	3.65	3.69
At Constant Price GDP Growth Rate	6.46	6.52	6.01	6.06	6.55	7.11	7.28	7.86	8.13

Source: Bangladesh Economic Review

Type of Industry	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Small and cottage	24557.9	26113.1	28342.6	30909.4	33945.8	37086.4	41148.0	42778.1	43519.1
	(8.81)	(6.33)	(8.54)	(9.06)	(11.20)	(9.25)	(10.95)	(3.96)	(1.73)
Medium	108436.2	118540.3	131225.4	147313.5	163819.5	187183.7	214969.9	217949.4	232245.1
Large	(10.65)	(9.32)	(10.70)	(12.26)	(9.82)	(14.26)	(14.84)	(1.39)	(6.56)
Total	132994.1	144653.4	159568.0	178222.8	197765.3	224270.1	256117.9	260727.6	275764.2
	(10.31)	(8.77)	(10.31)	(11.69)	(10.97)	(13.40)	(14.20)	(1.80)	(5.77)

Source : Bangladesh Economic Review 2021

Table 7 Identifying Sectors	for Growth: Key Ex	ports of China, Vietnar	n, India, and Indonesia

Table 7 Identifying Sectors for Growth: Key Exports of China, Vietnam, India, and Indonesia					
China	India	Vietnam	Indonesia	Bangladesh Potential	

Apparel & clothing accessories; textile yarn, fabrics etc.; dyeing & tanning The textile and apparel industry is the most market- oriented in China, experiences the most competition, and is closest to the market and end- users.As a pillar of the national economy, it is labor-intensive with comparative advantages in the world market	The textiles and apparel industry in India is the 2nd largest employer in the country providing direct employment to 45 million people and 100 million people in allied industries. India has also become the second- largest manufacturer of PPE in the world.	Vietnam textile and garment industry consists of two major parts: textile and garment. The textile sector includes fiber spinning, shuttle weaving, dyeing and finishing. The garment sector uses the main material as fabric and some machine to make the final garment.	The textile and apparel industry in Indonesia is one of the top economy contributors and largest employment sources. This labour intensive and export oriented industry has helped Indonesia making its way to the world's top ten largest textile and garment producing countries, accounting for 2% of global textile and apparel	Ready Made Garments (RMG) & Textiles is a highly successful industry primarily because competitiveness with imports is undermined by very cheap labor costs & tax exemption, subsidised power in Bangladesh, as well as a big wage differential to comparator countries which produce at large volumes. It is ranked number second after China.
Fish, crustaceans prepared China imports Inedible Fish and Crustaceans primarily from: Uzbekistan (\$6.45M), United States (\$3.03M), Russia (\$1.67M), South Korea (\$1.54M), and Vietnam (\$1.31M). The fastest growing import markets in Inedible Fish and Crustaceans for China between 2019 and 2020 were Uzbekistan (\$4.99M), Costa Rica (\$125k), and United States (\$94.6k).	Imports of Fish & Crustaceans in India is expected to reach - 2.33 USD Million by the end of 2021, according to Trading Economics global macro models and analysts expectations. In the long-term, the India Imports of Fish & Crustaceans is projected to trend around -1.87 USD Million in 2022 and -0.88 USD Million in 2023,	In 2019 Vietnam sold 334 tonnes of crustaceans. For the year 2019 alone, the interest in Vietnam crustaceans (seafood category) has decreased, with a change of - 33.861 percent compared to the year 2018. Between 2017 and 2019, crustaceans' exports decreased by -47.98 percent bringing the country US\$4.13m for the year 2019.	market. Indonesia Exports of fish, crustaceans, molluscs, aquatics invertebrates was US\$3.71 Billion during 2021, according to the United Nations COMTRADE database on international trade. Indonesia Exports of fish, crustaceans, molluscs, aquatics invertebrates	Shrimp & Frozen Fish: booming sector oriented to the international market; Shrimp are 2nd largest export; frozen fish & crustaceans 5th largest export

ICT Business Sector China's information and communication technology (ICT) market is among the most dynamic sectors in the economy. By 2021, the market is projected to reach \$8.1 trillion, representing 55% of China's GDP, according to information technology (IT) consulting firm IDC.	The ICT market in India is estimated at \$180 billion and is projected to grow to \$350 billion by 2025. The ICT hardware market is estimated at \$20 billion. The ICT sector growth rate is over 9 percent per year and it contributes about 9 percent of India's GDP.	The government has pledged to invest approximately US\$ 415 million from the State Budget in the ICT sector by 2020 ( Source: BMI Vietnam Information Technology Report 2016 ). There are four major ICT focus areas, addressing supply as well as demand:	The market potential for providing with ICT services in Indonesia is expected to reach US\$78 billion from 2019 through 2022. According to APIJJ 2017 survey, there is a growth demand for digital content applications and business solutions.	ICT and its related business services in Bangladesh are a vibrant sector supported by an enthusiastic culture and a government committed to providing a pro-business climate for all investors. Over 400 IT companies are now thriving in the country supplying to local and international markets worldwide . Over 800 IT companies are now thriving in the country and capturing a significant share in the international markets worldwide . Total estimated IT Industry Size is US\$ 120 Million (including export). Software contributes around 44% to the overall industry revenue, whereas ITES contributes around 56% to the overall industry revenue. Approx 30000 professionals, majority IT and other graduates, are employed in the industry.
Leather and Leather Goods In 2020, imported leather goods constituted mainly shoes (\$55.6 billion), luggage and bags (\$44 billion), and raw materials (\$10.1 billion). China imported those leather goods mainly from the EU (34.7%) and ASEAN (39.6%) and the USA (4.8%) which accounts for \$152.4 billion in total in 2020.	India has four main leather sectors: Tanning, Footwear, Leather Garments and Leather garments and Accessories. The country accounts for 13% of the world's total leather production. It is also the second largest producer and consumer of leather footwear.	Vietnam's leather shoe industry has developed very quickly and is considered one of the driving forces of the Vietnamese economy. With about 240 operating businesses, Vietnam's leather and footwear industry is a key export industry, attracting about 500,000 employees.	Indonesia has excellent growth economically in the leather industry as the people consume a lot of meat which results in an adequately steady raw leather supply. The fairly enormous populations of animals like cows, goats, and snakes make it easy to produce leather footwear and leather goods in Indonesia.	Bangladesh has a long established tanning industry which produces around 3-4% of the world's leather from a ready supply of raw materials. The country is therefore an established and attractive location to source and outsource the manufacture of finished leather products. The leather industry is ideally suited to Bangladesh with its abundance of labor and natural resources at internationally competitive rates .
Pharmaceutical Sector The pharmaceutical industry is one of the leading industries in the People's Republic of China, covering synthetic chemicals and drugs, prepared Chinese medicines, medical devices, apparatus and instruments, hygiene materials, packing materials, and pharmaceutical	In the global pharmaceuticals sector, India is a significant and rising player. India is the world's largest supplier of generic medications, accounting for 20% of the worldwide supply by volume and supplying about 60% of the global vaccination demand. The Indian pharmaceutical sector is worth US\$	According to some reports, the pharmaceutical industry in Vietnam has reached an intermediate level of international integration resulting in the development of a domestic pharmaceutical industry that is specialized in manufacturing generics and	Indonesia is home to 260 million people and one of the fastest growing pharmaceutical markets in Asia. In a survey done by Global Data, Indonesia's pharmaceutical market is ranked the largest market in the ASEAN regions, with the market value expected to hit	The pharma industry of Bangladesh is now on the verge of entering highly regulated overseas markets like USA and Europe. In this connection, several pharma manufacturers have already made huge investments in their new state of art manufacturing facilities. A number of companies have already obtained or in the process of obtaining UKMHRA, EU, TGA, AUSTRALIA and GCC certifications. Export earnings reached USD 82.109 million in 2015-16

machinery.	42 billion worldwide.	exporting non sophisticated pharmaceutical products to other countries.	IDR 141.6 billion (USD 10.11 billion) by 2021.	
Power Sector Background of the Energy Sector in China The distribution of China's electricity is managed by two mammoth state- owned enterprises, namely the State Grid Corporation of China and China Southern Power Grid Co. This distribution network relies on a mix of coal, natural gas, hydropower, wind energy and solar energy.	India's power sector is one of the most diversified in the world. Sources of power generation range from conventional sources such as coal, lignite, natural gas, oil, hydro and nuclear power, to viable non-conventional sources such as wind, solar, agricultural and domestic waste.	Vietnam expects power consumption to grow from 10% annually until 2030. Vietnam is experiencing significant economic growth and is rising as one of Asia's fastest-growing energy markets. The Government of Vietnam expects power consumption to grow from 10% to 12% annually until 2030.	Consultancy firm Frost and Sullivan has highlighted the key short term opportunities within Indonesia's electricity sector as geothermal energy and biomass followed by hydropower over the medium term and solar, wind as well as other sources offering potential for the long term	Bangladesh is progressing through a phase of development where automation is the key to its economy and business. As the country continues to industrialize the importance of power generation and electricity supply becomes a key government priority . The government has given top priority to the sector considering its importance in the overall development of the country .
Human Resource Sector Facts about the Population The concept of human resource management (HRM) in China was only adopted beginning in the 1990s as a foreign import. Many domestic firms still operate in a traditional personnel management mode with limited strategic planning or HR capability, although there is a general trend by which firms are increasingly becoming more strategic in their HRM.	The India human resource (HR) technology market reached a value of US\$ 850 Million in 2021. Looking forward, IMARC Group expects the market to reach US\$ 1,510 Million by 2027, exhibiting a CAGR of 9.9% during 2022-2027.	Despite large quantity, the quality of human resources in Vietnam is at a low level. The number of skilled workers is only 24.1 million workers (figures in 2021). Workers who have been trained and have certificates and diplomas at all levels from primary vocational, intermediate, college to university and postgraduate account for 20.92%.	Human Capital, Indonesia, 2045. Indonesia and Japan are highly committed to maintaining human resources development to support economic growth, in line with the development in the political and social dimensions. They are focusing intensively on the use of digital technology throughout many aspects of people's lives.	The population of the country makes up about 2.11% of the world's total population. The current population of Bangladesh is 165,424,778 as of Sunday, December 13, 2020. The average age of the country is approximately 27 years which shows that it has a huge population of youth, good news in terms of potential innovation for the future. 39.4% of the total population settled in Bangladesh is urban whereas the rest is in rural areas. Languages: 98% or nearly all of the population speaks Bangla, however, most people are also able to communicate in Urdu, Hindi, and English.

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Ship Building Sector Established in July 1999, the China Shipbuilding Industry Corporation (CSIC) is a leading state- owned business and one of China's largest shipbuilding and shiprepair groups. Its marine sector covers both naval and merchant ships and equipment manufacturing. It also designs, develops and manufactures a wide-range of non- marine products.	At present, there are four main centres of ship building industry at Vishakhapatnam, Kolkata, Kochi and Mumbai, all in public sector. 1. Hindustan Shipyard Ltd., Vishakhapatnam: It was set up by M/s Scindia Steam Navigation Company in 1941 and the first ship was launched on 14th March, 1948. It was taken over by Government on 21st Jan., 1952 and was renamed as Hindustan Shipyard Ltd. In 1962, the shipyard became a central public sector enterprise.	Since 2002, Vietnam's shipbuilding industry has been heavily invested. However, it is only in the process of receiving transfer from major shipbuilding centers in Asia. The overall picture of the shipbuilding industry is drawn as follows: Vinashin, which was established in 2006, is now the Shipbuilding Industry Corporation - SBIC is playing a key role.	In Indonesia, there are around 250 shipyards with an annual production capacity of 1 million DWT for new shipbuilding and 12 million DWT for ship repair. While the downturn in investment and consumption in 2013 had an impact on maritime cargo, the industry is expected to rebound once the general economy improves, boosted by strong freight demand in the ASEAN region.	Number of Companies: 130. Ships made in Bangladesh are 15% cheaper than even Chinese ships and are of the same quality The productivity of labors is good; average hourly labor charge in is only US\$ 1.00 Global shipbuilding market size is US\$ 1,600 billion. 1% of the global order for only small ships market the amount will be worth US\$ 4 billion for Bangladesh. Present capacity is 0.84% of global shipbuilding production. Declared as "Thrust Sector" in a different policy . 5 %t incentive on export.
Light Engineering Sector Exports of light engineering products have reflected a spiraling growth momentum until 2017. The products are mainly exported to European Union, Japan, China, India, Australia, Africa etc.	In the recent past, there have been many major investments and developments in the Indian engineering and design sector: In June 2022, exports of engineering goods from India stood at US\$ 9.58 billion, a 3.02% YoY growth.	With Vietnam blessed with one of the highest number of sunshine hours in the world, an increase in solar will form an important part of the energy mix with wind, hydropower as well as bioenergy. Looking at the local skills scene, clearly there is a huge demand for engineers from all disciplines.	Government has declared light engineering products as "the product of the year 2020". The fact that the product has been in the limelight for quite a period of time, has been mirrored in the activities and policies of our government.	The burgeoning domestic market and the prospect of significant cost reductions for companies sourcing components and finished goods for international markets makes Bangladesh a compelling choice for investors . Annual turnover is US\$ 1600 million of which Import substitute products is around US\$ 200 million
Renewable Energy Sector The state-level plan has given a strong impetus to China's renewable energy. The country's cumulative installed capacity of wind power and photovoltaic power increased	The installed Renewable energy capacity (including large hydro) has increased from 76.37 GW in March 2014 to 159.95 GW in May 2022, i.e. an increase of around 109.4%.	Vietnam is committed to reducing GHG emissions by 9% and 27% with domestic capacities and international support respectively.	Solar energy potential is well spread throughout Indonesia with the highest potential is in West Kalimantan (20GW), South Sumatera (17GW) and East Kalimantan (13GW) In 2017.	Economic growth of 7% calls for the scalability of its power infrastructure to keep up with the demands of industry and increased urbanization . Currently, renewable energy makes up 2.5% of the total electricity generation, The importance of an alternative source of energy in Bangladesh .

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Ceramics Industry China is a world leading ceramic producer accounting for 50% to 70% of the total production volume in terms of ceramics for daily use, display art and building. China is a big ceramic producer with the largest output volume in the world, but it is not a powerful ceramic country.	The India Ceramic Tiles Market is Segmented by Product (Glazed, Porcelain, Scratch- free, and Other Products), Application (Floor Tiles, Wall Tiles, and Other Applications), Construction and End User. The report offers Market size and forecasts for India Ceramic Tiles Market in value (USD Million) for all the above segments.	Vietnam is one of the largest producers of pottery and ceramics consumer goods in the world. Vietnamese products are exported worldwide, but the biggest markets are the US, Europe, and East Asia. When Vietnamese suppliers import materials for ceramics production, they mostly import them from China.	Indonesia has huge capital in the ceramic tile industry, with sufficient technologies and factories, which are capable of producing ceramic tiles to meet demands both at domestic and international level. Manufacturers are producing made- to-order ceramic tiles, based on orders from foreign buyers, so the tiles have unique designs.	Traditionally, the tableware industry is labor-intensive and companies in developed countries experience difficulties in remaining competitive. Investment interests in this sector are strongly welcome. The global ceramics industry is worth more than \$10bn .
Tourism Sector China's tourism industry consists of domestic and international tourism. Around six billion domestic trips had been made pre-pandemic, in 2019. Beijing, Shanghai, and Guangzhou were among the most popular domestic destinations among Chinese tourists.	India is estimated to contribute 250 Bn USD GDP from Tourism, 137 mn jobs in the Tourism sector, 56 bn USD in Foreign Exchange Earnings and 25 mn foreign arrivals are expected to be achieved by 2030. By 2028, Indian tourism and hospitality is expected to earn \$ 50.9 bn as visitor exports compared with \$ 28.9 bn in 2018.	Vietnam's tourism sector is an important pillar of the country's economic development, contributing six percent to Vietnam's GDP. It expects to attract approximately 17 to 20 million tourists in 2020. To make the sector attractive, the government is working on several reforms including infrastructure projects and the night economy.	Tourism is a key sector for Indonesia's economy. The World Travel & Tourism Council (WTTC) reported that Indonesia's tourism sector contributed for ~6% of Indonesia's GDP and employed ~13 million jobs (10.3% of employment in Indonesia) in 2018.	Bangladesh is a unique tourist destination where one can find the scopes for all kinds of tourist interest as well as investment. Government of Bangladesh has recognised tourism as an industry and framed a new National Tourism Policy in 2010 for the development of domestic and international tourism in the country.

# Table 8 Addressing the Binding Constraints

No.	<b>Binding constraints</b>	Recommended Solutions
1	Human Capital	Identify skill gaps for the industries mentioned in this article by conducting research.
		Encourage academic institutions to develop the appropriate curricula and teach students in the skills that are lacking, with a focus on technical and vocational education and training. (TVET),
		To increase employees' potential for performance, the government should enable experience sharing both domestically and overseas.

2	Access to Finance (A2F)	Government should facilitate access to finance at competitive bank interest rate,
	(121)	Policies, laws and regulations should be enacted to make easy finance access of industries identified in this paper
		Particularly, government facilitates SME business financing system to capacitate them to overcome financial problem.
		Government should facilitate collateral-free loan-screening mechanisms for identified sectors in this paper
3	Land	Government should promote industrial parks construction for identified sectors by availing free land
4	Corruption	The Bangladeshi government should enact or implement laws and regulations that will help the nation fight corruption.
		The people should be made aware of the negative impact that corruption has on economic growth.
		The government should take action against corrupt employees and officials.
5	Political instability	The government of Bangladesh should work to stabilize its internal political situation in order to attract foreign direct investment.
		Additionally, it should raise public awareness of the harm that political instability causes to the country's efforts to reduce poverty and promote economic growth.
6	Electricity	Government should encourage private companies in generating more powers by creating them conducive environments
		In particular, the government should provide a dedicated and uninterrupted power supply for businesses engaged in the manufacture of the industries listed by this study.
		The government should build new power plants and expand the capacity of current ones.
		It is important to focus on using renewable energy sources.