

8th Five Year Plan Background Papers

Volume 2

Trade and Industry

General Economics Division (GED)

Bangladesh Planning Commission
Ministry of Planning
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Trade and Industry

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M.A. Mannan, MP Minister Ministry of Planning Government of the People's Republic of Bangladesh

Message

I am happy to know that the General Economics Division (GED) of the Planning Commission is publishing the background papers conducted for the preparation of Eighth Five Year Plan (July 2020-June 2025).

The background papers have been provided with valuable inputs on both quantitative and qualitative data. These studies have made it easier to identify the areas of interventions and proposed some policy recommendations on how to achieve the targets set by the government in the 8th Five Year Plan.

Bangladesh has made commendable progress in MDGs. The success also continues in SDG period which is reflected by the SDG Progress Award received by honorable Prime Minister Sheikh Hasina from Sustainable Development Solution Network. Despite the achievement, we have to go a long way to materialize the dream of Father of Nation to become a happy and prosperous nation. We should not be complacent as we have to carry out the ongoing rapid transformation of the country. I hope these studies will be a useful reference for the policymakers, development partners, academics and researcher alike to further research endeavors and knowledge sharing and I would like to see the continuation of such publications in the future as well.

I am confident that the Eighth Five Year Plan will amply guide us in realising the agenda of our "Vision 2041" of becoming a High-Income Country (HIC) by 2041.

In this instance, I would like to take this opportunity to thank the state minister for Planning and GED officials for this initiative and hard work. My sincere appreciation goes to the experts in their respective fields for completing the Background Studies for the Eighth Five Year Plan preparation.

(M. A. Mannan, MP)





Dr. Shamsul Alam Minister of State Ministry of Planning Government of the People's Republic of Bangladesh

Message

I am glad that General Economics Division (GED) of Bangladesh Planning Commission is going to publish background papers which have been used as the inputs for preparing the country's Eighth Five Year Plan (July 2020-June 2025). These papers are the culmination of macroeconomic and sectoral issues of Bangladesh for future intervention that GED has pursued with various eminent economists, social scientists, researchers, academia etc. at national level.

These background papers were undertaken for generating quantitative/qualitative benchmark values and targets for relevant indicators of the Plan and fill in critical knowledge gaps. Renowned economists and development practitioners in the relevant fields with a longstanding flair were assigned to conduct the studies within the stipulated timeframe.

In the light of Vision 2041, the Eighth Plan looks to improved standard of living of the citizens, population better educated, better social justice and a more equitable socio-economic environment. Special emphasis was given on the investment of health and education as well as skill development of the upcoming and existing labor force. We must act now to protect the cognitive capital of our future generation and I believe we can act more vigorously because recent positive trends in Bangladesh's development give us that confidence. We can act more purposefully because it is evident that research-based policy making and practice can be successful in Bangladesh.

I congratulate the GED for taking up this bold and timely initiative. I would like to thank the authors and also the organizations who have contributed to prepare these background papers. Well Documented background papers will also be helpful for policy planners, development practitioners, researchers, academicians and even students as well. I expect that the background papers will be valuable for the officials of GED to prepare necessary policy briefs and write-ups they often prepare. I believe that not only GED but also other relevant officials will be immensely benefited with these background papers for upgrading and updating their knowledge and professional competences.

Finally, I convey my gratitude towards our Honorable Minister, Ministry of Planning, Mr. M.A. Mannan, MP for his guidance, instructions and continuous support in making this publication a reality.

(Dr. Shamsul Alam)





Dr. Md. Kawser Ahmed Member (Secretary) General Economics Division (GED) Bangladesh Planning Commission

Foreword

It is of immense pleasure that General Economics Division (GED) of Bangladesh Planning Commission is going to publish background papers which have been used as the inputs for preparing the country's Eighth Five Year Plan (July 2020-June 2025).

For developing the Plan strategies and indicating the desirable development path that would lead to fulfilling its objectives, twenty different background studies covering different socioeconomic sectors and sub-sectors, and a technical framework for macroeconomic projection for FY21-25 were prepared. Renowned economists and development practitioners in the relevant fields with a long-standing flair were assigned to conduct the studies within the stipulated timeframe.

These background studies are rich in contents and, if made available, will enrich the knowledge base relating to development challenges and development options facing Bangladesh. The background papers are going to publish in five separate volumes which will help the readers to understand the rational for the choice of the specific domain underlying the Plan and the design of the policy package adapted for the Plan for reconciling the goals of efficiency with those of equity.

I would like to express my deep gratitude to the authors and reviewers of the background studies for their sincere efforts in finalising the manuscripts in time. I am also indebted to the relevant officials of GED for their untiring support and cooperation in managing all the studies. I hope that the relevance of the issues and the diverse contents and analyses would make these volumes useful for the research community, policymakers, and others who are interested in understanding the development challenges of Bangladesh. I believe, readers would find all these approach papers of the Eighth Five Year Plan as source of rich treasure of knowledge and insights.

Dr. Md. Kawser Ahmed

LOWAND)

Acknowledgements

The preparation of Eighth Five Year Plan (8FYP) was commissioned in 2019. Initially, a 'National Steering Committee' was formed under the chairmanship of the Hon'ble Minister of Planning to oversight the preparation of the plan. A Panel of Economists', under the chairmanship of Dr. Wahiduddin Mahmud, was also formed comprising luminous Bangladeshi economists, sociologists, educationalists and experts on relevant fields, who gave continuous support in shaping the 8FYP. In this important initiative, General Economics Division (GED) ensured partnership of all the ministries/divisions/agencies, policy makers, academia, civil society organizations, NGOs, development partners, thinktanks and thought leaders in formulating this plan. A total of twenty (20) background studies were conducted with the help of the eminent experts in their respective fields. As GED is going to publish the background studies in 05 volumes, it would like to exert its gratitude to all the stakeholders involved.

First and foremost, GED would like to express its humble gratitude to the Hon'ble Prime Minister and the Chairman of the National Economic Council (NEC) H.E. Sheikh Hasina for her strategic direction and well-judged suggestions for finalizing the 8FYP.

GED is thankful for the guidance and timely direction provided by the Hon'ble Minister, Ministry of Planning Mr. M.A. Mannan, MP. His visionary leadership expedited the process of finalizing the 8FYP.

We are indebted to the outstanding leadership of Dr. Shamsul Alam, Hon'ble Minister of State, Ministry of Planning. He led the review and editorial process of the background papers and guided us to formulate the 8FYP.

Our heartfelt thanks to Mr. Md. Mafidul Islam, Chief, GED for his coordination and guidance in conducting the background studies. This would have not been possible without the extensive technical support from Mr. Md. Mahbubul Hoque Patwary, Joint Chief; Ms. Munira Begum, Joint Chief; Mr. Md. Mahbubul Alam Siddiquee, Deputy Chief; Mr. Mohammad Fahim Afsan Chowdhury, Senior Assistant Chief; and Mr. Shimul Sen, Senior Assistant Chief.

Finally, we would like to acknowledge with gratitude the continuing support being received from the officials and staff of the 'Preparation and Monitoring of Medium-Term Development Plans (8th Five Year Plan) to Implement SDGs and Vision-2041' project being implemented by GED for consolidating and publishing the aforesaid background studies in volume.

Study 5:

Employment and Labour Market: Strategy for Job Creation in the Eighth Five Year Plan with a Focus on the Fourth Industrial Revolution

Rushidan Islam Rahman*

^{*} Research Director, Bangladesh Institute of Development Studies (BIDS)

1. Introduction

Background and objectives of the study

In a densely populated and resource poor country like Bangladesh, proper utilization of labour force can be an important strategy for accelerating economic growth as well as for making growth more inclusive. During the period of the last two five-year plans, performance of economic growth in this country has been rather impressive. In addition, progress has been achieved in terms of social indicators like education, health and poverty reduction. Nonetheless, when it comes to employment growth, progress has been slow during the last decade.

Acceleration of employment generation is expected to make economic growth more equitable and inclusive which is an announced goal of Bangladesh's development. Realization of government's Vision 2041 also requires emphasis on employment growth especially for the youth population. This can help reduce income inequality which at present is quite high and is higher than her South-Asian neighbours. Bangladesh's commitment related to SDG (especially goal 8) requires faster employment growth which can help achieve improvements in other labour market outcomes as well.

Therefore, more indepth analysis of the labour market situation and formulation of appropriate policies deserve special attention in the coming years especially in the context of the Eighth Five Year Plan. The objective of the present paper is to undertake an analysis of labour market and identify the possible strategies of job creation taking into account the past performance, the nation's goals and aspirations and the fast moving technological changes which will take the form of another industrial revolution (41R) and may pose additional challenges and present new opportunities. Such an analysis is taken up with a special focus on the youth labour force who are more likely to proceed along the new path of development of human capital and will be prepared to contribute to an economy requiring dynamism. It must also focus on those who are more vulnerable to the challenges posed by new technology and the advancement of 41R. The strategy formulation in this context may be complex and therefore an early attention to this is desirable.

Organisation of the study

- Section 1. Introduction. This section includes the objectives and importance of the study and a brief mention of the methodology used. The organization of the study is presented in this section.
- Section 2. An analysis of employment growth targets and achievements during 6FYP and 7FYP are presented along with the factors underlying the performance.
- Section 3. This section reviews the employment growth and labour market situation including a special focus on youth employment issues. The analysis begins with a review of the employment situation by drawing on available diagnostics on the evolution of employment situation. The changes in the structure of employment with special focus on formal and informal employment receives attention. The study examines the elasticity of employment with respect to GDP growth. The paper also focuses on issues linked with youth employment including labour force participation among youth population and education.

- Section 4. Gender dimensions of labour market and Women's Employment prospects: This section of the paper specifically focuses on the gender differences in the labour market outcomes and analyses the constraints and challenges responsible for stagnation of female labour force participation at a rather low level.
- Section 5. Overseas employment It briefly examines the trends, prospects and challenges of overseas employment of Bangladeshi workers in the current context.
- Section 6. Employment projections
- Projections of employment corresponding to GDP growth rate targets of 7FYP and perspective Plan and using the past employment elasticity are presented in this section.
- Section 7. The Fourth International Revolution (4IR) and Future of work: 8FYP expects to enter into the era of 4IR with adequate preparation and the paper therefore, focuses on this subject. An attempt is made to identify sectors/subsectors which may be affected due to 4th international revolution in Bangladesh. A discussion on the extent of job loss and new demand for labour due to 4th industrial revolution during the 8th FYP period is provided. Avenues are identified to increase job creation to cope with the potential pressure of job displacement from the manufacturing sector in the face of 4th industrial revolution. This is followed by suggestions for developing a strategy for building appropriate knowledge base and human capital with embedded skills which are likely to be in demand in a fast-changing economic landscape and evolving labour market.
- Section 8. Policies and Strategies for employment growth during 8FYP: It specifically pays attention to how to avoid the phenomenon of jobless growth. Strategies are suggested also for the longer term for addressing the emerging challenges arising from job displacement due to technological transformation.

Methodology

The study is based on secondary data from various sources. Among the secondary sources, the Labour Force Survey reports of various years (BBS) and Household Income and Expenditure Survey reports (BBS), the latest report on "Employment, Productivity and Sectoral Investment in Bangladesh" published by GED, of Planning Commission (2019c) provides data on topics to be covered by the background study. Scholarly articles and reports from within the country and from international sources are used with appropriate references. The already available diagnostic studies and technical reports on labour market in Bangladesh are used extensively (Farole and Cho 2017, Islam 2017, MOLE 2020, Rahman and Islam 2019). Appropriate reference at relevant places where specific data or methodology draws from those and other studies have been provided.

Employment Growth during 6th FYP and 7th FYP: A review of Targets and 2. **Achievements**

The present section reviews the achievements of employment targets of 6th and 7th FYP and the factors contributing to the success or lack of it. In fact a review of achievements in the sphere of employment growth has to bring in the issues of growth of labour force as well and is incorporated in the analysis.

At the outset, it may be mentioned that the 6FYP was formulated with the objective of acceleration of economic growth, decent job creation, reduction of poverty and income inequality along with overall human development.

Similarly, overarching objectives of 7FYP include further acceleration of GDP growth, employment generation for absorbing the additional labour force as well as for the backlog of underemployed/unemployed workers. The emphasis on employment growth is expected to make growth more inclusive. Similarly, a structural change of employment (raising the share of manufacturing from 15 percent to 20 percent) is envisaged which is expected to raise productivity and quality of jobs. Specific targets have been set in 6FYP and 7FYP to translate the above mentioned objectives to more concrete goals.

Employment targets and the achievements: 6FYP and 7FYP

Keeping in mind the above context, the present section begins with review of goals related to employment in 6FYP and 7FYP and the achievements during the plan periods. Table 2.1 and 2.2 shows the targets and achievements. These data have been obtained from official sources, namely the reviews and mid-term reviews of the two Plans and the Labour Force Surveys of BBS.

Table 2.1: Sixth FYP period: targets and achievements related to employment

Components	Target (million)	Achievement (million)	Achievement minus target (million)
Increase of domestic labour force a	5.5	3.7	-1.8
Increase of domestic employment b	7.3	5.4	-1.9
Increase of overseas employment c	1.2	2.5	+1.3
Increase of total labour force (a +c)	6.7	6.2	-0.5
Increase of total employment (b+c)	8.5	7.9	-0.6
Total employment minus total labour force	1.8	1.7	-0.1

Source: PC (2019b), LFS (various years)

Data shows that During 2010-11 to 2015-16, that is the 6FYP period, domestic employmentgrowth was 5.4 million while the Plan target was 7.3 million. Thus there was a shortfall of 1.9 million. However, the growth of overseas employment was 2.5 million, compared to the Plan target of 1.2 million, thus reducing the shortfall of total employment.

The situation has been aggravated during the recent years. Table 2.2 provides relevant data. This set of data shows that employment growth during 2015 to 2016 was 2.88 million, just about half of the 7FYP target of 6.1 million over these years. In contrast, OE increased by 2.4 million compared to the target of 1.2 million. When domestic and overseas employment is added, increase of total employment compared to total target during the three years of 7FYP fell short by a large magnitude despite the over-achievement of OE target. The excess of OE helped keep unemployment rate unchanged at a low level. If OE was just at the level of target, unemployment rate would shoot up.

Table 2.2: First three years of 7FYP: targets and achievements related to employment

Components	Target (million)	Achievement (million)	Achievement minus target (million)
Increase of domestic labour force a	4.60	2.27	-2.33
Increase of domestic employment b	6.10	2.88	-3.22
Increase of overseas employment c	1.20	2.37	+1.17
Increase of total labour force (a +c)	5.80	4.64	-1.16
Increase of total employment (b + c)	7.30	5.25	-2.05
Total employment minus total labour force	1.50	0.61	-0.89

Source: PC (2019a), LFS (various years)

In contrast, when domestic and overseas employment is added, increase of employment during 6FYP exceeded the target. Credit goes to the excess achievement of overseas employment. Moreover, during both plan periods, increase of domestic employment was slightly in excess of actual increase of labour force. Here again a much smaller growth of LF compared to estimated figure in the Plans, have contributed to this. Therefore the following questions must be addressed:

- a) Why domestic employment growth was much smaller than the target?
- b) Why domestic LF growth was much smaller than the target?
- How the excess overseas employment was achieved and whether this may and should continue.

Factors behind overachieving OE target and related issues

Government policies of training, regulation, and market expanding negotiations were successful. Cash incentive for sending remittance has been effective to enhance remittance sent through formal channels. Although the cost of migration is high, land price is rising and sale proceeds from even the tiny land can cover the cost.

While the beneficial effects of overseas employment must be recognized, it cannot substitute the need for domestic employment growth. Therefore one must do a soul searching about why did this shortfall in achieving employment targets occur.

The dependence on OE may continue only in the short run. In the medium and longer run it may not be advisable to continue the overdependence on unskilled employment of Bangladesh's migrant workers. The reasons (discussed in details in Section 5) are:

- (a) Fluctuation and instability of demand for unskilled workers in the recipient countries
- (b) Abuses at workplace
- (c) Lack of attention to domestic demand and skill development by both LF members and policy makers may adversely affect acceleration of GDP growth in the long term.

Why domestic employment growth was much smaller than target

This has occurred even if growth of GDP went through some acceleration during the 6FYP. Nonetheless, GDP growth during this period was lower than the target which is actually due to over ambitious targets. Moreover, the targets of structural change of employment were much higher than what was achieved. Table 3.1 (in the next section) shows the structure of employment where it is shown that the share of manufacturing has stagnated or slightly declined.

Reasons behind inadequate performance in employment generation include the following:

- i) Ambitious target of DE growth resulted from over ambitious target of GDP growth.
- Moreover, employment elasticity was high during 2000 2009. Use of that ii) elasticity gave high employment growth projection.
- Employment elasticity has declined during 2010 2015.

But the real question is why employment elasticity has declined! The decline occurred mainly in industry. Low achievements in the employment front must be traced in the policy regime during the plan period and inadequacy of strategies and/or their implementation.

A review of policies and strategies in 6FYP reveals that the strategy merely restated the objectives and goals of employment generation and structural change of employment. For example, it was stated under the employment strategy

"The sectoral composition of growth has to change in favour of a much higher share of modern manufacturing and organized services to create rapid expansion of good jobs. The employment responsiveness of growth in manufacturing needs to increase to absorb more labour." (PC 2011, 6FYP 2011 Part 1, p46)

In addition policy requirement was stated in general terms. For example, mention has been made of business deregulation, infrastructure buildings, trade reform, financial sector reform, tax policy, education and training etc. (P 46, 6FYP part 1). More specific formulations could help adoption of policies for labour intensive non-farm sector growth.

Rising capital intensity in manufacturing has been encouraged by gradually declining cost of loans. Employers' perception of difficulty of labour management also leads to higher capital intensity and results in overall increase in efficiency. The manufacturing sector is dominated by RMG which receives various policy supports from government which are not linked with labour intensity. This, along with need for maintaining quality as demanded by importers, leads to rise of capital intensity. Since this is the dominant sector, and accounts for more than 85 per cent of exports, government cannot but keep on providing supports in various forms and can hardly negotiate on the conditions for providing support. Lack of diversification of exports and overall manufacturing is at the root of growth of capital intensity and stagnation/fall of manufacturing employment.

In addition, lack of skill which in turn is linked to poor quality of education at all levels creates a situation of lack of confidence among employers and a mismatch in job market expectations and reality for the prospective labour force. This vicious cycle of "deficiency of demand and discouragement for skill formation of labour force" must be broken immediately.

Reasons behind inadequate performance during the first 3 years of 7FYP

The set of reasons behind non-achievement of targets related to employment growth include those discussed above in the context of 6FYP. About target setting, employment targets and domestic LF targets were over ambitious. The 7FYP stated "....If the projected GDP growth materializes, employment generated in the economy will exceed additions to the LF each year so that many of the workforce currently unemployed or under-employed will have the opportunity to move into productive jobs, primarily in the formal manufacturing sector of the economy" (PC 2016, 7FYP, p48).

During the first three years of 7FYP, GDP growth targets were achieved or surpassed. Yet the shortfall in employment growth has been due to further fall in employment elasticity which has been already declining during the 6FYP and has not been taken into account in the 7FYP.

In addition, it appears that strategies and policies related to employment growth did not receive much attention. Gleaning through the Plan document, some mention of issues related to employment and productivity growth has been traced in the context of how to raise manufacturing growth. Apart from that no specific policies for accelerating employment could be found.

The employment growth related performance has been already unsatisfactory during the 6FYP and in that background the 7FYP should have had a focus on employment growth strategies as a central theme. In fact, for the remaining two years of the plan, renewed emphasis on this aspect could help close the gap between targets and achievements.

Above discussion highlights the need for a focus on employment growth in the future development plans of Bangladesh. If the course of economic growth is left entirely on the whims of the market, the trend of falling employment elasticity is unlikely to reverse. The future development plans must take a decision on how to combine policies for economic growth along with an emphasis on employment. Lack of domestic employment opportunities contributed to the smaller growth of domestic labour force compared to the projections/targets through "discouraged worker" effect and resorting to overseas employment irrespective of quality and risks of such employment.

3. A Review of Labour Market Situation and Employment Growth in Bangladesh with a Focus on Youth Labour Force

This section begins with an analysis of the labour supply and labour force growth. This is followed by discussions on employment growth and its links with GDP growth (employment elasticity). Structural change in employment especially sector and formality of employment also receives attention. This is followed by discussions on unemployment rate among educated youth. In fact youth labour force receives special attention in the discussion. It has been mentioned in the introduction (Section 1) that growth of productive employment and improvement of labour productivity are critical for achieving SDG goal 8 (productive employment for all labour force members, especially youth labour force). A rising share of formal employment in total and a rapid decline of NEET among the youth population are among the targets of SDG. Therefore the recent trends in terms of these indicators are examined.

3.1 Labour force growth and Labour Force Participation Rate (LFPR)

The variations of LFPR and LF growth over 2000 to 2017 period are presented in Figure 3.1 and 3.2 (and 3A.1). These figures show fluctuations in LFPR and LF growth rates over the 17 year period, 2000 to 2017. A number of factors have contributed to this.

- Depending on actual availability of employment, a part of the labour force withdraws themselves from the LF and this constitutes the 'discouraged worker' effect.
- b) Rises in school enrolment rate can have a negative impact on LFPR and LF growth. Nonetheless, the impact is likely to be continuous and cannot be responsible for the observed fluctuations.
- c) There are some differences in definition of LF and productive activities in various rounds of LFS.
- An important data issue is the question of how the emigration out of the country d) for overseas employment is treated. As has been mentioned in the clarification on data in LFS, the recent (within last 6 months) migrants are included in the working age population but not in the LF. Therefore in years when overseas employment shoots up, addition to domestic LF is low and the reverse. Data (from section 5) shows very high overseas employment in 2016-2017 and this has to some extent resulted in a decline of male LFPR in 2016. Growth of labour force has been partly maintained due to rise of female LFPR in 2016-2017. PC study (PC 2019c) shows a rise of male LFPR between 2017 and 2018 and a decline of female LFPR. The latter year has seen a downturn in overseas employment.

The increments to LF (which is effectively domestic LF) have been uneven in these years. Figures on addition to total labour force (per year) also reveal these fluctuations (Table 3A.1). The sizes of labour force were 60.7, 62.1, 63.5 and 63.9 million (PC 2019c) in year 2013, 2016, 2017 and 2018. Thus addition to labour force per year were 0.56, 1.4 and 0.4 between 2013-2016, 2016-2017 and 2017-2018 periods respectively.

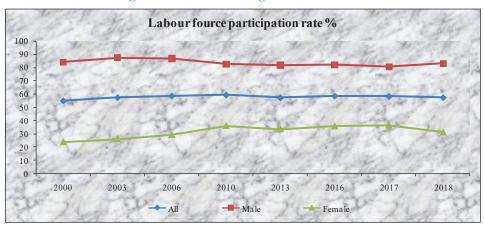


Figure 3.1: LFPR in Bangladesh: 2000-2018

Source: LFS various years, 2018 data is from PC(2019c)

Growth rate of laour force 2003-2006 2006-2010 2010-2013 2013-2016 2016-2017 2013-2017 Female

Figure 3.2: Growth rate of Labour Force (per cent per annum): 2006-2017

Source: MOLE (2020)

Structural change of employment

Bangladesh like other developing countries has made advances along the path of development through a structural change of GDP. This is expected to be associated with structural change in employment as well. Development theories based on dual sector model (Lewis 1954) envisaged a shift of labour force from traditional agriculture to modern sectors.

Data presented in Table 3.1 shows that the share of employment in agriculture has declined from 51 to 40 per cent during the 17 year period. This has been associated with an increase in the share of employment in both manufacturing and construction sector employment. The share of employment in the service sector does not show a definite trend but has been fluctuating. The pattern of change in the structure of employment differs by gender which will be discussed in a later section.

Table 3.1: Sector Composition of Employment (% of total): 2000 to 2018

Sector	1999-2000	2005-06	2010	2013	2015-16	2016-17	2017-18
Agriculture	51.8	48.1	48.4	45.10	42.7	40.59	40.40
Manufac-turing	9.6	11.0	10.8	16.36	14.7	14.42	14.10
Construction	2.8	3.2	4.2	3.69	5.7	5.64	6.30
Services	36.1	37.4	36.6	34.11	36.9	38.98	38.50
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: LFS various years, PC(2019c) for 2017-18 data

Table 3.2: Growth of Employed Persons by Industry (% per year)

Sector	1999-2000 to 2005-06	2005-06 to 2010	2010 to 2013	2013 to 2016- 17	2010 to 2016- 17
Agriculture	1.53	4.29	0.60	-1.67	-0.63
Manufacturing	5.82	6.34	12.34	-2.25	4.16
Construction	5.66	13.52	-6.28	14.39	2.87
Services	3.91	1.93	1.21	5.27	3.37
Total	3.30	3.32	2.39	1.33	1.82

Source: MOLE 2020, PC 2019c

Growth of Employment, Output, and Employment elasticity

Data on the growth of employment (Table 3.1 and 3.2) over the period of 2000 to 2017 brings out the following points.

During 2000 to 2010, growth of employment was high, around 3.3 per cent. But the impressive growth did not continue in the next decade. During 2010 to 2017 period, it has declined to 1.82.

During this entire period growth of employment in industry and service sectors have been positive although fluctuating. In agriculture it became negative during the latest period. In this period growth rates of employment in manufacturing and construction have also declined while there was a rise of employment growth in service sector. But this was insufficient to counterbalance the decline in the other three broad sectors.

During 2006 to 2010 period agriculture, manufacturing and construction have shown high growth of employment. If this could be continued during 2010 to 2017 period, the employment (and unemployment) scenario of the country would be more than satisfactory and it would be possible to absorb the entire new entrants to the labour force. However, as mentioned above, it did not materialize.

Another important point to be noted is the sharp fluctuations in the growth of employment in the construction sector during the period of 2000 to 2017. The increase in the growth of employment during 2006-2010 was followed by a substantial decline of growth during 2010-17. Employment in the sector is expected to rise again as the country has been implementing a number of mega projects.

The growth of employment is expected to be linked to growth of output in the sectors which are reflected in employment elasticity. These are shown in Table 3.3. Employment elasticity shown (Table 3,3) for the sub-periods reflects the patterns discussed above. Employment elasticity in both agriculture and manufacturing have declined in the latest period, reflecting growing capital intensity of the sectors.

For the economy as a whole, the contribution of economic growth to employment generation has declined over time and it is reflected in falling elasticity of employment with respect to output growth. The same remark applies to the job creating ability of the agriculture sector and the relevant elasticity figures.

Manufacturing and construction sectors were more employment intensive before 2010. Employment elasticity for the period of 2010 to 2016-17 is much lower compared to the elasticity figures for the previous five-year period (2005-06 to 2010). As a result employment elasticity for the economy as a whole has fallen sharply during the latest sub-period. The overall employment elasticity (i.e., for the economy as a whole) for 2010 to 2016-17 is half of that for 2005-06 to 2010 period. PC (2019c) shows that it has gone through a further decline during 2017 to 2018 period. The study reported that overall elasticity for 2010 to 2018 was 0.25 compared to 0.2755 for 2010 to 2017.

Table 3.3: Elasticity of Employment with respect to output

Sector	Employment elasticity, 1999- 2000 to 2005-06	Employment elasticity, 2005-06 to 2010	Employment elasticity, 2010 to 2016-17	Employment elasticity, 2010 to 2018*
Agriculture	0.8207	0.7103	-0.1877	0.09
Manufacturing	0.7807	0.8697	0.4159	0.65
Construction	0.6344	2.4164	0.5078	0.55
Services	0.6887	0.2734	0.5905	0.40
GDP	o.5861	0.5499	0.2755	0.25

Source: MOLE (2020), * This column is from PC (2019c).

Nonetheless, the falling employment elasticity implies a rise in labour productivity. The trends emerging from the above discussion on growth of employment and employment elasticity implies that the economy must raise employment elasticity along with acceleration of GDP growth for achieving better labour market outcomes.

3.3 Challenges of informality

Proportion of informal employment is an important indicator of vulnerable employment. Although a segment of the informal sector of Bangladesh exhibits characteristics of dynamic growth of investment and productivity, a large proportion of it consists of low productive activities and basically acts as the sponge for absorbing surplus labour. Previous studies (Islam 2017, Farole and Cho 2017, MOLE 2020) have identified this as a major challenge in terms of quality of employment.

It is quite expected that informal employment will constitute a major protion of employment in a subsistence based agricultural economy like Bangladesh. Nonetheless, the challenge related to informality of employment in Bangladesh is actually the persistence of the high share of informality (Table 3.4). The share of employment in the informal sector has increased substantially from 78.48 per cent in 2005-06 to 87.43 per cent in 2010. During 2010 to 2016-17, the share remains close to that figure. Even if the share of men engaged in the informal sector declined (although remaining at very high level), that of women actually stagnated.

Table 3.4: Employment in the informal sector: 2003 to 2017

Year	Employme	nt in the inforn (million)	nal* sector	Share of informal sector employment in total employment (%)			
	Total	Male	Female	Total	Male	Female	
2002-03**	35.1	27.2	7.9	79.2	78.9	79.8	
2005-06	37.2	27.5	9.7	78.5	76.2	85.7	
2010	47.3	32.4	14.9	87.4	85.5	92.3	
2013	50.1	35.6	15.2	87.4	86.3	90.3	
2015-16	59.5	41.8	17.8	86.2	82.3	95.4	
2015-17	51.7	34.6	17.1	85.1	82.1	91.8	

Source: Labour Force Survey, various years.

Note: *for definition of informality in 2013 to 2017, Labour Force Survey 2017 P 19.

^{**} The informal sector is defined in 2003 to 2010 in terms of the number of workers employed – those employing less than four workers are classified as informal.

The second important challenge is that, informality prevails not only in agriculture sector but also in industry in both rural and urban areas. As shown in Table 3.5, 90% of industrial employment is informal type. The shares are respectively 88.9 and 90.6 per cent in urban and rural areas.

Table 3.5: Share of formal/informal employment by sector and area

Sector of	Rural			Urban			Bangladesh		
employment	Formal	Informal	Total	Formal	Informal	Total	Formal	Informal	Total
Row %	Row %								
Agriculture	4.5	95.5	100.0	6.5	93.5	100.0	4.6	95.4	100.0
Industry	9.4	90.6	100.0	11.1	88.9	100.0	10.1	89.9	100.0
Service	25.7	74.3	100.0	31.8	68.2	100.0	28.2	71.8	100.0
Total	11.9	88.1	100.0	22.7	77.3	100.0	14.9	85.1	100.0

Source: BBS: Labour Force Survey, 2017.

Data on extent of informality by education level of workers shows that education level of HSC or above makes substantial improvement in the extent of informality. This has important implications for policy.

Wage and Earnings

Data on indices of wage/earnings presented in several studies (Rahman 2017, Islam 2017, Farole and Chao 2017) show that real wage/earning has increased during 2002 to 2012. However, the rise of wage rate indices and CPI during 2012 to 2018 are such that it shows a decline of real wage in both agriculture and industry (MOLE 2020). Recent data from LFS presented in Table 3.6 shows that during 2013 to 2017 real earnings have declined. Data shows that growth of nominal earnings from wage/salary per month were 3.9 and 2.8 per cent per year during 2013-2016 and 2016-2017 periods which are lower than the annual growth of CPI which averaged above 6 per cent.

Table 3.6: Monthly Earnings of Wage/Salary receivers (Taka)

Sex	Earnings (tk/month) 2013	Earnings (tk/ month) 2016	Earnings (tk/ month) 2017	Annual average (%) change 2013 to 2016	Change(%) 2016 to 2017
Male	11,621	13,127	13,583	4.1	3.5
Female	11,136	12,072	12,254	2.7	1.5
All	11,493	12,897	13258	3.9	2.8

Source: Calculated from LFS data.

3.4 Employment of youth labour force

Bangladesh has experienced high rates of growth of labour force especially youth labour force associated with positive population growth during the last few decades. Prospect of utilization of the growing youth labour force provides a scope for accelerating economic growth. The experiences of rapidly growing economies of Asia also illustrate cases of utilization of youth labour force, termed as demographic dividends, for accelerating economic growth (Bloom and Williamson 1998, Phang 2003). For Bangladesh growing youth labour force may be considered as 'potential demographic dividend' and if fully utilized, it can help economic growth and more specifically may enable the country reap the benefits of the future IR.

Employment strategy for 8FYP should specifically focus on the needs of this group. Younger labor force requires separate treatment because this group is likely to have special priorities in their choice of labour market roles and may face additional vulnerability because of their age. The transition of school to workforce is often difficult, especially for youth from low income families, who are likely to enter the labour force earlier than others. Young women face a different set of social constraints which may restrict their entry into the labour force.

In an economy dominated by family employment, the entry of youth into the labour force is considered as an automatic process where they are first engaged as unpaid workers in family farm/enterprise. But this process may no longer serve as a route to employment of youth as they receive education and aspire to move to paid jobs in skilled occupations.

Size and growth of Youth Labour Force (YLF)

Sizes of YLF (aged 15 to 29 years)¹ were respectively 14.5 and 20.9 million in year 2000 and 2010. It stayed at that level until 2016 and then slightly declined in 2017 (Table 3.7). LFPR among youth has risen from 51.7% in 2006 to 53.2% in 2010 and then it has declined and stood at 48.7 in 2017. Therefore, in the recent period the size of youth labour force has stagnated.

It would have declined if the size of youth population had not increased between 2010 and 2017. Population growth rate has significantly slowed down since the early 1990s (MoF Various years). The size of the youth population in labour force age is therefore, expected to start declining from 2015-18. The size of youth labour force may increase again if LFPR among young women rise. This is quite possible since the rate is currently quite low. Moreover the share of employed youth in total may go up also through reduction of youth unemployment which at present is much higher than the rate of overall unemployment which has been contributing to the recent decline of the share of youth in total employment.

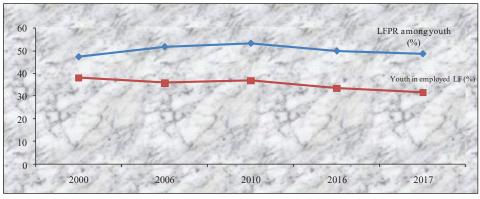


Figure 3.3: Youth labour force and youth LFPR (15-29 years)

Source: LFS various years

At this point the issue of definition of labour force used by LFS (discussed in Section 2) resurfaces. Since labour force does not include those who have taken up overseas employment and youth constitute a high share of those who migrate, rise in overseas employment results in a fall in domestic labour supply and LFPR of youth. The trend observed during 2010 to 2017 reflects this.

In Bangladesh, those with tertiary education enter labour market during ages 25-29. So 15-29 range is used in the present section. NYP defines youth as 15-35 year old.

Table 3.7: Growth of youth population and youth labour force (15-29 years)

Indicator	2000	2006	2010	2016	2017
Youth Population (mill.)	30.3	34.3	39.3	41.6	41.3
Average growth of YP (%)	-	1.92	3.46	0.01	01
per year					
Youth Labour force (mill.)	14.5	17.8	20.9	20.8	20.1
Average growth YLF per	-	3.48	4.09	.0	03
cent per year					
LFPR among youth (%)	47.4	51.7	53.2	49.9	48.7
Youth in employed labour	38.1	35.8	36.9	33.5	31.6
force (%)					

Source: BBS (various years): Labour Force Survey.

Does it mean that the decline of youth LFPR is not a matter of concern? One would still be wary about this feature of the youth employment. It implies that the potential demographic dividend is engaged in unskilled jobs abroad and is not getting an opportunity to be a part of the skilled workforce in the country. Compared to the success stories of migration, the hard life of migrant workers, risks and abuses they face are less obvious. Lack of domestic employment opportunities and low and non-increasing real earnings in non-farm sectors also contribute to the smaller growth of youth labour force.

Quality of youth labour force

How far the youth labour force will be able to contribute to the growth of the economy through employment in modern skill intensive sectors will depend on their education. Table 3.8 presents relevant data. There have been improvements over the 17 year period especially in terms of reduction of the share of uneducated youth and rise in the shares of primary to less than SSC educated youth. However the increase in the share with SSC/HSC or degree level education has been rather slow. This deserves serious attention because with less than SSC education they cannot move along the path of technology intensive employment and related skill development. Moreover the question of quality of education will come to the forefront if the nation wants to reap the benefits of 4IR.

Table 3.8: Level of education of youth labour force (15-29 years): 2000 to 2017(Percent)

Level of		2000			2006		2010			2017		
education	Total	Male	Female									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No schooling	38.6	34.3	49.4	27.75	25.87	33.17	26.9	27.4	25.9	8.95	9.13	8.78
class i – v	26.3	28.0	22.2	28.90	29.54	27.04	27.4	29.4	24.1	21.78	23.89	19.89
Class vi – viii	15.0	16.8	10.4	17.56	18.06	16.12	19.2	18.5	20.5	24.16	20.69	27.28
Class ix	6.7	7.0	6.7	10.38	10.76	9.28	13.3	11.6	16.3	28.78	27.12	30.28
SSC/ HSC& equivalent	9.4	9.6	9.1	11.72	12.06	11.75	10.7	10.3	11.5	12.16	13.93	10.57
Degree & above	4.0	4.3	3.2	3.44	3.47	3.37	2.5	2.8	1.7	4.17	5.24	3.20

Source: BBS (various years): Labour Force Survey.

Unemployment

Open unemployment is not an adequate measure of labour market performance in developing countries like Bangladesh and the reasons have been discussed by many studies (Rahman 2007, 2016). Still it can be an indicator to demonstrate the disadvantages of youth LF compared to aged LF. In Bangladesh open unemployment rate (for total labour force) has remained stagnant between 4 and 5 per cent of the labour force since the 1990s. Data (Table 3.9) shows that among youth LF the rate is much higher and has been rising.

In Bangladesh high rate of youth unemployment is actually due to higher rate of unemployment among educated youth. It is a matter of concern that unemployment rate is higher among educated youth compared to those without education (Table 3.6). This pattern at least partially reflects the fact that the educated youth are from better-off families and can afford to remain unemployed. Nonetheless, it implies wastage of human capital.

Young persons without education come from poorer households and can hardly afford to remain without employment. Unemployment rate is only 4.3 per cent in this group. These workers usually engage in the casual labour market and do not therefore face unemployment in the conventional sense. Among the tertiary degree holding youth, unemployment rates among men and women are respectively, 30.1 and 42.5 per cent. Educated unemployment tends to generate a vicious circle through its discouraging effect on future private investment on education.

Table 3.9 Unemployment rate (Per cent) among youth by level of education

Level of education	20	2010)16	2017		
	Male	Female	Male	Female	Male	Female	
No edu.	3.3	6.1	6.1	7.4	2.3	10.0	
i-v	5.1	7.1	*6.4	*13.4	*3.7	*9.3	
vi-viii	7.4	8.1					
ix-x	10.8	10.2					
SSC, and Equivalent	15.4	13.9	**7.8	**17.7	**6.7	**11.7	
HSC			6.1	5.8	22.7	35.1	
Degree & above	7.6	15.4	10.8	15.0	30.1	42.5	
All	6.8	8.5	7.4	11.3	8.2	15.0	

Source: BBS (various years): Labour Force Survey.

Note: * from primary to less than SSC, ** For only SSCs

Other challenges faced by youth labor force

(a) Type of employment

Present structure of youth's employment does not tally with the expectation that young workers demonstrates more dynamism and are likely to be employed in modern dynamic sectors. Latest LFS data shows that about 30 per cent of youth labour force is engaged in agriculture sector. Of course there may be modern enterprises in agriculture but there is hardly any information on the type of enterprises where the young workers are employed. Moreover, the largest shares of young women are employed as unpaid family workers. Regular employment consists mostly of jobs in export oriented RMG sector which is characterized by low wage, long hours of work and adverse working condition. Improvement of working condition in RMG is thus critically linked to good jobs for young men and women.

(b) NEET

Young population who are not in education, employment or training (NEET) represent wastage of potential human resource. 1.6 million young men and 10.7 million young women belong to this category (respectively 8.1 and 49.4 percent of young men and women). Bringing them to the labour force will require motivation, guidance, training, support services to reduce the burden of household chores, innovative schemes to create enthusiasm among young women to engage in income earning activities etc.

(c) Job search and Aspirations for overseas jobs

Young job seekers face difficulties in the job search process. Those who have not completed SSC level education face the bottleneck as a serious challenge. This group usually does not have links with persons who can informally connect them with jobs. In contrast, persons who have completed SSC/HSC with good grades can find out links for job search. In Bangladesh there is a dearth of services like job search assistance and employment intermediation which may help the school-to-work transition of the youth.

Many of the school leavers aspire to take up overseas employment. While some of them may succeed, some may be trapped in debt due to fraudulent behaviour of middlemen. Lack of knowledge and experience coupled with unrealistic expectations make them vulnerable in the hands of unscrupulous middlemen/agents.

(f) Training facilities

It is often suggested that young school dropouts or those with SSC/HSC education may have a better prospect of employment if they receive technical training. Recent spur in awareness about skill training is reflected in a high share of youth reporting that they desire to engage in skill training (LFS 2017). But only 2% of the youth have had an opportunity of skill training. Access to skill training is biased towards those living in the urban areas and having school education upto SSC or higher. In remote rural areas, spread of information about skill training is slower.

Moreover, employers wish to employ "experienced" persons but there is little scope of apprenticeship or internship which could generate relevant experience. Thus it is no surprise that job search process and matching with employers' demand is often difficult resulting in reliance on influential relatives, local political leaders and even middlemen.

Table 3A.1: Annual Growth of Labour Force (per cent per annum) and net addition to Labour force

Growth of	2002-03 to 2005-06	2005-06 to 2010	2010 to 2013	2013 to 2015-16	2015-16 to 2016-17
Labour force (all)	2.25	3.45	2.30	1.15	2.25
Male	1.19	1.44	2.47	0.70	0.93
Female	5.52	9.19	1.90	2.44	4.71
Net addition(million)	1.07	1.60	1.33	0.56	1.40

Notes: Labour force is defined as economically active population over 15 years of age.

Source: Calculated from Reports of Labour Force Survey, various years

Female Employment and Gender Inequality in the Labour Market² 4.

Women's participation in the labour force and employment can have important implications for their empowerment. Moreover, LFPR is already high among men and it may be difficult to increase it significantly. Therefore a rise in the participation of women in the labour market can help raise the overall LFPR and contribute to economic growth and development of Bangladesh. Expansion of quality employment for women can help attain sustainable development goals SDG 5 and 8. This section focuses on selected issues in this context which are relevant for 8FYP. These include structure of employment, the supply of female labour and quality of employment.

Gender Difference in Structure of Employment

As mentioned in Section 3, the process of acceleration of economic growth is expected to be associated with a structural change consisting of a reduction of the share of agriculture and increase in the share of industry and services in total GDP and employment. An empirical analysis of sector composition of employment is taken up to highlight gender difference in the structure of employment and its implications for future prospects of labour intensive growth.

Pertinent data on share of employment in broad sectors and growth of employment in each sector has been presented for 2000 to 2016-17 (Table 4.1). Data for the 17 year period (2000 to 2017) shows contrasting trends in the sectoral share and growth of male and female employment. Growth of women's employment in agriculture has been higher than the growth of male employment in this sector in each of the sub periods, 2000-2006, 2006-2010 and 2010-2017 (Table 4.2). As a result, the share of agriculture in total employment declined from 51.9 per cent in 1999-2000 to 34.0 per cent in 2017 for men (Table 4.1) and among women the share of agriculture increased from 46.2 per cent in 2000 to 66.5 in 2005-06. Then it has declined and was 59.7 per cent in 2017.3 Thus a structural transformation of sector of employment has been quite visible for men but has been small for women. It is the reverse if 1999-2000 is taken as the base. Concomitantly, women's share of employment in manufacturing has stagnated and the share of service sector has declined.

An important dimension emerging from the sectoral distribution of employment is the overriding importance of women in supplying food for the growing population of the country. Respectively 11119 and 12333 thousand women and men are employed in the "crop and animal" sector. Data from LFS shows that the workers employed in agriculture are older and less educated4. Data on land ownership of women employed in agriculture shows that 38% of them are landless or owns less than .04 acres of land. This will have adverse implications for productivity of the women employed in this sector.

This Section draws from Rahman and Islam (2019).

³ Data for 2010 to 2013 and from 2013 to 2017 shows instability in the pattern and no obvious explanation of such fluctuation is available, which led to questioning of data quality and definition of LFS 2013.

⁴ Rahman and Islam (2013) shows that self employed women (mostly in agriculture) are less educated but comes from larger land owning groups. ADB and ILO (2016) shows that the latter relationship has been weakened in 2013, which is also borne out by analysis of data of LFS 2017.

Table 4.1: Sector Composition of Employment (% of total) by Gender: 2000 to 2016-17

Sector	1999-2000		2005-06		2010		2013		2016-17	
	M	F	M	F	M	F	M	F	M	F
Agriculture	51.9	46.2	41.8	68.3	40.2	64.8	41.4	53.6	32.2	59.7
Manufacturing	7.5	17.6	11.2	11.5	12.7	11.8	13.8	22.5	14.0	15.4
Construction	3.2	1.2	3.9	0.9	6.3	1.4	4.8	1.0	7.5	1.3
Services	36.7	34.9	43.1	19.3	41.1	21.9	40.0	22.8	45.8	23.5

Source: Calculated from Labour Force Survey, different years.

Table 4.2: Growth of Employed Persons by Industry and Gender (% per y ear)

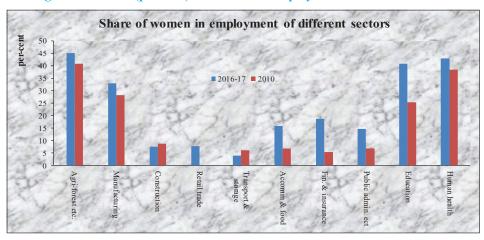
Sector	1999-2000 to 2005-06		2005-06 to 2010		2010 to 2013		2013 to 2016-17		2010 to 2016-17	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Agriculture	-2.14	12.77	1.79	8.41	4.12	-5.00	-6.53	6.22	-1.76	0.89
Manufacturing	9.09	-1.15	5.15	9.62	5.83	25.64	0.90	-7.57	3.15	6.50
Construction	6.05	1.34	13.01	19.51	-6.17	-9.55	14.53	12.79	3.10	0.30
Services	5.27	-3.24	0.08	12.88	2.18	2.68	5.63	3.73	3.29	3.27
Total	2.51	6.13	1.22	9.06	3.08	1.21	0.60	2.94	1.67	2.19

Source: Rahman and Islam 2019, different years.

The contrasting pattern of structural change of employment of men and women implies that men are capturing the advantages of modern sector employment and leaving the jobs in the traditional sector for women. Of course a part of the rising employment may be in high value product and in that case there is scope for optimism. There is no data on detailed breakdown of the types of women's activities within agriculture or on productivity of their labour. Data on sectoral wage/salary earnings (LFS 2017) show that earning of women is the lowest in agriculture, indicating that their productivity is also low.

Data on change in women's share of employment in detailed sector classification can provide further insights into the prospect of women's employment in more dynamic sectors (Figure 4.1).

Figure 4.1: Share (per cent) of Women in Employment of Different Sectors



Source: Based on Labour Force Survey, 2010 and 2016-17

- Within the modern sectors, women occupy a high share of employment in health a) services, education, and manufacturing. Women's share in education sector increased from 25% to 41% during 2010 to 2016-17.
- Similar pattern is observed in manufacturing employemnt which increased from b) 28 to 33% during this period.
- Some modern services including retail trade, finance and insurance, c) accommodation and food, public administration, etc. have emerged as employers of women which shows a welcome change from the traditional pattern.

Although the share of womens total employment in these sectors is still quite small, the positive trend should be encouraged and sustained with policy support of education, training and awareness raising. It has been argued that (Rahman and Islam 2019) the modern sectors of women's employment like education, health, accommodation and food, public administration require education above primary and in most cases above SSC. Therefore, education above primary and even higher levels can be an important steategy for increasing women's employment in modern sectors (MOLE 2020).

4.2 Female Labour force Participation and Quality of Female Labour Force

Women's participation in the labour force can have important implications for economic growth in countries like Bangladesh where male LFPR is quite high and may not rise further. It can be even more important for women's empowerment. Data on changes of FLFPR (Figure 3.1, previous section) shows that during the period 2000 to 2017, the rate has increased from 23.9 per cent to 36.3 per cent. The rate of increase has not been continuous and some fluctuations have been observed (Figure 4.2). In particular, during 2010 to 2017 it has stagnated around 36 per cent.

Male female difference in LFPR is large but has declined from 60.1 to 44.2 percentage points during 2000 to 2017. The decline is due to the combined effect of a rise of female LFPR and decline of male LFPR. There is a need for sustaining this trend by raising female LFPR although it will be difficult to make the difference close to the middle income countries.

In this context, the reason behind the recent stagnation of female LFPR deserve an explanation. This has been the net result of two contrasting trends in the rural and urban areas. In the rural areas, FLFPR has increased while it has gone through a decline in the urban areas from 34.5 per cent to 31.0 per cent (Figure 4.2). An understanding the factors behind stagnation of overall LFPR thus requires investigation into the factors underlying the decline of FLFPR in the urban locations.

The observed trend stands in contrast to the expectation that development and modernisation leads to growth of women's employment. Hence there is a need for explaining this decline of LFPR among urban women during a period of an acceleration of economic growth. Improvements have taken place in the front of social development, including education, decline of family size etc. Such advancements in the social front are more visible in urban areas where income growth and poverty decline have been faster.

In this context one must examine the demand side factors which may have influenced the decline of FLFPR. Lack of availability of sufficient jobs suitable for women, reflected

in high unemployment rate among them may have acted as a discouraging factor. Farole and Cho (2017) suggested that 'low levels of LFP of women are likely to be associated with high rates of early marriage, concentration of household responsibilities, mobility constraints and employer perception in the context of social and cultural norms9(P31).

Rahman and Islam (2019) demonstrate that a negative income effect is in operation at the household level which influences female LFPR. Households with higher income of spouse. large landholding and remittance income have lower female LFPR. It implies that the rise of urban income and decline of urban poverty may explain part of the decline of urban FLFPR. However it should not be interpreted as unwillingness of women from higher income groups to join labour market. Rather their preference will be for better quality jobs which require education and offer higher salary/wage.

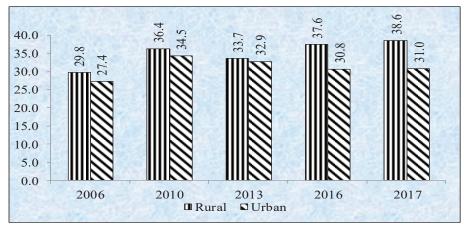


Figure 4.2: Urban and Rural Women's LFPR: 2006–2017

Source: Rahman and Islam (2019).

Multiple regression analysis of the same study (Rahman and Islam 2019) shows that the lack of services for care of children and aged and the resulting burden of care work are some of the constraints behind LF participation of women.

Data on hours of work disaggregated by broad sectors shows that women working in industry and service sectors work for 42 and 45 hours per week which are above full employment norm. Women who are employees spend 50 hours per week which is only two hours less than men and is 1.43 times of full weekly hours (35 hours). Women work more than 48 hours a week in the RMG sector, and are also often engaged in night work. They arrange informal child care on payment. Thus it is not entirely true that women may choose a job that allows shorter hours of work to manage the work- family balance.

When it comes to employment of educated women, they may have special preferences and here the presence of child, household responsibility of married women, high income of husband may pose constraints and the social norm that women will seek employment only as a fall back option (ADB and ILO 2016) starts operating. Whether employers will find it worthwhile to match the expectation of educated women's reservation wage will depend on the growth of demand for labour generated by accelerated investment in sectors which require HSC or BA degree holders. If sufficient demand for labour is generated so that male

workers' availability proves to be insufficient, employers will create incentive mechanisms to attract prospective female workers.

The question, however, is not only generating a sufficient demand but also the suitability of the educated women for the jobs created. Poor quality of education can pose a serious constraint to make these women employable in a skilled labour market.

It must be highlighted that if better quality jobs are available for educated persons, it will act as an incentive to raise male LFPR and thus job creation has to exceed the projections based on current LFPR of men so that women get a chance to avail these jobs.

Educational attainment of female labour force

Educational attainment of employed labour force aged 15 years and above shows (Table 4.3) that a large share is either without education or educated upto primary level. Among male and female, 36.4 and 60.6 percent are in this category. The higher share of uneducated female labour force reflects past difference of male female enrolment in schools. Gender difference persists in terms of higher levels of education as well. For example, 6.1 and 3.4 percent of male and female labour force has tertiary or higher levels of education.

Comparison of 2017 and 2010 shows that improvement has taken place over this period. The share of labour force without education has declined among men and women. The decline was higher among men, from 39.9 per cent to 29.8 per cent and among women the share has declined from 40.6 per cent to 36.4 per cent.

Unemployment rate among young women is higher than the rate for women of all age. In 2017 the values are respectively 15.0 per cent and 6.7 per cent. Unemployment rate among young women has risen during 2016 to 2017 from 11.3 per cent to 15.0 per cent (Table 4.3). What is more alarming, unemployment rate among young educated women (HSC and higher) is substantially higher than that among less educated (Table 4.3)

Table 4.3: Unemployment Rate among Educated Youth by Sex (age 15 to 24 years)

Education	20	017 (UE rate %	(6)	2016 (UE rate %)				
	Male	Female	All	Male	Female	All		
No education	2.3	10.0	4.8	6.1	7.4	6.7		
Primary	3.7	9.3	5.3	6.4	13.4	8.7		
SSC	6.7	11.7	8.7	7.8	17.7	10.7		
HSC	22.7	35.1	27.0	6.1	5.8	6.0		
Tertiary	30.1	42.5	34.3	10.8	15.0	12.1		
All education	8.2	15.0	10.6	7.4	11.3	8.7		

Source: LFS Reports, (various years).

4.3 Quality of Employment: Earnings, and Excessive Hours

Gender differential in wage was high during 1996 to 2006 (Rahman 2007). Data from the Labour Force Survey of 2016-17 show that on an average, women's wage and salary income are ten percent lower than men's showing a decline in the gender differential as compared to the earlier years. The difference varies between occupations and the gap is the largest for agriculture and elementary occupations. These occupations employ a high share of women implying that a large proportion of women suffer from gender difference of wage.

Excessive hours5

Although women's hours in productive employment is on average lower than men's hours of productive employment (respectively 38 and 52 among women and men), one has to add the hours of care work and domestic chores to get a more realistic picture of the work burden.

When these are added, the following picture emerges: Total hours worked is higher for women (Table 4.4). For those not in LF, own use service hours are much higher for women compared to men. Thus the production of family use services may act as an important constraint to women's LFP. This picture highlights that the contribution of women to the economy and society and must be adequately recognized.

Table 4.4: Working hours in employment and in family use services by sex

Sex	Persons employed		
	Hours in employment	Hours of family service	Total hours
Male	52	8	60
Female	38	21	59
Urban male	55	8	63
Urban female	47	19	66
	Not employed		
Male		11	11
Female		28	28

Source: BBS: LFS 2017

Overseas Employment of Bangladeshi Labour Force: Prospects and Challenges 5.

Overseas employment is important for Bangladesh from the point of view of providing the job-seekers with an alternative source of jobs. Even more important is that remittances sent by workers constitute an extremely important source of foreign exchange which has played a major role in the macroeconomic stability that the country has been able to maintain. It constitutes the second largest source of foreign exchange earnings and stands just next to RMG export.

5.1 Trends and patterns

Before 1990, the number of Bangladeshi workers availing overseas job opportunity was small. The number of people going abroad for jobs increased to over 100,000 in 1990 and continued to rise at a slow pace (Figure 5.1). Then the pace increased although there was a slowdown during 2007 to 2013. After 2015 the number was above 500000 in most years. Average outflow during 2016 to 2018 was around 800,000 with a peak of more than a million in 20176.

Of course other issues of working conditions, right to organize and benefits as per the labour laws are important.

Nonetheless, an important point to note is that the number migrating represent gross outflow in that year and no data is available on the number of migrant workers who return due to a variety of reasons. Nonetheless when the outflow is higher it reflects a rise in demand in destination countries and it is likely that the number of return migrants will be lower.

Total number of workers going abroad Total number 1000000 800000 600000 400000 200000 2002 2003 2004 2005 2006 2007 2007 2010 2011 2012 2013 2016 2017

Figure 5.1: Number of Bangladeshis going abroad for overseas employment: 1990 to 2018

Source: Constructed using data from the website of BMET.

Female migration for overseas employment

Before the year 2000, there were various restrictions on female migration for overseas employment and the number of women going abroad for employment was small.

Table 5.1: Female migration: Number and share in overseas employment

Year	Year Total		Share (%) of women in total
1976	6087		
1980	30073		
1985	77694		
1990	103814	2189	2.11
1995	187543	1612	8.60
2000	222686	454	2.04
2005	252702	13570	5.37
2007	832609	19094	2.29
2009	475278	22224	4.68
2011	568062	30579	5.38
2013	409253	56400	13.78
2015	555881	103718	18.66
2016	755731	118088	15.62
2017	1008525	121925	12.09
2018	734181	101695	13.85

Source: data from the website of BMET.

With the withdrawal of these restrictions, their number increased and the pace of increase was faster after 2008. Data on the share of women in overseas employment (column 3 of Table 5.1) show that in the past women accounted for a negligible proportion of migrant workers from Bangladesh. In 2018, the share of women in total was as high as 13.85 per cent. However, the recent increase in the number of female workers going abroad has raised various concerns as discussed below.

Country of destination

A few countries in the Middle East (Saudi Arabia, Kuwait, United Arab Emirates, Bahrain, Oman and Qatar) and in Asia (Malaysia and Singapore) account for most of the jobs for Bangladeshi workers. Workers from Bangladesh migrate for employment in a large number of other countries of the world as well. But the share of employment in those countries is rather small. There has been a gradual change in the mix of major destination countries for workers from Bangladesh. In the recent years, especially after 2007, there has been a sharp decline in the flow of workers to Kuwait, Saudi Arabia and Malaysia and the decline was made up to some extent by a rise in the flow to Lebanon, Oman, Oatar and Singapore (MOLE 2020). Up to 2005, eight countries (viz., Saudi Arabia, UAE, Kuwait, Oatar, Bahrain, Oman, Malaysia and Singapore) accounted for over 95 per cent of the flow. This share has declined gradually after that.

Skill composition

The skill composition of migrant workers is being examined on the basis of official BMET data. The skill composition is important from the point of view of their income prospect and hence the amount of remittance that they would be able to send. Data obtained from BMET sources indicate a gradual improvement in the situation in recent years (Figure 5.2).

Figure 5.2 shows that the share of professionals is very small. It was less than two per cent in the recent years. The "less skilled" constitute a very high proportion of migrant workers. This proportion has declined considerably since 2010. This has been accompanied by a rise of the share of skilled workers which has occurred in recent years. The shares of less skilled, semi-skilled and skilled workers were 38.5 per cent, 16.0 per cent and 43.3 per cent respectively in 2018 (Table 5.2). Since there is no "unskilled" category in BMET data, the less skilled possibly includes unskilled group.

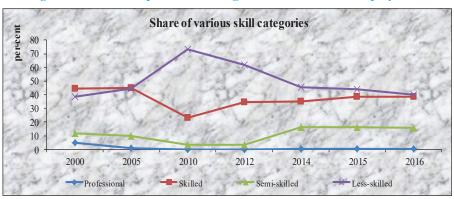


Figure 5.2: Skill composition of Bangladeshis in overseas employment

Source: MOLE (2020)

Table 5.2: Skill composition (Per cent) of overseas workers of Bangladesh (share of total)

Skill category	2018	2015
less skilled	38.5	43.9
semi-skilled	16.0	16.2
skilled	43.3	38.6
professionals and others	2.2	1.3
Total	100.0	100.0

Source: Calculated from BMET data.

5.2 Future prospects

The question of how many overseas jobs can be expected in each year of the coming 8th FYP is difficult to answer. A linear time trend equation (MOLE 2020) fitted to data for 1990 to 2018 has been used to provide indicative estimates of overseas employment during 2021 to 20257. The projected figures are 0.58 million for 2021 and 0.72 million in 2025. The figures are however, overestimates since these are influenced by the high figures during 2016 to 2018. Therefore the projection exercise in Section 6 uses the figures from Planning Commission macro-framework, which is 0.5 million a year. The latest data on overseas employment are lower. If this trend continues then the numbers during 8FYP period may be lower than the Perspective Plan figures.

Nonetheless, it should also be emphasized that the outflow may not be maintained without concerted policy efforts. The flow of workers going abroad depends on a variety of factors operating in the destination countries and in their policy fronts. Therefore, domestic policy making must take into account destination countries' policy as well as changes of domestic labour supply and domestic labour demand. Figure 5.1 provides examples of sharp increases in the number of migrant workers in 2007 and 2008 followed by a sharp decline and again an unexpected peak in 2017. Such fluctuations may continue in the coming years.

Moreover, the number of overseas employment during the last few years includes a significant share of female migrants. This pattern may undergo changes since there is a possibility of review of policies related to female migration for taking up jobs of domestic aid and similar services. In view of the reported abuses of women in these jobs, a number of Asian countries considered restriction on women's migration for such jobs. This may also influence supply of female labour from Bangladesh.

5.3 Challenges related to overseas employment

Bangladesh faces a number of challenges in the area of overseas employment. The first challenge has already received some attention, which is to maintain the flow of workers going abroad in view of the possible decline in demand for unskilled workers in the destination countries. Secondly, there are several serious issues on the qualitative side which are briefly mentioned below.

Many studies have identified that high cost of migration is a serious problem. The need for intervention on this front is called for because much of the excess cost does not reflect the true expenses of travel and related costs. Payments to intermediaries represent a large part of the total costs of migration. Although the government has stipulated the costs for various destinations, the expenses incurred by overseas job-seekers far exceed those minimum figures.

The equation from MOLE (2020) has been used here.

The abuses of migrant workers have been alarming and frequent media reports highlight these. Although quantitative data on this is scanty, guaranteeing their rights and ensuring their welfare remain major challenges. This aspect deserves more research, quantitative data generation and regular monitoring. Such monitoring requires cooperation of destination countries and proper channels must be prepared for doing this.

Bangladesh has been able to raise the total overseas employment as a supplier of semiskilled and unskilled workers in the overseas job market. The share of high skilled workers in the overseas employment remains small. It is not easy to change the skill composition rapidly due to reasons operating both on the supply and demand side. On the supply side the domestic capacity to produce the skills required in the overseas job markets remains rather limited. In addition, in the receiving countries perception about Bangladesh as a supplier of only low skilled/unskilled workers continues. The two sides are inter linked and will need to be addressed simultaneously so that the vicious cycle can be broken. Without such shift, the continuation of the current flow of emigration with same skill composition may be neither desirable nor viable in the longer run. Within the next decade or even a shorter time span, the jobs done by semi-skilled workers may be automated and overseas employment for those jobs will shrink. The policy responses to such challenges have been presented in Section 8.

Employment and Labour Force Projection for 8FYP

6.1 Methodology

This section presents projection of total employment and its change during the period of the Eighth Five Year Plan. In addition, projection of labour force has been made which depicts a picture of the supply side.

Labour force projection

Labour force projection uses the baseline data from LFS and the past growth rate of labour force. It would be logical to use the growth rate based on the latest two rounds of LFS (2016, 2017). But different inter-survey periods of the LFS show wide variations of LF growth (discussed in details in Chapter 3). The rate of growth of labour force varies from 1.15 per cent per annum during 2013 to 2016-17 to 3.45 per cent during 2005-06 to 2010. Moreover, there is no clear trend in the observed growth rates during the entire period of 2000 to 2017. Therefore it is more logical to use the growth figure of a reasonably longer time period for purposes of projections. The period chosen is 2002-03 to 2016-17 when the LFS data are reasonably comparable. Average annual growth of labour force was 2.28 per cent in this period. The present study uses this for making projections of labour force growth up to 2025.

Projection of employment

The projection of employment is based on an aggregate projection model involving the use of past data on elasticity of employment with respect to output and projected GDP growth over the period covered by 8FYP.

In the choice of data points for calculation of past elasticity an obvious preference would be to use the latest two years available (which are 2015-16 and 2016-17). However, since

2005-06, there has been a gradual decline in the elasticity of employment with respect to output. Moreover, this decline was quite sharp during the period of 2013 to 2016-17. The estimated employment elasticity for that period is only 0.1765 compared to 0.3887 for 2010 to 2013.

Bangladesh economy has undergone technological changes during this period as expected in the case of a country's early phase of high economic growth and that has resulted in a decline in the employment elasticity of output. However, it is difficult to explain such a sharp decline within a short period. So the use of the elasticity figure for 2013 to 2016-17 in a projection exercise is unlikely to help policy adoption for the 8FYP, as it is expected that the country will consider faster employment growth as a priority in this five year plan.

In order to present a moderately optimistic set of projection, the elasticity for a longer period 2010 to 2016-17, which is 0.2755 is used. An alternative set of projections uses a figure that is even higher, and it provides an idea about a highly optimistic scenario of what can be achieved if conscious employment- oriented policies are adopted and successfully implemented. An elasticity figure of 0.3 is used to prepare this alternative set of projections. This value of elasticity is from the Perspective Plan of Bangladesh (2021-2041). As for projected GDP growth, the Planning Commission's macroeconomic framework for 8FYP has been used.

6.2 Results of Employment and labour force projection

Labour force

Applying the LF growth rate of 2.28 per cent per annum (the observed growth of labour force during 2002-03 to 2016-17), one gets a projected labour force of 76.1 million for 2025 (Table 6.1). This gives an additional labour force of 8.11 million for the period 2020-21 to 2024-25, an average of 1.62 million per year. At this point it should be clarified that the figures on size of labour force are actually "domestic labour force" as clarified in Section 3.1. To recapitulate, LFS definition of labour force members exclude those who went abroad even temporarily for taking up overseas employment. If the labour force of Bangladesh who seeks employment overseas is assumed to be 0.5 million every year, then the incremental labour force per year adds up to 2.12 million.

Growth of employment (domestic and overseas)

For projection of employment the following equation is used (MOLE2020)8:

Et = E0 $(1 + \eta rg)t$ where Et is employment in year t, while E0 is employment in the base year t0, and n is elasticity of employment, and rg, is GDP growth in year t.

With an assumption of elasticity of 0.3, the projected incremental domestic employment (DE) generation over the plan period is 8.08 million (Table 6.2). Thus, even this highly optimistic employment projection slightly falls short of projected addition to domestic LF which is 8.11.

In a moderately optimistic scenario, with an assumption of elasticity of .2775 (obtained from data from LFS 2010 and 2017), the projected incremental domestic employment (DE) generation will be 7.16 million⁹. Thus, the projected employment growth will not be able to absorb the entire labour force.

- The model used here is adapted from MOLE (2020).
- However the projections depend critically on the targets of GDP growth rates. A change in these figures will change the projections. Therefore the results of the projections should be treated as illustrative.

Table 6.1: Labour force projection for 8FYP

Year	Labour force projection (domestic LF, in millions)	Change of Overseas Employment and labour force (OE) millions
2021	69.49	0.58 (.5) **
2022	71.08	0.61 (.5) **
2023	72.70	0.65 (.5) **
2024	74.35	0.69 (.5) **
2025	76.05	0.72 (.5) **
Change over 8FYP	8.11	3.25 (2.5)**

Source and notes: LFS various years Baseline: Labour force in 2017 = 63.5 million Labour force growth rate = 2.28 per cent per annum

Table 6.2: Employment and labour force projection for 8FYP

Year	Annual GDP growth (%)***	Domestic Employment (DE) projection (millions) with η = 0.3 *	Change of DE(millions) with $\eta=0.3$	Domestic Employment (DE) projection (millions) η = 0. 2755	Change of DE (millions) with η = 0.2755	
2021	7.4	66.11	1.43	65.77	1.08	
2022	7.7	67.63	1.52	67.16	1.39	
2023	8.0	69.25	1.61	68.64	1.48	
2024	8.32	70.98	1.72	70.21	1.57	
2025	8.51	72.79	1.80	71.85	1.64	
Change over 8FYP			8.08		7.16	

Source and notes: LFS 2017

Baseline: Labour force in 2017 = 63.5 million

Employment in 2017 = 60.8 million

With the figures from the Perspective Plan, 2.25 million overseas jobs will be taken up by Bangladeshis during the 8FYP period. This is about 27.8 per cent of the domestic employment projection derived on the basis of the highly optimistic assumption of employment elasticity (i.e., 0.3). The composition of employment thus shows a high dependence on overseas employment. As discussed in Section 5, there are risks associated with dependence on overseas employment.

6.3 8FYP targets for employment growth

When designing policies for employment growth on the basis of above projections, one has to take into account the new labour force, as well as the backlog of unemployment (2.67) million in 2016-17) that exists and for whom employment needs to be found. Even after allowing for some unemployment to continue, one could assume that the target should be to absorb about a quarter of them by 2025. This would mean that an additional 0.5 million employment has to be created and this increment should be added to the yearly target for employment up to 2025.

^{**} The figures in the Parenthesis are the values from macro framework of Perspective Plan.

^{***}GDP growth rate as in macro frame work for 8FYP

^{*} The value of elasticity in the in the Perspective Plan is 0.3, which is used here.

In addition, targets related to employment must pay attention to quality of employment. For example the pervasiveness of informality of employment must be gradually reduced. Therefore, a specific target of reduction of informality by certain percentage point should be an integral part of employment targets and strategy.

The other issue not covered by quantitative employment projections is what can be done to increase the hours of employment of those who are working less than standard hours due to lack of availability of opportunities of work. These issues should receive policy attention.

At the end it should be clarified that a plan document may not just use the projected figures as employment generation target. It must also take into account the experience of target setting and achievements in the past, the socio-political situations, business environment etc and take a judicious decision of what will be desirable and feasible.

6.4 COVID 19 and Employment Projection

Above projections have to some extent taken into account the downturn of the economy caused by COVID19. The GDP growth rates used in the projection reflect this. However, GDP growth rate of 2021 in the macro framework of PC for the 8FYP is higher than the early estimates obtained so far. This, therefore introduces an upward bias in the projected employment growth. Similarly GDP growth in the subsequent years of the 8FYP is likely to be lower if COVID19 continues.

Reconstruction of the economy in the COVID period and its aftermath unleashes forces which reduce employment elasticity of GDP growth. Most important among these forces is acceleration of the activities of the mega projects implemented with public investment. This constitutes a major strategy of economic recovery at present. However, these projects are mostly capital intensive and thus will not offer much employment to the workers who lose employment and livelihoods in the COVID period (Rahman 2020a).

Large scale industries experienced high growth rate during the last decade. They receive preferential support from the government as the country attempts to regain the growth momentum of the COVID affected economy. For example, the export oriented RMG entrepreneurs try to maneuver the policies in their favour. Utilising the policy support thus received, they may resort to higher capital intensity.

Therefore it is highly unlikely that the elasticity of employment will be close to the value given by the Perspective Plan. Targets for 8FYP must take this into account and may need to revise the targets as the impact of COVID19 unfolds. Early assessment of impact of COVID provides the following data (Table 6.3) which show rise of unemployment rate. This worsening trend may continue in the coming years as new waves of the virus hit the country.

Table 6.3: Job loss and unemployment during the pandemic period, April to September 2020: findings from some recent surveys

Survey period	Findings	Source and organization
June 10 to July 10	68 per cent of workers of poor slum areas of Dhaka	World Bank (2020)
(ref 7 days before	and Chittagong city corp areas lost jobs	
interview)		
April 4 to 12, (ref;	63 per cent of poor workers of rural areas and urban	BIGD and PPRC (2020)
date of interview)	slum areas lost jobs	
July 14 to 23, (ref	Small enterprise in light engineering sector: during	BIGD and Monash CDES
during and after	lockdown 24% have laid off some workers, Among	(2020)
lockdown)	workers who were retained, in 98% enterprises they	
	worked lower hours than normal	
September 10 to	Unemployment rates in three periods: March 4.1%,	BBS, GoB (2020)
20, 2020 (ref three	April-June 43.9%, July-September 7.35%	
periods)		

Source: Rahman (2021)

7. Fourth Industrial revolution (4IR) and the future of work in Bangladesh

Introduction

An understanding of the opportunities and constraints brought by 4IR¹⁰ begins by identifying the essential elements of it (Section 7.1). This is followed by discussions on the loss of growth potential if Bangladesh tries to avoid the use of the technologies which constitute the 4IR (section 7.2). In Sections 7.3 to 7.6 the opportunities, challenges, labour market impacts and constraints associated with 4IR receive attention. The last section discusses how Bangladesh can reap the benefits of 4IR and avert the problems which are likely to be associated with those changes.

From third to fourth IR

The 4IR is likely to cause revolutionary changes in production technology and characteristics of goods and services available for consumption. In fact, many studies on 4IR begin with description of the characteristics of first, second and third industrial revolution. The first IR (main feature was mechanization) and second IR (main feature was mass production) are matters of past and the potentials of these two have been reaped even by low income countries. The third IR's components deserve attention because some of it is yet to be fully adopted by counties like Bangladesh. Whether it may be possible to leapfrog to 4IR is rather uncertain.

The third Industrial Revolution (3IR) has been characterized as the age of computerization, which has also been popularly known as 'Digital Revolution'. As a result of digitization, computer use and automation the pace of globalization increased. Small and sophisticated electronics and computers led to digitization and digital record maintenance. Information and communication technology, internet, mobile phones and other related items in the field of telecommunication increased the speed of economic (and social) activities in an unprecedented and unthinkable manner. Production of information has been democratized which can enable social movements, and access to market information.

¹⁰ Fourth IR has been initially termed as "Industry 4.0", a term used in German industrial growth context.

Conventional economics usually treat automation as a threat to employment prospect and to the future of work. The history of industrial revolutions are experiences of development of machinery which reduced the need for labour and increased the productivity of human labour employed with the machines. This led to job loss in the short term leading to social disruption. Some oft quoted examples are:

- After the invention of weaving machine, the weavers attempted to destroy it as it might cause loss of their jobs.
- Invention of steam engine and railways caused job loss for the carriage drawers, boatmen etc.

However, the initial job losses were compensated by better and more jobs as shown below:

Automation \rightarrow higher productivity of \rightarrow labour and less labour

Higher labour income

Higher demand for goods and services

Faster growth of economy

Demand for higher skills & higher share of skilled worker

More and better paid jobs

Although in the long run 3IR created more and better jobs, access to technology was uneven. Those without access to capital, skill and technology were left behind. This led to slower growth of wages of unskilled workers in Bangladesh as elsewhere. The rising income inequality in the country was at least partly due to this.

Elements of 4IR

Before elaborating on the challenges of 4IR with respect to the 'future of work' it will be useful to mention the specific features of 4IR which distinguish it from the earlier ones and create greater threat for future of work. These are commonly known as robots, artificial intelligence, nano technology and biotechnology. 4IR thus combines digital, biological and physical innovations.

Given the above description, one may wonder why 4IR poses a special threat to the future of work. The difference between 3IR and 4IR lies in the fact that in previous eras machines were invented to perform specific tasks better than humans because those functions involved heavy tasks and routine activities which were physically and mentally painful and thus unattractive. In response, humans with their creative endeavors and social skills and intelligence have been able to specialize in higher grounds. A continuous process of expansion of education and skill upgradation took place enabling humans to find sufficient space on those higher levels. In contrast, the 4IR may squeeze that higher ground because of its special features which substitutes human's intelligence and process management ability and there lies the risk. Unless human capabilities are developed to rise above that level, there will be shortage of employment.

7.2 Whither 4IR

The advent of 4th IR is now a reality rather than a far away and uncertain phenomenon. It is natural that the analysts as well as policy makers in densely populated countries like Bangladesh with growing LF may first look at 4IR elements with apprehension. Bangladesh aims not only to raise GDP growth but is going through a difficult transition when it simultaneously requires acceleration of employment growth for its growing labour force.

One may visualize a scenario for Bangladesh in the short and medium term when many tasks are automated. For example in the sectors employing a large share of labour force (textile, wholesale and retail trade, tourism etc.) robots and other forms of automation may take place. Numerous retail stores may be replaced by huge stores operated by robots and automated check-out points. This is likely to result in mass unemployment of existing workers. Millions of young LF entering job market will not find good jobs. Therefore the policy makers may be persuaded to take up protective policies through high taxation and other barriers of trade to delay the inroads of 4IR. One may even argue that Bangladesh has not yet fully captured the advantages of 3IR and should focus on reaping these advantages rather than adopting 4IR.

Irrelevance of the above arguments may appear very basic and the theoretical and empirical studies on inefficiency of protectionism abound. Still a few general points on why shutting down the doors for 4IR may be impracticable and may not be to the best interest of the country deserve mention.

The automation process will bring with it economic growth and consumers' satisfaction. How this process takes place and how Bangladesh may reap these benefits will be elaborated later. At this point it should be highlighted that maintaining status quo, without advancing towards further automation may not be feasible. The barring of entry of 4IR may set in a process of downturn in the economy which may cause job loss as well as growth deceleration. Some examples may help to establish the point.

- The case of RMG: If automation is halted in Bangladesh while it makes progress in countries who are the competitors is this respect, Bangladesh will lose market and eventually lose on potential foreign exchange earnings and there may be drastic fall in employment, which had already been stagnating during the last few years. There may be attempts to cut down wage rate to keep the sector competitive leading to deterioration of quality of job and not much gain in competitiveness.
- Foreign direct investment may be conditional on the use of automation and if not adhered to, the FDI will flow to other countries of the region.
- The same may happen to the flow of concessional loans from international organization.
- Prospects of other foreign exchange earning sectors like food and accommodation, tourism etc. may nose dive because the quality of services provided without automation may not attract clients.

The above examples merely highlight that a country in isolation cannot deviate from the global trend of automation if it wishes to remain competitive. The failure to achieve efficiency and product (service) quality leads to lack of competitiveness. What about production for domestic markets? There may be scope for some continuation of existing technology based activities and some expansion of new goods and services. But gradually these have to be transformed because the machinery/spares required by the existing technology may no longer be available for import. Attempts to avoid or bypass the potential of a new industrial revolution may mean immense loss of potential which may be effectively irreversible when the loss becomes visible.

7.3 Opportunities associated with 4IR

Optimists have highlighted that the technological changes of 41R will bring benefits to all types of economies and bring opportunities for all types of producers and consumers. It will also help make our planet's life more sustainable (Suri 2019). Various studies show that enormous productivity gains will result from 4IR during 2025 to 2050. Such gains will spread over industry and services production, over health care to energy, faster transport facilities and many more. The technologies can fetch exciting capabilities enabling human civilization to "edit the building blocks of life" (Schwab 2018). This will influence the existing systems of incentives and norms of economic life which in turn will influence and modify the social behavior. Value of time and its allocation may be guided by the new opportunities creating scope for emphasizing welfare, creativity and other existing good values which could not be pursued because of the requirement to spend time on earning activities.

There are apprehensions that 4IR will worsen the already high income inequality in Bangladesh. However, when listing the opportunities of 4IR, it should include that there are various ways in which 4IR, if properly planned, can unleash powerful forces for not only faster economic growth but also for achieving greater economic inclusion (Menon and Fink 2018). These forces include easy access to new sources of information related to input and output markets, which can help raise incomes of micro, small and medium enterprises. New forms of education (online courses etc) and new routes to access healthcare services which are located in distant big towns can improve lives of people who are in remote regions far from the cities. Financial services can be accessed without having to travel to bank branches. The new technologies will save travel requirements and can help reduce congestion on Dhaka's roads which is already unbearable. 4IR can facilitate measures to manage environment, and to upgrade the systems of disaster preparedness and the strategies of handling disaster impacts.

Export industries like RMG, leather and tourism sector in Bangladesh can be the early adopters and take advantage of 4IR because automation will reduce unit costs, improve communications, raise efficiency and minimize work place accidents and improve working conditions.

Nevertheless, the gains from 41R will elicit newer forms of challenges and there will be tradeoffs in the time frame and sphere one chooses for adoption of 4IR. 4IR is not a fixed set of given items imposed by technologies. The present generation in Bangladesh and the policy makers will have to adapt this according to the broader development goal.

7.4 **Automation possibilities in various sectors/occupation**

Before we look at the impact of 4IR on future of work in Bangladesh, some general description of how the impacts are channeled is being presented. A number of studies, mainly in the context of high income, developed countries have outlined these courses (UN-DESA 2017, Raja and Christiaensien 2017, MGI 2017).

These studies show that the sectors/occupations affected will be influenced by the extent of the following tasks in that specific activity (MGI 2017).

- Planning, decision making and creative tasks
- Managing and developing people
- Inter facing with stakeholders
- Unpredictable physical activity
- Predictable physical activity in each of the above or independent of the above

Including, Collection of data and Processing of data

MGI provides estimates of the automation potential of each task in the 4IR and extent of workforce to be made redundant through use of technology already available. Some general applicability of patterns (even if not the exact magnitude) can be expected for other countries as well and therefore table 7.1 shows the results.

Table 7.1: Automation potential by task in the 4IR stage workforce

Type of activities	Share of (%) total time spent	Share of employment that may be automated (%)		
Managerial	7	9		
Planning, decision expertise	14	18		
Interface	16	20		
Unpredictable physical	12	26		
Collect data	17	64		
Process data	16	69		
Predictable physical	18	81		
Total	100	51		

Source: MGI (2017)

Table 7.2 Labour associated with automable activities

Country	Share of all labour (%)
Japan	55
India	52
China	51
US	46
Europe big	46
Rest of the world*	50

Source: Bajpai and Biberman (2019)

The figures for China, India and Rest of the world shown in Table 6.2 are close (around 50%). This figure will be used in Section 7.5 to make predictions for export sector of Bangladesh.

^{*} Pakistan, Taiwan, Vietnam, Bangladesh are not included.

7.5 Impact on Labour Market of Bangladesh

There is a general concern that the disruptive impact of 4IR on labour market will lead to exclusion of unskilled workers and other groups with less access to internet, computer etc from the benefits of 4IR. Moreover it can have disruptive effect on job opportunities as artificial intelligence and robotics can perform some of the jobs better and even faster than human labour. In the short term it will threaten jobs until workers are reskilled and tasks within jobs are realigned with the new situation.

On the estimates of extent of job loss, views of course differ. An ILO study estimates that 56% of jobs will be at high risk of automation during the next few decades (study for five countries: Cambodia, Indonesia, Vietnam, Thailand and the Philippines) (Chang and Huynh 2016). However, this should not be simplistically applied to all situations and especially for Bangladesh. Even if there is some displacement of labour in some sector and activities, employment is likely to be created elsewhere and the net loss may be small. 11

However, a study by OECD (2016) quoted by Chang and Huynh (2016) observed that only 9% of jobs in OECD countries are at risk of displacement by automation. Whatever be the magnitude of displacement these will inject processes of change in the labour markets of all types of countries, leading to demand for retraining and alternatives. Another study (Ernst, Merola and Samaan 2018) suggests that AI and automation will make available low cost devices which may be used by small producers and raise productivity, which may have a positive impact on employment and earnings.

Phases of employment growth in Bangladesh and 4IR

Previous discussion has mentioned the opportunities of adoption of 4IR. It may appear that the acceleration of both growth and the changes in employment can follow automatically. Nonetheless, the reality is that the current patterns of growth and existing quality of human resource cannot be altered overnight. The preparation for 4IR and its advent will actually be slow during the initial phase and will spread rapidly thereafter. The following discussion attempts to chalk out possible sequences and the impact of 4IR on employment. This is presented in tabular form for easy identification of the phases.

Table 7.3 below does not mention specific sources of data. These are guesstimates based on past employment growth in various sectors, expected sectoral GDP growth, skill composition of export oriented sectors (Rahman and Hossain 2016), assumption of policy changes for export diversification, provision of incentives for modern agriculture and other technology based sectors and above all the extent of labour displacement effects (Section 7.4). Data from the Table shows that during 2021 to 2025, there will not be much slowdown of growth of demand for labour due to 4IR. The reasons are as follows:

Formal sector will experience growth of employment while public sector employment growth may be minimal. Domestic market oriented manufacturing is expected to grow fast and government must take steps to boost their growth so that during 2021 to 2025 as much employment is created as possible. This should be done because in the next phase employment growth will slow down and the country cannot afford to accumulate backlog of unemployed.

A local newspaper has mentioned that 5.7 million unskilled Bangladeshi will lose jobs abroad and at home due to lack of technological skill. Dhakatribune.com/opinion/op-ed/2019/02/14 "What the 4th IR has in store for Bangladesh". However, this was later withdrawn from the internet version.

Table 7.3 Possible growth of employment in Bangladesh by type of activity: 2021 to 2040

Sectors	2021-25 (3IR)	2026-30 (3IR plus 4IR)	2031-40(4IR, initial
	total change	total change	stage) total change
Agriculture: traditional	Decrease 10%	Decrease 10%	Decrease 20%
Modern, commercial	Increase 20%	Increase 30%	
			Increase 10%
Manufacturing (export related)	Static or	Increase 5%	Stagnant or 10% decrease
	marginal		
	change		
			Increase 5%
Manufacturing (domestic)	Increase 20%	Increase 10%	
Construction	Increase 20%	Increase 20%	Increase 5%
Services Government: Admin,	Static or 5%	5% increase	Static or decrease 5%
Education, health	increase		
Services: formal banks, telecom	Increase 20%	Increase 10%	Static or decrease 5%
(government and private)			
Services: NGO, private sector			
formal	Increase 20%	Increase 5	Static or decrease 5%
Services: informal			
	Increase 20%	Increase 20%	Increase 10%

Export oriented industries are likely to accelerate growth but will shed labour due to automation based on 3IR (not 4IR). Agriculture will reduce labour as per the past trends. Commercial and modern agriculture is expected to grow and labour use will grow fast but this accounts for a small share of total employment. Those who do not find employment in this latter group of manufacturing can be absorbed in informal service sector.

In the next phase some slowdown of growth of employment will take place, if not absolute reduction in the size of employment. The situation may be saved if sufficient effort is made during the 8FYP period to accelerate export diversification and to boost the ICT sector, through building physical infrastructure and skilled human resource.

The preparation for the 2026 to 2030 period must be undertaken during the 8FYP period. If it is taken for granted that the benefits of 4IR will flow without policy effort, a blunder will be made and the consequence will be 4IR adoption in limited spheres creating island of high growth and prosperity. This cannot raise the overall growth of the economy and also will leave the low educated labour force without employment or with marginal types of occupation ensuring survival.

During last sub-period, 2030 to 2040, total employment is likely to stagnate or decline by a small percentage. But it is likely to match the reduced growth of labour force. The productivity and quality of employment will improve. The figure for this period is rather speculative and the tradeoff between quality and quantity of employment will depend on the adoption of 4IR technologies and the early preparations related to high level skill development and follow up measures for mitigating job loss through development of new sectors and economic activities and socio-cultural activities. At this stage there will be possibly a need for provision of social protection for aged workers who will be the initial victims of job loss.

In addition to domestic employment growth, overseas employment has played an important role during the last one decade. What will be the impact of 4IR on overseas employment? Obviously employment in the destination countries will shrink.

Greatest curtailment may take place in the unskilled employment opportunities which were availed by Bangladeshi workers. Therefore the number of workers going abroad with such employment will decrease. The speed of decline will depend on speed of adoption of 4IR in the destination countries. The number of such employment may be halved during 2031 to 2040. If the preparatory changes suggested above are put in place, the youth labour force that are eager to capture new opportunities will move forward and take initiatives for entrepreneurship and employment generation within the country and the need for dependence on overseas employment can be reduced.

7.6 Constraints and challenges faced by Bangladesh in the phase of 4IR

Above discussion has mentioned the enormous potentials of 4IR. However, the gains from 4IR for Bangladesh will depend on the actual utilization of the potentials. Such utilization will depend on the facilitating environment and constraints. Therefore, the constraints which may be foreseen are being identified.

First and foremost is the lack of adequate infrastructure and knowledge base. Infrastructural inadequacy includes lack of uninterrupted access to electricity and internet facilities, poor communication process, and poor internet broadband disbursement. Natural disasters, floods and other calamities easily disrupt communication, electricity and internet access. Even special economic zones, export processing zones are not equipped with features which are needed for automation. Without adequate physical infrastructure, equipment and installations cannot operate in smaller towns. Security and safety of the expensive equipment and devices poses additional risk. In fact the above features are still creating constraints to the full utilization of prospects of 3IR in the small town and peri-urban areas even if these technologies are available for the last few decades.¹²

Similarly lack of knowledge about the features of 4IR can be a serious constraint. The government and prospective private sector beneficiaries are enthusiastic about the potentials it may bring. Nonetheless, more in-depth knowledge is required for understanding the exact manners in which these should be realized.

The operational aspects of 4IR are likely to be handled by specialists with technical competency. But the decision makers must have sufficient understanding of the costs and benefits and prerequisites for 4IR. While the technical persons may also be hired from abroad, this may be expensive and not cost effective without local knowledge and skill base. In the recent past, the RMG sector of Bangladesh has employed huge number of expatriate skilled personnel for taking advantage of 3IR. If this route is followed also for 4IR, it can be less efficient and may mean loss of job opportunities for local labour force who would be any way hard hit by the low job creation due to automation.

The other issue which will come up in the course of adoption of 4IR is that it is expensive and requires support from government. However, the pressures from vested interest groups during 4IR phase may lead to subsidy policy resulting in premature and inefficient capital intensity.

Islam (2017) is the only study where are attempt has been made to identify the constraints to adoption of 4IR in Bangladesh on the basis of opinion of professionals and experts. However, the number of interviews was only ten. The views expressed by them corroborate to the commonly held ideas.

Policies and strategies for reaping the potentials of 4IR

"Fourth Industrial Revolution is a vision for developing, diffusing, and governing technologies in ways that foster a more empowering, collaborative, and sustainable foundation for social and economic development, built around shared values of the common good, human dignity, and intergenerational stewardship. Realizing this vision will be the core challenge and great responsibility of the next 50 years." (Schwab 2018). Thus 4IR is not a given or imported phenomenon and it rather calls for carefully chosen policy initiatives. Some of these are listed below:

- Policies for creation of environment and infrastructure for technology of 4IR are immediate needs. To establish the foundations of a hard and soft digital infrastructure are the required short run steps.
- The country should adopt a comprehensive approach for implementation of 4IR through consistent steps, adapting the experience of similar countries and improvising.
- Policies must be planned for redressing the harmful effects of mass unemployment before it occurs which may not be before the third decade of this century.

How skill and knowledge about 4IR can be integrated with labour market

Integration of the economy and the labour market with 4IR requires that relevant skills and knowledge bases make advancement. Knowledge of ICT and computerization are essential to reap the benefits of 4IR as consumers, producers and workers. In this context only basic knowledge will not be sufficient.

Those in the policy making role must have a thorough knowledge of the constituents of 4IR, its implications and the policy imperatives as well as the international perspective and possibility of regional cooperation in the context of 4IR. Only then appropriate policies and preparations can be planned. Even this knowledge will require computer and internet related skills and research background. With the advent of 4IR, the policy making activities cannot be isolated from automated/computerized and internet based situation analysis and its interface with policy. Policy makers' total dependence on technical specialists/ consultants may be rather futile. New recruitments would then require familiarity with relevant computer software and internet skills. It will also require upskilling of currently employed officials. This will send a strong message for the education system and for the potential entrants of the labour market. The traditional route of skill development and technical training cannot meet the demand from 4IR. In the courses which are ongoing, more indepth courses on computer and ICT skills should be incorporated. Specialized vocational model schools may be planned to initiate skill development for 4IR.

It should be clarified that policies aimed at utilization of potentials of 4IR has to embrace all sectors, agriculture, industry and service and all types of employment, public and private. Therefore the policy supports should be all encompassing. In a seminar organized by the Ministry of Industry it has been mentioned that policy is being framed to realize the potential of 4IR (Daily Star 2019)13. Whichever ministry is in charge of this, the policy implementation will require acceptance by all relevant ministries and policy formulation must go beyond rhetoric.14

¹³ In April 2019, Ministry of Industry has organized a seminar and Secretary Mr. Abdul Halim has mentioned this.

¹⁴ Government has been recently showing enthusiasm about the potentials of 4IR. For example, "I can now proudly say,

8. Recommendations of Policies and Strategies for Job Creation in the 8th FYP

Before moving on to specific policies, a remark from section 2 is worth highlighting. It has been observed that the employment growth performance has been unsatisfactory during the 6FYP and in the first three years of 7FYP because of lack of adequate strategy formulation in those Plans. In that background, the 8FYP should focus on employment growth strategies as a central theme. The past failure to accelerate employment growth has been due to reliance on GDP growth to result automatically in employment growth. In fact PC itself has in some its recent studies expressed the concern about lack of job creation in manufacturing sector (the major source of formal jobs) and raised the question whether a jobless growth scenario prevails (PC 2019a, 2019b, 2019c).

Fuller utilization of the labour force and working age population can be achieved through policies working on three fronts:

- Growth of employment opportunities
- Raising employability, especially of the youth population constituting the prospective labour force
- Creating favourable environment for raising scope for labour force participation of working population.

This section presents policy suggestions embracing these aspects. Specific attention is given to policies for raising female LFPR and employment. 8FYP intends to highlight the importance of 4IR in terms of its impact on the labour market. Policy response to 4IR has already been discussed in Section 7. A few policy issues specifically relevant for 8FYP are included in this section even at the risk of repetition.

Policy suggestions for employment generation and for raising employability

Choice of Appropriate growth strategies

Essential element of the first set of policies which focuses on the demand side is faster growth of employment intensive sectors. It requires growth of investment in infrastructure and policies for providing incentives for labour intensive modern sectors. In this context the need for diversification of manufacturing must receive emphasis. This has been reiterated by researchers and policy makers (7FYP) but serious measures for implementation have not been adopted.

Simultaneously small and medium enterprises need to be encouraged as these can be located in small towns and peri-urban areas. Regionally dispersed growth of non-farm sectors can help absorb labour force living in rural areas and remote regions.

Policies should also encourage non-cereal modern agriculture, especially livestock, fishery, horticulture including new high value crops. These can have linkage effects through agroprocessing and service sectors development which.

Increasing employability

Skill deficiencies and low quality of education are important factors behind low earnings. It should also be recognised that youth labour force may benefit more from improvement of employability through various types of skill training rather than direct entry into the labour market. In this context both short term programmes and long term policy focus are required.

Improvement of quality of youth labour force requires balanced development of quality education and training facilities. The following policy suggestions will focus on training while the general policies of improvement of quality of education have been reiterated in various policy documents and can be a part of education sector strategy of the 8FYP.

Education –Industry Linkage

An important issue which may as well be considered as part of quality of education is the Education –Industry linkage. This can provide guidance to the education system about the changing demand for graduates from various disciplines.

Increasing employability: Training and skill generation

The nature of medium and/or longer term policies of skill development will depend on the pace of economic growth and the structure of growth. Accelerated pace of industrial growth and 4IR technology will imply that gradually higher skills will be needed. This issue receives attention in Section 8.3.

Short duration training programmes can target the young unemployed persons and requires immediate implementation. Short term programmes should be based on the existing institutional facilities. The critical issue in this context is linking training with jobs. This can be ensured through prior assessment of demand and identification of the sectors, and locations where demand exists. Industry representatives and stakeholders' participation can play important roles in such assessment.

In addition, increased efforts are needed to reduce drop out and enable students complete secondary/higher secondary levels. Such steps for human resource development will not only reduce the size of NEET group (as envisaged by SDG 8) but also contribute to expansion of activities in the education and training sectors.

Short term policies should also focus on self-employment which requires a combination of skill and management training. Training organizations should be reoriented to adopt practices for 'getting the enterprise started' (enterprise incubation) and supporting it for a minimum period.

Vocational training should be also planned for specific groups: those with primary to less than SSC level education, older women from poorest groups, persons who are differently abled and from ethnic groups and other disadvantaged groups. Reskilling and upskilling of aged workers must also receive attention with specific target groups as and when a situation arises.

Schemes for dissemination of labour market information

In recent years private sector agencies are emerging with facilities for dissemination of information on jobs. Such agencies may be provided with incentives and should be encouraged to cater to the clients in rural and remote regions. Government may create Upozila level windows for channeling information on vacancies. Local NGO branches may join this endeavour.

Young school leavers usually do not have access to information on training facilities. They access such information through others who received training. In remote rural areas, spread of information is slower. Dissemination systems on training and jobs are also required to help school leavers who aspire to take up overseas employment.

Policies for bringing NEET into the labour market

It must be understood that a large part of the NEET who are mainly young women, can be mobilised for employment if suitable jobs are available. 'Suitable job' may mean not only higher wage, but jobs at a distance within easy commuting facility from home or at a place where safe accommodation and other amenities are available.. Government's role in creating suitable transport and other services, improvement of governance in the labour market, all are possible contributing factors.

Move towards formalisation

Rising competition among employers is expected to put pressure on wages and to make employment contracts more formal. Raising the share of formal employment in industry and services requires that formal sector hires workers on formal contract. There should be specific targets to raise formal employment to 50 percent within the next decade. In the meantime, steps needs to be taken to improve productivity and wage in informal jobs.

Policy response to face the challenges related to overseas employment

The traditional policy issues related to reducing cost of migration, eliminating abuses at work place are of course still relevant and must be pursued seriously.

It has already been mentioned in Section 2 that recent trends of overseas and domestic employment shows that Bangladesh's dependence on overseas employment is rising for absorption of her labour force which may not be quite desirable. Therefore the country should work towards reducing dependence on unskilled labour migration. Rather than reducing the number of overseas job seekers, a more desirable alternative is to make an all out effort to increase skilled migration and reduce the share of less skilled and semi skilled to less than 5 per cent of total by 2030.

In this context the types of skills which will increase in demand may be mentioned. Across sectors there will be demand for interpersonal communication skills, leadership skills, diversity and cultural intelligence, management skills of various levels. These skills can be accessed with various levels of education and targeted to a variety of occupations (for example geriatric care).

Policies for return migrants

To support the return migrants a number of policy supports can help.

- Those who have cash savings must be provided with safe routes for institutional a) savings and for investment.
- Those in the labour force age and are without means of support must be b) intregated into the economy through scope for generating self employment. This will require targeted training, provision of finance.
- Those willing to go for another round of overseas employment will need to upgrade skills.

Policies for SEZ

Government has undertaken the plan to create SEZ in different regions of the country. This can help acceleration of growth of economic activities, export and employment. While selecting foreign FDI for the SEZ, caution must be taken to get the labour intensive enterprises to help absorption of local labour. The SEZ's in the areas far from the capital can help regional dispersion of economic activity and employment. Therefore to attract investors to these zones, special benefits compared to the centrally located ones will be needed.

8.2 Policies and Strategies for Female Employment

Macro strategies

Macro strategies for growth of employment demand can be the most effective strategies to raise women's LFPR and employment. Accelerated growth of job opportunities will raise the bargaining power of women, lead to better wage/salary and encourage more women to enter labour market and thus raise female LFPR. To accelerate growth of female employment, policies must be geared in the direction of encouraging sectors and subsectors which have the prospect of being female labour intensive.

Indirect effect of other national policies (education and health):

Some of the existing government policies related to female education and health and family planning have contributed indirectly to a rise of women's LFPR and employment as these policies enhance the qualification and reduce the demand for care work respectively. These policies should continue and the effectiveness must be enhanced.

Better quality education and training as a strategy for women's better quality jobs

Both primary and higher education contributes positively to LFPR of women, to higher earnings, better quality of jobs in terms of formal contract and access to modern sector employment. Training courses participated by women must also focus on soft skills which can raise bargaining power of women in the labour market.

Services to reduce the burden of care work

Other policies influencing women's lives have interlinkages with job strategy in enhancing the prospect of remunerative employment. For example, policies for delaying marriage has a relevance because early marriage locks women into care activities which imposes additional challenges barring women's entry into education, skill development and employment.

Nonetheless, challenges may also be turned into opportunities. If supplies of paid services in the care sector can be expanded, this may itself have a direct employment creating impact and also set free women with small children so that they may seek paid work or self employment. This can be specially relevant for child care services.

Sectoral strategies for women's employment growth

Women's employment in agriculture

Since the majority of women are employed in agriculture, special strategy aiming at improvement of productivity of female farmers is needed. In the short term access to extension services for both crop and non-crop (including livestock), access to inputs (improved seed, feed etc.), access to credit should receive attention. In the medium term, they need strategies for technological improvement in the current activities and also routes to new activities. Such new activities will include new high value crops, new technology based livestock raising, marketing activities.

Non-farm employment in the medium and longer term

Policies have been put in place for providing incentive to female entrepreneurs through SME loans. Similar policies should be adopted for developing "Young female entrepreneurship". Medium term strategy can target women with some education who are suitable for training in e-commerce so that they may procure inputs and sell output through e-marketing and thus be prepared for the next phase of 4IR.

Strategies for better quality industrial and service sector employment of women

Quality of existing jobs for women falls short of expectation in various respects. Special focus is needed for improvement of working conditions of women in industrial job e.g. in RMG sector and and other export sectors.

8.3 Policies and strategies for proper response to potentials of 4IR

Policy suggestions in response to advent of 4IR have already been included in Section 7. Here a few issues are being emphasized for the 8FYP period, that is, the preparatory phase of 4IR. The following steps are recommended:

- Accelerated growth of employment intensive sectors must be pursued. This is needed as a preparation for the next phase of progress of 4IR when employment growth will slow down.
- Quality of education requires drastic improvement. Skill development, including its concepts, courses, systems and implementation need overhaul. In many cases the old system must be replaced by new ones.
- For the advancement of 4IR adequate physical infra structure, stable electric supply, secure internet access and provision of cyber security has to be ensured.
- Government sector activities may gradually move to digitization creating a

- demonstration effect and highlighting the need for such advancement in all types of sectors and economic activities which will send a signal for the education system.
- Changes which are very much components of 3IR should not be confused with a progress along the path of fourth IR.
- When adopting policies for employment growth especially in the context of 4IR, two specific issues must be borne in mind. These are
 - Young women's participation can help achieve the goals
 - Regionally spread facilities for advancement of 4IR is desirable from the very beginning. Else, the gap between the fast moving and the backward regions will widen and cannot be remedied.

A Few Strategic steps during 8FYP to make progress to 4IR

- Include 4IR component based elements in the ongoing, just-approved and onthe-drawing-board projects:
- Bangladesh is currently in the process of setting up various infrastructure facilities and there are major ongoing projects, 4IR elements may be integrated into these ongoing and approved (but not yet in implementation phase) projects. Government's stance on the support to private sector in this context should be judiciously analysed and decisions must be based on both pros and cons.
- Begin interface with employers, education sector and job seekers
- Employment expansion in domestic production: Aggressive policies for employment growth in short term is required to offset the slowdon of employment growth in the next phase.
- In the same spirit, preparation for 4IR based FDI should be initiated.

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Study 6: Trade and Industrial Policy Towards Achieving Upper **Middle-Income Country Status**

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1. **Overview**

The period of the 8th FYP straddles two key milestones for the Bangladesh economy: (a) 2021 is the 50th anniversary of independence of Bangladesh, and (b) the economy is set to graduate out of UN's LDC club of nations in 2024. This LDC group, classified as low-income and vulnerable economies, was regarded as a sort of global underclass of nations deserving of special and differential treatment in matters of trade and aid; thereby supplemented by a host of International Support Measures (ISMs) which will be phased out upon graduation. Having joined the LDC group in 1975, it will have taken Bangladesh good fifty years to come out of the group of now 49 nations, mostly landlocked or island economies, and largely African. Given the stage of our social and economic progress, the Government is determined to embrace graduation and prepare for the challenges that may be expected - primarily arising from the process of "preference erosion". That calls for trade and industrial policy to be revamped during the 8th FYP to cope with the impending challenges.

When economic growth and its acceleration are at issue there exists a symbiotic relationship between trade and industrial policy. Since the 1980s a new development paradigm entered the development discourse - export-led growth. Bangladesh embraced this paradigm as a strategy of growth for the past three decades by switching to a trade policy regime that was outward-oriented (export-oriented) based on an approach of leveraging the international market for industrial growth, employment creation, and poverty reduction. Hence, industrial policy, in concert with trade policy, became part and parcel of this development strategy.

The broad goals of Bangladesh's industrial policy can be classified into two tracks: importsubstituting industrial development and export-oriented industrialization. This creates the need for industrial policy to be in tandem with trade policy, as the two-track industrialization policy raises issues of complementarity as well as conflict in the articulation of incentives between the two strands of trade policy – import substitution and export promotion.

A sound industrial policy should complement market forces, maximizing the potential for the industrial sector to contribute to economic growth and job creation. In practice, Bangladesh industrial policy has multiple objectives including employment creation, promoting structural change towards an industrial economy, enhancing technological capacity, improving regional distribution of industrial activity, promoting investment in laggard regions, and facilitating more even income distribution. While it might be tempting to cover wide ranging goals the 8th Five Year Plan (2021-25) acknowledges that prioritization is of critical importance as industrial policy to be effective must have limited and clearly defined objectives, simply because there are not sufficient policy instruments to address multiple objectives. Moreover, different objectives may be inconsistent with each other. Thus the principal focus of our industrial policy during the 8th FYP will be to achieve structural transformation where industry's share in GDP would reach 40-45% of GDP by 2030 thereby absorbing the bulk of the labor force that was hitherto under-employed in agriculture and informal services. Furthermore, to develop a globally competitive manufacturing sector the strategy would be to provide support to infant industries with time-bound and performance-based criteria. Strategic coordination between the state and businesses in formulation and implementation of industrial policy is the accepted practice in Bangladesh.

Finally, Bangladesh's industrial policy for the 21st century (post-LDC graduation) has to be comprehensive rather than target specific in order to be WTO-consistent. Policies for promoting industries to stimulate investment or export growth are then restricted to generic instead of specific policy instruments with some scope for transitional arrangements under Special and Differential treatment with de minimis provisions. Generic policies for promoting industrial development include policies related to infrastructure, human capital formation, innovation, and diffusion of technology, all critical for export competitiveness.

The concurrent trade policy will have to be supportive of the industrialization strategy focusing on developing a globally competitive manufacturing sector with strong and sustainable export performance. The strategic approach will be to leverage the vast global marketplace via greater trade openness that involves greater trade integration with major players in the regional and global economy. To complement industrial policy, tariff, protection, and exchange rate policy will have to be streamlined to significantly eliminate any prevailing anti-export bias of the incentive regime. There is no option but for high and sustainable growth of the future to be driven by robust trade and export performance leveraging the enormous demand potential of the global marketplace.

In the post-LDC graduation environment use of trade policy instruments will have to conform to WTO rules. The tariff and para-tariff regime might need substantial rationalization in the run up to LDC graduation in 2024. There is still scope for using generic subsidies targeted for regional development, R&D, and the environment; and export promotion measures such as credit and insurance schemes at subsidized rates, duty and tax concessions, export processing zones and special economic zones.

This paper on strategic industrial and trade policy is structured as follows. Section B presents a review of Bangladesh's trade and industrial policy of the past with special focus on progress during the 6th and 7th FYP period. Section C draws lessons from international development experience relating to strategies of export-led growth while Section D articulates the more effective trade policies for industrial development. After an analytical and critical review in Section E of what worked or did not work in the prevalent trade regime relating to export performance Section F articulates a re-orientation of the trade regime for superior export performance and its diversification. Finally, Section F addresses the issue of FTAs as a means to greater market access and Section G discusses ways of making more productive use of inward remittance flows.

2. **Bangladesh Trade and Industrial Policies in Retrospect**

When it comes to trade and industrial policy Bangladesh began its development journey burdened by the legacy of past policies. It inherited highly restrictive trade policies that carried import substitution strategy to its extreme through high protective tariffs¹ and import bans on a wide range of importable commodities. At independence since the economy was devoid of any foreign exchange reserves this strategy was thought to be appropriate for saving precious foreign exchange and ensuring a sustainable balance of payments situation.

As for industry, by default the state became owners of a vast pool of jute, textile and other industries that were owned and operated by Pakistani entrepreneurs who abandoned them as they moved to Pakistan. Furthermore, state ownership of large industry – nationalization

Roughly 40% of tariff lines were subject to tariff rates of 100% or more, regardless of whether they were on manufacturing inputs or outputs.

- was adopted as national policy in 1972, thereby bringing within the fold of government management many large jute and textiles mills owned by Bangladeshi industrialists. In his 2003 book, Making of a Nation, Professor Nurul Islam records the division of assets in the nationalized sector as follows: 48 per cent of assets were inherited from the EPIDC (state enterprises before 1971), 29 percent were abandoned properties, and 23 percent were nationalized from Bangladeshi entrepreneurs. Though private enterprise in manufacturing was still permitted within limits public enterprises dominated the industrial sector thus determining resource allocation, investment and production. Market competition was severely constrained in the presence of public monopolies which, as expected, operated inefficiently, making losses and drawing endlessly from the national exchequer. It took a decade for the government to realize the folly of such a public enterprise regime that failed miserably to stimulate production, investment, industrial growth or balance of payments sustainability. However, even when the nationalization policy was abandoned and industries were de-nationalized, the policy of import substituting industrialization with strict import controls and high protection persisted until the 1990s.

Throughout these years, the economy was characterized by slow growth, at a time when other South Asian countries recorded faster GDP growth. The share of manufacturing in GDP, which was 10.2% in 1975-76 was down to 9.8% in 1990-91, without showing much traction in industrial growth. During this time East Asian countries had shown the world a new paradigm of rapid growth that was based on trade openness and export orientation, a complete opposite of the trade and industrial policies being pursued in Bangladesh. In the two decades since independence industrial development was by and large subservient to state control, regulation and direction - not the kind of industrial policies that would generate rapid competitive industrialization. The policy of import substituting industrialization with high tariffs and import bans produced neither manufacturing jobs nor industrial progress, nor the kind of growth needed to make a dent on the poverty situation. Consequently, in the final years of the 1980s decade, Bangladesh economy was engulfed in a severe macroeconomic crisis that involved foreign exchange shortages, balance of payments difficulties, and fiscal imbalances in the domestic economy. Structural reforms were long overdue if the economy were to survive.

Indeed the economy turned a page in the 1990s by undertaking structural reforms that included denationalization program, further liberalization of agricultural input markets, engaging in financial sector reforms, streamlining monetary policy to reduce inflation, all combined with de-regulatory measures to enhance the role of private sector enterprises. Macroeconomic stability was restored as the government implemented stabilization programs to force the economy to get back on track. A comprehensive program of marketoriented liberalization followed which included not only the first phase of privatization of state-owned enterprises but also de-regulation of investment with strong moves towards free market principles. Fiscal reforms were introduced (new VAT law) resulting in significantly improved resource position of the government with fiscal deficits contained below 5% of GDP for the decade. Trade policy changed direction towards outward orientation, with tariff and import liberalization, exchange rate flexibility, current account convertibility, including a host of supporting measures that encapsulated a strategy of export-led growth. All of these reforms in the 1990s together contributed to the lift-off in GDP growth of Bangladesh.

By the close of the 1990s Bangladesh economy was included among a select group of developing economies described as "globalizers" by the World Bank. A World Bank study

(2004) of developing countries found that, unlike non-globalizers, countries that were "globalizers" experienced growth acceleration as well as poverty reduction in the 1990s. This was also Bangladesh's experience starting from the 1990s decade. After unsuccessfully targeting 5% GDP growth for the first two decades post-independence, for the first time GDP growth in the 1990s averaged 5% for the decade while export growth for the first time crossed double digits at 12%.

During the first decade of the 21st century, industrial and trade policies evolved around the basic tenets of a free market economy with generous bits of government intervention in regulatory control of the economy while the private sector was acknowledged as the key driver of the economy as far as production and investment activities were concerned. Despite some occasional political setback, export-led growth took on a new meaning for the Bangladesh economy with the emergence of readymade garments (RMG) as the leading export industry overtaking jute and jute goods as the primary export product of the country. RMG exports overtook jute and jute goods as the predominant export item reaching 70% share in the export basket by close of the 1990s. Since then the RMG march continued with increasing export concentration, introducing vulnerability on that account, though Bangladesh emerged as the No.2 exporter of apparels after China, only to be pushed to No.3 by Vietnam in 2019.

Table 1: Trade and Tariff Policy Trends During 6th and 7th FYP

	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Average NPR	23.74	26.96	28.93	28.09	26.69	25.60	25.64	26.55	26.70	26.75
Average Output Tariff	41.29	43.49	46.82	45.98	43.16	41.32	40.55	38.79	39.64	46.43
Average Input Tariff	12.5	12.72	13.02	12.17	12.02	11.63	12.13	12.57	12.03	13.52
Exports (\$billion)	22.9	24.3	26.6	30.2	31.2	34.2	34.8	36.6	40.5	
Export growth	41.5	6	9.3	13.6	3.4	9.7	1.7	5.2	10.7	
Imports (\$billion)	32.5	33.3	33.6	36.6	37.7	39.9	43.5	56.4	59.9	
Import growth	52.1	2.4	0.8	8.9	3	5.9	9	29.8	10.3	
REER FY2001=100	89.4	91.4	101.5	107.2	130.6	138	107.5	100.6	104	

Source: BBS; PRI estimates based on NBR data

Table 2: Industrial Sector Performance 6th FYP

	FY11		FY12		FY13		FY14		FY15	
	Share	growth								
Manufacturing	17.7	10.0	18.3	10.0	19.0	10.3	19.5	8.8	20.2	10.3
Industry	27.4	9.0	28.1	9.4	29.0	9.6	29.6	8.2	30.4	9.7
GDP growth		6.5		6.5		6.0		6.1		6.1

Table 3: Industrial Sector Performance 7th FYP

	FY16		FY17		FY18		FY19		FY20	
	Share	growth								
Manufacturing	21.01	10.30	21.74	10.97	22.85	13.40	24.21	14.73		
Industry	31.54	10.10	32.48	10.5	33.66	12.06	35.14	13.02		
GDP growth		7.1		7.3		7.9		8.2		8.2(p)

Source: BBS

With the launch of the 6th FYP began the most prosperous decade of Bangladesh's development experience. Both the 6th and 7th Plans articulated trade and industrial strategies and approaches that were designed to generate high rates of growth with macroeconomic stability. Internal and external macroeconomic stability having been maintained, for the first time Bangladesh experienced 7-8%+ annual GDP growth during the 7th FYP. In contrast to the average GDP growth that increased by roughly one percentage point each decade until FY2010, average annual GDP growth rose by one percentage point every five years during the 6th (6.3) and 7th FYP (7.6). The share of industry in GDP rose from 27% in FY2011 to 35% in FY2019, with the share of manufacturing rising from 18% to 24% during the same period (Tables 1-3). Manufacturing growth averaged 10% during the 6th Plan and 12.3% during the 7th Plan playing the principal driver of growth acceleration.

However, trade policy stance remained practically unchanged after some modest reforms in tariffs and customs practices during the first decade of the 21st century. The economy reaped the benefits of trade liberalization and de-regulation in industrial investment. Trade and tariff liberalization of the 1990s soon gave way to the compensating emergence of para-tariffs in the form of Regulatory Duties (RD) and Supplementary Duties (SD) thus leaving average nominal and effective protection levels practically unchanged for much of the decade (Table 1). Though export performance could have been far more dynamic with the export-oriented trade policies proposed in the two Plans but left largely unimplemented, average double digit growth of 11.2% was still maintained boosted mainly by the 41.5% growth spurt recorded for FY2011. For much of the 7th FYP export growth was sluggish averaging a mere 6.8% until FY2019.

Though trade liberalization and export-led manufacturing growth became the principal strategy of growth a fundamental conflict emerged between trade and industrial policies since the close of 1990s decade. Industrial policy made no particular distinction between export-oriented industries and import substituting industries in incentivizing "thrust" sectors. The promotion of "winners" was based primarily on current successes and presumption of potentially successful industries. Though average tariffs were falling moderately, the decline was mainly due to reduction in input tariffs while output tariffs remained stubbornly elevated resulting in persistently higher effective rates of protection. In comparison incentives for exports (through subsidies or concessional credits) were no match to the higher levels of protection to import substitutes. Thankfully, RMG sector remained largely outside the ambit of the tariff regime because of the free trade regime they enjoyed though Special Bonded Warehouse facility that ensured inputs at international prices. Compared to the significant anti-export bias of incentives for non-RMG exports, RMG sector suffered no such handicap and continued with double digit export growth until the end of the 6th FYP.

Appreciation of the real exchange rate: A major factor underlying the weakening of export performance during the 7th FYP was the cumulative effect of appreciation of the real exchange rate since 2006. The Taka appreciated by 36% in real terms against the US dollar over the periods 2005-06 and 2018-19 (Figure 1). The appreciation against Euro happened a couple of years later from 2007-08. From then until 2018-19, the taka appreciated by 48% in real terms (Figure 2). This extra appreciation against the Euro reflects the fact that Taka is loosely pegged with the US dollar, which has strengthened significantly against Euro. The resultant appreciation of the dollar also transmitted into an additional source of taka appreciation against the Euro. These appreciations of the Taka in real terms against the two dominant global currencies where Bangladesh conducts much of its export trade was a real problem that substantially hurt export prospects and stemmed the diversification of exports.

Based on the available evidence, the conclusion is straight forward. The large anti-export bias of trade protection and the additional substantial loss in export competitiveness owing to the appreciation of the real exchange rate basically rendered the cash subsidies and other fiscal incentives for exports as ineffective instruments of export growth and diversification. Export growth plummeted since FY2017 and is yet to recover its long-term trend of the past.

Tk/USD (nominal) Tk/USD (real) 90.00 80.00 70.00 60.00 50.00 40.00 30.00 20.00 10.00 0.00 2007.08 208.09 2010:11

Figure 1: Bangladesh-US Dollar Nominal and Real Exchange Rate Trends

Source: GED estimates based on BB data

Taka/Euro (real) Tk/Euro (nominal) 120.00 100.00 80.00 Taka/Euro 60.00 40.00 20.00 0.00 2010:11 2004.05 205:06 2006.07 2007.08 2008.09 209:10 2002.03 2003.04 2012-12 2012:13

Figure 2: Bangladesh Taka-Euro Nominal and Real Exchange Rate Trends

Source: GED estimates based on BB data

3. **Drawing Lessons From International Development Experience**

In planning trade and industrial strategies for the next five years it is important to draw from relevant international experience - examples of successful strategies of rapid economic development. The objective is not to fully implant those strategies but to seek out those elements that could be suitably adapted in the Bangladesh context, recognizing that Bangladesh has unique social and economic features that are not necessarily compatible with other economies that have climbed the ladders of development. In that light, what follows is a succinct review of some of the key features of selected developing economies that adopted trade and industrial strategies that yielded huge dividends in terms of rapid growth and poverty reduction. Notable among these developing economies are the socalled East Asian Tigers (i.e. Korea, Taiwan, Hong Kong, Singapore), high-performing economies of Malaysia, Thailand, Indonesia, China, and, more recently, Vietnam. Figure 3 gives a picture of the extraordinary export performance (manufacturing goods) of the Asian Tigers during the 1970s, 1980s, and 1990s. China surpassed their performance in export growth in the 1980s, 1990s, and thereafter. Vietnam is a new entrant to the club of high export performers. From poor developing economies in the 1960s, the East Asian Tigers joined the ranks of developed countries in about 50 years.

The development paradigm of export-led growth emerged out of the experience of the highperforming East Asian countries which led other developing countries to adopt strategies of trade openness with export orientation departing – some more speedily than others -from the previous policies of import substituting industrialization. To pursue this change of direction in trade and industrial policies LDCs and other developing countries received guidance and financial support of multilateral agencies like the World Bank and IMF.

45.0 40.0 35.0 30.0 25.0 20.0 15.0 10.0 5.0 0.0 High income Low & Singapore Hong Kong Korea, Rep. World middle income **1971-1980 1981-1990 1991-2000** 2000-2018

Figure 3: Growth Rates of Manufactured Exports (%) of East Asian Tigers

Source: World Development Indicators (WDI), World Bank

What were the key features of the new development paradigm that focused on trade and industrial policies? Research by leading trade and development economists² reveal two strains of policies pursued: (a) openness to international trade based on largely neutral incentives between exports and import substitute production, and (b) selective industrial policy interventions, which often used trade policy instruments, in order to shift industrial structures towards newer and more modern sectors to capture opportunities from dynamic scale economies in the global marketplace. During their heavy and chemical industries (HCI) programs, Japan and Korea were the most active in promoting individual industries and sectors. Singapore and Taiwan have also actively provided incentives for technological upgrading. Malaysia had an HCI program reminiscent of Japan's and Korea's, while Indonesia has attempted to leapfrog from labor-intensive manufacturing to high-technology industries such as machineries and electronics.

How did the trade and industrial policies affect growth in East Asia? Early writing on trade policy and growth stressed the benefits of neutral incentives between production for the domestic market and production for export. With neutral incentives, it was argued, resources would flow to sectors in which the economy was most internationally competitive. Later theoretical work shows that, where market power, economies of scale, learning, or externalities are significant, departures from neutral incentives to favoring export production improves export performance. As far as government intervention is concerned, evidence shows that, on the one hand, government efforts to promote specific industries generally did not increase economywide productivity. On the other hand, broad government support for exports was a highly effective way of enhancing absorption of international best-practice technology, thus boosting productivity and output growth. In this light it would be worthwhile to review the experience of some of these countries in handling their trade and industrial policies.

Compiled in the World Bank 1993 report, The East Asian Miracle. 2

3.1 Review of East Asian Trade Policies

Most of the East Asian countries began industrialization with a protectionist orientation and have gradually moved toward increasingly free trade. Along the way, they often tapped some of the efficiency generating benefits of international competition through mixed trade regimes: they granted exporters duty-free imports of capital and intermediate goods while continuing to protect consumer goods. Since they had no control over export prices which were set in the international market and were often substantially less than current marginal or average costs the strategy was to ensure that profits in the protected market offset losses on export production. Nevertheless, export policies leveraged competition in the international market to ensure that firms did not suffer from loss of cost discipline. Subsequently, all the high-performing East Asian countries reduced their protection of import-substituting industries. What is notable is that even during the hey days of protection, effective rates of protection were much lower than what is in Bangladesh today.

Korea. There is considerable evidence that Korea selectively protected sectors that the government hoped to promote. Protection consisted of both tariffs and nontariff barriers. Nevertheless, even by 1983, when Korea's success had become an established fact, most sectors were still protected by some combination of tariffs and nontariff barriers. While Korea utilized a variety of instruments, especially export targets and rebates, to ensure that exporters faced international prices for their tradeable inputs, there was considerable protection of goods sold on the domestic market.

Taiwan. There was intervention by authorities of Taiwan, China, in product markets. The pattern of protection is not dissimilar from that of Korea. As late as 1972, a significant percentage of items were subject to nontariff barriers, and two-thirds of potential imports were subject to nominal tariffs in excess of 30 percent. As late as 1980, more than 40 percent of imports received nominal protection in excess of 31 percent.

Singapore and Hong Kong, by virtue of being city states, maintained free trade regimes for much of their period of growth.

Indonesia, Malaysia and Thailand. Malaysia was notable for low, if variable, protection of import substitutes, while protection levels in Indonesia and Thailand was higher. They all had import-substitution regimes that while modest by Bangladesh standards, nevertheless favored production of manufactured goods for the domestic marker at the expense of exports. All three economies began export-push trade strategies in the 1970s and 1980s while maintaining some protection in the domestic market. Though Malaysia was largely able to eliminate anti-export bias of policies, Indonesia and Thailand maintained higher protection that resulted in some anti-export bias.

The free trade regime for exporters in these economies partially offsets the structure of protection. Notwithstanding the protection that existed in all the East Asian economies, except Hong Kong and Singapore, the notable point is that domestic prices in these economies were kept closer to international prices, unlike in other developing economies where domestic prices diverged significantly from world prices due to protection and import restrictions.

3.2 Review of Industrial Policies in East Asia

Korea. Korean industrial targeting and promotion was pragmatic and flexible, and developed in concert with private industry. Moreover, only a relatively small number of activities were supported at a given time, and the effects of protection were offset by strong export orientation. These features strongly differentiate its interventions from those in typical import substituting countries, where infant industry protection was sweeping and open-ended, non-selective, inflexible and designed without consultation with industry.

Korea's industrial promotion policies included directed credit, protection, and limitation of entry into specific sectors. However, the Korean government promoted individual firms more often to rectify perceived entrepreneurial and skill deficiencies, using export performance to determine whether firms deserved continued promotion. Other policies to encourage industrial growth and export included making direct and indirect inputs to exports available at world prices. In Korea, the selectively promoted sectors were the heavy and chemical industries: iron and steel, metal products, machinery, electronics, and industrial chemicals. The motivation for these appears to have been both strategicto increase defense capability-and economic-to shift to capital and technology-intensive sectors in anticipation of a loss of competitive advantage in labor-intensives sectors.

Taiwan. The intervention of Taiwan in manufacturing has been similar to Korea's, though less important quantitatively. Taiwan used tariffs, quantitative restrictions, and selective credit policies, which shows that its success was at least partly attributable to an intensive government effort to direct the economy's sectoral evolution. The government invested in two strategic infrastructural efforts, namely, the Hsinchu Science Park and the Industrial Technology Research Institute. Both were major investments undertaken by the government to provide the basis for a rapid shift toward higher technology sectors.

Malaysia. In the 1980s Malaysia experimented with a heavy and chemical industries drive similar in focus to those of Japan and Korea but dependent on public investment. The Look East policy adopted in 1981 was an explicit attempt to emulate the heavy industrialization efforts of Japan and Korea, which were regarded as successes. The government created the Heavy Industries Corporation of Malaysia (HICOM) to be the vehicle for the heavy industrialization push. HICOM targeted a number of large-scale, capital-intensive projects for development including iron and steel, nonferrous metals, machinery and equipment, paper and paper products, and petrochemicals. While public investments were intended to be catalytic in each of these activities, the government actively promoted joint ventures with private (usually foreign) investors.

Indonesia and Thailand. Neither Indonesia nor Thailand has made the systematic efforts to change industrial structure characteristic of Japan, Korea, Malaysia, and Taiwan. Indonesia has used public investment in an effort to move forward high technology industries. Indonesia's technology development efforts represent an extreme case of state-supported technological upgrading, but the public sector research facilities and strategic industries have few links with the private industrial sector.

All the East Asian countries whose policies were reviewed above, made export performance the standard by which all economic activity would be judged. Even firms benefiting from higher than-average rates of protection in the domestic market understood that in the near future they would be forced to compete in world markets. Sustained reduction

in import protection sent a similar message to producers in the Southeast Asian newly industrializing economies. Governments were credibly committed to export competition. Exports were important because they ensured that productivity growth would be facilitated by the improved ability to tap international knowledge. Import substitution was quickly accompanied by the promotion of exports and duty-free admission of imports for exporters. The result was limited differences between international relative prices and domestic relative prices. Market forces and competitive pressures guided resources into activities that were consistent with comparative advantage and, in the case of labor-intensive exports, laid the foundation for learning international best practice and subsequent industrial upgrading.

3.3 China's Strategy of Economic Development Post-1978

From the position of a poverty redden large society until the 1970s, the emergence of the Chinese economy as a major global player within three decades of pro-market and pro-global reforms is the most striking example of successful economic strategy in the 21st century so much so that it is being described as "the world's factory" for creating the largest manufacturing hub in the world. This spectacular rise of China in becoming the top exporter of the world perhaps belies the record of the East Asian Tigers and is worth a careful review by all developing economies aiming at growth acceleration and poverty reduction in the shortest possible time. Bangladesh can surely attempt to take a leaf or two out of the Chinese book.

The key features of China's development strategy post-1978 that produced export surge, rapid growth and poverty reduction comprised the following (World Bank, 2013)3:

Pragmatic and effective market-oriented reforms. One key feature of these reforms was their "dual-track" nature—supporting state-owned firms in old priority sectors while liberalizing the entry of private enterprises.

Balancing growth with social and macroeconomic stability. The unstable economic situation that prevailed prior to 1978 reform phase made economic growth an urgent priority. A mix of fiscal, administrative, and employment policies helped to maintain social stability during this period of rapid economic and structural change. The restructuring of SOEs created massive displacement of labor who had to be rehabilitated in alternative employment.

Domestic market integration. Policies were undertaken to restrict the regional barriers to the movement of goods, labor, and capital and the establishment of a single national market. Infrastructure development projects to improve connectivity via roads and coasts were prioritized to help markets grow.

Steady integration with the global economy. The establishment of special economic zones and accession into the World Trade Organization (WTO) helped China expand its economic integration with the global economy.

Value Chain Integration. The country evolved from a somewhat closed and guarded economy to a highly integrated manufacturing hub for the global value chains (GVCs) by implementing policies to attract foreign investment and promote trade facilitation. Over the years, China invested heavily in transportation, internet, information and communication

The World Bank, (2013), China 2030-Building a Modern, Harmonious, and Creative Society,

technology (ICT) related infrastructure. Integration into GVCs helped improve firm productivity and competitiveness. As a result, today China is one of three main global manufacturing hubs; besides the US and Germany.

Asian economies are tightly linked with China through regional supply chains. McKinsey Global Institute finds that value chains are becoming more regional and less global. This development is particularly noticeable in Asia. China is the largest trading and investment partner of Malaysia, Singapore, and the Philippines. In recent years, China's role in international trade has begun to shift. China is moving into higher value-added sections of the GVCs.

There is broad consensus that China's growth is likely to slow; annual average growth over the next 20 years is expected to be one-third less than annual average growth for the past 30 years (6.6 percent versus 10 percent). Although the current growth trends will enable them to reach the high-income status by 2030, but the growth slowdown may have unexpected results on the economy. Successful implementation of the reform policies aimed at finding new growth drivers—increased efficiency in input use, higher human capital investments, increased innovation, and a shift to high-value services—will help China avoid the middleincome trap and maintain an expected average growth rate of between 6 and 7 percent a year in the coming two decades, compared with an average of nearly 10 percent a year in the past three decades.

3.4 Vietnam – manufacturing miracle

Worldwide, one in 10 smartphones is produced in Vietnam today. Mobile phones are Vietnam's number one export, generating export revenues of more than \$50 billion in 2019. Globally, Vietnam is among the most open economies with a trade-to-GDP ratio of 190 percent in 2018. Through the removal of both tariff and non-tariff barriers and fulfilling its commitment in several regional and global trade agreements, the country has made remarkable achievements in trade liberalization and integration with the largest trading blocs in the world.

There is something unique about Vietnam's development strategy. At a time when global trade has stagnated, Vietnam's trade has soared to 200 percent of GDP in 2018 from 70 percent in 2007. By leveraging the world economy, Vietnam's manufacturing sector has steadily expanded, adding an estimated 1.5 million new manufacturing jobs between 2014 and 2016 alone.

Why is manufacturing witnessing a renaissance in Vietnam, while relapsing in many parts of the world? Given the recent clarion call by several world leaders to create manufacturing jobs in their countries, Vietnam's experience holds lessons for developing and advanced economies alike.

Vietnam succeeded in sustaining strong export growth based on its strong foundations through good policies. First, it embraced trade liberalization with gusto. Second, it complemented external liberalization with domestic reforms through deregulation and lowering the cost of doing business. Third, it welcomed FDI with open arms without conditions or restrictions. Finally, Vietnam has invested heavily in human and physical capital, predominantly through public investments. These lessons—global integration, domestic liberalization, courting FDI, and investing in people and infrastructure - are worth emulating for developing countries.

30.00 25.00 26.36 20.00 17.66 17.60 17.51 17.28 15.00 10.00 7.12 5.00 0.00 1980-1989 1990-1999 2000-2015 ■ China ■ Vietnam

Figure 4: Export Growth in China and Vietnam (1980-2015)

Source: World Development Indicators (WDI), World Bank

First, trade policy has arguably been the most important industrial policy for Vietnam. With Singapore, it shares the top spot in East Asia of being a member for bilateral and multilateral free trade agreements. A signatory to 16 bilateral and multilateral free trade agreements, Vietnam is a member of the World Trade Organization, ASEAN, and has concluded bilateral agreements with the U.S., Japan, South Korea, the EU, and the Eurasian Customs Union. Earlier this year, it became one of 11 countries to join the revived CPTPP.

These trade agreements dramatically reduced tariffs, anchored difficult domestic reforms, and opened much of the economy to foreign investment. It is estimated that more than 10,000 foreign companies—including major global players such as Samsung, Intel, and LG—operate in Vietnam today, mostly in export-oriented, labor-intensive manufacturing.

Second, Vietnam has leveraged its demographic dividend through effective investment in its people. Vietnam's efforts to promote access to primary education and to ensure its quality through minimum quality standards have paid off.

Third, relentless focus on competitiveness and the ease of doing business. Vietnam has made steady progress in improving its investment climate, as evidenced by higher scores in the 2018 World Economic Forum's competitiveness index (up five points to 55th in the world), and the 2018 World Bank's ease of doing business ranking (68th in the world, up 31 places since 2014). Vietnam also reduced the corporate income tax rate to 20 percent from 32 percent in 2003.

Finally, Vietnam invested in infrastructure, especially in the power sector and connectivity. Thanks in part to high public investment, power generation, transmission, and distribution capacity have been scaled up to meet rapidly rising demand.

Overall, Vietnam's manufacturing sector remains relatively small. Most of the sector is driven by foreign direct investment (FDI), which accounts for close to 90 percent of manufacturing exports. Many of the newly created jobs in manufacturing are in basic assembly which requires manual labor but does not necessarily add a lot of value (per worker). Linkages between FDI and domestic firms are weak. Moreover, as wages inevitably rise, Vietnam's current comparative advantage in low-skill, labor-intensive industries will start to dissipate, a trend that may be amplified by new labor-saving technologies and automation. Vietnam's recent ascension to the ranks of global manufacturing hubs offers lessons on the potential of export- and manufacturing-led growth.

The take away. When it comes to trade and industrial policy the high-performing economies of East Asia including China left an indelible mark on development policies pursued until the present day. Vietnam, a late comer, has taken export orientation to the extreme with its export-GDP ratio now crossing 100% and its trade-GDP ratio crossing approaching 200%. What is common in the development strategies of all these economies is the leveraging of global markets through greater trade integration to provide impetus to industrialization and massive job creation at home. One common strategy across all East Asian Tiger economies was to ensure that, on balance, incentives to export production remained above those designed for production for the domestic market. This is contrary to the orthodox prescription of maintaining neutral incentives between the two markets. Industrial protection existed but was never high enough to undermine export incentives or create significant anti-export bias. In the case of industrial policy, "selective industrialization with significant government intervention" approach taken by Korea (heavy and chemical industries), Taiwan, and Malaysia, did not produce intended results and were ultimately abandoned by all. Departure from the age-old strategy of import substituting industrialization (ISI) to export-led industrialization was clearly the predominant strategy. With the rise in global value chain integration and the explosion of trade in parts and components Vietnam brought in the added approach of FDI-led investment and export orientation so much so that in 2018, 90% of Vietnam's manufacturing exports were driven by FDI. All three lessons incentives favoring export production over import substitution, paradigm of export-led growth, and FDI-driven manufacturing exports – are worth drawing from in articulating a medium- to long-term development strategy for Bangladesh.

Finally, it is important to reflect on the limited but effective role state intervention played in these economies. Markets are powerful forces but they are not perfect; institutions are needed to make them work efficiently and Government interventions are needed to improve on market outcomes. In their approach to development there was always a supportive though market-facilitating role for the state with the pivotal responsibility of providing a stable macro-economy with clear rules of the game, opening the economy fully to international product and factor flows, giving the lead role to private enterprise, and furnishing essential public goods like basic human capital and infrastructure.

4. **Trade Policies for Industrial Development**

Why trade policy matters. The Growth Commission⁴ asserted that strategic trade integration in the current state of globalization allows developing economies to grow at much higher rates than before. The way for greater trade integration is through increased trade openness

The Growth Commission launched in 2006 was an independent body chaired by Nobel Laureate economist Michael Spence that brought together 22 policy-makers, academics, and business leaders to examine various aspects of economic growth and development.

via trade liberalization, accompanied by complementary policies and institutional reforms, which in turn enhances competition and facilitates technological upgrading.

In the globalized world of today trade policies are recognized as the major instruments for industrial development. In fact industrial and trade policies are often two sides of the same coin. Broadly defined, industrial strategies are of two kinds: export-oriented industrialization and import substituting industrialization, depending on which market foreign or domestic – is the preferred destination of production. Trade policy is the major instrument used in steering the direction of industrial development towards foreign and/or domestic markets.

For much of the next quarter century, the bulk of job creation in Bangladesh will be taking place in a diversified manufacturing sector that is globally competitive, export-oriented, and focused on breaking into emerging markets while expanding its market share in developed economies of the world. The Government's Sixth and Seventh Five Year Plans and the Perspective Plan 2010-21 already laid out the blueprint for trade and industrial policies for growth acceleration through outward- orientated trade policy regime. The strategies for outward-orientation of trade policies in order to ensure export-led or trade-led growth will have to be activated in full during the 8th FYP. However, the reform agenda in this area remains unfinished and more will have to be done particularly as we approach the stage of graduation out of LDC status in 2024. Policies have to be put in place that ensures export competitiveness on the one hand, and restores the balance of incentives between production for exports and import substitute production for sale in the domestic market on the other. There is little doubt that "preference erosion" in the post-graduation scenario is expected to unleash the strongest forces of competitiveness in the global market. That calls for stronger measures to raise productivity, efficiency, and competitiveness of Bangladeshi products - mostly manufacturing, but agro-processed (e.g. jute goods) and agricultural products could be no less competitive.

Trade policy strategy for industrialization and growth

Recognizing that Bangladesh's future industrial prospects will be intricately linked to the projected trends in (a) global and regional trade in a highly competitive environment, (b) the future of globalization, and (c) the evolution of trade policies determined by the transformation of manufacturing and services of the future, during the 8th FYP which is also a preparatory period of LDC graduation, it is imperative to develop an integrated strategy for future growth and job creation for Bangladesh building on the interplay of these three interlinked and strategic forces that can fuel economic growth and propel Bangladesh comfortably across the finishing line of LDC graduation that also straddles the end-year of the 8th FYP.

Focus and principles of industrial policy. Structural change in Bangladesh has been consistent with the stylized facts of growth – where the share of industry in GDP rises at the expense of agriculture. Sound industrial policy is needed to make industrialization work for job creation and growth. Industrial policy has worked in countries such as Singapore, Ireland, Taiwan, Malaysia and S. Korea, who managed to direct the market into sectors using clustering and targeted technology complemented with human resource development. Over time, a more pragmatic view about the effectiveness of industrial policy is emerging: industrial policy is important in theory and practice and it is possible to identify a set of design principles behind effective industrial policy. Bangladesh does commit to an

industrial policy periodically, so it is important that we should examine what makes good industrial policy that helps to promote growth and productivity change.

Dani Rodrik, a leading global expert on trade and industrial policy, identified a few key principles behind the design of an effective industrial policy:

- Incentives should be provided only to 'new' activities
- There should be clear benchmarks/criteria for success and failure
- There must be a built-in sunset clause
- Public support must target activities, not sectors
- Activities that are subsidised must have the clear potential of providing spillovers and demonstration effects
- The authority for carrying out industrial policies must be vested in agencies with demonstrated competence
- Implementing agencies must be monitored closely by a principal with a clear stake in the outcomes and who has political authority at the highest level
- The agencies carrying out promotion must maintain channels of communication with the private sector
- Optimally, mistakes that result in 'picking the losers' will occur
- Promotion activities need to have the capacity to renew themselves so that the cycle of discovery becomes an on-going one.

These are very sound principles to follow and Bangladesh has taken many of these into the fold of its industrial policy while some others need work.

To sustain and boost industrial dynamism during the 8th FYP, a two-pronged approach is needed which is broadly on track though some shortcomings remain:

- Growth acceleration will be driven by export-oriented industrialization that is globally competitive and based on the country's dynamic comparative advantage, such that industrialization is employment-intensive with evolving skill-intensity consistent with technological sophistication of the Fourth Industrial Revolution (Industry 4) thus paving the way for greater export diversification and competitiveness. Recognizing that export and protection policies are not mutually exclusive, the objective will be to strike a harmonious balance between the two policies by modernizing and rationalizing export incentives and protective tariffs in addition to completing the unfinished trade reform agenda with emphasis on the trade facilitation component of customs administration modernization.
- Private sector will remain the driver of growth and, to this end, creating an b. investment-friendly environment by transforming the state's role as a facilitator of economic and investment activities, strengthening economic and political governance, including the interaction of the state with the private sector; improving law and order; addressing the critically constraining infrastructure bottlenecks (in power, overland and port transport, and communications); establishing a sound and well-functioning financial sector; and addressing other

barriers to productivity growth and international competitiveness.

With growth acceleration for faster poverty reduction as the desired goal, Bangladesh's private sector complemented by facilitating state apparatus will pursue the following strategies in a world market that will get more competitive by the day:

Seek global markets: We are living in a world that is transforming at speeds almost incomprehensible to the average mind. Unlike historical growth rates experienced in the past centuries, it is now possible for developing economies like Bangladesh to grow at 7, 8, 9, or 10 percent annually. This is because of the enabling effect of a rapidly integrating global economy. The global economy provides two things. One is a huge market which is getting more integrated over time. Provided an economy has some competitive edge – and Bangladesh does -- it can basically grow as fast as it can invest and build productive capacity. The second thing— even more important—is that the global economy provides knowledge, technology, know-how. Globalization coupled with instantaneous transmission of digitized information results in acceleration and augmentation of the flow of knowledge, technology, and learning. Properly harnessing these global forces will enable Bangladesh to grow at higher rates in future that were simply not possible before.

Given Bangladesh's enormous challenge for creating roughly 2 million jobs annually, there is no option but to creating bridgeheads in the global market for our exports. Given the small size of its domestic economy, Bangladesh needs to expand its exports of goods and services in order to move to a higher growth path and grow out of poverty. The domestic market, despite its continual expansion, is still no match for the vast global market place of \$80 trillion⁵ Capturing pieces of that market, beyond EU and North America, into China, India, and the Asia Pacific region to top \$100 billion of exports by 2025 will have to be the target to reach.

Enhance productivity: Over the next five years or so Bangladesh must be ready to face unbridled competition in the global marketplace as significant "preference erosion" will have taken place by then. In the new competitive environment, the key challenge for us will be to raise 'productivity' of our firms and industries/sectors within the framework of sound macroeconomic management. Bangladesh has roughly five years to climb appreciably up the ladder of World Bank's Ease of Doing Business (EDB 2019) where it is behind most of the comparators. Economic governance and regulatory environment have to be conducive for business and investment --with well-functioning factor markets, efficiently run infrastructure services, easy market entry/exit, enabling regulatory environment and bureaucracy, access to information, and strong competitive pressures--would allow firms to become more productive, competitive, dynamic, and innovative. Such an environment accentuates competitiveness of exporting firms. It extends beyond comparative advantage (based on cheap labor) and shifts to competing on the basis of competitive advantages.

Strive for diversification and competitiveness: And this is what Bangladesh needs to strive for in the coming years for promoting export diversification and competitiveness. Given that there is a significant backlog of incomplete reforms, there is indeed an urgency to act fast in addressing the priority policy and institutional constraints to improving Bangladesh's competitiveness. First, global markets are undergoing rapid technological transformation and trade integration with mooting competitive pressures. There is no option for Bangladesh but to strengthen its competitiveness and diversify its export in order to improve our export

World Bank estimate of World GDP in 2017 reported in World Economic Forum 2018 (Jeff Desjardins: The World's \$80 Trillion economy in one chart).

performance to engender faster growth. Second, though Bangladesh has become a global player in RMG it has to be ready to cope with stiffer competition once it loses preferential access to its leading export market – the EU. The RMG industry has indeed matured with some of the world's greenest factories (top 3 eco-friendly and 7 of the top 10 garment factories in the world are in Bangladesh). Nevertheless, the industry must remain on the alert to keep in step with technological innovations taking place that could undermine Bangladesh's competitive edge unless all efforts are made to at least march in step with the industry leaders around the world. Finally, the potential for export diversification needs to be fully exploited. Bangladesh has a mono-product export basket with 83% of her exports made up of RMG. Yet, over the past 10 years, Bangladesh has been exporting non-RMG goods numbering 1000 to 1300 products (at HS6-code level) mostly under \$1 million in value (75% of non-RMG exports in FY2018).

With LDC graduation looming large, the severest degree of competition will be unleashed over the next 5 to 10 years. Preparation for that stage must be done in earnest now. Given the current state of trade orientation there are two areas in which the country faces serious challenges: (a) making trade policy – internal and external – tilted in favor of exports, and (b) addressing the plethora of behind-the-border obstacles or deficiencies in order to make exports diversified and competitive in the world market based on our comparative advantage. Efforts made towards enhancing international competitiveness and removing anti-export bias will eventually pay off. It is therefore critical that concerted effort is made to improve Bangladesh's competitiveness by addressing both behind-the-border constraints as well as the remaining significant external trade agenda.

Review of Current Trade Regime and Export Performance

The trade policy reforms of the 1990s signaled a significant departure from the highly protectionist, inward-oriented import-substitution policies of the past. Trade integration was enhanced along with greater domestic competition, and domestic relative prices were aligned closer to international prices. These reforms were meant to promote efficiency in resource use, lead to productivity growth, spur activities with comparative advantage, encourage technological progress and diffusion and thus generate dynamic gains. The trade policy measures included tariff cuts and rationalization, elimination of quantitative restrictions, adoption of a unified exchange rate system, switching from a fixed to a more flexible exchange rate regime, and current account convertibility. The expectation was that these reforms would be gradually intensified to make Bangladesh an export powerhouse in the region with the economy more open and fully integrated with the global market.

Progress in accentuation of trade liberalization has not been as deep and comprehensive as was needed to give sustainable impetus to Bangladesh's export performance. But with LDC graduation looming large Bangladesh can ill afford to remain complacent. Unless trade policy reforms are taken to the next phase, LDC graduation in 2024 could serve as an adverse shock to the economy. The plan is to move this agenda forward and be fully prepared to face any adverse developments in the global marketplace.

Despite considerable progress in the past decade, mostly by default rather than design, the current trade regime appears biased in favor of import substitute production - anti-export bias. High tariffs and other protective instruments that protect domestic industries create strong disincentives to exports and export activities through several channels, thus causing significant anti-export bias. It has taken time to recognize that tax and incentive policies

have created a situation where production for export is less incentivized than production for the domestic market. How?

- Almost all domestic production of manufactured consumer goods is protected by high tariffs and para-tariffs. Duties levied on imports of final goods raise their domestic relative prices, thereby increasing the profitability of import substitutes relative to exports, which have to be exported at world prices. This diverts resources towards production for the domestic market, away from the production of exports. For example, the very high protection (85.6 percent to 113 percent) afforded to the ceramics, plastics, and biscuits industry—tableware, kitchenware; footwear, lamps, and biscuits, etc. which, to some degree, are reflected in much higher domestic prices of these products compared to their export prices. The net result is that domestic sales are far more profitable than exports, so exports are discouraged. Almost all of these products have some exports but export potential, which is much higher, is never realized.
- With import demand being curtailed under high protection, import-related (ex ante) demand for foreign exchange is being curtailed, thus perhaps enabling the exchange rate to be lower than otherwise (i.e., a lower domestic currency price for US\$). This would mean that export proceeds, expressed in domestic currency, would be lower than what the exporter would receive. Thus the exchange rate becomes over-valued as a result of protection making exports less competitive.
- Not just tariff levels, tariff escalation is also high. An escalating tariff structure, with lower tariffs on imports of raw materials and intermediates and higher tariffs on more processed products, raises the effective protection for an import substitute above the nominal protection that the same import substitute receives from import duties and other protection. This means that the valueadded (processing margins) involved in production for the domestic market will exceed the value-added that would have existed in the absence of any protection, by proportionately more than the nominal protection of the final product. This further increases the anti-export bias. Research shows that the rates of tariff escalation in Bangladesh's tariff structure is among the highest in the world, but it should not be. So there is work to do here.
- Exporters sell in competitive world markets and cannot pass on increases in their costs of production to their buyers. Thus, import duties paid on imported inputs increase their production costs and reduce their profit margins. Similarly, if they buy their inputs from local producers, again there may be cost raising effects due to protection and/or lack of local competition.

To counter the effects of tariffs on inputs and ensure supply of inputs at international prices, the Government has put in place two mechanisms: (a) The special bonded-warehouse (SBW) scheme used largely by the RMG sector and occasionally by others, and (b) the Duty Exemption and Drawback (DEDO) scheme, both managed by the Customs department. The SBW, which allows duty-free import of inputs, is far more effective in a high tariff economy and NBR is working to extend the facility to other exporters as well. DEDO, which involves reimbursement of tariffs already paid on inputs, has proved dysfunctional and cannot be relied on to make exports competitive.

Anti-export bias remains high. Research shows that high tariff protection is the main source of anti-export bias. Export success so far has been limited to readymade garments (RMG) without much traction in other labor-intensive exports. Among other things, there is an inherent conflict between export policy and protection policy, which are not mutually exclusive. This needs to be recognized and actions taken to streamline these policies. High protective duties on imported inputs hurt competitiveness of exports. Table 4 shows Bangladesh's low ranking in relation to other developing countries (implying relatively high tariff protection). Tariffs raise the relative profitability of domestic sales compared to exports, thus discouraging production for exports. Thus, there is an inherent bias of incentives skewed in favor of import substitute production rather than exports. This has to change.

Table 4: Bangladesh Rank of Average Tariffs in Relation to Other Developing Countries 2018

Countries	All Products (in Asia)	Manufacturing (in World)
Bangladesh	4	19
India	10	74
Pakistan	5	25
Sri Lanka	12	82
Vietnam	16	90
Malaysia	22	102
Thailand	14	84

Note: All products tariff rankings are based on Asian countries (46 countries); Tariff ranking in manufacturing is based on world ranking of tariffs (182 countries); Ranks higher for lower tariffs

Source: ITC database, Indexmundi trade statistics

Tables 5-7 show that our tariffs compare unfavorably with the average rates for different country groups based on various standard classification criteria.

Table 5: Average Tariff Rates by WB Country Classifications

Category	Average tariff rate (%)
Low-income countries	11.0
Lower middle-income countries	7.2
Upper middle-income countries	3.7
High-income countries	2.0

Source: World Bank Tariff Tables

Table 6: Average Tariff Rates of Countries by UN Classification

UN country classification	Average tariff	Minimum	Maximum	
Developed/ OECD Countries	2.06	0.2 (Iceland)	5.8 (Chile)	
Developing Countries	6.53	1.1 (Turkmenistan)	25.7 (Bahamas)	
Least Developed Countries	8.41	3.4 (Bhutan)	19.6 (Djibouti)	

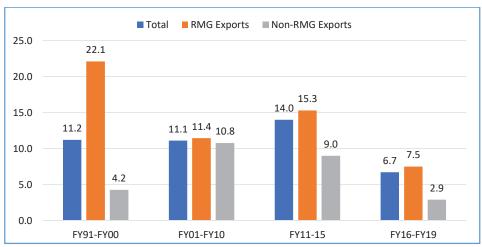
Table 7: Average Tariff Rates of Selected Comparator Countries

Country	Average tariff
Vietnam	6.5
Thailand	8
Malaysia	6.2
Philippines	3.7
Indonesia	5.9
India	8.9
Sri Lanka	10.3
China	8.5

Source: World Bank World Tariff Table 2017

In the preceding it has been argued that a nation's export performance and its structure of tariffs and protection are not mutually exclusive policies. High protection undermined competitiveness and incentives for exports. Though Bangladesh's export performance was boosted by the deep trade liberalization program of the 1990s clocking double digit growth for a quarter century, by the end of Sixth FYP export growth seem to have petered out (Figure 5). Bangladesh's export potential, particularly in labor-intensive non-RMG exports, has not been fully utilized. This situation needs to be reversed with a concerted effort – a combination of trade and industrial – to regain the strong export momentum of the past. Policies and actions need to be directed towards exploiting the latent potential in our exports beyond the RMG sector without losing continued momentum in RMG exports of course.

Figure 5: Disaggregated Export Performance (Average annual growth rate %)



Source: Export Promotion Bureau

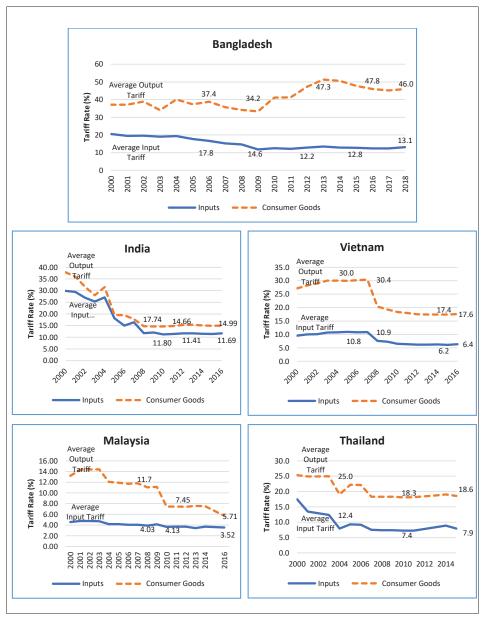
A Trade Regime for Higher Exports and Diversification 6.

Having established that the two inter-linked policy of rationalizing the protection structure and sufficiently incentivizing exports needs immediate attention, the 8th FYP articulates the required strategy. Since protection levels are high any support to export (e.g. subsidies) will have to be high, but such measures will fall afoul of WTO rules and more complaints will be forthcoming from competitors following LDC graduation. The imperative of being WTO compliant in our trade practices will be all the more pressing upon graduation from LDC status in 2024. So, there is no option but to rationalize the level and structure of protection to import substitute industries in order to minimize the level of anti-export bias.

The Imperative of Tariff Modernization. Streamlining trade and tariff policies calls for a five-year program of adjustment culminating in a trade and tariff regime that is reflective of or trending towards a UMIC economy, a goal that is set for 2031 in the Bangladesh Perspective Plan 2021-41. Needless to say that the current tariff regime, which is replete with para-tariffs for protection purposes and the near absence of tariff bindings on manufacturing products, will have to change dramatically once the economy loses LDC status. Both external (opening markets by seizing opportunities of bilateral, regional and plurilateral agreements) and domestic content (eliminating anti-export bias by balancing incentives for exports and domestic sales) of trade policy will have to be revamped to fit the demands of a dynamic global market and an export-oriented trading regime, not to mention the impending structural adjustments that might be unleashed into the manufacturing and services sector by the on-going Industry 4.0 (IR4).

The current tariff structure is archaic and needs urgent reforms. One required priority action is the further rationalization and modernization of the tariff regime. Research and crosscountry evidence regarding protection confirm that (a) protection once given has a tendency to perpetuate as producers in protected activities develop a vested interest in maintaining it; (b) industries protected for too long become inefficient and uncompetitive at the global level as they have little incentive to innovate or raise productivity. A close examination of the structure of tariffs reveals that the decline in average nominal protection rate (NPR) was due primarily to the reduction in tariffs on basic raw materials, capital goods and intermediate inputs, while the top CD rate remained flat at 25% since FY05, topped up by generous supplement of levies such as supplementary duty (SD) and regulatory duty (RD) - para-tariffs. The trends in nominal protection rates of import categories reveals that in the recent past the average NPR for input categories have been declining rapidly while that of final consumer goods remained practically flat if not increased. The wedge between output and input tariffs has become unusually large, unlike that in any other country (Figure 6 and Table 8). What is seldom recognized is that this trend of input and output tariffs is unique for Bangladesh and deviates far from the pattern followed by the high-performing economies in East Asia and other comparator countries. Two things to be noted: while the divergence between input and output tariffs (tariff escalation ratio) in comparator countries is low and over time both input and output tariffs trend downwards, Bangladesh tariffs have not followed this trend. Instead, output tariffs have risen while inputs tariffs declined over time.

Figure 6: Trends in Output and Input Tariffs: Bangladesh, India, Vietnam, Malaysia and Thailand



Source: NBR, TRAINS Database, WITS

Table 8: Tariff Escalation Ratios of Bangladesh and Selected Countries/Regions

Country/Region	Year	Average Input	Average Output	Tariff Escalation
		Tariff	Tariff	Ratio
Bangladesh	2018	13.13	45.98	3.50
China	2016	8.33	13.41	1.61
India	2016	11.69	14.99	1.28
Indonesia	2013	5.28	9.20	1.74
South Korea	2015	13.24	12.06	0.91
Malaysia	2014	3.69	7.53	2.04
Philippines	2015	5.01	9.82	1.96
Thailand	2015	7.92	18.59	2.35
Vietnam	2016	6.41	17.59	2.74
Turkey	2016	7.69	10.58	1.38
South Asia	2016	10.66	16.00	1.50
ASEAN	2016	3.65	7.27	1.99

Source: NBR: WITS Database, World Bank

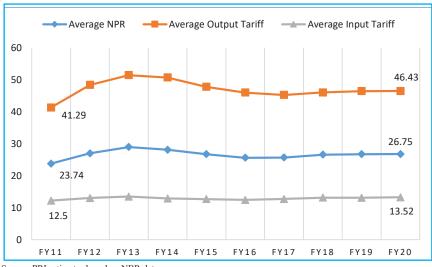
The gaping wedge between the two averages - of input and output tariffs - lasted all through the 6th and 7th FYP (Table 9). This is untenable and needs to change for the future. There is no justification for tariff escalation -- defined as ratio of average tariff on output over avg. tariff on inputs – to be so high.

Table 9: Average Tariff Trends, FY11-20

	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Average NPR	23.74	26.96	28.93	28.09	26.69	25.60	25.64	26.55	26.70	26.75
Average Output Tariff	41.29	43.49	46.82	45.98	43.16	41.32	40.55	38.79	39.64	46.43
Average Input Tariff	12.5	12.72	13.02	12.17	12.02	11.63	12.13	12.57	12.03	13.52

Source: PRI estimates

Figure 7: Average NPR, Average Input and Output Tariffs



Source: PRI estimates based on NBR data

The common perception is that the reduction in input tariffs while keeping output tariffs high makes domestic production of import substitutes more competitive. But the net outcome of this process is higher effective protection to domestic producers over time yielding windfall profits simply through tariffs and without any improvement in productivity or competitiveness. It breeds further inefficiencies in the protected industries. This simply cannot be a long-term protection strategy for an economy seeking a productive and competitive industrial sector during the run up to graduation in 2024.

To continue on a path of sustainable export growth with a diversified basket of goods, Bangladesh faces an immediate challenge to restructure its tariff regime in order to gradually phase out effective protection levels and anti-export bias. In the process, tariff escalation rates would be gradually minimized as the tariff structure trends towards low and uniform rates.

Protection, particularly for those industries that have enjoyed protection for ten years or more, will have to be phased out in five years. Activities that have enjoyed protection for less than ten years will have to be notified that further protection will be made time-bound and performance based – performance based on output/employment or exports.

Addressing the challenge of export diversification. The export-led growth philosophy underscores the need for setting up an incentive structure that overcomes the problem of serious policy-induced anti-export bias. The notion of anti-export bias is related to the trade policy measures that act to favor the import-substituting sector and discriminate against the export activities. The principal route to this 'bias' or discrimination is accomplished by altering relative prices of exports and domestic sales. While for exporters it is not possible to influence the world price, import tariffs and quantitative restrictions allow the producers to raise the domestic price of their commodities above the world price. The resultant profitability (and thus relatively high price of import substitutes to export goods) under the shield of protective measures encourages reallocation of resources from the production of exportable to that of import substitutes. Also, policy-induced domestic production may result in increased demand for non-tradable diverting further resources into this sector at the cost of exportable. True, the domestic market is expanding rapidly with a fast-growing middle class strengthening domestic demand. Growth strategies that rely exclusively on domestic demand eventually reach their limits. The home market is usually too small to sustain growth for long, and it does not give an economy the same freedom to specialize in whatever it is best at producing. Over time, future trade policy must move towards neutrality between domestic and export markets, with a slight tilt for exports. The open world economy offers developing countries like Bangladesh deep elastic markets for their exports, both RMG and non-RMG.

If anti-export bias is so prominent in our trade policy orientation, it is pertinent to ask how is it that RMG exports rose to such heights as to make Bangladesh one of the leading RMG exporters of the world. It goes to the sagacity of our policy makers to have devised a "free trade channel" for this 100% export-oriented sector within an otherwise high tariff regime. Aided by the MFA which gave access to world markets, domestic policies designed exclusively for RMG industry, comprising special bonded warehouse and back-to-back LC, were able to soundly neutralize anti-export bias of a high tariff regime. Indeed, these policies constituted the bedrock of success for this labor-intensive industry that symbolized Bangladesh's strength in low-skill intensive manufacturing, the sort of specialization that

should spill over to other industries as well. Replicating these policies for non-RMG exports is the way to go as long as high tariff protection prevails.

It is time to replicate the effective export-oriented policies for RMG sector for non-RMG exports. At the end of the 7th FYP (FY19), Bangladesh exported some 1400 non-RMG exports (at HS-6 digits) but only a handful reached the volume of \$1 billion (e.g. jute and iute goods, footwear and leather goods, home textiles, etc.), though this picture would be different if we include "deemed exports" (backward linkage industries to RMG) where fabrics, yarn and accessories supplies now account for over 50% of RMG exports of \$34 billion in FY2019. This is part of the export diversification to be reckoned with. As for other non-RMG exports, the fact that exporting firms (estimated at about 3500) have a choice between producing for exports or the domestic market and find the latter to be far more profitable (i.e. anti-export bias), the incentive to export looks feeble, with the consequence that both the firms and their exports remain small in size (barely 300 non-RMG products exceed \$1 million). The critical step needed to break ground on export diversification and to get traction under these policy circumstances is to rationalize the tariff and protection structure to change the current policy tilt in favor of import substitute production. This is the necessary condition for getting progress in export diversification that has been elusive so far.

Going forward, other aspects of efficiency and transparency will have to be added to customs administration which, by 2025, will no longer have a major role in revenue collection because domestic taxes (income tax and VAT) will become the principal revenue instruments. Trade facilitation will be the underlying principle of its existence. Still, protection of specific products through the application of tariff peaks (a high tariff rate) might emerge from time and time and exceptions to the uniform tariff rule would then have to be made as temporary measures. Such a tariff structure will impart minimal distortion to domestic production and trade. Our trade regime must be so formulated as to enable a modern high-tech industrial sector of the future to function with seamless movement of goods and services across borders or via online with least transaction costs.

New directions in trade policy. Some new thinking and new directions in trade policy orientation, with significant departures from past approaches have become the national imperative for successful export-push policies for industrialization in the post-LDC period. These are:

- New approach to protection policy. High protection for a long period creates inefficiency and undermines competitiveness over the long-term. Consider reviewing protection policy, scale down the level of protection, and institute a mechanism of time-bound protection for import-substitutes.
- (b) Tariff rationalization. Bangladesh tariffs, nominal and effective protection levels are among the highest in the world. In addition, tariff escalation, and the spread between NPR on output and inputs is too high. Recognizing that a high tariff regime undermines export competitiveness, it is time to seriously start scaling back NPR on domestically produced final consumer goods. NBR must adopt a strategy of lowering average NPRs by 3-5 percentage points every year until 2025, largely by reducing NPR on import-substitute consumer goods.
- (c) Access to world-price (duty-free) inputs must be ensured to all exports. The spectacular success of RMG industry has not been replicated. A major reason

for this is the existence of anti-export bias in non-RMG export production. To replicate RMG success in other labor-intensive production, the facility of dutyfree imported inputs must be provided even to firms that export part of their total production. The policy for providing duty-free inputs for export production is not a privilege (or support) but a requirement for all export production in order to be on a level playing field with global competitors who have access to worldpriced inputs. Export success calls for a policy environment with no anti-export bias.

- (d) Intermediate goods sector needs a boost. 98% of Bangladesh's exports are final consumer products with little or no intermediate goods. As high protection is provided to mostly consumer goods, trade and domestic policies have an anti-intermediate goods bias. This needs to change as trade in intermediate goods is the fastest component of global trade. Bangladesh needs to exploit the opportunities created by cross-border production networks to produce and export intermediate goods that could be assembled elsewhere.
- (e) Access to long-term and short-term financing must be made available to both large and small exporters in a country where large numbers of small exporters are unable to scale up their export activities due to various constraints.
- Foreign direct investment (FDI). Partnership with good international investors that can support technology transfer, create market access abroad and jobs at home, can be the ultimate boost for diversification of our exports. Most important for the next decade, FDI can help bridge the technology gap and make Bangladesh manufacturing catch up with the latest advancement in global manufacturing.
- (g) Government support to open external markets. As trade preferences get phased out over the 5-10 years in developed markets, government assistance and support through embassies become even more critical for successful market penetration in the largest global markets, such as EU, North America, Japan, and emerging economies.
- (h) Policy flexibility helps. Not all good policies produce their intended outcome. Experience of successful export economies shows how flexibility in policy implementation averts crisis. When a policy does not yield results there should be scope for changing directions.
- Trade Agreements with Regional Communities. Barring the USA, the vast majority of WTO member countries would like to see a reformed and more effective multilateral trading system. Bangladesh, which has benefited from the multilateral regime as an LDC, may use the special dispensation for LDCs for the remaining years (until 2024) but will have to prepare for the stiffer competition our firms will face in the global market, once the preferential access provision evaporates following graduation. Furthermore, it must seek market access under various bilateral and regional trade and investment agreements. Markets in Asia are growing faster than any other region of the world and ADB projects that by 2050 50% of global GDP will be in Asia. Two regional trading arrangements that hold tremendous potential for trade and investment are RCEP (ASEAN+) and CPTPP which together will constitute the bulk of Asian market of the future. Bangladesh would be well advised to reach trading arrangements with these

groupings. But that could be an uphill task give the current high tariff regime in Bangladesh and the enormous resistance from domestic import substitution industries to any reduction of protective tariffs. The political economy challenge is considerable but a breakthrough is essential in this area.

Behind-the-Border Issues for Export Competitiveness. For effective export promotion, in addition to the export policies, a set of other complementary policies and programs are critically required. Stabilities of the macroeconomic environment, effectiveness of the export promoting and supporting institutions, and smooth functioning of the financial markets are necessities. Furthermore, the quality of governance should be improved through promoting transparency and accountability, and by reducing the extent of corruption. The government should also take effective role in technology diffusion and in providing appropriate physical infrastructural facilities.

Streamlining and mainstreaming trade policies over the next five years or so will be the most important policy challenge to deal with. Then, there is the burning issue of ensuring competitiveness in a dynamic global marketplace. The competitiveness agenda is getting increasingly more challenging in the era of 4IR and the associated technology revolution, and automation. Trade preferences and trade concessions seek to compensate for some of the inherent vulnerabilities of LDCs. These vulnerabilities often include the high cost of production owing to infrastructure constraints and other domestic policy-induced rigidities. Indeed, global evidence shows that high trade logistic cost often imposes a higher cost disadvantage than trade taxes in developing countries. Evidence from Bangladesh also shows that there are many behind-the-border constraints that increase the cost of production and trading across borders thus undermining export competitiveness.

6.1 Improving Trade Logistics

Export competitiveness can be adversely affected by high cost of trading, both for imports of raw materials and capital goods and exports of products. Bangladesh has gradually opened its economy to international trade. Domestic production and investment are now heavily reliant on imported inputs. Imports as a share of GDP amounted to 22% in FY2018. Exports have also grown and are now about 14% of GDP. Financial cost of trading (transport, insurance, handling) and the efficiency of port clearances can both have determining influence on competitiveness.

Recognizing the importance of trade logistics, the World Bank compiles and regularly updates index of trade logistics performance (LPI) and ranks countries based on the LPI scores. The 2018 LPI rankings for Bangladesh and comparators are indicated in Figure 8. Bangladesh is ranked at 100 out of 160 countries. The LPI ranking is very low relative to China, Thailand, India and Vietnam. For example, China, India and Vietnam are major Bangladesh competitors for RMG in the EU market and the higher cost of trade logistics may have serious adverse consequences for maintaining market share post-LDC graduation. So, paying attention to improving trade logistics performance gains added significance in a post-graduation environment. Bangladesh must improve the LPI rankings.

140 122 120 100 94 100 80 60 44 39 40 32 26 20 0 China Thailand India Vietnam Sri Lanka Bangladesh Pakistan

Figure 8: Rankings of Bangladesh in the World Bank's Logistics Performance Index 2018

Source: World Bank

The Way Forward. Exports stimulate imports. Delays in imports not only increase the costs to the firms importing them, but it also puts them in a tight situation when many of these imports are raw materials for export-oriented industries. After Bangladesh graduates from LDC status in 2024, the competitiveness challenge will intensify. In order to maintain their market share in the more competitive environment, it will be vital for all the firms to have timely and less costly access to raw materials, maintain their production schedules and ship their products to their buyers on time. Chittagong port handles 75% of Bangladesh's \$100 billion of export-import trade. Ship turnaround time and cargo clearance from container yards are longer than most ports in the region. Opperational efficiency at the port must be radically enhanced to ensure lower turnaround time for vessels in order to benchmark good productivity and performance in this port. High efficiency in import clearance at ports is critical for export competitiveness.

Strengthening Electricity and Transport Infrastructure

In today's globalized environment, infrastructure is one fundamental determinant of external competitiveness. While high GDP growth has been achieved, for further growth acceleration and achieving the medium to long-term socio-economic development targets, improved infrastructure including expanded and uninterrupted power supplies will be crucial. Besides, Bangladesh's inability to attract enough quantum of FDI as well as mobilizing higher levels of domestic private investment are often attributable to the lack of adequate and reliable infrastructure services. The 6th and 7th Five Year Plans rightly prioritized the need for improved power, energy, transport and other infrastructure-related services for achieving GDP growth and development targets. The implementation of these plans has been backed by enhanced resource allocation through the Annual Development Programme (ADP), leveraging private investments in the power sector with policy and institutional support.

Considerable progress has been achieved in terms of upgrading power and transport infrastructure. But the magnitude of the infrastructure gap can be gauged from crosscountry comparison of infrastructure adequacy. The World Economic Forum regularly publishes global comparisons on competitiveness based on 12 broad pillars. Quality of infrastructure is one of them. Despite Bangladesh's notable economic growth performance and an impressive record of social progress, the country lags many other Asian developing economies on infrastructure-related indicators. In 2018 the GCI ranking for Bangladesh infrastructure stood at 109 out of 144 countries. Bangladesh performed especially low in roads, ports and electricity.

China Thailand India Sri Lanka Vietnam Pakistan Bangladesh 60 80 100 120

Figure 9: Global Competitiveness Index; Ranking in Infrastructure

Source: Global Competitive Index 2018

The way forward. Keeping in mind the rise of projected demand for electricity to 34,000 MW by 2030, the government is planning to invest around \$70 billion in the power sector over the next 15 years. It is important that this investment is based on using least cost options and renewable energy to the extent technically possible to lower the cost of electricity, to ensure the sustainability of primary energy supply and to reduce carbon pollution.

The current road network in Bangladesh is inadequate to provide infrastructural support to a country with a population of more than 160 million people which is aspiring to become a High-Income Country in 2041. This is reflected in the GCI's Road Connectivity Index, where Bangladesh is given a score 34.3 out of 100 and a rank of 121 out of 140. In transport there is presently excessive reliance on the road network. This is very costly and will also become increasingly difficult owing to the growing land constraint and the costs of rehabilitation of large number of displaced people. On the other hand, as analysed in great detail in the Delta Plan (Government of Bangladesh 2018), the inland waterways are low-cost and environment-friendly option that has not received adequate attention. Implementation of the inland waterway development strategy articulated in the Delta Plan will be of high priority. Additionally, much more attention needs to be given to the issue inter-modal transport balance based on cost and efficiency.

Improving Technology Transfer and Market Access Through FDI

Export expansion and diversification is often constrained by limited domestic capital, technology and market knowledge. It is not surprising that the role of foreign direct investment (FDI) in promoting export-oriented industrialization has attracted considerable attention in recent times. FDIs with their better technological and managerial skills and knowledge about international marketing conditions, are expected to improve the productivity as well

as export performance of host country firms by creating certain positive externalities known as 'spillovers'. Spillovers can take place when FDI improves the productive efficiencies of domestic firms, making their products efficient in price and quality in the international market and thus improving their export performance. Such spillovers may occur either to domestic firms in the same industry group of foreign firms through competition, known as 'horizontal spillovers', or to firms in the upstream supply chain through buyer-supplier linkages, known as 'backward spillovers'. FDI can help to channel capital and technology into industries that have the potential to compete internationally, and the global linkages of multinational corporations can facilitate their access to foreign markets. In addition to exports that are generated directly by foreign affiliates, FDI can also promote exports of domestic firms through the teaching of proper marketing strategies, methods, procedures, and channels of distribution.

FDI strengthens competitiveness and fuels GVC exports. Finally, FDI is critical in supply chain trade (SCT). Bangladesh needs to get on the bandwagon of GVCs as a means to export-oriented industrialization. Cross-border FDI flows have been the lifeline for the growth of GVC (or SCT) trade that helps sustain the growing production networks across borders. Therefore, courting FDI in the future to capture and expand supply chains will have to be an essential strategy for Bangladesh's export-oriented industrialization. Because of the widespread existence of production fragmentation across borders – a phenomenon that creates challenges as well as opportunities -- a better understanding of how Bangladesh as an LDC is positioned within global value chains is absolutely critical. In Asia, FDI has played a particularly catalytic role in stimulating trade in intermediate goods over the past 25 years or so.

Acquiring technology and skills through FDI: Apart from support to the expansion of exports, FDI will be instrumental in acquiring new technology and training labor. While the importance of domestic investment in R&D for technology development and innovation for long-term growth cannot be over-emphasized, at the early stages of development technology, new products, new markets and skills can also be acquired through foreign direct investment (FDI). The value of FDI in these areas was amply demonstrated by the highly positive experience in RMG. The example of Desh Garment partnership with Daewoo in acquiring new product design, foreign market penetration and skills and the spill-over effect of this experience for the entire RMG industry well illustrates the power of FDI-based joint ventures in transfer of technology, markets and skills. Similarly, Japan, China, Korea all benefitted from strong large-scale partnerships with powerful FDI sources at the early stages of development. They acquired new technology, labour skills and markets through these partnerships. With experience gained thereby and supported by heavy investments in human capital and R&D, the transition to domestic-based technology development, innovation and new product discoveries were made.

The way forward. Currently, Bangladesh faces the dual challenge of mobilizing more FDI and into the GVC operation. That is, its best chance of getting on the GVC bandwagon lies in aggressively courting FDI from multinationals that are seeking low-cost locations for producing parts and components or for final assembly within the framework of crossborder production integration. FDI thus becomes critical for Bangladesh to not only develop a wider base of intermediate goods industry but also to diversify exports into intermediate goods by vertically integrating with cross-border production entities. It needs to translate its RMG experience with GVC on to other sectors like Footwear and Leather

goods, electronics, light engineering, toys, plastics, and other sectors with an aggressive strategy of FDI-driven GVC over the course of the next decade. That would constitute a new form of export-oriented industrialization for Bangladesh on way to graduating out of LDC status and becoming a UMIC.

Improving the Investment Climate

Despite progress with the policy environment for the private sector that has spurred the expansion of private investment from a low of 6% of GDP in FY1989 to 24% of GDP in FY2019, the overall investment climate for Bangladesh remains substantially weaker than those found in competing countries. This is reflected in the global rankings of investment climate prepared by the World Bank. For example, the World Bank's 2020 Ease of Doing Business (EDB) ranks Bangladesh at 168th out of 190 countries (Figure 10). The more advanced economies of the ASEAN countries perform much better than the South Asian countries in the rankings due to their institutional strengths and openness to trade (Figure 11).

India Bhutan Sri Lanka 100 Nepal 110 **Pakistan** 136 Maldives 139 Afghanistan 167 Bangladesh 176 0 20 40 60 80 100 120 140 160 180 200 Rank Out of 190 Countries

Figure 10: Ease of Doing Business Rank of the South Asian Countries in 2019

Source: World Bank Doing Business 2019

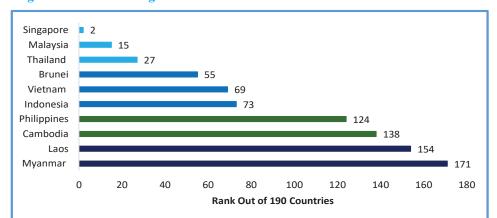


Figure 11: Ease of Doing Business Rank of the South-East Asian Countries in 2019

Source: World Bank Doing Business 2019

These rankings reflect Bangladesh's shortcomings in the various factors which are taken into consideration for these computations. The evidence also shows very little progress over the past several years. Similarly, the World Economic Forum's Global Competitiveness Index (GCI) puts Bangladesh at 103 out of 140 countries surveyed for 2018. According to the World Bank's EDB rankings, the major problem areas that lower Bangladesh performance include weak infrastructure services and high transaction costs relating to paying taxes, registering property, enforcing contracts and trading across border. Additionally, the availability of serviced land with all necessary infrastructure connections including electricity, water, and industrial waste disposal facility is a major hassle that lowers private investment in the manufacturing sector. To strengthen the investment climate to attract domestic and foreign investments, these constraints will have to be addressed head on in the next 5 years to bring significant improvement in the investment climate.

In order to improve its position in the Ease of Doing Business and Global Competitiveness rankings, Bangladesh can take inspiration from a country that had to go through reconstruction after a long and devastating conflict around the same time as our War of Independence – Vietnam. The country improved its ranking in the Global Competitiveness Report from 77th in 2006 to 55th in 2017, while its improvement in the Ease of Doing Business has been even more impressive – from 104th in 2007 to 69th in 2019. The reasons behind this jump were the reforms which Hanoi undertook with regards to paying taxes, trading across borders, enforcing contracts, access to credit and getting electricity.

The Way Forward. Bangladesh has taken some positive steps to address the serviced land constraint through industrial parks and special economic zones. This is a welcome move. Speedy completion of all ongoing facilities and making those available on a timely and business-friendly way will be an important factor to spur domestic and foreign investment. The Government is focusing top attention on reducing the time it takes in the country to (i) get electricity; (ii) register property; (iii) obtain credit; (iv) trading across borders; (v) enforce contracts; and (vi) resolve insolvencies. If carrying out reforms addressing these issues results in an improvement of the country's rank for Ease of Doing Business, this should give a positive signal to potential investors around the world that the climate for investment in Bangladesh is improving due to sincere efforts by the government. Improvements in the above areas are being developed under the direct supervision of the Prime Minister and coordinated by the Bangladesh Investment Development Authority (BIDA). In addition, a strong marketing effort is being launched by BIDA and Commercial Wings in Bangladesh's diplomatic missions around the world (especially Europe and North America) to highlight and showcase the progress made on the investment climate front as a means to attract FDI.

Strengthening the Institutions for Trade and Industry

A careful review of economic history suggests that rapid growth that transforms developing economies into developed economies in the course of a generation requires a combination of two things: sound economic policies and good institutions to implement them. Research has shown that differences in institutions related to trade and industrial activity explain a good deal of why export and industrial performance differs across countries. There is much to be done in reforming several of the institutions in Bangladesh that deal with trade and industry, particularly in the area of promoting exports and its diversification.

The next decade will be crucial for strengthening economic institutions that will help entrepreneurs seize market opportunities emerging in a fast-changing global economy driven by innovation and creative destruction. In order to attain and sustain high economic growth what is needed is building and nurturing inclusive economic institutions that are effective in enforcing property rights, creating a level playing field for small and large entrepreneurs, SMEs and big business, and encouraging investment in innovation, adoption of new technologies and developing skills for the future.

The Way Forward. Transforming the Bangladesh economy into a high-income economy over the next 25 years will require strengthening of institutions that promote sound economic fundamentals, enhance functioning of markets for efficient resource allocation, and foster competitive discipline. Intervention in markets would have to be kept to a minimum. The record of high-performing economies show that promotion of specific industries did not yield results as industrial development tended to be market-conforming and exports performed better when driven by factor-intensity based comparative advantage. That means we need to revisit the approach to "thrust sectors" providing instead a conducive policy environment for all investors and let those with the best potential succeed.

As Bangladesh graduates out of its LDC status, it will need to be cognizant of some WTO rules that it had hitherto ignored - particularly, those relating to levels of protective tariffs and para-tariffs. Other multilateral disciplines will also come into play, such as rules governing intellectual property, subsidies, standards, and trade-related investment, which are going to be the same for developing and developed economies. Moreover, if Bangladesh were to seek membership of regional trading blocs, like RCEP, it would have to submit to their disciplines which are also likely to be stringent. Broadly speaking, economic institutions in Bangladesh will have to start getting ready to face and conform to a more competitive and rules-based global trading environment in the future. Nevertheless, trade facilitation with improved customs infrastructure and administration will remain effective mechanisms to promote exports while being consistent with multilateral rules.

7. **WTO-Consistent Industrial Policy for Rapid Development**

In Bangladesh, as elsewhere, trade policy is an instrument of and an integral part of industrial policy. And industrial development is an integral part of any economy's growth strategy. So it is and has been for Bangladesh for the past several decades. Structural change in our economy validates an important stylized fact of development where the share of industry rises over time, at 34% of GDP in FY2019 compared to only 14% in 1972. With impending LDC graduation it has also become essential to conduct an effective, WTO-consistent industrial policy. Given the changing global and domestic landscape, our industrial policy will have to encompass government efforts to promote industrialization that generates export-led and productivity-based rapid growth. In practice, industrial policy may include such goals as employment generation, increased output, removing regional disparity in incomes or investment, and enhancing technological capacity. The priority goal should be to promote industrial growth that is export-oriented and job creating.

Instruments of industrial policy. Bangladesh has been using a wide range of interventions in articulating its industrial policy. These could be categorized as external, product, and factor market interventions.

- External market interventions involve protecting domestic industries from import competition, using instruments such as tariffs and para-tariffs, import quotas (eliminated since 2004), backward linkage programs, as well as export promotion measures (e.g. duty-free import of inputs, export processing zones or special economic zones, cash subsidies, concessional loans) to assist industries to catch up and break into new markets. Other policies directed to exports include promotion of FDI and participation in international networks, appropriate macroeconomic policies, efficient infrastructure and supporting services, and policies to enhance human capital and technological capability, such as research and development, education, and creation of industrial clusters.
- Product market intervention that includes domestic market entry regulations, regulatory control and tax policies to ensure fair competition between domestic and foreign firms, promoting domestic content requirements.
- Factor market interventions include policies such as performance requirements and restrictions on FDI designed to influence the operation of foreign affiliates so that Bangladesh realizes a net benefit from FDI. Significant factor market interventions are prevalent in the capital market and the financial sector aimed at promoting infant industries, and protecting declining industries. For this purpose there are development finance institutions providing investible capital to selected industrial enterprises, furnishing capital subsidies and capital assistance to declining or mature industries and providing priority access to subsidized and directed credit by requiring financial institutions to lend to "thrust" sectors (selected sectors with presumptive potential for future growth based on recent performance).

WTO-compliant Industrial Policy Instruments. Being a founding member and a major beneficiary of the WTO rules-based system of multilateral trade, it is incumbent upon Bangladesh to adhere by WTO rules regarding application of industrial policy instruments. Some of these instruments widely used in Bangladesh are highlighted here.

Tariffs and para-tariffs. Tariffs are now the principal instrument of protection of domestic industries. Although WTO only recognizes custom duties (CD) as the only tariff Bangladesh uses supplementary and regulatory duties (SD and RD) for additional protection though, ostensibly, these are levied for revenue purposes. WTO rules regard such para-tariffs under the nomenclature of other duties and charges (ODC). As an original WTO member Bangladesh was subject to limited extent of tariff bindings or tariff caps. Bangladesh agreed to bind all agricultural tariff lines at 200% and only 5% of non-agricultural tariff lines at rates ranging from 3% on sparking plugs (HS3808.92) to 50% on sweet biscuits and wafers (HS1905.31). Generally, bound tariffs are much higher than applied tariffs (CD). However, when ODCs are included, there are instances where applied tariffs exceed bound tariffs (e.g. biscuits, sparking plugs). Upon graduation from LDC in 2024, such violation of WTO rules could evince complaints (and safeguard tariffs) from trading partners; so it would be wise to restrict the level of applied tariffs within bound rates.

Export subsidies and other support measures. The Agreement on Subsidies and Countervailing Measures (SCM) prohibits export subsidies by countries with GNI per capita above US\$1000 (at constant 1990 US\$), with exception for LDCs and some developing countries (listed in ANNEX VII of SCM Agreement) with GNI per capita below US\$1000.

Bangladesh currently offers cash subsidies to 35 export products ranging from 4% (export to non-traditional markets) to 20% (fruits and vegetables). Upon graduation in 2024, Bangladesh will not have this option as an LDC but may still enjoy the exemption if its per capita GNI is still below US\$1000 (at constant 1990 US\$), provided it applies to WTO for maintaining the exemption to be listed among the countries in ANNEX VII⁶. Subsidies towards protecting local content use are also prohibited, but with the exception for LDCs. Roughly one-half of export subsidies in Bangladesh go towards supporting backward linkage in textiles and garments. This option could be in jeopardy in 2024 or thereafter. Finally, according to WTO procedures adopted in November 2001 export subsidies are prohibited in cases where the export product exceeds 3.25% market share globally because then the product is deemed to have become competitive and the infant industry export support does not apply. RMG exports with 6.5% global market share falls in this category; therefore any or all export subsidies to RMG exports are not WTO-consistent.

Trade-Related Intellectual Property Rights (TRIPS). This is a major facility accorded to LDCs like Bangladesh, one that has allowed Bangladesh to develop a robust pharmaceutical industry manufacturing generic drugs (through reverse engineering or imitation of brand name patented drugs) without any patent infringement. Thanks to this facility Bangladesh pharma industry now meets 97% of domestic requirement of all drugs besides exporting about \$150 million of medicines to some 60 countries. The period for this facility for LDCs was extended to 2033 but if Bangladesh graduates out of LDC in 2024 it will expire in that year. The option for seeking a transition period and/or extension to 2033 would require applying to the WTO but chances are that developed countries will put up strong opposition to accepting such a request.

TRIPS agreement which was actually directed to strengthening of protection of intellectual property rights (IPR), has important implications for industrial policy. Because developing countries do not in general have a comparative advantage in innovation, attracting FDI as a means of transferring and diffusing technology is important for them. An important provision for developing countries from an industrial policy perspective is TRIPS Article 66.2, which requires industrial countries to support technology transfer to LDCs. As IPR protection improves, firms from developed countries are expected to have greater incentive to invest in and operate in developing country markets. So IPR strengthening would be one item to focus on if Bangladesh wants to attract more FDI.

In sum, it is critically important to conduct industrial policy that maximizes its potential to contribute to economic growth while minimizing the risks that it will generate waste and rent-seeking. Bangladesh industrial policy to be WTO-consistent will have to be comprehensive rather than target specific sectors; that is, there should be a concerted effort to shift toward more generic policies for promoting industrial development. Policies related to infrastructure, human capital formation, innovation through more R&D, and diffusion of technology are now critical for export competitiveness. WTO-consistent industrial policy instruments for Bangladesh would include tariffs (within bound rates); subsidies for reginal connectivity, R&D, and the environment; and export promotion measures such as credit and insurance schemes at subsidized rates, concessional tax and duty provisions, and export processing zones (EPZ) and special economic zones (SEZ).

Applying the WTO methodology set out in G/SCM/110/Add.15 the estimate for Bangladesh GNI per capita of FY2018 works out to US\$627. Assuming the current trend growth of GNI per capita, Bangladesh GNI per capita might exceed US\$1000 by 2026 or thereabouts. So there is need for applying to WTO for exemption if we wish to continue to enjoy the

8. **Courting FTA For Rapid Market Access Expansion**

A Preferential Trade Agreement (PTA) among member countries provides preferential market access, through duty concessions or other means, to selected products of member countries (e.g. Asia Pacific Trade Agreement (APTA), of which Bangladesh is a member). A Free Trade Agreement - FTA -- is an extreme form of a PTA providing duty-free or lowerduty access to markets of partner countries on a wide range of products, typically with a small negative list of products (sensitive list). Thus a PTA is characterized by a "positive list" of products whereas an FTA is characterized by a "negative list". An FTA could be bilateral (e.g. Vietnam and Japan), or regional (e.g. ASEAN), or plurilateral (among several countries spread across geographical regions; e.g. CPTPP-Comprehensive and Progressive Agreement for Trans-Pacific Partnership). Some 300 PTAs/FTAs have been notified to the WTO which has seen the proliferation of PTAs/FTAs since 2000. Typically, two conditions mark all TPAs/FTAs: (a) reciprocity (in contrast with non-reciprocity of GSP schemes), and (b) rules of origin (ROO), to ensure that substantial transformation of a product has occurred in the partner countries to deserve preferential access. The rules of origin are therefore a key element determining the magnitude of the economic benefits that accrue from preferential trade agreements and who gets them.

The multilateral trading system is now characterized by a multiplicity of overlapping and intersecting PTAs/FTAs with complex web of tariff schedules and ROOs. Each PTA/ FTA creates its own web of regulatory rules that coexist alongside multilateral rules. The attraction of an FTA stems from the fact that it offers members a means of securing enhanced market access and attracting investment. A bilateral FTA requires the assent of both governments, which becomes easier when there is a balance in the potential trade between the countries. It is understood that Bangladesh has received requests for bilateral trade negotiations for FTA from several countries including China, India, Malaysia, Thailand, and Nepal.

For Bangladesh, an FTA could be an attractive proposition in the context of market losses due to preference erosion following graduation in 2024. The only FTA that Bangladesh is signatory to is the South Asian Free Trade Agreement (SAFTA)) which, according to most analysts, has not made much headway in expanding intra-regional trade in South Asia – an avowed goal of the Agreement.

What should be the strategic trade policy orientation when it comes to negotiating and signing bilateral and regional FTAs during the run up to LDC graduation and beyond? Post-LDC Bangladesh may have to negotiate a trading arrangement with the EU along with the possibility of another one with the post-Brexit United Kingdom to ensure favourable access to these important markets. Beyond that, Bangladesh may seek more bilateral or regional FTAs if the projected trade creation (or trade growth) contributes positively to growth and employment creation.

First, it is important to acknowledge that Bangladesh is a significant beneficiary of the multilateral trading system (WTO) and its special and differential dispensation for LDCs and developing countries. It would be in the best interests of Bangladesh to continue to be a strong participant under this global system of compliance of trade rules even after graduation.

In the meanwhile, since the multilateral system does permit the contracting of preferential trading arrangements, such as a Free Trade Agreement (FTA), departing from the guiding principle of non-discrimination defined in Article I of GATT, Article II of GATS, and elsewhere. FTAs may be signed under Article XXIV of the GATT, which allows for the formation of trade blocs, permitting WTO members of a trade bloc to discriminate against nonmembers, as long as the agreement results in trade liberalization among the signatories extends what is available under the WTO. FTAs in recent times are seldom limited to just trade in goods, as they encompass services as well as investment.

Of late, the multilateral trade regime and its offshoot, globalization, has come under serious strain from the rise in economic nationalism and protectionism. Consequently, a growing number of nations, both developed and developing, have been seeking to sign FTAs on a regional or bilateral basis. Bangladesh, with only one regional FTA (SAFTA) and no bilateral FTA in its armor, has fallen behind in this game of trade openness beyond the WTO. Basically, an FTA has the potential of creating access to larger markets for Bangladesh exports. But they have advantages and disadvantages.

On the plus side, an FTA can force local industries to improve competitively and rely less on government subsidies. These can open new markets, increase GDP, and invite new investments. They also allow companies to discover new technologies and better ways of doing things. FTAs could trigger a beneficial process of "competitive liberalisation", as nations vie to open their markets to each other. On the downside, FTAs could bring disruptive competition, destruction of traditional livelihoods, with adverse implications for employment. Given Bangladesh's high protection regime, an FTA with Malaysia (whose average tariff is 6.2%) would imply "enhanced protection" for Malaysian exporters while Bangladesh exporters would face "reduced protection". An FTA with Malaysia would also require substantial scaling down of protective tariffs which could be a major political economy challenge.

Whereas Bangladesh's preferential access into major global markets under WTO system relies on unilateral provision, a fundamental tenet of FTA is "reciprocity". Concessions in the liberalization process have to be offered, though there is scope for negotiations for staggered adjustments of tariffs or other trade barriers. Where Bangladesh is involved in a North-South (i.e. developed and developing country) arrangement, tariff reductions on its part could have a longer timeline. Gains from an FTA is expected to be greater when such FTA opens larger markets (e.g. North-South FTA, such as between Bangladesh and OECD members). But there are potentially large market creation effects to be had from engaging with regional associations (South-South) like the BIMSTEC, ASEAN or its surrogate, the Regional Comprehensive Economic Partnership (RCEP) that adds six more FTA partners.

However, it is worth keeping a few things in mind while considering FTAs:

- Deeper, broader, rapid liberalization under an FTA produces a bigger effect. Firms are less likely to incur additional administrative costs if the tariff advantage provided by the FTA is small.
- The FTA impact will be greater if the impediments to trade removed by the FTA are large relative to those that remain untouched.
- The most fundamental factor is the capacity of our economy to increase supply of products for which the FTA has boosted demand.

- They reinforce the point that any contribution of an FTA to Bangladesh's economic development is likely to be influenced heavily by the broader policy stance of its government, the flexibility of the economy and the extent to which supply can respond to any new demand that has been created.
- We could target FTA with countries that have already shown interest, such as Malaysia, China, India (post-LDC, as SAFTA already gives market access), Thailand. Emerging market economies would also be good candidates, quite apart from OECD member countries. The point to note is that gains from any FTA will be minimal if the market size of the partner country is small.
- Most importantly, the first item in an FTA relates to trade openness in terms of tariffs. With its sky high tariff regime relative to its comparators, that is where Bangladesh will face a major hurdle in getting prospective FTA suitors to come calling. Mutually reciprocating tariff reductions are usually critical items in any FTA negotiation. But when tariffs are very high, as is the case for Bangladesh, the leverage from offering tariff reductions is all but lost. Thus rationalizing Bangladesh's tariff structure then becomes a national imperative if the country seeks FTAs with any country or region in the future. FTA negotiations could be highly complex and take long periods of time.

To conclude, it is time to mainstream trade and trade policy. For trade reform to unleash its catalytic potential during the run up to LDC graduation it should be designed as part and parcel of Bangladesh's 8th and 9th Five Year Plans and the Perspective Plan 2041, where its role will be given due cognizance and the necessary facilitating infrastructure adequately provided to make trade policy perform. In practical terms, this means incorporating trade issues into every stage of the development planning cycle. This must be underpinned by strong inter-ministerial coordination and consultative processes with a wide range of stakeholders, including consumer groups.

Harnessing Remittance Flows for Development

Migrant workers and their remittances have played a pivotal role in reducing poverty as well as fueling growth in Bangladesh. As the labor force grows in size, a good number is seeking and finding temporary work abroad mostly in the Middle Eastern countries but also elsewhere. In the past three years (FY17-19) the number of migrant departures ranged from 700,000 to 1 million. One estimate by the RMMRU (Refugee and Migratory Movements Research Unit) indicates the current stock of Bangladeshi migrants worldwide at 11.5 million. After RMG exports, remittances bring home the maximum amount of foreign exchange, rising to US\$16.4 billion in FY19 or 5.4% of GDP (Table 10). As of December, FY20 a major uptick in remittance inflows is evident.

Table 10: Bangladesh Remittance Inflow

Year	Remittance Inflow (Us \$ Millions)	Remittance Growth (%)
2009	10521	18%
2010	10850	3%
2011	12071	11%
2012	14120	17%
2013	13867	-2%
2014	14988	8%
2015	15296	2%
2016	13574	-11%
2017	13498	-1%
2018	14980	11%
2019	16420	10%
*2020	18807	14%
2020*	18807	14%
*2020	18807	14%

*FY20 is annualized based on data available from July-Dec

Source: Bangladesh Bank

Cross-country research evidence confirms that remittances from migrants have positive impacts on poverty reduction and development in originating countries, mostly developing ones, substantially contributing to the achievement of development goals. These positive impacts become greater when remittances can be saved and invested in infrastructures and productive capacity. Government policy measures could induce such use. So significant barriers to migration and remittance transfers in Bangladesh need to be addressed in order to harness opportunities for development and poverty reduction, including through easing financial transfers, setting appropriate incentives, improving policy coherence in migration and remittances policies, and facilitating the temporary movement of people.

The poverty reduction impact of remittances is substantial, as they are, in many cases, directly received by the poor households, augmenting their income and alleviating their poverty. Remittances have proved to be a more stable source of poverty reduction in Bangladesh. Such flows could last for one generation or more, and usually go to more or less the same family members or families in the same local neighborhood within districts.

Remittances have also played an essential role in smoothing impacts of devastating natural disasters. International aid and private philanthropic support may be useful in the initial phase of reconstruction; however, this aid cannot be long-lasting. Remittances and other supports from migrants abroad play a more effective role in the post-disaster recovery and rehabilitation in Bangladesh.

Though not the most productive use of remittances, they have driven consumption spending in a big way particularly in the rural areas. The multiplier effect stems from the purchase of essential goods and services, home appliances, and medical and education services. Most of the goods and services consumed (mostly utilities and financial services) are produced locally, except for home appliances with a high level of imported component. Such consumption increases the local demand, particularly in poor or rural areas, thereby driving domestic production.

When remittances are converted into investible resources they have stronger multiplier effects with a major impact on the overall economy. When a share of remittances is used for small business investments, the multiplier effect becomes larger and more sustainable as they create income stream. On average, around 10 per cent of remittances are found to be saved and invested. Evidence shows that remittances help to increase the level of small business activities in the country as they are key sources of finance for investment in farming and other off-farm small and medium enterprises. Remittances have helped local entrepreneurs bypass inefficient or non-existent local credit markets, especially in rural areas, and to start productive activities. To get the most developmental outcome from remittances, one goal of the 8th FYP will be to channel remittances as a source of development finance to support development and poverty reduction, including the building of local infrastructure and productive capacity.

Steady flows of remittances from migrants have had important stabilizing effects on the balance of payments. Despite chronic trade deficits, the current account balance of Bangladesh has turned positive with the rise of remittances. Remittances and exports together grew at an average rate of 11.6% during FY2001-19, contributing significantly to the sustainability of our external balance with accumulation of foreign exchange reserves of \$33 billion by end of FY2019 (Table 11 and Figure 12).

Table 11: Foreign Exchange Earnings from Exports of Goods and Factor Services (US\$ million)

Fiscal Year	Remittance	Export	Rem+ Exp	Growth rate	Avg GR (5 yrs)	Avg GR (10 yrs)
2000-01	1882.1	5752.2	7634.3			
2001-02	2501.1	6467.3	8968.4	17.5		
2002-03	3062.0	5986.1	9048.1	0.9		
2003-04	3369.2	6548.4	9917.6	9.6		
2004-05	3848.3	7603.0	11451.3	15.5	10.9	
2005-06	4801.9	8654.5	13456.4	17.5		
2006-07	5978.9	10526.2	16505.0	22.7		
2007-08	7914.8	12177.9	20092.6	21.7		
2008-09	9705.1	14110.1	23815.2	18.5		
2009-10	11015.8	15565.2	26581.0	11.6	18.4	15.1
2010-11	11625.3	16204.7	27829.9	4.7		
2011-12	12846.0	22928.2	35774.2	28.5		
2012-13	14461.1	24301.9	38763.0	8.4		
2013-14	14228.3	26567.0	40795.3	5.2		
2014-15	15312.0	30186.0	45498.0	11.5	11.7	
2015-16	15201.5	31208.9	46410.4	2.0		
2016-17	14769.6	34241.82	49011.4	5.6		
2017-18	14980.3	34835.0	49815.3	1.6		
2018-19	16415.3	36660.4	53075.7	6.5	3.9	8.2

Avg GR(5 yrs)

18.4

15.1

10.9

11.7

10.9

11.7

10.9

11.7

Ave GR (10 yrs)

Figure 12: Average Growth Rate of Remittance & Export Earnings 2001-2019

Source: GED estimates based on Bangladesh Bank data

Such funds also improve a country's creditworthiness for external borrowing. Remittances create the scope for introducing diaspora bonds which could be used as an innovative tool for development financing by tapping into the wealth of a diaspora population and opening new marketing channels. India was the first developing country to issue diaspora bonds during the economic crisis in 1991, when it experienced a large trade and fiscal deficit, high inflation and devaluation of the Indian rupee. The Indian Development Bonds targeted at Indian diasporas enabled India to raise \$1.6 billion in a short period of time, which was critical to India's recovery from the crisis.

Remittance and Exports – twin sources of development finance. It is important to consider the impact of the two medium of foreign exchange earnings for Bangladesh that started to show promise since the 1990s. Together they account for 20% of GDP, driving consumption, investment and job creation. The chronic trade deficits resulting from the importdependent development programs that arguably involves rising imports of machinery, capital goods, and industrial raw materials, has been regularly offset by consistently rising remittance inflows to yield current account surpluses for 13 of the last 20 years. For a rapidly developing economy with enormous requirement for investment current account surplus indicate paucity of investment relative to national savings. During the 7th FYP, the implementation of several mega projects (e.g. Padma Multi-purpose Bridge Project, Ruppur Nuclear Power Project, Rampal Coal Based Power Project, Chattogram-Dohajari to Ramu-Cox's Bazar and Ramu-Gundum Railway Construction Project, Dhaka Mass Rapid Transit Development Project) that required massive imports of heavy machinery and equipment, has now tipped the external balance towards negative current account which thus far has been financed largely through remittances, concessional aid, supplier's credit, and other loans. But the good side of current account deficits is that it signifies excess of investment over national savings, indicating that we are finally displaying an appetite for meeting the yawning infrastructure gap that, once bridged, will yield enormous returns in terms of growth over the medium and long-term. The bottom line is that for planning purposes exports combined with remittances now make up the principal source of development finance with official development aid (ODA) playing a much smaller (albeit critical) role.

Study 7: **Development of the MSME Sector in Processing and** Manufacturing

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1. Introduction

Bangladesh achieved remarkable success during the past decade in accelerating the growth of the overall economy. Starting from a level of 5.05 percent in 2008-09, the GDP growth rate steadily increased and reached the level of 8.13 percent in 2018-19. Per capita income rose sharply from \$703 to \$1909 during the same period.

Bangladesh has also succeeded in bringing down poverty level considerably. Incidence of poverty came down from 40 percent in 2005 to 21.8 percent in 2018. Bangladesh's performance in improving various social indicators particularly with respect to gender equity, child mortality etc. has also been spectacular.

A critical aspect of Bangladesh's development strategy during this period has been the promotion of micro, small and medium enterprises (MSME). Although the sector received considerable attention in successive plan documents in Bangladesh since independence as an important tool for poverty alleviation, a comprehensive strategy for developing the sector and reaping the advantages of its growth linkages for accelerating overall growth of the economy has been more visible during the past decade. In addition to supporting cottage and micro activities for poverty alleviation, there has been a clear shift towards a more proactive policy for identifying the dynamic components of the sector and nurturing them with adequate infrastructure, finance, technology and marketing support with a view to accessing export market and accelerating growth. Within the wide range of activities pursued under MSME, processing and manufacturing activities assumed special importance because of greater scope of value addition, technological up-gradation and export potentials. Two critical components of this new MSME growth strategy have been the cluster approach and wide-ranging provisions for institutional finance with emphasis on women entrepreneurship development.

Prior to launching of the 8th Five Year Plan, it is imperative to make a critical assessment of this strategy with a view to (i) fine tuning policy measures for better outcome, (ii) identifying needed support measures for facilitating smooth graduation of the enterprises up the scale ladder, and (iii) ensuring right alignment of the policies with the SDGs.

When this paper was under progress Bangladesh, like the whole world, has been exposed to the Covid-19 pandemic and is facing adverse health as well as economic consequences. The MSMEs of Bangladesh are hard hit as they are unable to carry on their regular businesses.

This background paper is intended to address these issues and is organized as under.

After the introductory remarks in Section I, Section II examines place of manufacturing MSME in Bangladesh economy. Section III provides a broad narrative of the current policies and institutions for the development of MSME in Bangladesh and their major initiatives. A critical assessment of these policies and institutional initiatives are provided in Section IV. Section V provides a brief review of international experience which Bangladesh can draw upon. Finally, the critical components of MSME development strategy for the 8th Five Year Plan are put together in Section VI. A discussion on the impact of Covid-19 pandemic and necessary actions to address those, is included in this section.

2. Place of Manufacturing MSMEs in the Bangladesh Economy

Size and Contribution of non-farm sector

The main source of nation-wide statistics for the size, structure, location and composition of MSMEs in Bangladesh is the Economic Census. Statistics on manufacturing enterprises (organizations with 10+ employees) is also found in the Survey of Manufacturing Industries (SMI). Bangladesh Bureau of Statistics (BBS) carried out the third Economic Census of the country during March - May 2013 and the final report was published in December 2015. Like the previous two censuses in 1986 and in 2001 & 2003, the Economic Census 2013 attempted a 100% count of all economic units in the country outside householdbased agriculture. As the 7th Five-Year Plan was formulated on the basis of the preliminary results of the Economic Census 2013 and no other economic census has been conducted since then, the current analysis of the size, structure, location and composition of MSME in Bangladesh has been done on the basis of the final results of the Economic Census 2013 and other studies conducted thereafter. Economic Census 2013 portrays the following picture of the economy outside household-based agriculture (Table 1).

Table 1: Location and Size of Non-farm Economic Activities, Economic Census 2013 (Figures within parentheses give column percentage)

Location/	Number of esta	blishments (000)	Number of person	s engaged (million)
Size Group ^a	All	Manufacturing	All	Manufacturing
Rural	5589.0	662.7	15.0	4.1
	(71.5)	(76.3)	(61.2)	(57.6)
Urban	2229.6	205.5	9.5	3.1
	(28.5)	(23.7)	(38.8)	(42.4)
Cottage	6842.9	727.2	13.2	2.0
_	(87.5)	(83.8)	(53.7)	(28.8)
Micro	104.0	104.0	0.6	0.6
	(1.3)	(12.0)	(2.3)	(7.8)
Small	859.3	30.9	6.6	1.2
	(11.0)	(3.6)	(26.9)	(16.2)
Medium	7.1	3.0	0.7	0.4
	(0.1)	(0.3)	(2.9)	(6.5)
Large	5.3	3.1	3.4	3.0
	(0.1)	(0.4)	(14.1)	(40.6)
MSME	970.4	137.9	7.9	2.2
	(12.4)	(15.9)	(32.1)	(30.6)
Total	7818.6	868.2	24.5	7.2
	(100)	(100)	(100)	(100)

a As defined in Industrial Policy 2010

To assess changes in the size distribution of enterprises over time, the Economic Census 2013 data has been recast to make it comparable with data from earlier censuses (Table 2).

As can be seen from the Table-2, the overwhelming dominance of the size group "<10 workers" in the number of all nonfarm economic units persisted around 98 per cent during all three censuses. However, in the case of manufacturing enterprises the dominance is less and declined somewhat in 2013 compared to 1986.

However, the dominance of this size group is significantly less in terms of employment, especially in the case of manufacturing. The share of this size group in manufacturing employment seems to have steadily declined over the years from 60.6 per cent in 1986 to 40.4 per cent in 2001/03 and further down to 36.2 in 2013.

Table 2: Distribution of Nonfarm economic Activities by Size Groups in the Three **Economic Censuses**

Size Groups	Econo	mic Census 1986	Econom	ic Census 2001/03	Econo	omic Census 2013
	All	Manufacturing	All	Manufacturing	All	Manufacturing
% Distribution of N	lumber of	Units				
< 10 workers	97.6	96.5	97.6	93.2	98.03	94.79
10-99 workers	2.3	3.1	2.2	6.0	1.88	4.56
100 or more workers	0.1	0.4	0.142	0.8	0.09	0.65
Total	100	100	100	100	100	100
% Distribution of P	ersons En	gaged				
< 10 workers	73.8	60.6	67.5	40.4	71.8	36.2
10-99 workers	13.1	12.6	14.3	17.3	13.3	18.2
100 or more workers	13.1	26.8	18.2	42.3	14.9	45.6
Total	100	100	100	100	100	100

Source: BBS (2005) and Economic Census 2013

2.2 Size and Contribution of Manufacturing MSMEs

Before we discuss the contribution of manufacturing MSMEs, let us elaborate on the definition of various size groups under MSMEs. Different industrial policies have provided different definitions of micro, small and medium enterprises and the latest one is given in the Industrial policy 2016 (Table 3b). However, the discussion in this section refers to the definitions mentioned in the Industrial Policy 2010 because the discussion here utilizes SMI (2012) and preliminary findings of SMI 2019 (data collected in 2016), both of which have used 2010 definitions.

Though the 8th five-year will take account of the latest (2016) definition of MSMEs, the analysis based on the previous definitions still provides useful insights into the basic characteristics of enterprises of different size groups. One needs to bear in mind that enterprises under micro, medium and small groups under the new policy are slightly bigger than corresponding groups under the previous policy and the new policy also includes separate definitions for medium and large ready-made garments (RMG) enterprises.

Table 3a: Definition of Manufacturing Industry Size Groups, Industrial Policy 2010

Cottag	e Industry	Micro	Enterprise Small Enterprise I		Medium Enterprise		Large enterpris		
Fixed	Employed	Fixed	Employed	Fixed	Employed	Fixed	Employed	Fixed	Employed
Asset	Manpower	Asset	Manpower	Asset	Manpower	Asset	Manpower	Asset	Manpower
(Tk.)		(Tk.)		(Tk.)		(Tk.)		(Tk.)	
Less	Less than	5 Lac	10 to 24	50 lac	25-99	10	100 to 250	More	More than
than 5	10	to less		to less		crore		than	250
lac		than 50		than		to less		30	
		lac		10		than 30		crore	
				crore		crore			

Note: Fixed asset refers to assets other than Land and Building; There was also different definition for service sector, which is not noted here.

Table 3b: Definition of Manufacturing Industry Size Groups, Industrial Policy 2016

Cottage Industry		Micro Enterprise		Small Enterprise		Medium Enterprise		Large enterprise	
Fixed Asset (Tk.)	Employed Manpower	Fixed Asset (Tk.)	Employed Manpower	Fixed Asset (Tk.)	Employed Manpower	Fixed Asset (Tk.)	Employed Manpower	Fixed Asset (Tk.)	Employed Manpower
Less than 10 lac	Not more than 15	10 lac to less than 75 lac	16-30	75 lac to less than 15 crore	31 to120	15 crore to 50 crore	121-300 (for RMG up to 1000)	More than 50 crore	More than 300 (more than 1000 for RMG)

Note: Fixed asset refers to assets other than Land and Building; There is different definition for service sector, which is not noted here. Different definition for the ready-made garment sector has also been given in this policy.

Manufacturing MSMEs in the Economic Census 2013

We noted earlier that about 137.9 thousand MSME manufacturing establishments employing 2.2 million persons were recorded in the Economic Census 2013, which accounted for nearly 15.9 per cent of all manufacturing establishments and 30.2 per cent of all manufacturing employment respectively (Table 1). It was also noted from Table 1 that with 104 thousand establishments, Micro enterprises were the dominant size category within MSME manufacturing while Small enterprises with 1.2 million persons engaged had the highest share of employment.

Table 4: Distribution of MSME Manufacturing Establishments and Employment by Size Group, Location and Sex of Worker

Size	No. of	% distribution		No. of	% distribution				
Group	units (000)	Rural	Urban	persons engaged (million)	Rural	Urban	Male	Female	
Micro	104.0	60.5	34.5	0.5	61.2	38.8	77.8	22.2	
Small	30.9	63.6	36.4	1.2	66.1	33.9	77.3	22.7	
Medium	3.0	63.7	34.3	0.5	66.5	33.5	75.7	24.3	
MSME	137.9	61.3	38.7	2.2	65.0	35.0	77.1	22.9	

Source: Author's calculation based on Economic Census, 2013

Of the total manufacturing enterprises, 76.3 per cent were located in the rural areas. A similar picture of dominance of rural enterprises are seen in the case of MSME manufacturing enterprises both in terms of number of establishments and persons engaged (Table 4). Any policy to support manufacturing MSMEs, therefore, should take into account the realities in rural Bangladesh, such as distance from market and urban centers, transport facilities, communications etc. Table 4 also shows the relatively small involvement of women in the manufacturing MSME workforce, which underscores the importance of devising more pro-women policies for the development of this sub-sector.

Table 5: Industry classification of permanent manufacturing MSMEs

BSIC 2009	Industry	I		on of numl Establishm		% distr	ibution of	number of	persons
		Micro	Small	Medium	MSME	Micro	Small	Medium	MSME
10	Manufacture of food products	18.46	15.87	1.52	17.02	22.29	14.23	2.28	13.43
11	Manufacture of beverages	0.07	0.07	0.12	0.07	0.08	0.06	0.22	0.10
12	Manufacture of tobacco products	0.14	0.27	0.51	0.19	0.19	0.29	0.92	0.41
13	Manufacture of textiles	15.33	24.29	6.77	17.50	20.10	23.26	11.12	19.85
14	Manufacture of wearing apparel (Ready-made garments)	4.47	14.57	15.83	7.80	4.01	20.90	27.21	18.42
15	Manufacture of leather and related products	2.58	3.13	0.51	2.65	2.57	2.45	0.84	2.12
16	Manufacture of wood and products of wood and cork	5.89	2.01	0.14	4.56	5.73	1.76	0.18	2.32
17	Manufacture of paper and paper products	0.86	0.89	0.61	0.86	0.97	0.84	1.02	0.91
18	Printing and reproduction of recorded media	3.27	1.03	0.22	2.51	2.82	0.80	0.34	1.16
19	Manufacture of coke and refined petroleum products	0.03	0.03	0.02	0.03	0.03	0.02	0.02	0.02
20	Manufacture of chemicals and chemical products	0.31	0.37	0.47	0.33	0.07	0.25	0.77	0.33
21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	0.08	0.28	0.51	0.15	0.11	0.35	0.88	0.41
22	Manufacture of rubber and plastics products	1.93	1.77	0.89	1.84	2.12	1.56	1.49	1.67
23	Manufacture of other non-metallic mineral products	1.49	11.70	27.48	5.47	1.80	20.44	48.02	22.27
24	Manufacture of basic metals	0.36	0.58	0.75	0.44	0.33	0.62	1.30	0.70
25	Manufacture of fabricated metal products, except machinery and equipment	8.39	3.25	0.53	6.61	7.30	2.96	0.70	3.46

BSIC 2009	Industry			ion of nun Establish		% distribution of number of persons engaged			
26	Manufacture of computer, electronic and optical products	0.06	0.04	0.04	0.05	0.06	0.03	0.06	0.04
27	Manufacture of electrical equipment	0.52	0.47	0.44	0.50	0.48	0.50	0.75	0.55
28	Manufacture of machinery and equipment n.e.c.	0.43	0.18	0.14	0.35	0.45	0.17	0.15	0.23
29	Manufacture of motor vehicles, trailers and semi- trailers	0.18	0.12	0.02	0.16	0.17	0.11	0.05	0.11
30	Manufacture of other transport equipment	1.13	9.89	41.17	5.29	0.00	0.00	0.00	0.00
31	Manufacture of furniture	20.32	7.74	0.79	15.94	18.94	7.08	0.91	8.43
32	Other manufacturing	12.54	1.18	0.44	8.82	8.45	1.11	0.63	2.69
33	Repair and installation of machinery and equipment	1.17	0.26	0.08	0.86	0.94	0.21	0.13	0.36
	Total (number of enterprises and persons engaged)	100 (81196)	100 (33955)	100 (5055)	100 (120206)	100 (484503)	100 (1159972)	100 (467740)	100 (2112215)

Source: Author's calculation based on Economic Census, 2013

Of the 868 thousand manufacturing units recorded in the Economic Census 2013, nearly 396 thousand were found to have permanent establishments. In the case of manufacturing MSME, the number of permanent establishments were recorded to be 120 thousand. Table 5 shows the distribution of these establishments and persons engaged according to the industry type. As is evident from the Table, major industry category in terms of number of establishments are Textiles (17.50%), Food products (17.02%), and Furniture (15.94%). In terms of employment share, the major industry categories are Non-metallic mineral products (22.27%), Textiles (19.85%), and Wearing apparels (18.42%).

Manufacturing MSMEs in the Survey of Manufacturing Industries (SMI) 2019

The latest survey of manufacturing industries (SMI) carried out by the Bangladesh Bureau of Statistics is for 2019 and the full report is yet to be published. The brief preliminary report of SMI 2019 provides the following statistics on the manufacturing sector of Bangladesh with 10 or more workers (Table 6). The figures inside the parenthesis show corresponding figures from SMI 2012.

As is evident from Table 6, in 2019, there were about 46 thousand manufacturing enterprises in the country with 10 or more workers, employing a total of nearly 5.9 million workers. Of these about 36% belonged to micro enterprise category while the shares of small and medium enterprises in the total number of enterprises were 50.9% and 6.5%

respectively. In contrast, the shares of these three size groups micro, small and medium enterprises in manufacturing employment with 10 or more workers were 4.49%, 19.18% and 7.84% respectively, and the share in gross value added were 2.21%, 21.62% and 2.24% respectively. MSME, thus, comes out as a significant component of the manufacturing sector (with 10 or more worker) in Bangladesh accounting for 93.5% of the establishments, 31.5% of employment and 26.1% of gross value added.

Within MSME, the dominant size group is the Small category with 25-99 workers. The other point to note is that the size group Small also has the highest level of labor productivity amongst all size groups including Large with 250 or more workers.

According to BBS's national income data, manufacturing GDP at current price in 2018-19 stood at 4820.48 billion taka and the share of manufacturing in GDP was 19%. The SMI 2019 estimated value addition in MSME manufacturing to be 1228.96 billion Taka. The share of MSME in manufacturing value added thus works out at 26% and the share of MSME in the GDP of 2018-19 stood at 4.85% (Table 7).

Table 6: Size Distribution of Manufacturing Establishments with 10 or more workers, preliminary findings of SMI 2019 (SMI 2012)

Description	Micro 10-24	Small 25-99	Medium 100-249	Large 250 or	MSME 10-249	Total
	workers	Workers	workers	more	Workers	
	WOLKETS	WOLKETS	WOIKEIS	workers	WOLKELS	
No. of establishments	16,689	23,557	3,014	3,031	43,260	46,291
	(17,384)	(15,666)	(6,103)	(3,639)	(39,153)	(42,792)
Share of different size groups	36.05	50.89	6.51	6.55	93.45	100
in total manufacturing	(40.62)	(36.61)	(14.26)	(8.50)	(91.50)	(100)
establishments (%)						
Total persons engaged in	263,720	1,127,841	461,142	4,027,141	1,852,703	5,879,844
manufacturing	(271,644)	(738,801)	(1,041,220)	(2,964,272)	(2,051,665)	(5,015,937)
Share of different size groups	4.49	19.18	7.84	68.49	31.51	100
in total persons engaged (%)	(5.42)	(14.73)	(20.76)	(59.10)	(40.90)	(100)
Gross value added in current	104.4	1,019.2	105.4	3,485.7	1,229.0	4,714.7
prices (billion Taka)	(92.1)	(370.0)	(363.7)	(737.2)	(825.8)	(1,563.0)
Gross value added in constant	73.4	716.1	74.1	2,449.1	863.5	3,312.6
2012 prices (billion Taka)	(92.1)	(370.0)	(363.7)	(737.2)	(825.8)	(1,563.0)
Share of different size groups	2.21	21.62	2.24	73.93	26.07	100
in gross value added (%)	(5.89)	(23.67)	(23.27)	(47.17)	(52.83)	(100)
Value added per worker in	396	904	229	866	663	802
current prices (Thousand Taka)	(339)	(501)	(349)	(249)	(402)	(312)
Value added per worker	278.2	635.2	160.9	608.5	465.8	563.5
in constant 2012 prices	(339)	(501)	(349)	(249)	(402)	(312)
(Thousand Taka)						

Source: SMI 2012 and Preliminary Findings of SMI 2019 BBS.

One, however, observes major discrepancies in the national level data on MSME manufacturing from different sources. Thus, Economic Census 2013 reported nearly 137.9 thousand MSME manufacturing enterprises with nearly 2.2 million persons engaged. The SMI 2012, on the other hand, shows total number of MSME manufacturing enterprises to be 39, 253 with employment of 2.1 million. The sector classification used in the Economic Census 2013 may have been faulty because all the 104 thousand Micro nonfarm economic units were identified as belonging to the manufacturing category (Table 1).

One also observes some discrepancies in the estimation of total manufacturing employment. Thus, Economic Census 2013 reported total manufacturing employment to be 7.18 million while Labor Force Survey 2013 estimated the same to be 9.5 million.

Table 7: Place of MSME in the Overall Manufacturing Sector

Description	Estimates
No. of manufacturing units in Economic Census 2013	868,244
Share of manufacturing in total number of nonfarm economic units (Economic Census 2013)	11.10%
No. of manufacturing units with 10 or more workers in Economic Census 2013	45,223
No. of manufacturing units (with 10 or more workers) in SMI 2019	46,291
No. of MSME manufacturing units recorded in SMI 2019	43,260
Share of MSME in total number of manufacturing units in SMI 2019	93.45%
Total persons engaged in manufacturing in Economic Census 2013 (million)	7.18
Total persons engaged in manufacturing (with 10 or more workers) in SMI 2019 (million)	5.88
Total persons engaged in manufacturing MSME in SMI 2019 (million)	1.85
Share of manufacturing MSME employment in total manufacturing employment reported in SMI	31.5%
Manufacturing employment recorded in LFS 2013 (million)	9.5
Manufacturing employment recorded in LFS 2016-17 (million)	8.8
Share of manufacturing in total employment in LFS 2016-17	14.47%
Manufacturing GDP at current price 2018-19 (billion taka)	4820.48
Share of manufacturing in total GDP 2018-19	19%
Gross Value Added in manufactured products in SMI 2019 (billion taka)	4714.69
Gross Value Added in MSME manufactured products in SMI 2019 (billion taka)	1228.96
Share of MSME in Gross Value added in manufacturing products in SMI 2019	26.07%
Share of SMI MSME in Total GDP in 2018-19	4.85%
2 2 2	

Source: SMI (2019), Economic Census 2013, Bangladesh Economic Review (different issues)

Growth in Manufacturing MSMEs

As mentioned earlier, the latest Economic Census is for 2013. Hence, for assessing recent growth aspects of manufacturing MSMEs one can only compare the information presented in the preliminary report of SMI 2019 with those in the SMI 2012. The information presented in Table 6 along with growth rates worked out in Table 8 provides the relevant evidence.

The following main points can be discerned from these two Tables.

- a) The manufacturing sector of Bangladesh having establishments with 10 or more workers experienced spectacular annual compound growth of 11.33% in gross value added during 2012-2019.
- b) The two size groups that contributed mainly to this high growth performance are Small industry with 25-99 workers and Large industry with 250 or more workers.
- In terms of the nature of growth, however, the two size groups display somewhat c) different patterns. Small industries were identified in SMI 2012 as the size group with the highest level of labor productivity even in comparison with Large

- industries. Capitalizing on this dynamism the Small size group seems to have expanded during 2012-19 experiencing respectable yearly compound growth in the number of establishments (6.0%), number of persons engaged (6.23%), value added (9.89%), and modest growth in labor productivity (1.23%).
- The large industry, on the other hand, focused mainly on productivity d) growth presumably through technology up-gradation and better supply chain management and ended up with nearly 18.7% yearly compound growth in value added, 13.62% yearly compound growth in labor productivity, moderate employment growth (4.47%), and an actual yearly decline in the number of establishments (-2.58%).
- Both Micro and Medium industries failed to improve on their labor productivity levels and experienced decline in terms of all the parameters, namely, number of establishments, number of persons engaged, and value added.
- f) The contractions in the Micro and Medium industries, however, have been outweighed by the growth of Small industries and consequently the MSME sub-sector as a whole ended up with yearly compound growth of 1.44% in the number of establishments and 0.64% growth in value added. Decline in the level of sub-sectoral employment helped MSME post annual compound growth of 2.13% in labor productivity.

Table 8: Growth of MSME Manufacturing Establishments with 10 or more workers between SMI 2012 and SMI 2019 (Size Groups according to 2010 Industrial Policy)

Description	Annual	compound g	rowth rate be	etween SMI 20	12 and SMI 2	019 (%)
	Micro 10-24 workers	Small 25-99 workers	Medium 100-249 workers	Large 250 or more workers	MSME 10-249 workers	Total
Number of establishments	-0.58	6.00	-9.59	-2.58	1.44	1.13
Total persons engaged	-0.42	6.23	-10.98	4.47	-1.45	2.30
Gross value addeda	-3.19	9.89	-20.33	18.71	0.64	11.33
Value added per worker ^a	-2.78	1.03	-10.47	13.62	2.13	8.81

a At 2012 constant prices. Source: SMI 2012 and Preliminary Findings of SMI 2019 BBS.

As mentioned earlier, Economic Census 2013 found establishments with less than 10 workers to account for nearly 95% of all manufacturing establishments in Bangladesh. The SMI 2012 and 2019 show that during the inter-survey period, the manufacturing sector with 10 or more workers experienced growth in both number of establishments and persons engaged despite decline in Micro and Medium industries on both counts. A related evidence coming from the Labor Force Survey (LFS) 2016-17 shows that between 2013 and 2017, overall manufacturing employment in the country declined by nearly 0.7 million.

The upshot of all of this is that the MSME component of the manufacturing sector of Bangladesh has undergone significant structural changes in recent times. Both Micro industries and establishments with less than 10 workers have been on decline perhaps because of their low productivity levels. While growth in manufacturing value added during this period has been spearheaded mainly by Large industry, the MSME component has trimmed itself with leading role assigned to the more dynamic component, namely Small industry. At the same time, the Medium industry is undergoing significant downsizing and will require considerable modernization to revamp its productivity levels and reclaim the share in sectoral value added.

Policies and Institutions for development of MSMEs

Development of MSMEs constitutes a key element in the Government's strategy towards achieving the twin targets of becoming a developing country by 2024 and meeting the Sustainable Development Goals (SDGs). To this end, the Government has successfully steered development of MSMEs in recent times by playing the role of a facilitator, which involved easing barriers to the sub-sector's growth and providing necessary policy and institutional support.

A wide range of institutions currently exist in support of the development of MSME in Bangladesh. The multi-institution approach evolved overtime out of the need for providing specific support service to the sector, although as would be expected, a certain degree of overlap persists in the sphere of activities of these institutions.

In this Section, we provide a narrative of the key policy and institutional initiatives that may be considered as the Movers and Shakers of MSME development in Bangladesh in recent times.

3.1 Ministry of Industry

Policy supports for MSME development are provided by the Ministry of Industries (MOI) at different tiers. At the top, there is the National Industrial Policy (NIP) 2016 which identified the development of cottage, micro, small and medium industries as a critical component of the overall development strategy of the government. In a dedicated Chapter, the NIP 2016 laid out the main objectives of MSME development and the policy directions for accomplishments of these objectives. The policy guideline emphasized the facilitator role of the government with the purpose of removing all policy obstacles and neutralizing market barriers towards the development of the sector. The roles of different institutions in achieving the targets of MSME development has been spelled out in the NIP 2016. For example, the Small and Medium Enterprise Foundation (SME Foundation), Bangladesh Bank and the Bangladesh Small and Cottage Industries Corporation (BSCIC) have been assigned to work together to create 7500 new MSME entrepreneurs during the implementation period of NIP 2016. The Small and Medium Enterprise (SME) Cell has been set up within the MOI to coordinate the activities of the pertinent institutions and act as the focal point for providing necessary promotional supports to the MSMEs.

The second tier of policy support has been provided by the MOI through the SME Policy 2019, which spelled out detailed guidelines for SME development in Bangladesh (Box-1). Overseeing the implementation of these guidelines and monitoring the process of MSME development are also being done by the MOI.

Box 1: SME Policy 2019 and Strategies for Development

The SME Policy 2019 has noted that effective SME strategies will be built upon the following six factors:

- 1. Access to Finance;
- 2. Access to Technology and Innovation;
- 3. Access to Market;
- 4. Access to education and training;
- 5. Access to Business Support Services; and
- 6. Access to information.

In order to ensure effective development of SME Sector and entrepreneurs, SME development strategies have been designed around three elements: 1) Supportive policies and appropriate environment; 2) Sustainable and effective organizations; and 3) Opportunities to provide financial and business support services to prospective and disadvantaged entrepreneurs.

Ten Strategic Goals for SME Policy 2019 implementation are noted to be:

Strategic Goal 1: Improve business environment and institutional framework

Strategic Target 2: Increase the scope of SME sector to get institutional funding

Strategic Goal 3: Increase competitiveness capabilities in SMEs and help SME products to enter into the

Strategic Goal 4: SME business support services, support to start-up business set up in short period of time and with low cost

Strategic Goal 5: Development and expansion of SME Clusters Business Network

Strategic Goal 6: Increase the use of ICT and other technologies

Strategic Goal 7: Extension of educational development and training programs for entrepreneurs

Strategic Goal 8: Expansion of women entrepreneur development programs and special services

Strategic Goal 9: Establish SMEs forward and backward linkages with large industries and introduce standards and quality of SMEs products

Strategic Goal 10: Develop capacity of SMEs in establishing environmentally friendly industries and industrial waste management

Implementation Agencies for SME Policy 2019

BSCIC and SME Foundation are noted to be manly responsible for overall implementation of strategic goals and action plans described in the SME Policy 2019. BSCIC will implement its own strategic action plans in collaboration with other implementing agencies subject to the approval of the Ministry of Industries, while the SME Foundation will inform Ministry of Industries about its own yearly strategic action plan and implement it in collaboration with implementing agencies. The Ministry of Industries will regularly monitor and evaluate the progress and implementation of the action plans/activities of BSCIC and SME Foundation and will provide necessary financial and other supports. BSCIC and SME Foundation should collaborate with relevant trade bodies in implementing MSME development strategies. They will also create an effective support environment to accelerate the development of the SME sector. To avoid redundancy and reduce cost, they will coordinate with the other relevant government organizations including: Bangladesh Bank; Bangladesh Investment Development Authority (BIDA); Bangladesh Economic Zones Authority (BEZA); Investment Promotion Agency (IPA); Bangladesh Industrial Technical Assistance Centre (BITAC); Bangladesh Council of Scientific and Industrial Research (BCSIR); National Productivity Organization (NPO) and Bangladesh Institute of Management (BIM).

The SME Policy 2019 has noted that The National SME Development Council (NSDC) will be the highest policy-making body to implement the government's commitment to the development of SME sector. This Committee is headed by the Minister of the MOI. An SME Task Force has also been formulated as the executive committee to identify the priorities of the proposed initiatives in the SME Policy 2019 and review the action plan.

Unlike the SME Policy 2005, the new SME policy does not identify any priority sector for SME. Rather the new policy has noted 60 action plans to be implemented by different relevant agencies in Short term (implementable in 1 year); Medium-term (enforceable in 2-3 years) and Long-term (4-5 years inclusive). The period from July 2019 to June 2024 has been defined as the implementation period of that policy on the basis of vision, mission, targets and objectives of SME Policy 2019.

With this short, medium and long-term focus, the SME Policy 2019 is clearly a phased development policy for the SME sector spanning over the five years 2019-2024 that overlaps with the 8th Five Year Plan period. It would be imperative that the 60 action plans delineated in the SME Policy 2019 are carefully taken into account in the formulation of the 8th Five Year Plan. In particular, the 5th strategic goal of the SME Policy 2019, namely, "Development and Expansion of SME Clusters Business Network", as will be discussed later, would be expected to continue as a key policy intervention in fostering dynamism in the sector

The third tier of policy support is provided by the MOI at specific industry level, e.g. The National Handicrafts Policy (NHP) 2015. In the NHP 2015, a more targeted approach is taken to support the development of the handicrafts industry in general with specific provisions for women. The policy focusses on creating employment opportunities in the industry and reducing movement of artisans to cities. It aims at ensuring economic stability of groups and families affiliated with this industry. For providing financial support, the entrepreneurs are to be brought within the fold of the banking system with the provision of equity capital, term and working capital loan, export credit etc. as per Bangladesh Bank policy. An important aspect of NHP 2015 is the development of women's capacity to manage handicraft enterprises. The policy also aims at creating backward and forward linkages for the development of the handicrafts industry. However, the SME Policy 2019 has not taken this policy into cognizance and therefore, it is not clear how the objectives and development plans for the handicraft enterprises, as noted in NHP 2015, relates to the new policy. We may consider that the cluster based SME development initiatives for handicraft cluster may relate to the NHP 2015.

3.2 BSCIC

Bangladesh Small and Cottage Industries Corporation (BSCIC) is a subsidiary organization under the Ministry of Industry. It was established by an act of the Parliament in 1957. The main responsibilities of this subsidiary include (a) development of industrial estate, (b) imparting entrepreneurship skill development training, (c) promoting sub-contracting, and (d) running credit program.

BCSIC is primarily concerned with the development of industrial estate/park for all kinds of industries with the required infrastructural facilities like water, electricity, gas, road etc. Up to February 2019, 10,171 industrial plots were allotted in favor of 5,852 industrial units in 76 Industrial Estates of BSCIC throughout the country. Amongst them, 4,721 units are presently carrying out production activities. Given the size of these industrial estates, they are more suitable for small and medium industries. Total investment in these 76 industrial estates up to June 2018 stood at Tk.25,418.20 crore. These units produced goods worth Tk.59,107 crore in the FY2017-18, out of which, products worth of Tk.25,241.65 crore were exported. Exports consisted mainly of hosiery items. FY2017-18 reported significant increase in investment, production, export and employment in these industrial estates over the previous financial year. The latest available information on the BSCIC industrial estates is summarized in Table 9.

The Small and Cottage Industries Training Institute (SCITI) was set up in 1985 under BSCIC. This is the only Institute in the country that supports the entrepreneurs in the SME sector and their employees in the development of their entrepreneurial & managerial skill. This institute is also supposed to impart training to the extension officials of both public and

private sector agencies on different aspects of SME development. Apart from the SCITI, BSCIC also has 15 Skill Development Training Centre and 64 Industries Service Centre. Through these and other facilities, a total of 9,497 entrepreneurs, technicians, managers and others were given training up to February 2019 during the FY2018-19.

Table 3.1: Investment, Production and Employment of BSCIC Industrial Estates

1	Total no. of Industrial Estates	76
2	Total no. of Industrial plots	10,589
3	Total no. of plots allotted (Up to February 2019)	10,171
4	Total no. of Industrial units allotted (Up to February 2019)	5,852
5	Total no. of units under production (Up to February 2019)	4,721
6	No. of export-oriented units (Up to June 2018)	946
7	Total Investment (Up to June 2018)	Tk.25,418 crore
8	Employment (Up to June 2018)	5,79,055 Persons
9	Total sales price of the products produced (FY2017-18)	Tk.59,107.21 crore
10	Total sales price of exported product (FY2017-18)	Tk.25,241.65 crore

Source: Bangladesh Economic Review, 2019

BSCIC also arranges credit facilities under credit programs such as (a) self-employment through small & cottage industries, and (b) United Nations Capital Development Fund (UNCDF). A total of 27 projects were implemented by the BSCIC during FY2018-19 as part of its long-term plan for the development of small and cottage industries sector under the existing socio-economic conditions of the country.

3.3 SME Foundation

The SME Foundation was created under the Ministry of Industries as an apex institution for SME development in the country through a gazette in 2007. The major activities of the Foundation include (i) implementation of SME Policy Strategies adopted by the Bangladesh Government, (ii) policy advocacy and intervention for the growth of SMEs, (iii) facilitating financial supports for SMEs, (iv) providing skill development and capacity building training and facilitating adaptation with appropriate technologies and access to ICT, and (v) providing business support services, etc. The Foundation is intended to work as a one-stop service delivery window for SMEs. The Foundation operates through eight different wings for carrying out its activities and implementing the strategies. These wings are: (i) Business Support Service; (ii) Credit Wholesaling; (iii) Human Resource Development; (iv) Women Entrepreneurship Development, (v) Research and Policy advocacy wing, (vi) Access to Information, (vii) Access to Technology, and (viii) General administration

The SME Foundation became functional with 24 staffs in 2008 following government gazette dated August 7, 2007. The number of staffs is now about 60. The Foundation was set up by the government of Bangladesh with a total endowment of Tk. 2 billion. The interest earning on this endowment fund is the sole source of finance for different activities undertaken by the Foundation. The main strategies followed by the Foundation are as follows:

Strategy 1: Strengthen regulatory and legislative framework in favor of SMEs

Strategy 2: Identify problems and prospects of SMEs/SME sectors/SME cluster for designing appropriate development interventions.

- Strategy 3: Ensure availability of business support services for SMEs
- Strategy 4: Access to institutional finance for SMEs
- Strategy 5: Up-gradation and adoption of appropriate technology for SMEs
- Strategy 6: Develop human resources for SMEs
- Strategy 7: Adaptation of Information and Communication Technology (ICT) in SME Development
- Strategy 8: Position women entrepreneurs into the mainstream business community
- Strategy 9: Cluster based SME development
- Strategy 10: Institutional linkage for SME development

During the implementation period of the 7th Five-year Plan, the SME foundation made some important progress in cluster-based SME development, brought about improvements in their training program, took initiative to provide market to SME products through organizing SME trade fairs in different parts of the country and encouraged women entrepreneurship development. However, SMEF's role in creating access to institutional finance remained limited to its Credit Wholesale Program (CWS), under which a total of 1857 entrepreneurs received credit to the tune of Tk. 91 crore up to December 2019. Only 512 of these credit recipients were women entrepreneurs. Clearly, there is need for expanding the activities under CWS and broaden its coverage of potential women entrepreneurs. The special initiatives taken by the Women Entrepreneurship Development Wing of the SMEF are based on a set of objectives listed in Box 2.

Box 2:

Objectives of Women Entrepreneurship Development Wing (WED) of SMEF

The WED wing of SMEF has mentioned following objectives in their website.

- To provide a framework and strategic directions to identify the gender gaps, needs, interests, opportunities, and issues involved in women entrepreneurship development in the SME sector. Such strategic analysis and understanding can be most effective in advancing women entrepreneurship at local, national, regional and also in international level.
- To promote the empowerment of women and gender equality through addressing the problems of exclusion of women relating to entrepreneurship thereby mainstreaming gender into policy level and facilitate effective support for these target groups.
- Support to women led trade bodies/associations for building their institutional capacity and competitiveness.
- Assist gender sensitive value chain analysis for identifying the gender relations impacts on different parts of a value chain.
- To create a favorable environment for women entrepreneurs and bring them into the mainstream development process.
- To ensure full participation of women entrepreneurs in economic development of the country.
- To improve efficiency of women entrepreneurs in performing their business responsibilities.
- To strengthen institutional capacities for monitoring and evaluation of gender equality in the area of entrepreneurship development.
- To enhance women's participation in the decision-making process and build up capacity to improve knowledge, skills, abilities, aptitudes, values and preferences in order to set up a successful business.

Source: http://www.smef.org.bd/v2/index.php/2014-01-22-04-15-32/access-to-wed

Cluster-based SME Development initiative by the SME Foundation

An important strategy adopted for the development of SME sector of Bangladesh is the cluster-based SME development. Along with the Government of Bangladesh (GoB), the United Nations Industrial Development Organization (UNIDO) is working for cluster development in Bangladesh. UNIDO is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization, and environmental sustainability. The cluster/network development program is one of the SME programs managed within the Private Sector Development Branch of UNIDO.

According to the definition used by the SME Foundation, a cluster is a concentration of enterprises producing similar products or services and is situated within an adjoining geographical location and having common strengths, weaknesses, opportunities and threats. In practice, key criteria used to identify a SME cluster include the following: (a) products or services should be similar or homogenous and related, (b) enterprises must be production or service units, (c) there should be at least 50 or more production units located in adjoining geographical location covering several villages, wards, unions or industrial estates, scattered within an area of 3-5 kilometer radius.

Based on the above definition SME Foundation identified 177 SME Clusters in 51 districts of Bangladesh. These include (i) 38 Handicrafts & Miscellaneous clusters, (ii) 34 Agro-Processing/Agri-business/Plantation, (iii) 31 Light Engineering and Metal working, (iv) 22 Knitwear & Readymade Garments, (v) 16 Fashion Rich Effects, Wear & Consumers Goods, (vi) 13 Leather Making & Leather Goods clusters, (vii) 10 Handloom & Specialized Textiles clusters, (viii) 5 Healthcare & Diagnostics clusters, (ix) 3 Plastics & Other Synthetics, (x) 3 Electronics & Electrical, and (xi) 2 Educational Services clusters in Bangladesh. These clusters are located in 51 different districts. The 13 districts where no clusters were found included Netrokona, Rajbari, Narail, Meherpur, Lalmonirhat, Sunamganj, Barguna, Bhola, Patuakhali, Noakhali, Bandarban, Rangamati and Khagrachari.

The existing SME clusters are mostly naturally grown. Availability of raw materials and skilled labor supported by local demands have contributed to the emergence of these clusters. Sustained demands, both local and international, have helped some of these clusters to thrive and grow while in the absence of necessary policy support other clusters are struggling to maintain their existence.

SME clusters are playing a vital role in decentralized employment generation and balanced development of the country. To harness further the growth linkages of these clusters, there is need for industry specific technology development and market linkages with local and foreign buyers and location specific improvements in infrastructure and utility services.

3.4 Bangladesh Bank

For the development of the SME sector, Bangladesh Bank has taken up several measures to facilitate the access of SMEs to institutional finance. These include (a) credit wholesaling by using the grants received from different development partners, (b) opening of 'Dedicated Desk' and 'SME Service Centre' in the banks and (c) special services for the women entrepreneurs. The sole responsibility of the 'SME and Special Programs Department' of Bangladesh Bank is to formulate policy, facilitate credits and monitor the development of small and medium entrepreneurship. Under this department a Women Entrepreneurs Development Unit has also been set up to support the women entrepreneurs. Bangladesh Bank has identified a list of 132 sectors for SME development. To help the potential

borrowers to apply for SME loan, they have also developed a checklist of deed and documents needed for SME loan sanctions.

SME and Special Programs Department has formulated a guideline for compliance of the banks and financial institutions (FIs) as follows:

- Bangladesh Bank will set an indicative target for SME loan disbursement for a
 year and will remain closely involved with the banks and financial institutions
 to achieve it. According to the target, SME loan will be disbursed to the small,
 and medium entrepreneurs.
- Following the 'Area Approach Method', banks and financial institutions will try to attain their indicative targets separately by dividing it by branch, region & sector.
- Each bank/financial institution will be allowed to follow a separate business strategy in financing SME loan with least formalities in executing documentation to ensure easy and speedy loan sanction and disbursement process.
- For small entrepreneurs, credit limit will range from Tk. 50,000 (Fifty thousand) to Tk. 50,00,000 (Fifty lac). At least 40% of the total disbursement target of SME credit will be reserved for small entrepreneurs and the rest will be for medium ones.
- The success in SME loan disbursement will be considered as yardstick for further approval of new branches of the concerned bank. License for new branches will be issued for financing the priority sectors like SME and Agriculture from 2010 in the name of 'SME/Agriculture Branch' instead of 'SME Service Centre' in order to involve banks in financing priority sector like SME and Agriculture'.

Within these general guidelines for SME financing, special provisions were made for women entrepreneurship development. These special provisions have been listed in Box-3.

Box 3: Special provisions for women entrepreneurs in SME Credit Policies & Programs by Bangladesh Bank

The WED wing of SMEF has mentioned following objectives in their website.

- To provide a framework and strategic directions to identify the gender gaps, needs, interests, opportunities, and issues involved in women entrepreneurship development in the SME sector. Such strategic analysis and understanding can be most effective in advancing women entrepreneurship at local, national, regional and also in international level.
- To promote the empowerment of women and gender equality through addressing the problems of exclusion of
 women relating to entrepreneurship thereby mainstreaming gender into policy level and facilitate effective support
 for these target groups.
- Support to women led trade bodies/associations for building their institutional capacity and competitiveness.
- Assist gender sensitive value chain analysis for identifying the gender relations impacts on different parts of a
 value chain
- To create a favorable environment for women entrepreneurs and bring them into the mainstream development process.
- To ensure full participation of women entrepreneurs in economic development of the country.
- To improve efficiency of women entrepreneurs in performing their business responsibilities.
- To strengthen institutional capacities for monitoring and evaluation of gender equality in the area of entrepreneurship development.
- To enhance women's participation in the decision-making process and build up capacity to improve knowledge, skills, abilities, aptitudes, values and preferences in order to set up a successful business.

Source: WED unit, Bangladesh Bank.

Until the Industrial Policy 2016 was formulated, Bangladesh Bank followed the definition recommended by Better Business Forum in providing credit to SMEs. With a circular of 29 June 2017, of the SME and Special Programs Department of the Bangladesh Bank, all banks and non-bank financial institutions have been asked to follow the definition given in the Industrial Policy 2016 while defining the size of an enterprise.

3.5 Refinance for Small Enterprises

In addition to regular financing to SME enterprises, Banks and NBFIs are also making short to long term financing to SMEs through refinance schemes of Bangladesh Bank. Presently, Bangladesh Bank with the help of government and different development partners is implementing different refinance schemes in the SME sectors which include (i) JICA assisted Financial Sector Project for the Development of SME (FSPDSME) Fund, (ii) JICA assisted Urban Building Safety Project (UBSP) fund, (iii) five other refinance schemes of its own fund for Agro-Product processing Industries in Rural Areas, (iv) Bangladesh Bank Fund, (v) Bangladesh Bank Women Entrepreneur Fund, (vi) New Entrepreneurs Fund and (vii) Islamic Shariah based Fund. Currently 63 financial Institutions (36 banks and 27 nonbank financial institutions) have signed a participation agreement with Bangladesh Bank for financing the SME sector. The overall status of these funds as on 28 February 2019 has been presented in Table 10.

A total amount of Tk.8,016.38 crore has been provided to different Banks and NBFIs under different refinance/pre-finance schemes up to February 2019 against 59,952 enterprises. Out of total refinance, Tk.2,258.78 crore has been provided as working capital, Tk.3,465.27 crore as medium-term loan and Tk.2,292.33 crore as long-term loan. These refinancing facilities have been helping the SMEs to expand their business and create employment opportunities. Details of BB's refinancing facilities to Banks and NBFIs for promoting SMEs are outlined below:

- Bangladesh Bank Fund (BB Fund): Bangladesh Bank introduced a refinancing scheme named Small Enterprise Fund (SEF) of Tk.100 crore out of its own fund for supporting the development of small enterprises in the country. Later on, the size of the fund has been increased to Tk. 850.00 crore. To meet the increasing demands from women entrepreneurs, refinancing facilities under their scheme were extended to the Banks and NBFIs at bank rate against their financing to the small entrepreneurs, usually left out by the formal sector financing. The scheme demonstrated a high market demand. Recovery against refinanced loan is being used as a revolving fund for further financing to SME sector. Up to end of February 2019, Tk. 3,686.20 crore has been refinanced under this fund against their financing to 34,897 enterprises (Table 10).
- Enterprise Growth and Bank Modernization Program (EGBMP) Fund: In 2004, the IDA Wing of the World Bank provided an additional amount of US\$10 million to EGBMP fund to reinforce this scheme under a Development Credit Agreement signed with the government of Bangladesh for financing the development of small enterprise sector of the country. In addition, the government of Bangladesh also allocated an amount of Tk.58.00 crore under the said agreement. Out of this fund, an amount of Tk. 312.61 crore has been provided to 32 banks and financial institutions against 3,160 enterprises on revolving basis. The full disbursed amount has been recovered from Participating Financial Institutions (PFIs) by the end of June 2017.

- C. ADB Fund-1: A fund called ADB-1 Fund to finance a scheme titled 'Small and Medium Enterprise Sector Development Project (SMESDP)' was launched in 2005. Asian Development Bank initially provided an amount of US\$30.00 million for financing the scheme under a loan agreement with the government of Bangladesh to strengthen the SME sector in Bangladesh. Tk.334.94 crore has been provided to Banks and NBFIs under the ADB-1 fund against 3,264 enterprises. Disbursement from this fund was completed in September 2009. The full disbursed amount has been recovered from PFIs by the end of June 2015.
- ADB Fund-2: The Small and Medium-Sized Enterprise Development Project D. (SMEDP) was created in 2009 jointly by the contribution of ADB and Bangladesh government. The objective of SMEDP was to provide credit facility for enhancing access to medium to long term financing to eligible SMEs. The total fund of the SMEDP was US\$95.00 million. Out of that, ADB provided US\$76.00 from its special fund and GoB (BB) provided US\$19.00 million which was transferred from the balance of the earlier ADB-1 (SMESDP) fund. Disbursement from this fund was completed in December 2013 and Tk.746.95 crore was provided to Banks and FIs against 13,645 enterprises on revolving basis during the project period. By the end of June 2018, Tk.742.13 crore has been recovered from PFIs.
- E. JICA Two Step Loan Fund: A loan agreement was signed between JICA, Japan and the government of Bangladesh in 2011 for the development of SMEs and financing. As per loan agreement, Bangladesh Bank is implementing the Financial Sector Project for the Development of Small and Medium-Sized Enterprise (FSPDSME)-BD-P67 project. The objective of the project is to create a medium to long term financing market for SMEs especially for the productive investments. The Fund size is 5,000.00 million Japanese Yen including a technical assistance component. A total of 25 Banks and 21 financial institutions signed Participating Agreements with Bangladesh Bank. Refinancing or prefinancing facilities are being provided to Participating Financial Institutions (PFIs) at the bank rate for on lending to SME sub-projects of productive investment for medium to long-term duration at the market rate. As of February 2019, Tk.752.17 crore has been refinanced against 903 enterprises.

In the backdrop of tragic incidence of Rana Plaza collapse, a special initiative to finance the improvement of safe working environment of RMG and knitwear sector workers was taken under the JICA assisted FSPDSME project. RMG and Knitwear factories which are members of BGMEA and/or BKMEA with labor employment of 100-2000 provided that the factory building is owned by the applicant entrepreneur will get loan facility up to Tk.10.00 crore for the purpose of retrofitting, rebuilding and relocation of their factory buildings. This TSL fund for RMG and knitwear factories of FSPDSME scheme will support 100 percent of the sub-loan amount as pre-finance. At the end of February 2019, two RMG industries have been financed Tk.16.00 crore for retrofitting purposes. The project was completed successfully by the end of June 2016. Meanwhile, the project received full allocation of TSL fund from JICA. Disbursement to accredited PFIs is, however, being continued utilizing the Revolving Fund Account (RFA) of the FSPDSME project.

- F. Refinance Fund for New Entrepreneurs under Cottage, Micro and Small Categories: In order to provide start-up capital to new cottage, micro and small enterprises, Bangladesh Bank has created a new fund worth of Tk.100.00 crore from its own source. Prospective entrepreneurs selected and trained by recognized public and private training providers are eligible to receive credit from this fund. Current value of that fund is Tk.50.00 Crore. The trained entrepreneurs have the opportunity to get maximum of Tk.25 lakh with collateral and Tk.10 lakh without collateral at 9 percent interest rate (bank rate +4%). As of February 2019, a total of 367 new entrepreneurs have been refinanced worth Tk.20.21 crore (included in "Others" category in Table 10)
- Refinance to Women Entrepreneurs: Bangladesh Bank is encouraging all banks and FIs to provide loan to women entrepreneurs at 10% percent interest rate. Banks and FIs were instructed to reserve 15.0 percent of total SME funds exclusively for women entrepreneurs. An amount of Taka 24.6 billion has been refinanced to women entrepreneurs until the end of February 2019 against 22173 enterprises. (included in "Others" category in Table 10).
- Refinance Scheme for Agro-based Product Processing Industries: Bangladesh Bank launched a scheme of Tk. 1.0 billion in November 2001 out of its own fund for financing the agro-based product-processing industries in the areas outside Divisional Head Quarters and Narayangani town. The size of the fund increased to Tk. 8.8 billion in 2016 and later to Tk. 11.2 billion in 2017. Refinancing facilities are provided to banks and financial institutions at the bank rate. An amount of Taka 16.2 billion has been disbursed under this scheme until the end of February 2019 against 2987 enterprises on revolving basis.

Table 3.2: Loan disbursement under various refinancing schemes of the Bangladesh Bank

Year	Name of	Amoun	t Refinanc	ced (cror	e Taka)	No. of Refinance Beneficiary Enterprises				
	Banks/FIs Refinanced	Working capital	Mid term loan	Long term loan	Total	Industrial loan	Commercial loan	Service	Total	
2015	Bangladesh Bank Fund	384.93	596.52	242.25	1,223.70	5,021	5,921	1762	12,704	
	Bangladesh Bank Women entrepreneurs	225.46	625.34	258.44	1,109.24	4,079	6,436	1,736	12,251	
	IDA	80.34	132.47	99.80	312.61	1,368	1,306	486	3,160	
	ADB-1	144.48	132.27	58.19	334.94	800	2,096	368	3,264	
	ADB-2		568.39	178.56	746.95	3,765	7,435	2445	13,645	
	JICA	17.26	57.31	246.17	320.74	318	9	110	437	
	Others	196.61	134.33	424.48	755.42	2125.00	118.00	6.00	2249.00	
	Total	1049.08	2246.63	1507.89	4803.60	17476	23321	6913	47710	

Year	Name of Banks/FIs Refinanced	Amount Refinanced (crore Taka)				No. of Refinance Beneficiary Enterprises			
		Working capital	Mid term loan	Long term loan	Total	Industrial loan	Commercial loan	Service	Total
2016	BB Fund	691.65	1495.31	609.61	2,796.57	9,857	14,413	3,886	28,156
	IDA	80.34	132.47	99.80	312.61	1,368	1,306	486	3,160
	ADB-1	144.48	132.27	58.19	334.94	800	2,096	368	3,264
	ADB-2		568.39	178.56	746.95	3,765	7,435	2445	13,645
	ЛСА	20.99	85.38	347.14	453.51	416	9	129	554
	Others	418.48	166.91	513.22	1098.61	2454	375	124	2953
	Total	1355.94	2580.73	1806.5	5743.19	18660.0	25634.00	7438.0	51732
2017	Bangladesh Bank Fund	385.11	598.24	242.95	1226.3	5024	5926	1767	12717
	Bangladesh Bank Women entrepreneurs	394.99	1080.02	460.37	1935.38	5751	9896	2621	18268
	IDA Fund (EGBMP)	80.34	132.47	99.8	312.61	1368	1306	486	3160
	SMESDP (ADB-1)	144.48	132.27	58.19	334.94	800	2096	368	3264
	SMEDP (ADB-2)	0	568.39	178.56	746.95	3765	7435	2445	13645
	JICA FSPDSME	38.52	113.44	420.3	572.26	513	11	174	698
	Others	645.59	215.96	638.96	1500.51	2861	438	178	3477
	Total	1689.03	2840.8	2099.1	6629	20082	27108	8039	55229
2018	Bangladesh Bank Fund	385.11	598.24	244.68	1228.03	5029	5926	1767	12722
	Bangladesh Bank Women entrepreneurs	459.33	1268.8	538.74	2266.86	6551	11161	3042	20754
	IDA Fund (EGBMP)	80.34	132.47	99.8	312.61	1368	1306	486	3160
	SMESDP (ADB-1)	144.48	132.27	58.19	334.94	800	2096	368	3264
	SMEDP (ADB-2)	0	568.39	178.56	746.95	3765	7435	2445	13645
	JICA FSPDSME	52.74	312.9	319.9	685.54	462	34	344	840
	JICA UBSP			4.47	4.47	1			1
	Others Total	1005.13 2127.13	250.37 3263.43	163.62 1607.96	2015.12 7594.52	3171 21147	473 28431	196 8648	3840 58226

Year	Name of Banks/FIs Refinanced	Amount Refinanced (crore Taka)				No. of Refinance Beneficiary Enterprises			
		Working capital	Mid term loan	Long term loan	Total	Industrial loan	Commercial loan	Service	Total
2019	Bangladesh Bank Fund	385.11	598.39	245.03	1228.53	5029	5926	1769	12724
	Bangladesh Bank Women entrepreneurs	503.32	1386.97	567.38	2457.67	7092	11833	3248	22173
	IDA Fund (EGBMP)	80.34	132.47	99.8	312.61	1368	1306	486	3160
	SMESDP (ADB-1)	144.48	132.27	58.19	334.94	800	2096	368	3264
	SMEDP (ADB-2)	0	568.39	178.56	746.95	3765	7435	2445	13645
	JICA FSPDSME	62.82	369.45	319.9	752.17	491	34	378	903
	JICA UBSP	0	0	16.55	16.55	3	0	0	3
	Others	1082.71	277.33	806.92	2166.96	3350	519	211	4080
	Total	2258.78	3465.27	2292.3	8016.38	21898	29149	8905	59952

3.6 The Business Initiative Leading Development (BUILD)

This is a public-private dialog platform set up jointly by the Dhaka Chamber of Commerce and Industry, the Metropolitan Chamber of Commerce and Industry, and the SMEF. Recommendations of the BUILD are backed by research and analyses to develop businessfriendly policies. BUILD has a separate committee for SMEs which is co-chaired by the Secretary of the Ministry of Industries and Managing Director of the SMEF. BUILD is actively working towards enhancing women SME entrepreneurs' access to technology.

4. SME development strategies according to the 7th Five-Year Plan and respective targets for SME development in the Sustainable Development Goals

The 7th Five-Year Plan recommended a three-step strategy for the development of the SME sector of the country. The first step related to the consolidation of the naturally developed capabilities mainly serving the domestic market, the second step focused on making the entry of SMEs into the export market easier and the third step emphasized the enhancement of capacities to thrive into the global market. The plan suggested some steps for the development of SMEs according to this strategy. These were (a) identifying areas of comparative advantage, (b) creating an enabling environment for private investment, (c) adopting a differentiated and hassle free indirect tax system for SMEs, (d) easier access to imported inputs, (e) targeting public expenditure towards augmenting demand, (f) access to financing facilities, (g) cluster based SME development program, (h) women entrepreneurship development program and (i) human resource development for SMEs.

During the implementation period of the 7th Five Year Plan, there has been substantial progress in cluster-based SME development, enhancing access to finance by SME entrepreneurs specially women entrepreneurs, development of skills among SME entrepreneurs and access to market. As has been noted above SMEF has identified 177 clusters throughout the country for efficient development of SMEs. To expand national and international markets. SMEF organized several trade fairs at national and district levels; it supported entrepreneurs to participate in international trade fairs. SMEF is regularly

providing training for existing and potential entrepreneurs. There has been change in topics of training modules that has included more trainings on accounting for business, ICT etc. However, SME entrepreneurs still face problems to adopt new technology for their business, accessing imported raw materials, access to finance and identifying niches where SMEs have comparative advantage and higher growth potential.

Sustainable Development Goal (SDG) and associated Targets: SDG goal 8.3 calls for promoting development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro, small-and medium sized enterprises, including through access to financial services. Goal 9.2 intends to promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries. Goal 9.3 intends to increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.

Actions to achieve the SDG targets within 7th Five Year Plan (2016-2020) gave emphasis on the following issues:

- ICT penetration in rural Bangladesh to bring financial services to the doorsteps of most of the unbanked rural population, expand access to financial services to the underserved including micro and household enterprises now operating in the informal market.
- Removing policy induced constraints; structural constraints; and constraints prioritizing public investment designed to ease various structural bottlenecks faced by SMEs pertaining to physical and infrastructural facilities, energy, and technology.
- A strategy for SME to be premised on further trade liberalization measures with a view to providing SMEs easier access to imported inputs.

MSME Development in Bangladesh: Critical Assessment of Impacts of **Policies and Institutions**

To understand the effectiveness of various initiatives for development of the MSMEs, findings of four recent research have been discussed in this section. These are:

- Impact Assessment of SME Foundation's Activities, by Monzur et al, 2019
- 2.. "An Evaluation of BSCIC Industrial Estates" by Monzur et al, 2018.
- 3. Women Entrepreneurs in SMEs: Bangladesh Perspective 2017 by Ahmed et al, 2019.
- 4. A Comparative Study on Clusters and non-Clusters Based SME Development in Bangladesh, by Iqbal et al., 2020

The findings from these studies are analyzed here to understand the effectiveness of various initiatives to develop the MSMEs, with special focus on the development of manufacturing MSMEs.

5.1 Roles played by SME foundation in development of SMEs: Analyzing the findings of the study on Impact Assessment of SME Foundation's Activities

This evaluation of the activities of SME Foundation was based on a survey of 500 SMEs that included 373 treatment (those who received some sort of benefits/services from SMEF) firms and 153 control firms (firms that did not receive any kind of service from the Foundation). The study also conducted extensive interviews with staffs of different wings of SMEF and made the following observations and recommendations for the SMEF.

A high proportion of the treatment firms indicated the following three services of SMEF as "satisfactory", namely (i) human resource development and efficiency improvement service (90.03%), (ii) production process and technology service (83.39%) and (iii) business planning (81.47%). However, the loan application preparation services of SMEF was reported as "unsatisfactory" by about 14% of the enterprises. A significant proportion of the respondents showed their ambivalence about the service quality of SMEF regarding (i) exporting/international businesses (62.75%), (ii) providing tax advice (49%), and (iii) the provision of government rules (39.5%) by marking their response as "neutral". The study noted that the firms which received any sort of services from the SMEF was making more profit compared to the firms of similar characteristics but not receiving any support from SMEF. The evidence provided the basis for the recommendation that the activities of SME Foundation need to be to scaled-up to a higher level.

However, the study reveals that the Foundation has been facing shortage of fund for running many of its mandated activities in wider scale. It operates on the basis of the interest earned on an initial endowment of Tk. 200 crore provided by the government. It appears that the total income of the Foundation over the last five years has annually declined by 0.74% (due to interest rate variations) relative to the expenditure which has annually increased by 12%. The overall net income also declined by 13.5% in the last five years.

A high proportion of the entrepreneurs attending both national and regional fairs reported that through participation in the fair they experienced (i) marketing advantages (90.60%), (ii) increased sales/order (82.91%), and better networking (75.21%). However, the lack of adequate advertising/campaigning, the low probability of customers visiting the fair, high participation fee, poor management and security measures as well as an unsuitable time of fair organization were some of the weaknesses reported by the respondents. The study reveals that the overall income earned from both regional and national fairs was BDT2.88 million in 2011 which has declined to BDT0.53 million in 2016 (30th June). During this time period, the overall income earned from these fairs is estimated to have annually declined by 24.6%.

The study has underscored the need for making SMEF more dynamic and transformed into a knowledge-based institution. It has provided some guidelines for administrative restructuring that will be needed for achieving these improvements. An important step in that direction would be to fill up nearly one third posts in the organogram that have been lying vacant.

Several initiatives have been suggested for strengthening the activities of the Foundation. Establishment of the long-standing full-pledged One-Stop service center at the Foundation is one of the key recommendations. The study also emphasized the need for gearing up the activities and roles of Policy Advocacy and Research Wing. Important elements of this would be (i) regular updating of SME directory, (ii) periodic publication of SME statistics (yearly/half yearly), (iii) opening-up data base of SMEF-sponsored surveys, and (iv) updating of women entrepreneur database.

To extend the geographical coverage of the business support service, the SMEF needs to be decentralized. The study recommended exploring the possibility of collaboration with BSCIC for utilizing BSCIC facilities at the field level.

The main constraint SMEF faces in its credit wholesaling program is inadequacy of fund. One possible way out of this, as suggested by the study, is to bring credit wholesaling of SMEF under the refinancing scheme of Bangladesh Bank.

5.2 Effectiveness of activities of BSCIC: Analyzing the findings of the Evaluation of BSCIC'S Industrial Estates

This study was conducted by Monzur et al (2018) with the objectives of (i) assessing the existing infrastructure facilities of BSCIC industrial estates, capacity needs, and policy relevance; (ii) identifying the constraints towards distribution and use of unutilized plots in the industrial estates and better utilization of the existing industrial estates; (iii) estimating economic and social impacts of industrial estates, such as investment impact, employment impact, gross value added, technological innovations and transfers, spillover impact, etc.; (iv) assessing whether the current industrial estate model of BSCIC is sustainable and whether it has accomplished the mandated functions in line with the previous industrial policies; and (v) to provide future policy directions for BSCIC industrial estates and alternative sustainability approaches. The study conducted a census of 72 industrial estates and an enterprise survey of 500 firms from 25 randomly selected industrial estates.

The study found that a total of 10389 plots were developed in 74 estates, 96.8% of which were earmarked for allotment to entrepreneurs. The existing industrial units were found to hold on an average, 1.7 plots, the average land size per plot being 0.19 acres. The study observed that the allotted plots were not fully utilized given the production capacity of the firms. Plot utilization rate was found to be the lowest in Barisal division (50%) and highest in Rajshahi division (95%). Such a high degree of underutilization of the plots poses a major concern for BSCIC.

Several factors seem to have contributed to this aspect of underutilization of plots. To start with, faulty plot allotment appears as a key reason. Plots are often allotted to persons who are not true entrepreneurs or those who do not have the intention of fully utilizing the plot for the proposed activity. Key informants who were interviewed in the course of the study mentioned that the incidence of faulty allotment was as high as 34%. A high proportion of the key informants identified three reasons behind such faulty allotments – (i) political interference (68.29%), (ii) weak selection process (36.58%), and (iii) bribery (34.15%). The study suggested streamlining of the plot allotment process by bringing on board more participants from the local business community and experts in the plot allotment committee. Other factors contributing to underutilization of plots included weaknesses in the enforceability of rules and regulations and infrastructure bottlenecks relating to gas, electricity connections etc.

Poor entrepreneur selection not only caused underutilization of the plots but also affected the performance of the firms. Many of the allottee firms encountered financial constraints and fell sick. The study estimated the annual compound growth rate of sick units to be about 4.4%.

Because of all these reasons, firms are often seen to change trade or sell out ownership to others. The study found that about 300 firms change ownership and about 160 firms change trade every year. BSCIC's approval process for such changes is quite centralized requiring nearly six months. Such delays in the approval process often causes loss to entrepreneurs. The study recommended expediting the process and bringing down approval time to 1-2 months.

The infrastructure situation in the Industrial Estates are not fully satisfactory. While electricity connections are there, only 57% of the estates have gas connection and 80% have water supply facilities. CETP is available in only one estate (Savar tannery). Because of poor drainage facilities, water logging is a common problem in most estates. The security situation in the estates are quite precarious as none of them have boundary walls and most of them lack street lights within the estate. Despite paying holding tax to the local Poruroshova/Municipality, the industrial units inside the estate do not receive any maintenance service from these local government bodies.

The contribution of the BSCIC estates to the manufacturing sector in the overall economy is quite significant. In particular specialized estates have played a critical role in the development of four sectors, namely, Jamdani, Hosiery, Tannery and Electronics. Textiles and Agro-food processing are the dominant industry types accounting for 35% and 28% respectively of all industrial units in the estates.

The value of total output produced in the BSCIC estates in 2016-17 was Tk. 552.62 billion, which accounted for 11.7% of the country's total industrial production and 18.7% of the country's manufacturing production. Gross Value added (GVA) in these units in the same year was estimated to be Tk. 105.55 million, which was 6.35% of SME GVA. BSCIC estates have so far created employment for 0.56 million people, which is 8.8% of total manufacturing employment and 21.4% of SME employment. About 21% of the firms are engaged in exporting. Nearly 9.5% of total exports and 10% of manufacturing exports of the country come from the BSCIC estates.

Although employment level in the estates did not indicate much growth over time, production level registered nearly 10% annual growth with exports posting about 5% annual growth, which is a reflection of the improved efficiency of these units.

The estimated Return on Investment (RoI) for BSCIC estates over time is found to be more than 1 indicating that the estates generate positive return on investment.

Firms located in the estates compare quite favorably in terms of their performance with SMEs located outside the estates. Opportunities to share risk and returns arising out of the agglomeration of business inside the estate may explain the better performance of these units.

Impacts of various initiatives to develop women entrepreneurship: Findings from the survey on Women Entrepreneurs in SMEs, Bangladesh Perspective 2017

The study, conducted by Ahmed et al. (2019) explores the current status of women entrepreneurs in small and medium enterprises. The study attempts to identify the sources of success of women entrepreneurs in the Small and Medium Enterprises (SMEs), sociocultural and legal barriers faced by women to become entrepreneurs and ways to improve the opportunities in the SME sector so that more women may become entrepreneurs.

The study is based on a sample survey of 1510 entrepreneurs, 6 Focus Group Discussions (FGDs) at divisional level and several Key Informant Interviews (KIIs). The study found most of the women entrepreneurs to be married. A quarter of them have tertiary or higher level of education with another quarter having secondary school level education.

In terms of type of activity, the highest proportion of the women-owned enterprises fell in the trading category (69%), followed by manufacturing (19%) and service (12% percent). In the manufacturing enterprises the average size of employment was around 70 workers. However, the modal size group of the enterprises of women entrepreneurs was 1 to 10 workers. One notable aspect of employment in these enterprises is the high incidence of female employee accounting for nearly 85 percent of the total employees.

While a wide range of policies including Industrial Policy, SME Policy, SME related policies of the Bangladesh Bank, ICT Policy, Bangladesh Handicraft Policy 2015, Women Development Policy 2011 etc. support development of entrepreneurship among women, the study argues that implementation of most of these policy measures has remained rather unsatisfactory. For example, the refinancing scheme of Bangladesh Bank requires 15% of credit under this scheme to be disbursed by the commercial banks to women entrepreneurs. But in practice, the share of women amongst total borrowers remained way below this level in most years, often as low as 3% to 4%. In many cases the business is actually operated by some male member of the family using woman's name to take advantage of the priority access of women to the credit line. The low incidence of women borrower is partly because of rules and regulations applied by banks in the case of women entrepreneurs which makes it difficult for the women to take advantage of the special credit facilities. For example, instead of granting collateral free loan against group security or security by the chambers or associations, banks often ask for guarantees from a male member of the family. Sometimes a women entrepreneur fails to get loan if her husband is a loan defaulter.

Even in the cases where woman entrepreneurs actually venture into business activities, they face difficulties in sustaining their drive to expand their business due to variety of reasons including lack of child care facilities.

So, although the myriad of policies provides the broad framework for women's entrepreneurship development, the ultimate objective of economic empowerment of women remains underachieved due to inadequate planning, monitoring, and coordination amongst the stakeholders.

An important aspect of women's entrepreneurship development is imparting IT skills to the would-be women entrepreneurs. Because of lack of prior IT familiarity, women face difficulty deriving full benefit from entrepreneurship training. The challenge is to get them overcome their tech-phobia which will require continued post-training support to

encourage MSME women entrepreneurs to use computer technology in their business.

The study made a comparison of the situation of women entrepreneurs in 2017 with the situation that prevailed in 2009. There is a clear trend towards more educated women taking up business activities. In most of the indicators of 'financial benefits of a business', current women entrepreneurs were found to be doing much better than before. All these changes indicate that becoming an entrepreneur is more gainful than the challenges faced. At the same time, women seem to be facing relatively lower social and familial constraints to start and run businesses. As a result, many educated women are taking up business as their profession instead of looking for salaried jobs

The study found the average size of the initial capital of women entrepreneurs to be around Tk. 3-4 lakh. The initial investment was mostly financed out of own savings. Nearly 58% of the entrepreneurs sought institutional credit to enhance their investment and most of them succeeded in getting such loans. However, insufficient information about ceiling of loans for different sectors, long processing time and high interest rate acted as major disincentives for them.

Sourcing raw materials for production and marketing of the final products are important segments of the value chain of any business and are challenging factors for the women entrepreneurs. Due to family and social reasons, poor networking and communication difficulties, they have less mobility which restricts their access to district level and border markets. As a result, their sales are limited to local market. But they often end up getting lower price for their products as they lack their own sales outlets.

5.4 Impacts of cluster-based SME development initiative: A Comparative Study on Clusters and non-Clusters Based SME Development in Bangladesh (preliminary report)

Following the spirit of the 7th FYP of the government and UNIDO's effort to develop an efficient and productive SME sector, the SME Foundation, the apex body for the development of the SME sector in Bangladesh, initiated a study on the comparative performance of the cluster-based SMEs vis-a-vis non-clustered SMEs. The study was conducted by Iqbal et al. (2020). Though the report is yet to be finalized, it provides some important insights into the impact of cluster-based SME development initiatives in Bangladesh. The main objective of the study was to assess the comparative performance of the enterprises under the cluster and those of the enterprises outside clusters. The study also aimed at identifying the barriers and challenges to cluster-based SME development and making appropriate recommendations for overcoming these constraints. The sample size for the enterprise survey was 500 (250 cluster SMEs and 250 non-cluster SMEs). The Key Informant Interviews (KIIs) included 75 cluster KIIs and 75 non-cluster SMEs. There were 15 cluster meetings and 15 non-cluster meetings.

The analysis of the study by Iqbal et al. (2020) reveals that cluster SMEs are larger than the non-cluster SMEs in terms of capital stock, output, and sales but not in terms of employment. Clustered SMEs are more capital intensive than the non-clustered SMEs. However, the study found no difference in labor productivity between clustered and non-clustered SMEs. Cluster SMEs were seen to have higher total factor productivity (TFP), although there was no difference in the profitability of clustered SMEs and non-clustered SMEs.

Non-cluster SMEs were found to rely more on semi-formal sources than the cluster SMEs for credit, although the role of Mahajan was found to be not very significant. Friends and relatives constituted the major semi-formal source of credit for both cluster and non-cluster SMEs, Cluster SMEs were found to have received credit from banks with less hassle than the non-cluster SMEs. The study found TFP of the cluster to be about 10-11 percent higher than that of non-cluster after controlling for capital-labor ratio, total labor hour and sectors.

The study identified several areas of externalities enjoyed by the cluster SMEs vis-à-vis the non- cluster SMEs which involved sharing, matching and learning benefits. One important area of such externality is transport sharing. About 15 percent of the cluster SMEs were found to have shared transport with neighboring SMEs against only 3.2 percent in the case of non-cluster firms. The higher transport sharing by cluster SMEs was evident even after controlling for technology, size, and sectors. The incidence of knowledge sharing is also higher in the cluster compared to non-cluster SMEs. A significantly higher share of clustered SMEs learned business and skill related knowledge from other SMEs than the non-clustered ones, the experience varying negatively with the size of the enterprise, i.e. smaller firms were seen to share knowledge more than the larger ones. The positive impact of the cluster initiative is thus vindicated by these findings of the study.

5.5 Reaping the Growth Linkages of MSME: Review of International Experiences¹

As indicated in the previous section, the cluster-based SME development strategy adopted in the 7th Five-year plan of Bangladesh yielded positive results although the desired growth linkages are yet to be fully derived. In the face of diverse constraints faced by SME clusters in Bangladesh, the question, therefore, naturally arises as to how other countries have coped with these issues and came out successful in cluster-based SME development strategy. This section discusses some international best practices of SME development focussing mainly on SME clusters of some of the Asian countries.

5.5.1 SME Development in Japan through the 'Knowledge Cluster

The Japanese Ministry of Economics, Trade, and Industry (METI) launched the Industrial Cluster Project 2001 as an initiative to encourage collaboration between industry and academia. The industrial cluster project was run by METI during the period of 2001 to 2010 which aimed at enhancing the competitiveness of Japan through industrial clusters. Knowledge clusters establish networks through join research and project planning with individuals of academia and private and government sectors (Yamawaki, 2001).

Japan is home to one of the highest numbers of SMEs amongst industrialized countries, and a large proportion of these SMEs have evolved out of clusters. According to the 1996 survey of the Small and Medium Enterprise Agency, a total of 537 clusters existed throughout Japan. One of the oldest manufacturing clusters in Japan is in Kiryu City located in Gumma prefecture, which specializes in silk and man-made silk and other synthetic fabrics. Some of the recent practices of clusters in Japan are in Hokkaido region, Sapporo city, Miyagi and Niigata city.

The key policy instrument used for developing "Knowledge cluster" SMEs in Japan is that the government provides financial incentive and tax credits for SMEs conducting joint R&D and innovation activities. Financial grants to the tune of 55 billion yen was provided

This part is drawn largely from BIDS (2020)

in R&D support under the Industrial Cluster Project (ICP, Phase 2001-2004). For small business networking, 2 billion yen in indirect support was granted from the government. These funds focussed on promoting specialized human resource and promotion of regional cluster associations.

5.5.2 Highlights of SME Development Strategy India

Creating entrepreneurship and employment opportunities with low capital cost and to foster socio economic development through those initiatives are the key objectives MSME Development Strategy in India. The support measures provided by the Ministry of MSME for this purpose include financial assistance, technology support, infrastructure development, skill development, and marketing assistance. The Ministry of MSME collaborates with other concerned Ministries/Departments, State Governments and other stakeholders to provide support to existing enterprises and encourage creation of new enterprises in the MSNE sector including Khadi, Coir and other village industries.

India has devised a simple way of MSME registration. Since 2015, a new online registration system called Udyog Aadhaar Memorandum (UAM) has been introduced. UAM is a one-page online registration system for MSMEs, based on self-certification. The entrepreneurs in the MSME sector just need to file online, a simple one-page UAM on http://udyogaadhaar.gov.in to instantly get a unique Udyog Aadhaar Number (UAN). The information sought is on self-certification basis and no supporting documents are required at the time of online filing of UAM. This has resolved the earlier hassle prone registration process that discouraged the MSME entrepreneurs to register their business.

Indian SME clusters contribute almost half of the country's industrial output and about 60% of the manufactured exports. Some of the best practices of SME clusters in India are (i) hand block printed textile cluster in Jaipur, (ii) knitwear cluster in Ludhiana and Tripura, (iii) food processing cluster in Pune, (iv) drugs and pharmaceuticals cluster in Ahmedabad, and (v) leather shoe cluster in Ambur.

Indian Ministry of MSME adopted cluster development as the major strategy for enhancing the productivity, competitiveness and capacity building of MSMEs. The main approach followed under this strategy include the following.

- 1. Support the sustainability and growth of MSMEs by addressing common issues such as improvement of technology, skills & quality, market access etc.
- 2. Build capacity of MSMEs for common supportive action through formation of selfhelp groups, consortia, upgradation of associations, etc.
- 3. Create/upgrade infrastructural facilities in the new/existing Industrial Areas/Clusters of MSMEs.
- 4. Set up Common Facility Centres for testing, training, raw material depot, effluent treatment, complementing production processes etc.
- 5. Promotion of green & sustainable manufacturing technology for the clusters so as to enable units switch to sustainable and green production processes and products.
- 6. Credit Linked Capital Subsidy Scheme for Technology Upgradation: The objective of the Scheme is to facilitate technology up-gradation in MSMEs by providing an upfront capital subsidy of 15 per cent on institutional finance of up to Rs 1 crore availed by them for induction of well-established and improved technology in the approved 51 sub-sectors/products.

5.5.3 Some SME development initiatives of China: the importance of local government

In China, growth of SME clusters has been significant during last 20 to 30 years. Some of the earliest Chinese SME clusters include (i) needlework in Suzhou, (ii) china production in Jingdezhen, and (iii) rice paper manufacture in Anhui. However, growth of thousands of industrial clusters in recent times involve high-technology clustering² of SMEs. According to Sheng et al. 2004, growth of the vibrant city Zhejiang province was fuelled by the clustering of SMEs in the area into specialized industrial zones.

Currently, most of the Chinese SME clusters are located in the Pearl River Delta Economic Zone, Yangtize River Delta Economy Zone, and the Bohai Rim Economy Zone. Some of the best SME clusters are located in Guangdong province and Zhejiang provinces. According to Shi 2004, these clusters are traditional labor-intensive manufactures, engaged mainly in the production costume, textile, ceramics, hardware, household electric home appliances etc. In fact, Guangdong, along with the related Guangdong Pearl Delta Economic Zone has gradually become the largest regional cluster.

The policy of One Town, One Product (OTOP) adopted by the Chinese government back in the 1990s, influenced the development of SME clusters in China. Examples of such locational concentrations can be found in Jiangsu province where the town Guanlin focuses on cable cluster, the Shengze town focuses on the textile cluster, and the Hengshan town focuses on sewing machine cluster, which constitute the top three industries of China. Such SME clusters located mainly in towns and coastal areas are the economic drivers of the respective localities. Apart from such clusters that have evolved historically, both central and local governments in China also set up high-tech development areas and special economic zones like electronic industry clusters in Guangdong, textile industry cluster in Zhejiang and Jiangsu, and leather cluster in southeast coastal areas of Hebei, Henan and Ningxia Provinces³. The specialize town program in China also helped in bringing about technological upgradation and new innovation to increase labor specialization.

The local government in China played an exemplary role in developing the clusters. In particular, the local government in the coastal areas provided massive marketing support to the clusters. They arranged display of products in international exhibitions, and created webpages to promote the product and services to the international market. The local government took initiative in constructing specialized marketplace, opening wholesale centre, and hosting regular national or international exhibitions for cluster promotion. They also supported setting up learning institutions. For example, with the help of Italian business, Wenzhou started footwear design center.

5.5.4 SME Development in Malaysia and Thailand

Malaysia and Thailand illustrate some of the best practices in Asia in terms of effective SME cluster strategies. One such case is the automotive sector strategy of Thailand developed with the help of Japan, in which the government, since 1980s, adopted a bottom-up support approach giving a key role to industry and cluster associations. Using this approach, supporting industries for the motor vehicle industry was successfully developed through

SME in China: Integration development (in Chinese) Wu, De-jin, Agricultural Economics, No. 9, 2004.

Sources from Ministry of Commerce, PRC (https://www.qulitosourcing.com/main-industrial-areas-in-china) updated on 08/12/2018

regional small and medium enterprises, and Thailand earned the nick name "Detroit of South Asia"

Another Successful practice of cluster in Thailand was built around the hard disc drive (HDD) industry. A Hard Disc Drive Institute (HDDI) was set up at the behest of the private sector but government provided financial support to facilitate the growth of cluster around the Institute. The HDDI with the participation of global HDD producers, local research institutes and government organizations such as the Board of Investment worked towards strengthening the capabilities of domestic suppliers, and Thailand eventually became the largest exporter of hard disk drives in the world.

One of the best practices of SME cluster development in Malaysia is seen in the successful development of IT clusters in Penang. The distinctive feature of this strategy was the central role played by cluster related institutions such as Penang Development Corporation providing general industry level support, and Penang Skills Development Centre providing critical support for skill development in the clusters.

5.5.5 Additional Insights from the Experience of Other countries

The experience of different countries pertaining to cluster-based SME development can provide useful lessons for Bangladesh striving to promote SME clusters. As we have observed, different countries pursued development of SME clusters from different vantage points. Thus, in the case of Japanese clusters, the focus is on innovation while Chinese clusters are more manufacturing based. Vietnamese clusters evolved more naturally while the clusters in Thailand and Malaysia are more policy driven.

SMEs usually reap the advantages of the natural endowments of a country and contribute to the growth of the economy by ensuring their maximum use through alternative means and intersectoral linkages. The success stories of different countries suggest that government support towards SME development needs to be comprehensive covering not just incubation and birth but also its entire growth process focusing on financial as well as non-financial factors, especially the technological aspects.

Like India, SME clusters in Bangladesh evolved mostly through a natural process. The regional economies of India are benefitting significantly from the natural evolution of these clusters. According to the Indian Ministry of MSME, there were 2,443 clusters in the SME sector in India in 2012 that accounted for 34.85% of total employment. Through the generation of new business and job creation the SME clusters played a vital role in the growth of regional economies in India, which provides important lessons for SME clusterbased growth in Bangladesh.

According to an UNIDO report⁴, Indian approach to cluster development had three distinctive features. These were (i) Need based, being beneficiary led and managed, (ii) Flexible, to match the local dynamic requirements, and (iii) Focused, on intermediary groups, not individual firms. The key factors that contributed to the successful growth of these clusters are narrated below.

Source: Ministry of MSME (http://laghu-udyog.gov.in/clusters/stratools.htm).

i. Existence of one or few large enterprises in clusters

Development of a few strong large enterprises was found to play an important role in raising the awareness of the small clusters in India. Existence of such large enterprises helped the SMEs to channel their products and minimize their production cost. This was seen to happen in the Machine tools cluster of Bangalore, Chittoor Fruit Processing cluster, Heavy Engineering fabrication cluster of Trichy, Rubber cluster of Kottayam, and Hosiery cluster of Tirupur, and it facilitated the entry and growth of smaller firms and the cluster itself (Dinesh Rawat, 2017).

ii. Logistics development

To improve the quality and operational efficiency, clusters require to have better warehouse, cold chain logistics (unbroken from farm to table), better transportation, and ecologically sustainable real estates. Logistics are also necessary for enhancing market access by SME entrepreneurs, specially the women entrepreneurs. Development of such needed logistic has been an important aspect of the growth of Indian clusters.

Pooled labor market of skilled workers: iii.

Training and development of the human resource base is a critical aspect of any development process. There is need for one set of skilled personnel motivated and able to create new businesses and another set with technical skills to meet the growth concerns of the sector. Training on soft skill is necessary to impart workers with business management skills, negotiation skills, and communication skills that may add to the capacity of the enterprises to expand into international markets.

In India, most of the clusters became successful because of access to pooled labor market of skilled workers in their region. According to Rawat et al. (2017), the Chanderi Handloom cluster, Solapur terry towel cluster, Crochet lace cluster of Narsapur, Mojari clusters of Rajasthan, Kannaur handloom cluster, and Hand block printed textile cluster of Jaipur, flourished taking advantage of the presence of such a pool of skilled manpower.

Following this Indian experience, the medium-term SME cluster development strategy in Bangladesh should attach high priority to training and development of the human resource base.

Government intervention iv.

Governments played a critical role in the success of SME cluster-based growth initiative in different countries. One important aspect of this intervention is the implementation of various development projects that focuses on improving and upgrading existing infrastructure and technologies as well as innovation of new technologies that are relevant for SME clusters and contribute towards increasing productivity and efficiency of the clusters. Policy support in the form of easier access to imported raw materials and time bound protection to SME products were also important aspects of government intervention for cluster development in different countries.

Access to finance ν.

A binding constraint to growth of SMEs across countries has been lack of finance, and satisfactory resolution of this problem has been an important contributing factor in SME cluster development. Given the higher cost of loan administration and the need for customeroriented dispensation, the central bank needs to induce banks and financial institutions to wholeheartedly undertake MSME credit programs and innovate new products for the MSMEs.

In Bangladesh, access to finance continues to be a critical factor for the MSME particularly in the case of new and potential entrepreneurs. The problem is likely to become more acute in the post Covid-19 period. The wide array of financing arrangement that has been put in place need to be more effectively implemented for MSME both within and outside clusters. Government support in providing access to finance also needs to be integrated into a comprehensive plan of MSME development requiring government investment as well as policy support.

Critical Components of Manufacturing MSME Development Strategy in the 6. 8th Five Year Plan given the reality of Covid-19 pandemic

6.1 Impacts of Covid -19 on MSMEs and actions necessary during the 8th Five-**Year Plan implementation Period**

While the preparation for adopting the 8th Five Year Plan was progressing, the whole world was exposed to major global health and economic crisis due to a pandemic called Covid-19. To avoid the fatal effects of this virus, economic activities across the world came to a dramatic halt. Bangladesh also adopted a strategy of social distancing and closing of economic activities (except emergency activities) since the last week of March 2020 to end of May 2020. The government announced general holiday for all economic activities excluding the emergency production and services. Inter-city movements of vehicles were restricted. Movement outside home was also under high restriction. As a result, most of the manufacturing MSMEs, like other organizations, remained closed except enterprises involved in food processing, pharmaceuticals, export-oriented garments and production of emergency health equipment. Moreover, closing of markets and shops together with people staying at home, resulted in drastic fall in demand for products produced by manufacturing MSMEs. In particular, the MSMEs that are highly dependent on sales during festival times such as Pahela Baishakh and Eid incurred significant losses due to extended public holidays and movement restrictions. Both the demand and supply shocks, together with rapid decline in the savings of MSME entrepreneurs exposed MSMEs to current and longterm economic risks.

International agencies (Asian Development Bank, World Bank, IMF, OECD, etc.) and individual countries forecasted likely economic and social costs of the Covid-19 global pandemic. In April, 2020, IMF projections showed that an overwhelming majority of global economies to contract in 2020, and the growth in the Asia-Pacific region to hit the lowest since the 1960s.5 Hundreds of millions of people worldwide have lost their jobs. Given the low survival capacity, the MSMEs, throughout the world, are amongst the worst affected, where employment and livelihood struggle has already begun as they are unable to produce and sell their products.

⁵ World Economic Outlook, April 2020.

Bangladesh government declared a stimulus package of Tk. 200 billion to support MSMEs under a refinance scheme. According to Bangladesh Bank Circular (SMESPD Circular no.-1)6, government will provide 5% subsidy on 9% interest to be charged by the commercial banks. As a result, the effective interest rate for the borrowers will be 4%. Under this stimulus package, manufacturing MSMEs will get priority and 50% of the disbursed loan by the commercial banks are to be targeted to such enterprises. Moreover 15% of the loan are to be earmarked for rural enterprises and 70% of the loan are to be given to cottage, micro and small enterprises. Women entrepreneurs will get at least 5 percent of the package which stands at Tk. 1,000 crore, according to the guideline. The loan from this stimulus package are to be given for 3 years. However, this stimulus fund is only for existing business. This cannot be taken to start any new business initiative.

Box-4

Experience with Implementation of Government Stimulus Package for SMEs

Though MSMEs needed the support immediately, the disbursement of the stimulus package has been slow. The banks are usually reluctant to provide credit to MSMEs due to higher risks. The government even announced credit guarantee scheme to cover any loan default by the MSME borrowers. To boost credit to SMEs, government declared further Tk. 20 billion as Credit Guarantee Scheme for the Banks and financial institutions, with a maximum 80% of guarantee coverage provided against working capital loans to SME clients Even after all these initiatives by the government of Bangladesh, the implementation of stimulus package for CMSMEs was 57.96% up to end of January 2021(Bangladesh Bank, 2021) against 91.53% implementation of the Tk330 billion stimulus package for large scale industries. During this period, no bank has utilized the fund for credit guarantee.

As a large number of MSMEs did not receive support from the stimulus package, they have been surviving on depleting their past savings of taking loans from relatives and costly sources.

The whole world is currently going through economic uncertainty and no one knows when there will be an end to the pandemic. Under the circumstances, concerns regarding the manufacturing MSMEs under the 8th Five Year Plan should take into account the following possibilities.

- 1. The dilemma between health risk and livelihood may continue till the pandemic stops (may be after discovery and commercialization of a vaccine). As that could take months, preparation towards restarting business activities must be taken.
- 2. The first year of the five-year plan will be a survival period for the MSMEs, as the MSMEs will not be able to run in full swing either for supply side constraints or for low level of demand from consumers.
- Second and third years will be recovery period as possibly by that time the 3. pandemic will be mostly over, and the market will start to go back to normalcy.
- 4. The last two years of the 8th Five-year plan will be the moving-forward period.

In the light of the above considerations, the strategy for MSME development over the next 5 years needs to be framed in three phases: survival phase, recovery phase and movingforward phase. Based on that phasing, the list of actions that will be necessary during the implementation of the 8th Five year Plan to address the adverse economic impacts of

https://www.bb.org.bd/mediaroom/circulars/smespd/apr132020smespd01.pdf

Covid-19 pandemic are presented in Table 11. This is followed in the next sub-section by a discussion of the steps required for advancement of manufacturing MSMEs.

Table 6.1: Actions needed during the 8th Five-Year Plan implementation period to address the impacts of Covid-19 Pandemic

Phases	Strategic objectives	Necessary Actions
Survival Phase	To sustain the business by maintaining the wages of employees.	Support to the MSMEs to adopt facilities in their workplace to fight adverse health impacts of Covid-19. (guideline for a risk-free workplace, cluster or community-based sanitization facility etc.)
(1 year)		Priority health care services should be provided to factory workers. Workers' insurance for Covid-19 could cover their medical expenses.
		At this phase there will still be the presence of the virus and therefore, it is necessary to expand online marketing platforms together with well-structured home delivery system. This will help to maintain the supply chain both for raw materials and for final goods.
		Quick and proper disbursement of loan from the government stimulus package.
		• Funds can be allocated to micro enterprises in the informal sector through organizations like <i>Palli Karma Sahayak Foundation (PKSF)</i> , Bangladesh NGO Foundation, <i>Amar Bari Amar Khamar</i> , <i>Palli Sanchay Bank</i> etc. This fund can be allocated as loan for 2-year period.
		Where possible fiscal support needs to be given (reducing VAT against rent, providing electricity at a lower cost as generation cost of electricity is now lower with drop in oil price in the international market, raising the tax exempted turnover limit etc.)
Recovery phase	To pull the existing enterprises	 In addition to loan from government stimulus package, assistance needs to be given for access to regular finance (as there is limit to how much an enterprise can borrow from the stimulus package).
(Year 2 and Year 3)		The condition for guarantor should be made easy. Requirement of guarantors is a big constraint for women entrepreneurs of SMEs when they apply for credits from banks. Though it is enough to have one guarantor to apply for a collateral-free loan, many banks ask for at least 2 guarantors.
	initiatives.	 Introduce Credit Guarantee Scheme (CGS) for SME entrepreneurs. Simplify and streamline procedures to access funding from Entrepreneurship Support Fund (ESF) of Bangladesh Bank for SMEs.
		 Special attention should be given to boost the cluster-based SME development initiatives that evolved during the implementation of the 7th five-year plan.
		More support should be given for market access. (more trade fairs, information sharing, campaign for using local products etc.)
		The registration process should be made easy for the new business.
		Productivity enhancing skill development training should be designed.
		ADP projects that support MSME development to be given priority.
Moving- forward	To grow business with increased	 Improvement of market linkages of the MSMEs, both nationally and globally.
phase (Year 4 and	productivity and efficiency, encouraging	Support the MSME development in an environmentally sustainable way, so that the SDG goal for development could be achieved.
Year 5)	innovative startups	Other recommendations given in the next subsection will also be applicable here.

6.2 Further Actions needed for manufacturing MSMEs during the 8th-Five Year Plan implementation

In addition to the actions described in Table 11, several steps are necessary in all three phases noted above, specially, in the last phase of the implementation of the 8th Five-Year Plan. These are summarized in this section. Some of the suggested initiatives follow from the recommendations and action plans mentioned in the four recent studies discussed in the earlier section.

6.2.1 Access to Finance

SMEs often fail to realize their full potential because of inadequate access to finance. The constraint seems to have persisted despite growth of overall credit to SMEs in last couple of years. The situation is likely to worsen due to the devastating economic impacts of Covid-19 pandemic. The abrupt stoppage of economic activities is causing serious depletion of the savings and financial strength of the MSMEs. In the post Covid-19 period therefore, they will require quick access to credit.

The arrangement for upscaled supply of credit to the Covid-19 battered MSME sector needs to be worked out jointly by banks and financial institutions along with SMEF and various business associations. While one set of entrepreneurs with high potential of recovery and growth may have less difficulty in availing these emergency credit facilities, support of SMEF and business associations will be necessary in reaching credit to weaker MSMEs. Easing of collateral requirement and other conditions for access to finance will be the call of the day. Given that MSME women entrepreneurs are likely to be more vulnerable in the present crisis, there is need for the credit facility to be more gender friendly.

The SMEF may extend support to bank's attempt to work out sustainable mode of financing, innovative financing and better regulatory and institutional framework for financing to mitigate the credit needs of the SMEs. SMEF's own credit wholesaling (CWS) program also needs to be expanded in terms of its coverage and volume, and can prove to be an effective window if credit disbursement is done without outside interference. Moreover, CWS could be brought under the refinancing scheme and this may reduce the risk of loan default

6.2.2 Human resource development to enhance productivity

The success stories of SME clusters in some of the Asian countries reviewed earlier clearly demonstrated the critical role of labor skill and technological improvements in raising the productivity and efficiency of the MSMEs and rendering them competitive in the global market. Skill enhancement to raise productivity is likely to assume greater importance in the post Covid-19 days. Unfortunately, Bangladesh lacks adequate institutional facilities and trained personnel to conduct necessary trainings for enhancement of skill with modern technical knowhow. As a result, shortage of skilled workers held back the MSME sector from realizing its growth potential and technological advancement of the sector also faltered. In this respect, the SMEF has the scope of joining hands with the government in organizing cluster-based training facilities to cater to the skill demand of the MSME sector.

To meet the diverse training need of MSMEs, training modules need to be designed in sector specific and cluster specific manner. Opening district based SMEF office can

facilitate such decentralized training process. Possible components of training program include (i) sector-specific vocational training, (ii) sector-specific tailor-made course, (iii) technological training by collaborating with large industry and/university, (iv) computer training for the administrative staffs, (v) training on communication and marketing, (vi) sector-specific worker's training, (vii) entrepreneur and business development training, and (viii) training on production process and product development.

A recent study conducted by BIDS (2016) identified skill gaps in different industries and projected future employment demands and trainings needs in these industries. For example, the study noted that there is need for more training on sewing operations for the RMG sector and training on designing for the leather sector. Although the skill gap study was conducted for all size groups of industries, the picture of skill need for MSMEs is also reflected in the study.

Major restructuring of school curriculum and skill trainings of the labor force is needed to meet the growing demands for skilled and semi-skilled workers in various dynamic sectors of the economy. The training modules should be in line with market demand and the scale of training operations need to be raised many folds. Both public and private sector need to play important roles in implementing the training programs. Currently, the technical training schools in the public sector are the main source of skilled labor catering to the demands from different sectors. Skill training designed for women should include more women instructors, especially for the courses, where physical interaction is needed during training, such as training on use of computer, driving a car etc.

6.2.3 Improvement of Infrastructure and public utilities

Underdeveloped road infrastructure is a major impediment to SME development, in general, and SME clusters, in particular. Reaching SME clusters located in rural areas with modern vehicles is time consuming and costly. Investment in road infrastructure is often held up due to lack of fund. Contribution by cluster associations to public fund may expedite the process of road development, under which the government initially shall bear the large share of the cost of road development, and the clusters, once they grow to a sizeable level, pay back the cost through a development tax. In the light of Covid-19 experience, such initiative may also be required to install health related infrastructure in the cluster areas, such as common facilities for hand washing, disinfecting zones etc. Similar attempts at joint infrastructure development may also be made inside BSCIC industrial estates.

Uninterrupted supply of electricity and gas are essential for smooth conduct of production activities. MSME clusters need to be treated as special economic zones with provision for quick new connection to utility services, and continuous supply of electricity and gas.

6.2.4 Support to expand markets for MSME products

Efficiency and dynamism are important conditions for MSME to act as an engine of growth. This would be reflected in the competitiveness, export capabilities and job opportunities in the sector. The SMEF has been working towards improving the efficiency level by focusing on management and skills and induction of improved technology in production process for improved product quality and innovation. The SMEF efforts need to be extended to cover the whole value chain and explore the scope for enhanced value addition at both domestic and international level.

The weaknesses in the competitiveness of MSMEs arise out of low productivity, lack of innovation, poor product quality, poor packaging, and deficient marketing skills. To enhance the competitiveness of the MSMEs, the SMEF should, therefore, focus on these issues and also create a marketing network for the sector to enable it to become an active player in the international value chain.

An important instrument of the marketing drive should be organization of frequent trade fairs at local, national and international level of adequate duration. This will have very significant impact on market expansion, product diversity and improvements in product quality. MSME entrepreneurs also need to be trained in marketing skills. Government can support the marketing drive by displaying MSME products in popular tourist spots, important government offices and bill boards in busy and populated areas.

Special attention should be given to increased participation and exposure of women entrepreneurs and highlighting successful women entrepreneurs through awards and sponsorship. Women, who are real entrepreneurs, should enjoy preferential treatment in government owned markets. To promote women entrepreneurship, women friendly markets should be developed at district level.

An important vehicle for expanding market access of MSME is use of online platform and utilizing mobile financial services for this purpose. Alibaba in China is a successful example of connecting small entrepreneurs of remote areas of China to broader markets through online market hubs and utilizing the mobile financial services. There have been several attempts at setting up online marketing platforms in Bangladesh, e.g. AjkerDeal, Chaldaal etc. Supporting these moves and removing obstacles to the setting up and growth of such platforms should constitute an important component of marketing support policies for MSMEs. The need for such support has assumed greater importance in the current context of Covid-19 pandemic.

6.2.5 Technology and Innovation

To retain competitiveness both national and internationally, MSMEs need to endeavor constantly to innovate and upgrade technology. There is need for policy support to encourage research and investment to facilitate innovation that will keep MSME entrepreneurs ahead of their competitors. Import of new machinery to access modern technology needs to be supported with necessary information dissemination and import policy. Productivity enhancement with improved technologies is likely to prove quite critical for the recovery and advancement of MSMEs from the adverse impact of Covid-19.

6.2.6 Availability of land and Preferential Treatments

A major constraint to cluster-based SME growth is lack of land for locating the cluster. Emergence and growth of natural clusters are inhibited by paucity of land. Even when land is available potential MSME investors are often discouraged by high price of land. Difficulties in ascertaining the legal status of land also create scope for prolonged litigation after land purchase creating serious problems for the investor. As discussed earlier, some BSCIC industrial estates have been set up to develop particular industries such as jamdani, hosiery, leather and electronics. In addition to these isolated attempts, government should come in a big way allocating khas and unused government land at subsidized price to potential entrepreneurs to facilitate natural emergence of more MSME clusters.

6.2.7 Fiscal Incentives for the SMEs

Existing tax laws provide limited fiscal relief to MSMEs. The new VAT act of 2012 with modifications in 2019 excluded traders having annual turnover up to Tk. 50 lakh from the VAT net, but imposed a 4% turnover tax for the small traders having turnover up to Tk. 3 crore. The VAT registration threshold has been set at Tk. 3 crore which was Tk. 80 lakh earlier. The Finance Bill 2019 also provides VAT exemption facility to a total of 98 products and 42 services. Given the uneven playing field MSMEs face with their largescale counterparts, favorable fiscal dispensations are considered critical for ensuring the competitiveness of MSMEs and facilitating their growth. In the face of devastating effect of Covid-19, the case for further relaxation of tax laws for the MSMEs becomes even stronger.

6.2.8 Easier access to imported inputs

Rapid trade liberalization measures of the early 1990s provided MSMEs in Bangladesh with easier access to imported inputs and facilitated their growth. Later, the process slowed down and widespread use of para tariff reverted the benefit somewhat. The Covid-19 pandemic has worsened the situation as imports of capital machinery and vital inputs from countries affected by the virus has seriously disrupted the supply chain. During the survival and recovery phase from Covid-19 pandemic, there will be critical need for restoring the supply chain and ensuring easier access to all imported inputs including modern machinery by the distressed MSMEs. Easing of import tariff regime, therefore, will have to constitute an important component of future policy support strategy for the MSMEs.

6.2.9 Streamlining the legal and regulatory framework and enhancing business support services

The legal framework in Bangladesh involving contract enforcement, dispute settlement, bankruptcy laws, copyright protection, land titling and labor laws etc. are not very business friendly. There are long standing reform issues that need to be resolved to provide adequate legal protection to legitimate business. The MSMEs are particularly disadvantaged in this regard in the sense that they do not enjoy any differential treatment due to their smaller size and are required to perform the same legal drills as their largescale counterparts.

A similar situation prevails with regard to regulatory rules. The MSMEs are required to meet the same set of regulatory compliance as the larger units. Worse still, the regulatory approvals have to be obtained separately from each agency, which involves high transaction costs raising overhead costs for the MSMEs per unit of their output compared to their largescale counterparts.

There is, thus, the critical need for simplifying and streamlining all these regulatory and legal provisions and bringing them under one unified arrangement to make them more enabling and less restrictive for the MSMEs. The burden on the MSME investor could also be eased by delegating some of these authorities to the Chamber bodies. SME Policy 2019 have a number of reform measures along these lines, whose early implementation will significantly improve the investment regime for the MSMEs.

MSMEs also suffer from grossly inadequate business support facilities from institutional sources. Product development, technological improvements, market promotions, and quality controls are the especially deficient areas of business support measures. To remedy

the situation, public sector agencies such as BSCIC, Bangladesh Standards and Testing Institution (BSTI) etc. should have close collaboration with the trade bodies. For example, there is the need for trade specific initiative to set up standards as per international requirements. With support from matching grant facilities, the trade bodies can play an important role in this regard and in helping member enterprises to get internationally recognized certification.

6.2.10 Targeting public expenditure towards augmenting demand

Rapid growth in per capita income in Bangladesh during the past decade raised domestic aggregate demand and was an important factor contributing to the growth of MSMEs. Growth in per capita income, in turn, was driven mainly by three factors, namely, rise in (i) remittance, (ii) export, and (iii) public expenditure. Of these, the first two are, somewhat, dependent on exogenous factors, while the size of public expenditure is determined mainly by the government.

Increased public expenditure, particularly on rural infrastructure and in support of agriculture is a double-edged sword. On the one hand, it eases supply constraint by improving access of producers to relevant inputs. On the other hand, the positive impact on rural income created by infrastructure and agricultural development boosts rural demand. Since the demand structure of this segment of the population is more oriented towards local products, it contributes towards growth and expansion of SMEs catering to domestic market.

The role of public expenditure assumes special importance in the context of Covid-19 pandemic. Along with the stimulus packages designed to provide support to various production sectors to recover from the stalemate, increased public expenditure including cash disbursement to the severely affected households will help revamp domestic demand and expedite the process of recovery, particularly of the MSMEs.

7. **Concluding remarks**

According to the latest available survey (SMI 2019), MSMEs constitute a significant component of the manufacturing sector in Bangladesh having 10 or more workers, accounting for 93.5% of the establishments, 31.5% of employment and 26.1% of gross value added. To reap the growth linkages of the MSMEs, the 7th Five Year Plan focused on identifying niches where MSMEs had comparative advantage and then promoting these activities through policy and institutional support. In that pursuit, the cluster-based development of MSME achieved considerable success.

The latest survey results have shown that Small industry, which enjoyed highest level of productivity within the manufacturing sector experienced respectable yearly compound growth in the number of establishments (6.0%), number of persons engaged (6.23%), value added (9.89%), and modest growth in labor productivity (1.23%) during 2012-19. However, the potentials of the MSMEs remained far from realized as both Micro and Medium industries could not display the same level of dynamism as their small-scale counterpart. The analysis in this study has brought out quite clearly that the basic constraints facing the MSMEs involving access to finance particularly by the women entrepreneurs, need for human resource development, improved infrastructure and utility services, access to market, availability of land, adequate fiscal support, shortage of demand etc. continue to restrict the scope of MSMEs to flourish.

The 8th Five Year Plan aims at consolidating the gains achieved during the 7th Five Year Plan and scaling up measures such as cluster-based development and women entrepreneurship development that proved effective means of promoting MSME while putting in place comprehensive policy and institutional framework to address lingering constraints to the development of the sector. In this context, the 60 action plans delineated in the SME Policy 2019 provides the relevant reference point for detailing out components of MSME development strategy to be incorporated in the 8th Five Year Plan.

While the preparation for devising strategies for MSME development in next five years was in progress, the whole world has been exposed to Covid-19 Pandemic. The world has entered in a state of economic recession. Bangladesh is no exception to that. The economy is experiencing both demand and supply side sluggishness. As a result, the regular path of development of the manufacturing MSMEs has become uncertain. At this backdrop, this paper has devised a three-phase MSME development plan to be implemented during the next five years.

Because of the pandemic induced health and economic crisis, the immediate concern for the MSME entrepreneurs is to survive the situation together with their workers both healthwise and financially. There is need to ensure that the MSMEs restart their production and sales without causing much health risks.

The stimulus package that has been designed for the CMSMEs by the Bangladesh Bank will require coordinated action to ensure proper implementation. Development institutions such as SMEF and the chamber bodies need to join hands with banks and financial institutions to facilitate quick channeling of fund to the distressed MSMEs with eased provisions for collateral particularly in the case of women entrepreneurs. Micro enterprises which remained outside the banking channel need to be provided with financial support by bringing on board organizations such as PKSF, MIDAS to provide necessary logistics.

In the medium term, support measures should include fiscal reliefs in the form of raising of tax exempted turnover limit, waiver of VAT at certain stages etc. At the same time, ADP projects that are related to the development of MSMEs should be implemented with priority.

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