Chapter 4

Post-Graduation Globalization Trends and Challenges

4.1. Overview

LDC graduation is unquestionably one of the greatest national achievements and a worthwhile international recognition of substantial progress made by Bangladesh over past few decades. The graduation can also be seen as a giant step towards Bangladesh's deeper economic integration with the global economy without the need for specific support measures granted for the poorest and most vulnerable countries. But, when seen from the context of the current global environment, this accomplishment could not have come at a more inconvenient time. The global economy has embraced a series of unfavourable events in recent times. Once unanimously accepted norms of the international trade regime and globalization are now subject to unjustified scrutinies giving rise to potential adverse consequences for many developing countries that for a long period considered international trade as an engine of economic growth and prosperity. Amongst others, trade slowdown, and faltering economic recovery, rise of economic protectionism, uncertain fate of the multilateral trading system, and the potential impact of automation on employment in the upcoming industrial revolution have now become important concerns facing trade-led globalisation. This chapter attempts to discuss those issues and their implications for Bangladesh. In addition, the chapter sheds light on transition period experiences of former LDCs from relevant perspectives.

4.2. Global Economic Context - Global Recovery, Output and Trade Trends

In many respects, Bangladesh is graduating out of the LDC status at a time when global economy is going through uncharted waters with prolonged levels of inauspicious forecasts. And, the unprecedented slowdown in international trade is one consequence of the unfavourable circumstances. Since the Global Financial Crisis of 2008 and subsequent recessions in the Western developed countries, global trade has experienced extremely sluggish growth trends. Although there were indications of early recovery in immediate post-recession years, the pace of revival has been rather slow in more recent years. Until now, Bangladesh is one of a very few countries in the world that has remained relatively less affected by the fluctuations of international trade. But, as LDC graduation looms large and an increased level of integration with a competitive system of global economy is on the cards, there are reasons for Bangladesh to be more attentive to global economic and trade landscape.

Even after more than a decade after the financial crisis, the world economy is still struggling to return to its pre-crisis era export growth trajectory. Global trade has been on the rise since the inception of the World Trade Organization, and its successful early negotiations for trade liberalization. Withstanding cyclical recessionary impacts, global trade saw a steady average expansion of above 6 percent per year between 1990-2008. This growth is even higher if we consider it from 1980 (about 6.5 percent annually). But the scenario changed drastically since the financial crisis. The average annual trade volume growth for 2012-16 has been 2.9%, which is less than half the comparable growth achieved during the 1990s and 2000-08. If IMF projections turn out to be correct, 2012-21 would be the slowest decade of trade expansion since the second world war.

30 15% 10% 5% 10% 5% 15% 10% 5

Figure 4.1: Global exports of goods and services (1990-2018)

Source: Based on IMF data

The magnitude of this slowdown is somewhat hidden underneath when the data on 'real' or 'volume' growth is used (Razzaque, 2017). Measured in current US dollar terms (shown in Figure 4.1), world exports of goods and services contracted by an astounding \$2.8 trillion in 2015 (from 2014) and then again fell by about \$500 billion in 2016 (from 2015). That is, in value terms, global exports of goods and services in 2015 declined by almost 11 percent followed by another 3.5 percent drop in 2016. As a result, global exports in 2016 were just roughly around the same level as in 2008. The situation has slightly improved in 2017 and 2018. While they are much appreciated tailwind in a difficult time, trend of slow growth persists strongly across the globe.

The rate of economic recovery has been largely uneven. Figure 4.2 shows the rate of average annual growth of real GDP since the crisis for few selected economies. The rate of GDP expansion appears to have peaked in some major economies and growth has become less synchronized. After decades of fast growth, China has started showing signs of sluggishness with lower than 7 percent GDP growth since 2015. Other large developing economies including Brazil, Mexico, Turkey have started to slow down. Developed economies have been the prime victims of the financial crisis and the following recession. Although USA has indicated stronger recovery (more than 2.5 percent growth rate) in last couple of years, other advanced economies are far from it. OECD countries including Japan, Canada, Australia, UK and the EU are growing at lower than 2 percent rate per year. Overall, the global economy has increased at rate of only 2.47 percent between 2008-2018.

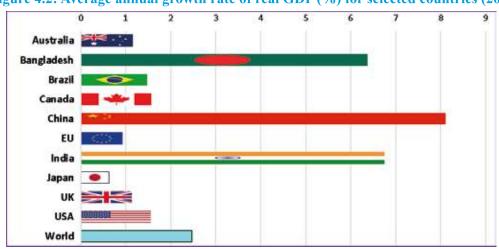


Figure 4.2: Average annual growth rate of real GDP (%) for selected countries (2008-2018)

Source: Based on IMF data

This trend of weak global trade expansion has adverse effects on LDCs as well. Securing stronger participation of the poorest, most vulnerable countries (including the LDCs) in world trade has been a longstanding international development objective. Although some decent progress was made regarding this during the 2000s, consequences in the aftermath of the 2008 financial crisis have reversed the trend. During 2000–2008, LDC exports grew almost five-fold, from U\$ 43 billion to about U\$ 200 billion. But in 2015, LDC exports stood just about the same as in 2008, only at US\$201 billion (Razzaque 2016). Moreover, export-to-GDP ratios of LDCs have been on average about 25 percent since 2008, substantially below the developing country average of about 35 percent.

Even under these critical periods of global trade, Bangladesh has maintained a stellar performance to secure growth in merchandised exports. In fact, Bangladesh became the best performing LDC in terms export by a distant margin. During the 1980s, Bangladeshi merchandise exports grew by \$0.5 billion. In the following decades, that expanded rapidly: by \$3.4 billion in the 1990s, followed by another \$10 billion in the 2000s; and then a staggering \$20 billion between 2010 and 2018, when the total exports crossed \$36.6 billion mark. Bangladesh managed to attain a radical structural shift in exports, moving towards manufacturing exports (RMG) from traditional agricultural goods (Jute, tea, fish etc.). This is something that most countries from sub-Saharan Africa and Latin America have been unable to do despite having more favourable foothold in the race and better starting positions. Between 1990 and 2016 while world merchandise exports grew at a compound annual average rate of 5.8 percent, Bangladesh managed to grow twice as fast. Since 1990, Bangladesh has seen a four-fold rise in its share in world exports in comparison with 1.75 times achieved by LDCs (Figures 4.3 and 4.4)

Figure 4.3: Evolution of Bangladeshi Merchandise Exports

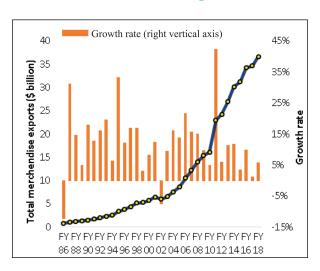
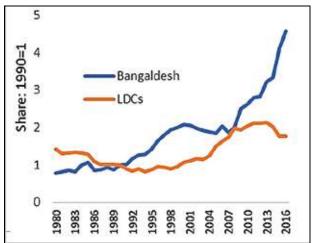


Figure 4.4: Bangladesh and LDCs Growth of Share in Global Exports (as %)



Source: Razzaque (2017)

Despite these improvements, Bangladesh is not immune to the existing trends of the global market. Especially, uneven expansion of the global economy has strong implications for the local exporters. The developed economies are most prominent export destinations of Bangladesh. Their difficulties in attaining full-speed recovery is costing export prospects of local manufacturers. Primarily, weakened economic progress of the European Union, Canada, Japan and Australia result into weaker aggregate demand in those markets. If significant unemployment or underemployment persist in those countries, consumers spending will fall. Even though Bangladesh's export performance remained impressively resilient and increased in the midst of all the turmoil, the country cannot materialise its full potential with a slowed-down global economy.

Another important consequence of the slow global economy and international trade is the potential impact in achieving sustainable development goals (SDGs). The 2030 Agenda for SDG provides an elabourate role – both direct as well as cross-cutting – for international trade in achieving many specific goals (SDGs) and targets. Trade appears directly under seven goals concerning hunger, health and wellbeing, employment, infrastructure, inequality, conservative use of oceans, and strengthening partnerships (Razzaque 2016). Compared to MDGs, the SDGs go further in clearly identifying the 'means of implementation', where trade has been given a prominent role. The ability of trade in creating wealth through value addition and then magnifying it through the value chains, makes it an enormously powerful component in pursuit of attains inclusive growth.

As we already know, LDCs suffer from structural capacity and other constraints which restricts them from participating in meaningful value addition. International trade offers them an opportunity to attain inclusive and sustainable development in the LDCs. As LDCs become further integrated with global value chains, their contribution in trade increases. This allows them to have access to crucial foreign exchange and capital stock for future investments. According to the World Investment Report 2014 of UNCTAD, developing and least developed economies face an annual investment gap of \$2.5 trillion per year in meeting the SDGs. Therefore, it is high time for the global community to consider actions that will revive global trade flows and enhance the participation of LDCs including Bangladesh in improving the situation.

4.3. Coping with Rising Protectionism in Developed Countries

In a period when global economy is already suffering from post-recession inertia and failing to pick up strong pace of recovery, surge of protectionist trade policies has emerged as a new obstacle in path of promoting inclusive growth through international trade. While a number of cyclical components such as weak prices of energy or metal items and several structural factors like consolidation of global value chains has contributed to the persistence of global trade slowdown, protectionist trade interventions by advanced economies has also played its part in the process. In fact, the arrival of economic protectionism in the worst performing decade for trade growths has cornered any efforts of international commerce liberalisation.

In general sense, protectionism refers to act of shielding domestic industries of a country by imposing higher tariffs on imports, or by imposing non-tariff barriers such as import quotas and numerous red-tape restrictions. While apologists of economic protectionism argue for saving domestic producers, businesses, and workers of the import-competing sectors foreign competitors, protectionist measures are inherently distortionary by nature. They harm welfare of consumers, impedes international trade and incentivises uncompetitive sunshade industries to continue production. It also encourages countries to retaliate against each other by causing trade disputes to full-scale trade wars.

To understand what fueled the current specter of global protectionism, which has become evident with implementation of "economic nationalism" in some western democracies, it is important to understand how global trade has affected other economic ingredients across the globe. There is a clear consensus among economists about trade liberalisation improving wealth and income, and free trade benefiting a country as a whole. It is equally true that both protectionism, and system of free trade creates winners and losers. While protectionism ends up handpicking winners amongst industries and jobs which are more influential to governments, free trade picks its winners based on competition. Jobs and industries that are less competitive cedes to more competitive foreign entities. But far more importantly for any country, freer trade means cut in consumer prices, increased wealth, higher productivity and higher efficiency in allocation of resources. Setbacks of less competitive or uncompetitive businesses in a country gradually open up investment and expansion opportunities to more competitive industries of the same country. This mostly translates into concentrating efforts on items in which the country has comparative advantage. For Bangladesh, a shift towards liberalisation during 1980's and 1990's from heavily protectionist regime resulted into a boom in more competitive RMG sector and overtook jute from being the prominent export item.

Inevitably, free trade can have adverse distributional consequences and can affect certain population groups. Addressing this will require effectitve policy measures from governments. In case of some western democracies, progressive trade liberalisation displaced significant amount of manufacturing job overseas, to more competitive workers of emerging economies. If substantial number of losers from global trade are left to the hands of markets without adequate government interventions, they are more likely to remain unemployed or underemployed, and become increasingly reliant on social protection. Without investing in workers, developing human capital and enhancing productivity of workers, the gains from free-trade give asymmetric rise to wealth inequality. And when this inequality is translated into socio-political system, it creates faction and aversion towards global trade. For example, according to the estimates of Economic Policy Institute of United States, the North American Free Trade Agreement has resulted in 682,000 jobs to be lost or displaced from USA.

Such results may create mass-disapproval about free-trade agreements and the constituencies with highest job displacement become increasingly skeptical about future trade agreements. In addition to that, several political-economic factors, such as role of private financial institutions in global economic meltdown of 2008, use of scarce public funds in commercial bailouts and slow pace of economic recovery have resulted in groups of disaffected population worldwide. High income-inequality and stagnant real wages in many advanced democracies added fuel to the fire. And the refugee crisis across the globe exacerbated this situation with rise of anti-immigration political narratives. Under these circumstances, populist political ideologies that identify globalisation and free trade as threatening component for national economic integrity received public appreciation. And the dismal state of affairs has accentuated when anti-globalist agendas resulted political upheavals in elections of Europe and the USA.

The globalisation backlash resulted from global financial crisis has also fueled a rise in protectionism, with different countries implementing various trade-restrictive measures. Most protectionist measures in the existing global system proliferated and persisted since the crisis. At that period, both advanced and developing economies started applying protectionist options to safeguard their economy from global fluctuations. The WTO estimates a total of 1,583 trade restrictive measures have been imposed by G20 countries since November 2008, and only a quarter of these measures have been removed. These restrictions have had a detrimental impact on trade flows, particularly for the world's poorest countries. According to another estimate (Evenett & Fritz, 2015), LDCs have incurred a loss of \$264 billion in exports as a result of these protectionist measures. In other words, the value of LDC exports could have been 31 percent higher if post-crisis protectionism had been avoided.

Just like other LDCs, Bangladesh has also been affected by these protectionist measures. According to the global trade alert (2019), there are 57 protectionist interventions that harm Bangladeshi export initiatives. On the contrary, Bangladesh experienced only 29 interventions since the crisis from foreign governments which were liberalising in nature or promoted trade. In more recent times, two largest economies of the world got embroiled in retaliatory trade disputes, starting with USA imposing a series of high tariff on Chinese imports. But Pew research center (2018) pointed out, Bangladesh pays highest amount of tariff on total import value in the US market (Figure 4.5). This is because, Bangladesh does not receive any generalised system of preference in US market, and the MFN tariffs set by US authorities for the most prominent Bangladeshi export (RMG) is high.

Global avg.
China
Moldava
Myanmar
Vietnam
Pakistan
Sri Lanka
Cambodia
Bangladesh

0 2 4 6 8 10 12 14 16

Figure 4.5: US duties as a percent of the total value of imports

Source: Pew Research Centre (2018).

As the global economy goes through a difficult time, there is a significant possibility that the increasingly anti-trade political rhetoric could spin out of control, with damaging consequences for the international community. The European Central Bank assumes that global trade will grow at slower rate in 2019 than previous year and rise of protectionist trade regimes is a primary contributing factor behind that situation. Consequently, Asian Development Bank has also issued warnings about slower continental growth over the next two years due to softer demands and persistent trade tensions (2019). Nonetheless, the future prospects are not necessarily bleak for Bangladesh. Small scale trade disputes between advanced and major developing economies may divert investments to alternative sources of emerging markets. Such trade spats between big economies creates short or medium-term demand for suppliers who are competitive enough to deliver under difficult circumstances. If local exporters are keen and competitive enough to attract some of those attentions, it may end up giving Bangladesh an additional boost to exports during the LDC transition, while some preferential market access are still available. However, in case of a full-scale global trade war, all countries, including Bangladesh, may end up losing valuable share of exports and face further trade slowdown. Despite progress, Bangladesh itself continues to impose high trade protection. One important policy question is whether trade protection helped GDP growth. On the surface it would appear that high GDP growth co-existed with high trade protection. Indeed, as shown in Figure 4.6, impressive economic growth has been accompanied by a much higher level of tariff protection than all other successful developing countries including China, India, Indonesia, Malaysia, the Philippines and Vietnam. During the period 2010-17, except for just one (Chad), there was no country that had applied tariff rate higher than Bangladesh (approximately 12 percent) and achieved average growth rate higher than Bangladesh. However, this simple correlation is misleading.

The two major drivers of growth have been the RMG exports revolution and the surge in foreign remittances both of which were associated with an open trade and factor market regime. Indeed, there is evidence that trade protection-based manufacturing performed worse than export-oriented manufacturing. Similarly, job creation was better in export-oriented RMG than trade-protected domestic industries (Ahmed and Sattar 2019). Furthermore, as explored in detail in chapter 5, large trade protection has created a major anti-export bias that has hurt export diversification and export growth.

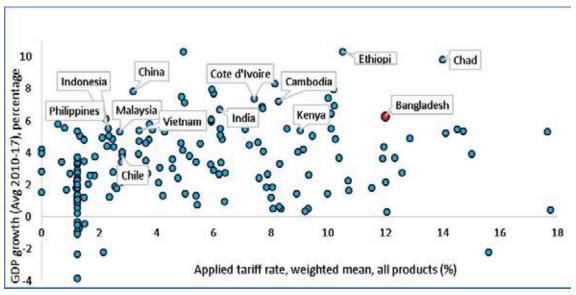


Figure 4.6: Economic Growth and Tariff Protection (2010-2017)

Source: (Razzaque, 2018); based on World Bank data.

In addition to the need to lower trade protection to promote export diversification, with LDC graduation on the cards, trade liberalization will become an issue of concern. Bangladesh will have to trim down certain protectionist measures for remaining consistent with core WTO trade agreements. This will be a test of prudence of policymakers and adaptiveness of domestic industries. However, in a world scenario where protectionism is rising, Bangladesh cannot single handedly cut own tariff rates and open the market for other parties. This calls for strong trade negotiations and engaging in meaningful regional or bilateral trade agreements. Discussions in the following sections will shed light on these issues.

4.4. State of Multilateralism; Rise of Regional and Plurilateral Trade Agreements

International trade has been the primary engine of facilitating income and accumulating wealth around the world in the post-WWII period. The goal of progressive trade liberalisation has been universally accepted and pursued under the singular body of the multilateral trade regime (GATT since 1948, which became WTO in 1994) for nearly seven decades. During this period, trade restrictions have been significantly reduced, non-tariff barriers have been cut drastically and applicable tariff rates have been slashed down to record low levels worldwide. Nonetheless, nearly twenty years after the World Trade Organization's establishment, trade multilateralism has reached at crossroads. With Doha Development Agenda (DDA) negotiations going on since 2001, WTOs role, relevance or competency in greater trade liberalisation and providing relevant governance are under increased scrutiny. At the same time, with proliferation and deepening of regional trading arrangements (RTAs), control over new or broader horizon of international trade rules are leaning towards individual economies. Therefore, the organization is becoming sidelined and its members are showing increasingly greater reluctance in multilateral trade discussions. As LDC graduation approaches alongside a stalled multilateral trade regime, Bangladesh is also confronted with a challenge of expanding exports through outside multilateralism-through bilateral and regional trade negotiations.

Under the current structure of global trade governance, most countries including Bangladesh are involved in two broad types of trading arrangements. The first one is multilateral trading arrangements and processes led by WTO. While the rests fall under broad definition of preferential or regional trading agreements (PTAs or RTAs). When RTAs contain several signatories across continents, they become mega-RTAs (such as proposed Transatlantic Trade and Investment Partnership). Another type of arrangement- the plurilateral agreements are negotiated under facilities of multilateral system, but they do not include all members of that system. When WTO members are given choices to agree or decline a new set rules on a voluntary basis, it becomes a plurilateral trade agreement. Besides, there exists many other forms of trade cooperation arrangements that are often reflected in motion of unions and agreements between countries. These instruments could include expression of intent for increased trade and investment flows, initiating trade negotiations, greater cooperation involving the private sectors, etc. with many of the provisions being non-committal in nature. However, any legally binding trading arrangements must be consistent with WTO rules.

Although, the WTO is based upon a key principle of non-discrimination between signatories (i.e. not favouring one trading partner over another), one major exception allows enabling members to sign RTAs. Three sets of WTO rules will have to be observed before entering any bilateral or regional trading arrangements. These rules relate to the formation and operation of RTAs (including customs union and free trade areas) covering trade in goods (Article XXIV of the General Agreement on Tariffs and Trade 1994), regional or global arrangements for trade in goods between developing country members (the Enabling Clause), as well as agreements covering trade in services (Article V of the General Agreement on Trade in Services). The WTO requires that, RTAs must cover 'substantially all trade' unless they are under the Enabling Clause. However, there is no quantitatively specified definition for substantially all trade.

When the WTO was established after Uruguay round (1986-1994) negotiation of GATT, it was meant to be the parliament of international trade, dictating terms through an all-encompassing system of multilateralism, and achieve a freer world for global economy that pushes for globalisation agendas through negotiation and progressive liberalisation of trade barriers. On the other hand, it was also meant to be the enforcer of the regime by using its even-handed dispute settlement mechanism and making sure members abide by the binding agreements. The WTO managed to bring countries from both developed and developing economies on the same table and provided equal footing in negotiation process.

It also managed to acknowledge the supply side constraints of LDCs and necessity of special & differential treatment (S&DT) for most vulnerable countries of the world, through necessary provisions in binding agreements²⁴. In order to streamline the system of global trade, the WTO provided a singular stage where the weakest countries can represent their stakes in global trade as the strongest one.

Despite all these improvements, the multilateral trade negotiations have been moribund since the beginning of this century. When the center piece of the WTO - the Doha Development Agenda (DDA) negotiations started in 2001, signatories envisaged concluding the round within three years. From the traditional subjects such as agriculture and industrial products to the new generation issues like services, investment, competition and the environment-the original mandate of DDA negotiations included numerous topics relevant to both developed and developing world. After 18 years of being a virtual stalemate, this is now the longest running trade round in the history of the multilateral trading system, with no clear direction in future. These stagnant conditions have frustrated members up to such extents that most countries are now redirecting their negotiation resources in conducting bilateral FTAs or RTAs.

In the earlier stages of global trade negotiations, regionalism was thought to be a faster way of reaching multilateralism. Many protectionist and small economies preferred taking smaller steps towards trade liberalisation by opening domestic markets to regional or prominent trade partners first. The WTO also encouraged members in RTA, by setting up basic frameworks or laying down groundwork for agreements with binding agreements like GATT, GATS, TRIPS. This trend of trade liberalisation in early 1990's saw a boom in regionalism. And global trade started picking up pace, which continued an average growth of 6 percent till 2008. Figure 4.7 shows how RTAs proliferated over the years. In many cases, countries aggressively signed a number of RTAs with their trading partners, which resulted in some redundant agreements. As of April 2019, there were 289 physical RTAs in force, while the WTO has been directly notified about 686 RTAs (active and dormant). Currently, G20 country members of the WTO often interpret it as covering 80 percent of all trade between the RTA partners (South Center, 2008).

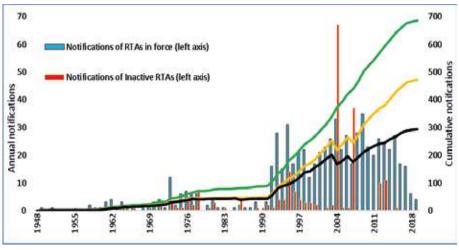


Figure 4.7: Active and Inactive RTAs (1948-2019)

Source: Based on WTO data

²⁴ These S&DT preferences are given at Annex 5.A.

This proliferation of RTAs soon emerged as a stumbling block to multilateralism itself. One of the biggest problems with regional, preferential and bilateral trade deals is that they discriminate against excluded members. As a result, every time an RTA is signed, excluded members face substantial preference erosion. For example, when the USA signed African Growth and Opportunity Act (AGOA) and offered DFQF access for numerous products originated from Sub-Saharan Africa, it caused a discrimination against non-African LDCs, including Bangladesh. It made African products more competitive in the US market, at the expense of products from excluded parties. These DFQF access from AGOA resulted in a boom of apparel industry in southern African countries. While a more competitive RMG exporters from Bangladesh pay more than 15 percent tariff on exported value. As we can see, discrimination caused by RTAs are distortionary in nature, as more competitive producers are forced to pay a high MFN tariff, while uncompetitive actors are made competitive artificially and get access to greater markets.

Apart from being trade distortionary, regionalism can even become detrimental for trade liberalisation. Instead of expanding trade, large number of trade arrangements between different countries can even slow it down. Signing multiple FTAs creates complication in applying domestic rules of origin, a situation termed as the "spaghetti bowl effect". Such phenomenon leads to discriminatory trade policy, as the same commodity is subjected to different tariffs and tariff reduction trajectories for the purpose of domestic preferences. With the increase in FTAs throughout the international economy, the phenomenon has led to paradoxical, and often contradictory outcomes amongst bilateral and multilateral trade partners. In addition to these issues, engaging in RTAs or FTAs require a combination of significant resources including skilled negotiators, trade experts, legal professionals, academics, unison of different private industries, time and money. These are scarce in most small and vulnerable countries. That being the case, LDCs rely more on successful negotiations from WTO as it is not possible for them to engage in many regional agreements,

It can be also noted that, the proposed mega-regional arrangements such as The Comprehensive and Progressive Agreement for Trans Pacific Partnership (CPTPP), flagrantly discriminate against every single excluded actors of global trade, especially emerging economies and all LDCs including Bangladesh. In many cases, mega-regionals agreements are politicised, and uses trade as a weapon to enforce geopolitical hierarchy. Therefore, in several ways, the original multilateral dream of trade liberalisation is facing dire consequences from multiplication of RTAs. And the WTO's agenda of economic integration is being thrown in the backseat, with countries showing reluctance in making meaningful multilateral progress and providing more efforts in RTA negotiations. Therefore, regionalism has eventually turned into stumbling block in the path of multilateralism and greater international integration, instead of helping the original cause.

Although the WTO is going through virtually a stalemate with both developed and developing countries being protective about their interests and repeatedly declining to make necessary concessions about individual demands, enforcement of the Trade Facilitation Agreement (TFA) came as a glimmer of hope. Despite being a plurilateral agreement, it has potentials to increase global merchandise export by \$1 trillion per annum. This deal is considered one of the most important achievements of WTO since establishment. As explained in earlier chapter, TFA makes especial considerations for LDCs with technical supports, longer implementation window and softer provisions. After ratifying the TFA as the 94th country in 2016, Bangladesh is currently at the implementation stage of this agreement. Overall, Bangladesh has been tremendously benefited from WTO provisions.

Supports through LDC specific enabling clause, S&DT preferences, TRIPS waiver, services waiver have been discussed earlier. The country also served twice as the coordinator of the LDCs in Geneva in 2007 and in 2011, leading negotiations on behalf of the group, championing their interests in various areas including greater market access, increased flexibility in the development of multilateral trade rules, and targeted assistance for improving trade infrastructure among others.

Despite the challenges, rules-based multilateralism is an indispensable global public good (The Commonwealth, 2015). Through its trade rules and binding dispute settlement system, the WTO-led multilateral trading system formally provides a level playing field to all its members. There is an urgent imperative for those who wish to promote a sustainable, inclusive, equitable and dynamic global rules-based multilateral agenda to rally forces. In the absence of a strong and effective multilateral trade regimes, LDCs and small actors of global economy are the biggest losers. The Istanbul Programme of Action (IPoA) of 2011-2020 for LDCs set a target to double the LDC share of global exports by 2020. This share was 1.05 percent at the beginning of IPoA implementation, then declined to 0.96 percent in 2015. And the average share of LDC export in global economy between 2009-2016 was only 0.91 percent (UNCTAD, 2018). Without a successful multilateral leading progressive trade liberalisation, global trade cannot recover post-recession flows, and objectives like export expansion from LDCs cannot be achieved.

Against these backdrops, Bangladesh will now have to look for the practical options in securing its trading interest. Instead of traditional policies, medium to long-term negotiation stances from the position of a developing country will have to be devised. It might require actively engaging in the negotiations by forming coalitions with other graduating LDCs or non-LDC developing countries in various areas of interests. On the contrary, Bangladesh will also have to catch up the advanced and tactically strong emerging economies by actively engaging in regional or bilateral free trade agreements. The standstill of multilateralism could many more years to result in meaningful outcomes. In the meantime, Bangladesh must ensure a strong footing in global market by strengthening exports and securing favourable terms of business with prominent partners.

The Government of Bangladesh has received proposals for potential bilateral trade arrangements from several countries including China, Malaysia and Thailand in recent years. Some analysts suggest that under the current unorthodox protectionist approaches by the United States and some European governments to trade negotiations, Bangladesh would be an attractive country for a potential bilateral deal. Post-LDC Bangladesh may have to negotiate a trading arrangement with the EU along with the possibility of an FTA with the post-Brexit United Kingdom. But as it stands today, Bangladesh neither has the adequate capacities or experiences for strong trade negotiations and signing comprehensive FTAs. Therefore, the Ministry of Commerce is currently emphasizing on developing trade negotiation capacity and practical experience of that matter²⁵.

²⁵ Currently, the government is in the process of negotiating FTA with Sri Lanka, which is a relatively small country with the current bilateral trade flows (exports plus imports) with it being small (around \$160 million). Despite a priori expectation of limited trade and economic gains, one reason for pursuing this FTA is to develop some capacity to deal with the challenges of more demanding negotiations in the future.

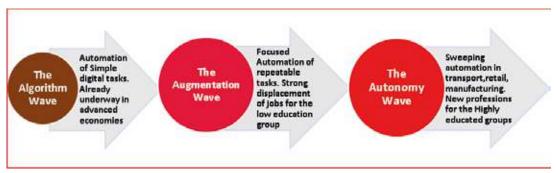
4.5. Industry and Trade Under the Fourth Industrial and Technology Revolution

As Bangladesh is set to graduate out of the LDC status, a global scale fourth industrial revolution powered by cutting-edge technology is also on the horizon. As civilization went through a progressively rapid set of changes, new scientific developments made unthinkable economic growth possible, helping to close down the productivity gaps between advanced and developing world. It also inundates the old institution and methods of production in the process. As the 21st century world prepares for a new age economic transformation, mechanisation or automation has reached a new height emerging as a serious problem for job creation. Previously what was thought to be simple "creative destruction" or process of 'industrial mutation' that incessantly revolutionizes the economic structure from within, is now showing signs of emerging problems with sheer magnitude thereby disrupting the predictable trends of global economic output and livelihoods. Automation happens to be one of those issues that just might arise as an obstacle in the path of achieving inclusive growth. Like any other country of the world, Bangladesh also needs to be cautious and well-prepared about approaching this future.

Technology has dramatically altered what it means for many people to work. But, at times technological advancement also comes with automation. This is however not something new. Notable previous impact goes back to the 19th century when handloom and other jobs of British textile workers were replaced by mechanised production. Innovations in production line automated many industrialised jobs during the boom of industrial production in the 1920s. Automation in the new millennium however comes with a completely different dimension. Jointly with the rise of artificial intelligence (AI), developments made in machine learning process and availability of industrial robots make new the waves of automation completely different from anything the world has ever experienced. While automation will result in more efficiency, faster production, lower costs, increased outputs and it is meant to make life easier for people by completing mundane and repeated tasks, its absolute ability to displace human jobs across manufacturing, agriculture and service sector poses unprecedented threat for global employment levels.

According PricewaterhouseCoopers estimations, job displacement, or automation is likely to impact economies around the world in three phases (Figure 4.8). The first stage, termed as the algorithm wave, has already started in developed economies. Powered by highly functionable algorithms, simple digitalised tasks will be automated first. The financial, professional and technical services, and information and communications sectors are likely to be the most affected in this phase. The second phase of augmentation wave is likely to start by the end of next decade when repeated tasks in manufacturing, service and agriculture will be taken up by machines. Finally, the third phase is expected to start in the 2030s. Use of AI and robotics are going to be widespread during this phase. With driverless transports, self-checkout counters, and completely automated factories becoming more omnipresent around this time, chances are that more than half of traditional jobs will be destroyed for good. According to recent research by the McKinsey Global Institute, up to 800 million workers globally will lose their jobs by 2030, to be replaced by robotic automation.

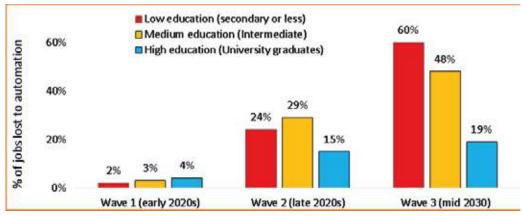
Figure 4.8: Three Stages of Automation in the Fourth Industrial Revolution



Source: Based on PwC, 2018.

It is important to note that the impact of automation is likely to be different for gender and educational backgrounds. In the first two phases of automation, women are likely to be hit harder. In the algorithm and augmented phase, jobs that are considered female friendly, such as repeated tasks in service or manufacturing sector will be replaced quickly. By the third phase, impact is thought to be wider, affecting all major fields and professions in the economy. Jobs that are traditionally held by men will be affected more in the third phase. For educational background, staying relevant to the with new innovations is key to alter impacts of automation. But it does not guarantee an employment when machines take over. By the augmentation and autonomy stages, groups of people with low education will be hit harder (Figure 4.9). Close to 60 percent of jobs held by low- educated groups may not survive till the third phase.

Figure 4.9: Impact of Automation on Job Displacement by Education Level



Source: Based on PWC, 2018 and OECD stats

University graduates, and especially graduates from science, technology, engineering, and mathematics (STEM) fields are more likely to remain protected. Technological development will also result in the generation of a plethora of new jobs and novel professions. It is now quite clearly understood that commercialised use of machines will focus on displacing jobs where robots will have comparative advantage over human beings. But many jobs will require experts in maintaining or overseeing these machines. While jobs like elementary school teaching, health professionals for growing populations, therapists, social workers, strategists and more than else-jobs requiring empathy and creativity will be more powerful than they are now. But again, these jobs and new professions are likely to have an unequal distribution based on educational background.

Bangladesh's economy is also showing signs of the first stage of automation. There is some evidence of the defeminisation of the manufacturing labour force is currently underway. The apparel industry in Bangladesh was marked by a spectacular rise in the share of female wage-workers in the formal manufacturing sector. For quite a while, it was widely considered that women constituted around 80 percent of RMG workers. According to the (LFS) labour force survey (2017), the female shares of employment in the sector fell from 57 percent in 2013 to 46 percent in 2016. This is line with the findings of economists Sheba Tejani and William Milberg (2010), who pointed to a global defeminisation process as a result of industrial upgrading. Their research shows that capital intensity in production, as evidenced by shifts in labour productivity, is negatively and significantly related to shifts in the female share of employment in manufacturing.

As women traditionally dominate the export-oriented apparel production workforce, increased capital intensity will result in a greater number of their job losses. There can be several factors behind such phenomenon. Women's concentration in repetitive task is one reason, which are most vulnerable to automation. Technological up-gradation could also favour men in the short-run as a result of women's weaker educational background in general. Another possibility is that, unlike men, women have been willing to work very long hours, resulting in their rising share in jobs; automation tends to affect most those jobs that involve multiple shifts on a routine workload (Razzaque & Dristy, 2018).

As things stand, Bangladesh needs to generate 2 million jobs every year to accommodate new entrants to its labour force. Some 41 percent of the workforce is still in agriculture, whose share in the GDP is only 15 percent and shrinking. Underemployment, youth unemployment are already major issues in the country, with close to 29 percent of youth being NEET (not in employment, education or training). These mean, non-farm activities will also have to absorb the influx of labour from agriculture. Productivity growth and a rise in the formalisation of informal activities may exert further pressure on the labour market situation. In a context where the 7th Five Year Plan has set a target of increasing the sector's share in total employment from 15 percent to 20 percent by 2020, emerging evidences suggest manufacturing growth and employment generation not going hand in hand for Bangladesh. Between 2013-17, while adding more than Tk 648 billion-worth of output (in real terms using 2005–2006 prices), employment in manufacturing sector increased by a mere 0.3 million according to LFS (2017).

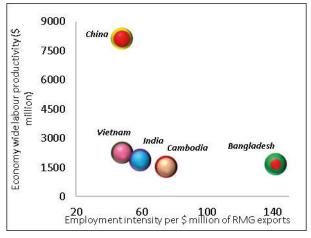
The stagnancy of manufacturing employment becomes more evident when we look at the RMG sector. Between 2010-2018, the sector saw a staggering 245 percent growth in export earnings (from \$12.5 billion to \$30.61 billion). But during the same period, growth in employment generation in the sector was only 11 percent. This slowdown of employment generation happened as local workers became more productive, and producers invested in capital intensive technologies. In the early 1990s, a million-dollar apparel exports required on average 545 workers, while in 2016, it had come down to 142.

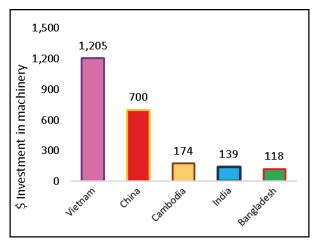
Although it is not good news for the unemployment issue, suggesting a fall in labour absorption capacity of the sector- this change was inevitable in many respects. Without investing in capital-intensive machineries and becoming more reliant on automation (i.e. sewing bots, mechanised production line), Bangladeshi exporters can never become competitive in the international market. Comparators of Bangladesh, such as China, Viet Nam, India, and Cambodia that are far ahead in terms of lower employment intensity or fewer number of workers per unit of exported goods (ranging from for example 48 to 75 workers per \$1 million garment exports compared with 142 workers for the same amount of export earnings). Apart from Cambodia, all these countries have better economy wide labour productivity than Bangladesh (Figure 4.10).

It means as export production technologies across countries seem to converge, for Bangladesh there exists enormous scope to improve labour productivity driven by more technology-intensive and labour-saving production processes. In 2016, investment in machinery per unit of labour was the lowest in Bangladesh among the major apparel exporters (only \$118). Compared to Bangladesh, Viet Nam (\$1,205) and China (\$700) are way ahead; while Cambodia (\$174) and India (\$139) were slightly ahead (Figure 4.11). If the flagship sector of Bangladesh's export is going to remain competitive in the global market, moving in the direction of comparators is perhaps unavoidable, which will further suppress its employment generation potential per unit of export.

Figure 4.10: Labour Productivity vs Employment Intensity

Figure 4.11: Investment in Machinery per unit of Labour





Source: Razzaque, 2018

Among the post-graduation challenges faced by Bangladesh, automation is perhaps the most challenging one in nature. With correct direction and planning, there is an opportunity to tackle this issue. By managing necessary institutional transformation in changing the conventional ways of developing human capital, Bangladesh can mitigate some of the challenges posed by automation. Some suggestions in this respect are:

- To remain consistent with the job creation targets of the 7th Five Year Plan, it is extremely important to realise a rapid expansion of exports through export diversification. Given the trends in production technologies, export diversification is perhaps more important than ever. Automation will affect all labour intensive exports, but an expanded range of production activities has the potential to generate new jobs.
- Automation is inevitable, and there should be no hesitancy about promoting competitiveness by supporting technological up-gradation, particularly for export sectors. In some cases, technological advancement can lead to improvements in product quality with prospects for export expansion.
- Non-export and import-competing sectors also needs to embrace more capital-intensive production techniques. Investment in machinery and equipment, as measured by import data, per unit of labour is much lower in Bangladesh, compared to Cambodia, Viet Nam or China.

- Despite ominous forecasts of employment generation, automation can open a new horizon of fast economic growth. Rapid manufacturing expansion can fuel this growth and create large number of employment opportunities. Therefore, automation can turn into an opportunity to augment growth. Bangladesh must materialise this window by persistently hitting double digit growth rates (above 10 percent) per year. Small and medium enterprises, which are critical for livelihood generation, will need support to obtain better access to technology so they can raise their productivity and competitiveness.
- In many ways, the bigger question is not "will there be enough jobs in future?", it is "will there be enough job for workers with the current skill sets in future?". Automation is likely to erode many conventional professions, or change the objectives of same professionals in future. The importance of updated curriculum in education and training cannot be overemphasised. Adapting with the forces of creative destruction requires future generations to be equipped with adequate education. In all levels of education, mandatory quantitative literacy, computing skills and basic STEM courses will become a necessity. As technological advancement will make many skills redundant in quick succession, norms like life-long educational and skill-development practices must be cultured in private-sectors.
- Transforming the social sectors to generate productive employment is another critical policy area. As investment in health, education and public social services remained low, quality of these services is widely perceived to be far from satisfactory. Careful policy attention to these sectors are a necessity in generating future jobs and developing the human capital needed to support socially coherent technological progress.
- As explained earlier, automation will lead to higher inequality with certain groups of people getting significantly worse off in the process. Potential impact on women and low-education groups must be addressed with necessary government interventions. Policies focusing on training, education and social security of displaced workers will have to be dealt with utmost priority, while progressive taxation will help to ease the rising inequality.
- Future trade policies of Bangladesh need careful evaluation. There will be temptations and political-economic interests to shield the domestic economy from import competition, capital-deepening and technological up-gradation. But an excessively protected environment could lead to mounting inefficiencies, with adverse welfare consequences.
- Finally, to enable informed policy-making, there is an urgency for comprehensive research based on quality data. Potential impact assessment of automation across industries of Bangladesh is relatively new and less explored subject. Without the availability of timely, appropriate-robust data and quality research, it will not be possible to understand the complex interactions involved in labour market dynamism, capture potential changes brought about by technological changes and suggest required policy interventions to respond those impacts.

4.6. Smooth Graduation in Challenging Times: Experience from Former LDCs

As noted in Chapter 2, only five countries have managed to graduate out of Least Developed Country status and became Other Developing Countries since the formation of LDC group in 1971. However, in terms of economic structure, these countries are quite different from Bangladesh. Among these graduated former LDCs, Cape Verde, and Samoa fall into the category of small island developing states (SIDS), while Botswana and Equatorial Guinea are countries with abundant natural resources. Equatorial Guinea is the only country to graduate under income only criterion, while the rest of the countries fulfilled two criteria of GNI per capita and HAI. All countries had weaker than desirable scores in Economic Vulnerability Index. Compared to these countries, Bangladesh is a country with huge population, is not dependent on natural resources and met graduation thresholds for all three criteria. Therefore, in essence, experiences of former LDCs are not going extremely helpful in predicting outcomes of post-graduation era. Nonetheless, they can offer several insights about how a country can maintain progress smoothly in after graduating from LDC status.

In years after graduation, all five countries have improved on Human Assets Index, while the situation of Economic Vulnerability Index improved over time. But the EVI scores are still higher than the graduation criteria of 32 or lower, suggesting that downward vulnerability remains high. Except for Equatorial Guinea, all former LDCs have maintained a steady progress in GNI per-capita after graduation. Equatorial Guinea's fall in income level can be contributed to unstable price of primary export, crude oil. Therefore, it can be said with confidence, Bangladesh is going to graduate out of LDC status with flying colors and will keep progressing in the post-graduation era in absence of extremely disruptive events.

Table 4.1 provides a comparative picture of the former LDCs through the transition period (Equatorial Guinea excluded because it graduated only in mid-2017). If we look at the few primary indicators for these countries five year prior to graduation and five year after graduation, it gives us a good idea about how LDC graduation have shaped their economic performances. A common theme for Botswana, Cape Verde and Maldives during the transition period has been a slowdown of economic growth. In the immediate post-graduation era, Botswana saw its growth cut down by half while Cape Verde by more than one third. Maldives also experienced slow growth- particularly due to the slow performance of the main export items (fish fillets and frozen fish) to key export destination (EU, Japan). Loss of DFQF status in the European market created adverse pressure on the Maldivian economy.

Table 4.1: Comparative View of Transition After LDC Graduation

Country	Reference year	Real GDP growth rate (%)	Share of ODA (% of GNI)	Tax revenue (% of GDP)	FDI (% of GDP)	Remittances (% of GDP)	Merchandise export (% of global trade)
Botswana	Pre-grad (5 years)	10.55	3.67	26.15	0.66	2.01	0.0510
	Post-grad (5 years)	5.50	2.06	17.21	1.32	1.16	0.0430
Cape Verde	Pre-grad (5 years)	6.18	15.92	21.91	6.66	13.14	0.0002
	Post-grad (5 years)	3.98	14.04	20.20	10.46	8.64	0.0003
Maldives	Pre-grad (5 years)	9.09	3.08	11.56	7.83	0.26	0.0020
	Post-grad (5 years)	7.40	1.70	18.47	12.14	0.12	0.0020
Samoa	Pre-grad (5 years)	0.43	16.44	20.68	1.73	21.05	0.0004
	Post-grad (5 years)	1.53	11.98	23.06	2.41	18.91	0.0003
Bangladesh	Average (2011-16)	6.45	1.30	8.76	1.28	9.15	0.1663

Source: Bangladesh's Graduation from the Least Developed Countries Group, Pitfalls and Promises, 2019

^{*}Note: Pre-grad (5 years) = Five years before LDC graduation; Post-grad (5 years) = Five years after LDC graduation

Despite fall in the GDP growth rate, Botswana's mining industry boomed in post-graduation era and the government maintained a high current account surplus and high tax revenue earning owing to successful diamond mining industry. The country is closely integrated with the global trade and cyclical factors are determinants of growth. But overall, the economic performance of the country has been good since graduation.

One issue that has remained historically challenging for Bangladesh is the collection of tax-revenue in terms of GDP. Evidence suggests, during preparation period of graduation, former LDCs had a high starting tax-GDP ratio. And in the post-graduation transition period, they maintained close to 20 percent tax revenue-GDP ratio. Overall, the tax revenue collection efforts of Bangladesh will need to go up significantly over the years.

An interesting issue that can be learned from former LDCs are share of ODA with respect to national income and share of FDI against GDP during the transition period. Proportion of Official Development Assistance falls against income when any country develops. Countries grow more aid independent in post-graduation era.

Apart from Cape Verde, all other four countries had a three-year grace period for preferential access, ISMs and other LDC-specific preferences. Cape Verde undertook good planning prior to graduation. The country successfully negotiated with the EU for additional two-year grace period for EBA above the original three-year grace period, and some other transition period deals with prominent trade partners like China (Bhattacharya & Khan, 2019). Malaysia and Botswana have also planned about potential negative impact of graduation. It is to be noted that only the EU and Turkey have an explicit policy for extending LDC-specific trade preferences for a transition period, the same is not necessarily true for other countries offering unilateral trade preferences (UNCTAD, 2016). For example, there are no smooth transition provisions in case of Japan's or Canada's GSP scheme. Therefore, one option for Bangladesh is to start planning for the future ahead and negotiate for transition period preferential access, with options for post-graduation trade deals or free-trade agreements with countries of interest. All graduated LDCs have experienced stronger inflow of FDI in the post-graduation era. This has helped them to recover from early loss of preferential access. Convinced that FDI is critical for achieving robust export growth, Bangladesh is proactively seeking FDI from all countries in the East and West. Vietnam has shown the way by becoming a dynamic export economy on the back of heavy FDI integration into the export sector (e.g. its RMG sectors is 60% FDI driven). Three strategic steps are under way to mobilize more FDI into the economy to reach a target of \$10 billion by FY2024 (Table 4.2): (a) as many as 100 Special Economic Zones (SEZs) are being set up with several designated in favor of leading FDI source countries like Japan, China, India; (b) special efforts are being made to improve the business and investment climate; and (c) removing barriers to entry of FDI in any specific sectors (e.g. RMG, Footwear, Ceramics).

Table 4.2: FDI Projections for the Medium-term

	FY2018	FY19	FY20	FY21	FY22	FY23	FY24	FY25
US\$ billion	1.8	3.2	3.5	4.5	5.8	7.5	10.0	11.4
%GDP	0.6	0.9	1.1	1.2	1.4	1.6	1.9	2.0

Source: PP2041 Projections

From perspective of Bangladesh, remittance earning has always been a matter of key interest. A strong remittance inflow helps to develop good reserve of foreign currencies, which provides significant leverage to central banks in maintaining favourable exchange rates. Small island nations and land-locked LDCs also substantially rely on remittance inflow due to lack of other exporting sectors. Former LDCs also faces problems like unemployment, underemployment, automation and inadequate working opportunities. They also faced the problem of declining significance of remittance earnings (as proportion to their GDP) Bangladesh thus needs to emphasize on maximizing the remittance earning opportunities to tackle any adverse consequences of LDC graduation.

It is essential to remember that all countries are different and likely to have their distinct versions of post-graduation challenges. But a common theme for any graduating country will be loss of trade preferences. Experience of former LDCs show why it is important to concentrate on building capacity of domestic industries and develop infrastructures to overcome headwinds of higher integration more competitive global economy. Small island nations focused on their key sources of income (tourism and related service sectors) after graduation.

Importantly, Bangladesh is much better advanced on the development path. Bangladesh has a much-diversified economy with huge domestic demands for different products. The export performance and remittance inflows are substantial. It has a buoyant private sector with strong entrepreneurial skills. The social fabric is dynamic. The formation of human capital has taken roots. Therefore, with further policy reforms and investments in human capital, technology and institutions, Bangladesh can smoothly transit from LDC to the road of upper middle income.

4.7. Conclusion and the Way Forward

Bangladesh's LDC graduation is taking place amid some unprecedented uncertainties at the global level with significant implications for developing countries. After more than a decade since the Global Financial Crisis of 2008, the Western Developed countries have failed to resume a sustained growth process. The growth in world trade has also faltered. Indeed, as against the emphasis on trade as an important enabler of realizing SDGs, the world economy is witnessing one of weakest decades of trade growth. Furthermore, in an unprecedented manner the benefits of free-trade has been called into questions with the on-going US policy reversals and Brexit processes causing heightened policy uncertainties.

Although Bangladesh has so far been one of the few least affected countries from the global trade turmoil, it may not be immune from the unfolding developments. As the developed economies are the most prominent export destinations, their difficulties in attaining full-speed recovery greatly hampers future export prospects. Particularly, weakened economic growth prospects of Australia, Canada, the European Union, and Japan are major concerns. Furthermore, China has stabilised around a so-called 'new normal' lower economic growth of just around 6 percent, yielding a trend of decelerating import demand from many developing countries.

Coping with rising protectionism in the world economy is going to be a major challenge for many capacity-constrained developing countries including Bangladesh. One important consequence has been the weakening trade multilateralism under the auspices of the WTO. Even before the Global Financial Crisis (GFC), the proliferation of regional and plurilateral trading arrangements generated rules, regulations and practices bypassing the WTO system. The post-GFC period caused further damages as large and economically more powerful WTO members resorted to new protectionist measures. The failure of the Doha Round in generating results even after 18 long years of negotiations is the reflection of a deep crisis that trade multilateralism currently confronts with.

The current state of multilateralism has serious implications for many developing countries. The WTO system provided a set of rules for international and an effective dispute settlement mechanism that protected capacity-constrained developed countries from being too vulnerable in trade negotiations and in guaranteeing enforcement of rules and procedure established by WTO members. The prolonged crisis, failure to achieve breakthroughs in Doha Round, and more recently, the unfolding of the USA-China trade war seems to suggest that the world trading system may not be the same again as envisaged when the WTO was established. This is rather unfortunate that the confidence in the WTO system reaches a new low as Bangladesh graduates from the LDC group.

In the above backdrop, Bangladesh must prepare for new eventualities. First of all, even in the current situation, there is no alternative of continued engagement with the multilateral processes. Strengthening the system constitutes a core objective of many developing countries like Bangladesh and as such an important role can be played by Bangladesh. Furthermore, Bangladesh will have to catch up with the negotiating issues that so far did not occur as important since LDCs were exempted from undertaking commitments in many areas. This will require building capacity in trade negotiations. The emerging trends would indicate that if the WTO system is going to be re-energised, there could be proliferation of trade disputes. Settling trade disputes are extremely challenging tasks and as a graduating LDCs Bangladesh will have to prepare for such eventualities. Along with these issues, striking new regional and free trade deals will remain a priority for Bangladesh.

Another emerging trend that coincides with Bangladesh's development transition is technological advancement that prompts the deepening of the capital-intensive production processes manifested in a high-degree of automation, putting downward pressure on the demand for labour. Development and use of artificial intelligence and robotics are thought to reshape the production landscape and redefine competitive advantage. Numerous recent researches seem to suggest widespread labour-saving and unemployment to take place as a result. There are however arguments that the problem might not be availability of jobs but changes in the skill composition, favouring more skilled workers could be the ultimate implications.

While technological advancements would be inevitable anyway, the resultant implications could present new challenges for Bangladesh in the post-graduation phase. Available evidence suggests that compared to other countries Bangladesh uses more labour-intensive technologies in the apparel sector. In recent times, the industry is going through a technological transformation giving rise to more automated tasks in the production process. Therefore, the most recent doubling of garment export earnings in the country was not associated with any significant rise employment in the sector. When compared with other Asian comparators, it is found that Bangladesh has an enormous scope of improving labour productivity by using more technology-intensive production processes. Given this, increased competition in the post-graduation period could trigger faster technological upgradation with reduced impact on employment generation.

It is in this context is imperative to bear in mind that there should be no reluctance in promoting competitiveness by supporting technological upgradation, particularly for the export sector. Without technological upgradation and catch-up, Bangladesh's exporters will not be able to compete in global markets. Technological advancement can lead to improvements in product quality with prospects for improved enhanced export earnings. Automation and technological progress can help achieve and sustain higher growth rate thereby creating opportunities for employment, including in the new sector such as non-export and services sectors.

Since jobs in the apparel industry has been dominated by women and if automation is to slowdown employment generation, the impact on women's income-earning opportunities and any policy options to address the problem should be given serious consideration. Policies focusing on training, education and social security of displaced workers will have to be dealt with utmost priority.