



# Implications of LDC Graduation for Agricultural Exports from Bangladesh: Issues and Policy Options



# Implications of LDC Graduation for Agricultural Exports from Bangladesh: Issues and Policy Options

## Bangladesh Trade Facilitation Project

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## Table of Contents

<b>Executive Summary</b>	<b>01</b>
<b>I. Background</b>	<b>04</b>
<b>II. Salient Features of Agricultural Exports from Bangladesh</b>	<b>07</b>
<b>III. An Assessment on the Impact of LDC Graduation on Agricultural Goods Exports</b>	<b>21</b>
3.1 Loss of preferential market access in major destinations	21
3.2 Impact arising from the loss of policy space	32
<b>IV. A Quantitative Impact Assessment of LDC Graduation on Agricultural Exports</b>	<b>41</b>
4.1 Impact of tariff preference erosion on exports	41
- The partial equilibrium model	41
- General equilibrium analysis	45
4.2 Assessment of tariff reductions by Bangladesh on agricultural imports	52
<b>V. A Review of Experiences of Recently Graduated Countries</b>	<b>55</b>
<b>VI. Conclusions and Policy Recommendations</b>	<b>62</b>
<b>References</b>	<b>73</b>
<b>Annex</b>	<b>75</b>

## List of Figures

Figure 2.1	Bangladesh's agriculture exports (million \$)	07
Figure 2.2	Export growth of agricultural and non-agricultural products	07
Figure 2.3	Agriculture export share in total export among LDCs	08
Figure 2.4	Per capita GDP and share of agriculture in total exports of respective countries	08
Figure 2.5	Agricultural export performance country wise	09
Figure 2.6	Composition of Bangladesh's agricultural exports (average of 2020-22)	09
Figure 2.7	Processed food export performance country wise	10
Figure 2.8	Export performance of fish	11
Figure 2.9	Bangladesh's agricultural export performance by HS chapter	15
Figure 2.10	Bangladesh's agricultural (including Fish) export share by destinations (average of FY20 to FY22)	16
Figure 2.11	Bangladesh's agricultural exports, by major destination country (2011-2012=1)	17
Figure 2.12	Agricultural export & its share to major destinations	17
Figure 2.13	Export market for agricultural products in India	18
Figure 2.14	Export market for agricultural products in the EU	19
Figure 2.15	Export prospects for agricultural products to Saudi Arabia	20
Figure 3.1	Post-graduation average tariff increment in destination countries (percentage points)	23
Figure 3.2	MFN duty, total tax incidence and bound tariff rates on agricultural products in Bangladesh	33
Figure 4.1	Impact of LDC graduation on Bangladesh's exports and imports (% deviation from the baseline)	50
Figure 5.1	Trend of agriculture export of graduating countries	58
Figure 5.2	Share of agriculture exports in total exports of graduated countries	60

## List of Tables

Table 2.1	Top ten agricultural export items at the HS 2-digit level (million \$)	12
Table 2.2	Top 20 export items at the HS 6-digit level (million \$)	13
Table 2.3	Bangladesh's agricultural export to top destinations	16
Table 3.1	Summary of preferential market access and rules of origin in key export destinations	22
Table 3.2	Number of product coverage in LDC and post-LDC scheme	25
Table 3.3	Changes in tariffs on Bangladesh's agricultural products exports after graduation (percentage points)	28
Table 3.4	Tariff structure to be faced by Bangladesh after LDC graduation	30
Table 3.5	Product category-wise MFN tariff rates, bound tariff rates, and total tax incidence of Bangladesh	34
Table 3.6	Hs code-wise import taxes in Bangladesh, by duty type (%)	34
Table 3.7	Agricultural subsidies and support measures in the multilateral trading system	37
Table 3.8	Support measures covered by prohibited and actionable subsidies	40
Table 4.1	Potential loss in agricultural export earnings (including fish) after LDC graduation – results from the partial equilibrium model	44
Table 4.2	Loss in export earnings at the HS 2-digit level in selected destinations	46
Table 4.3	GTAP sectoral aggregation	48
Table 4.4	Simulation design in the GTAP model – post-graduation tariff rates are based on these market access provisions	49
Table 4.5	Impact of LDC graduation on exports, by sectors and destinations (% deviation from the baseline)	50
Table 4.6	Impact of LDC graduation on exports by sectors (% deviation from the baseline)	51
Table 4.7	Impact of tariff cut on Bangladesh's exports and imports (% deviation from the baseline)	52
Table 4.8:	Impact of tariff cuts on agricultural exports and imports (% deviation from the baseline)	53
Table 5.1:	Summary matrix of the graduated countries	56
Table 6.1	LDC Graduation Specific Recommendation matrix	69
Table A1	Product group definition	75

## List of Tables

Table A2	Export incentive rate in Bangladesh	76
Table A3	Major agricultural exporting goods to India and tariff rates under MFN, GSP and SAFTA	78
Table A4	Major agricultural exporting goods to EU and tariff rates under MFN and GSP schemes	79
Table A5	Major agricultural exporting goods to China and tariff rates under MFN, APTA GSP schemes	81
Table A6	Major agricultural exporting goods to the UK and tariff rates under MFN & DCTS schemes	82
Table A7	Major agricultural exporting goods to Japan and tariff rates under MFN & GSP schemes	83
Table A8	Major agricultural exporting goods to the Republic of Korea and tariff rates under MFN & GSP schemes	84
Table A9	Major agricultural exporting goods to Canada and tariff rates under MFN & GSP schemes	85
Table A10	GTAP sector wise tariff	86

# Executive Summary

The impending graduation of Bangladesh from the category of Least Developed Countries (LDCs) represents a remarkable achievement. However, this significant developmental transition also presents a challenge in which Bangladesh's exports could encounter heightened competition in international markets due to the loss of LDC-specific trade preferences. Furthermore, LDC graduation would result in a reduction in the policy space available for providing support measures, such as cash assistance to exporters. While most studies on the implications of LDC graduation focus on the readymade garment sector, the trade rules and market access provisions for agricultural goods are notably different. This study aims to assess the potential impact of graduation on agricultural exports, considering changes in market access and export support provisions. It also provides policy recommendations to navigate these changes effectively.

## Key Findings



Over the past decade, Bangladesh's agricultural exports, on average, grew at an annual rate of 5.3 per cent. In 2021-22, such exports were 3.3 per cent of merchandise export receipts.



Upon graduation, Bangladesh will no longer receive duty-free market access benefits in many importing countries and will be subject to either less favourable Generalized System of Preferences (GSP) arrangements or no preferences at all. Average tariffs on Bangladesh's agricultural exports will increase by 11 percentage points in India, 6 percentage points in the EU, 3 percentage points in the UK, 10 percentage points in China, and 5 percentage points in the Republic of Korea.



A partial equilibrium analysis shows Bangladesh's agricultural exports (including fish) to seven major GSP donor countries could experience an export shock of 6-11 per cent due to post-graduation tariff hikes.



Simulations from a general equilibrium model suggest that overall agricultural exports could decline by about 4 per cent.

## Key Findings



While both partial and general equilibrium models have their inherent limitations, tariff hikes are widely recognized as having adverse implications for export performance.



LDC graduation does not require Bangladesh to reduce its import tariffs. Undertaking tariff-cut obligations for any free-trade arrangements is a separate issue.



Bangladesh's domestic support for its agriculture is below the WTO's Agreement on Agriculture threshold, allowing for increased support without violation.<sup>1</sup>



Countries irrespective of their LDC status cannot provide export subsidies in agricultural exports. Marketing-related activities can be subsidized by a country classified by the WTO as a net food-importing developing country and Bangladesh is not included as such a country.

1. This is stipulated under the Aggregate Measurement of Support (AMS) provisions of the Agreement on Agriculture. AMS is a measure used in World Trade Organization (WTO) rules to quantify the amount of government support provided to agricultural producers. AMS is defined as the total amount of support provided to agricultural producers, expressed as a percentage of the total value of agricultural production in a country. The AMS provides a way for WTO members to assess the impact of domestic support policies on the agricultural sectors of other countries and to negotiate reductions in support levels. The goal is to prevent the use of domestic support policies that distort trade and reduce competition in international markets.



## Major Recommendations



- Agricultural exports from Bangladesh are relatively small and as such any potential adverse implications due to LDC graduation will be limited.
- **Nevertheless, Bangladesh should proactively engage with major GSP-providing countries for extended preferences or for favourable market access in the post-LDC graduation period.**
- The options for bilateral and regional free trade agreements for maintaining duty-free market access for exports could be explored.
- The scope of improved and strengthened domestic support for agriculture can be utilized for promoting agricultural exports.
- Bangladesh should pursue being enlisted as a net food-importing developing country. This will enable exercising certain policy flexibilities to support the exporters of agricultural products.
- Irrespective of LDC graduation, improving farm-level competitiveness and productive capacity is critical for export expansion.
- Addressing such supply-side issues as improving product quality and standards, enhancing productivity, tackling the high cost of doing business, improving trade facilitation, and other general agricultural development issues will remain important in increasing agricultural exports.

# I. Background

Bangladesh is set to graduate from the group of least developed countries (LDCs) in 2026. Although a noteworthy accomplishment, this important development transition will result in the discontinuation of LDC-specific International Support Measures (ISMs), potentially affecting LDC export competitiveness.<sup>2</sup> These include development partners' special attention and commitments to support LDCs with trade preferences. The World Trade Organization (WTO) also provides favourable conditions and flexibilities for LDCs in implementing and enforcing international trade rules and regulations.<sup>3</sup> It has legitimized other countries' offering unilateral preferential market access to LDCs, and accorded them, on many occasions, with privileges associated with not undertaking any new commitments for trade liberalization. Bangladesh is usually recognized as the country that has been the largest beneficiary of the LDC-specific unilateral duty-free market access and relaxed rules of origin requirements offered by most developed and some developing countries. By utilizing these market access facilities, Bangladesh's exports, particularly of apparel products, rose

rapidly over the past several decades. Being an LDC, Bangladesh enjoys preferential market access in about 50 countries.<sup>4</sup> Almost three-quarters of Bangladesh's export earnings are sourced from the countries that grant tariff preferences.

The loss of LDC-specific preferences means Bangladesh's exports will come under stiffer competition in international markets. In some cases, tariffs will be imposed on the products originating in Bangladesh, and graduation will also restrict Bangladesh's policy space as the country may not be able to provide export incentives in the form of cash assistance and subsidies. Following graduation, compliance with WTO rules and regulations could be more stringent, along with constrained access to overseas development finance. Various studies and analyses seem to suggest that the most important change that LDC graduation is likely to bring for Bangladesh's exports will be associated with forgone preferential market access and lost policy space in providing export subsidies.

- 2. Having recognized their highly disadvantaged development process, the group of LDCs was created by the United Nations in 1971. These countries were characterized as being caught in a low-income trap facing the risk of failing to overcome poverty and deprivation; predominantly dependent on primary commodities for domestic production and export with extremely inadequate opportunities for diversification; and, critically reliant on foreign aid due to limited economic activities accompanied by unfavourable fiscal (internal) and current account (external) balances. To respond to the development challenges confronted by LDCs, the global community has devised special international support measures (ISMs). Graduation from the LDC status would imply a country's achieving greater self-reliance and exhibiting increased resilience to economic shocks without the need for special concessionary treatment from development partners.*
- 3. This includes the policy space for LDC governments to support their non-agricultural goods export sectors (including fish) with export subsidies, which are prohibited for non-LDCs (along with a few other pre-specified countries with per capita income less than \$1,000 in 1990 prices).*
- 4. These include EU27 countries and the United Kingdom, Australia, Armenia, Canada, Chile, China, Iceland, India, Japan, Kazakhstan, Kyrgyz Republic, New Zealand, Norway, Rep. of Korea, Russian Federation, Switzerland, Taiwan (Chinese Taipei), Thailand, and Turkey. The United States is only the major global economy where Bangladesh does not receive any LDC-relat-*

Studies attempting to assess the LDC graduation implications for Bangladesh have mainly focused on the export-oriented apparel industry, given its sheer significance for the country's overall exports. The overwhelming dependence on just one broad sector for export earnings constitutes a major concern. While export diversification has received massive policy attention, it has remained a formidable task for Bangladesh. In light of the impending LDC graduation, there is now some concern that the loss of market access and policy space privileges would undermine the competitiveness of other sectors as well. In this context, the potential impact on a traditionally important sector, agriculture, is extremely important to assess.

Despite its relatively small size, agricultural exports are important for Bangladesh. While its share has fallen significantly, agriculture still holds the potential to be a source of export growth, diversification, and employment generation. Historically, agriculture has been the lifeline of Bangladesh economy, with the sector contributing to about 40 per cent of the country's labor force employment and 12 per cent of its gross domestic product (GDP). As a result of the graduation, like the garment sector, Bangladesh's agricultural exports will have to face changes in global trade rules, including tariff rises, more stringent rules of origin requirements for any preferences that might still be available, and restricted policy space. The global trade rules and preference mechanisms targeting agricultural goods differ greatly from industrial sectors. As such,

assessing the implications of LDC graduation for agricultural exports is crucial.

In the above context, the objectives of this study are to review the changes in rules and provisions that are likely to affect agricultural exports from Bangladesh. More specifically, this study analyses the post-graduation changes in tariff structures and rules of origin in different destination markets to be faced by agricultural product exporters of Bangladesh; to identify specific agricultural export items that are affected; to analyse the potential impact tariff rises in different countries; to assess the impact of any tariff reduction on agricultural goods imports into Bangladesh; to review the experiences of previously graduated LDCs in relation to their agricultural exports; and to deduce relevant policy implications for Bangladesh in mitigating in any potential consequences.

At the outset, it is worth pointing out that there can be some confusion regarding what constitutes agricultural exports. While agriculture generally includes fish and dairy sectors, WTO rules and provisions, as specified under its Agreement on Agriculture (AoA), do not classify fish (HS 03) as an agricultural good (Box 1). Nevertheless, given its critical importance for Bangladesh, this study includes the exports of fish and fish products.

### **Box 1: Definition of agriculture as per the WTO**

The Agreement on Agriculture (AoA) is a part of the World Trade Organization (WTO) Agreement that deals with the rules governing international trade in agricultural products. The agreement covers a wide range of products which is given in Annex 1 of AoA and includes:

HS Chapters 1 to 24 less fish and fish products, plus\*  
HS Code 2905.43 – (Mannitol)  
HS Code 2905.44 – (Sorbitol)  
HS Heading 33.01 – (Essential oils)  
HS Headings 35.01 to 35.05 – (Albuminoidal substances, modified starches, glues)  
HS Code 3809.10 – (Finishing Agents)  
HS Code 3823.60 – (Sorbitol n.e.p.)  
HS Headings 41.01 to 41.03 – (Hides and skins)  
HS Heading 43.01 – (Raw furskins)  
HS Headings 50.01 to 50.03 – (Raw silk and silk waste)  
HS Headings 51.01 to 51.03 – (Wool and animal hair)  
HS Headings 52.01 to 52.03 – (Raw cotton, waste and cotton carded or combed)  
HS Heading 53.01 – (Raw flax)  
HS Heading 53.02 – (Raw hemp)

\* The foregoing shall not limit the product coverage of the Agreement on the Application of Sanitary and Phytosanitary Measures.

\* The product descriptions in round brackets are not necessarily exhaustive.

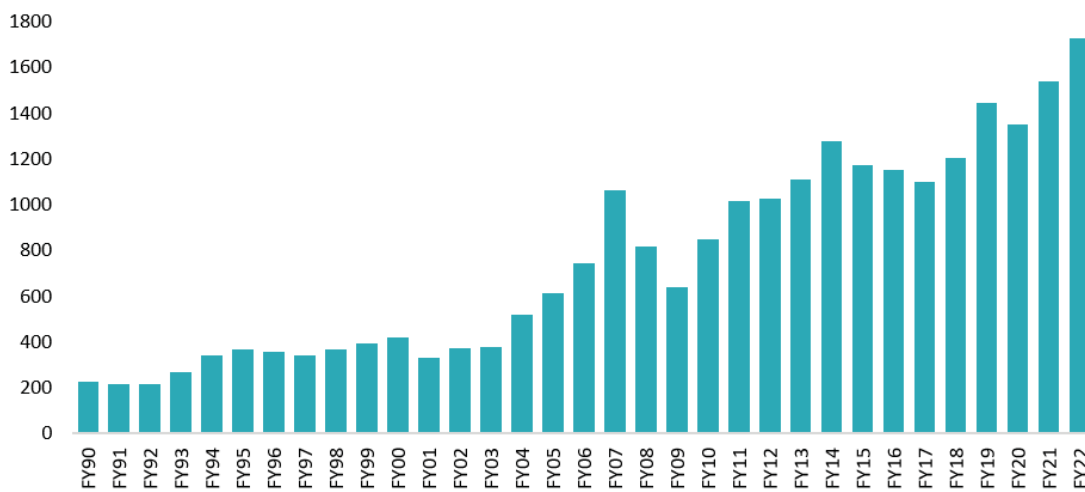
According to WTO's AOA, fish is not considered an agricultural product. However, fish sector is an important sub-sector in Bangladesh's agricultural sector. The study will follow WTO's definition of agricultural goods, including fish. Discussion related to subsidy will be applicable for goods mentioned in AoA.

This report is organised as follows: after this background, Section II provides the trends and composition of agricultural exports from Bangladesh, including the major destination markets of these products. Section III assesses the impact of LDC graduation on agricultural exports of Bangladesh, including post-graduation tariff structures to be applicable for agricultural exporters in different markets. Section IV analyses the potential impact of graduation on agricultural exports by utilizing quantitative models, and Section V reviews the experiences of previously graduated countries. Finally, Section VI provides a set of pragmatic policy recommendations for Bangladesh.

## II. Salient Features of Agricultural Exports from Bangladesh

Bangladesh's export earnings from agricultural products have depicted a positive trend over the past two decades, from \$200 million in 1990 to \$1.7 billion in FY22 (Figure 2.1). However, a much faster rise in non-agricultural exports, spearheaded by apparel—also known as readymade garments (RMG)—means the relative significance of farm products (including fish and fish products) fell to just about 3.3 per cent in 2022.

**Figure 2.1: Bangladesh's agriculture exports (million \$)**



Source: Author's analysis using Export Promotion Bureau (EPB) data.

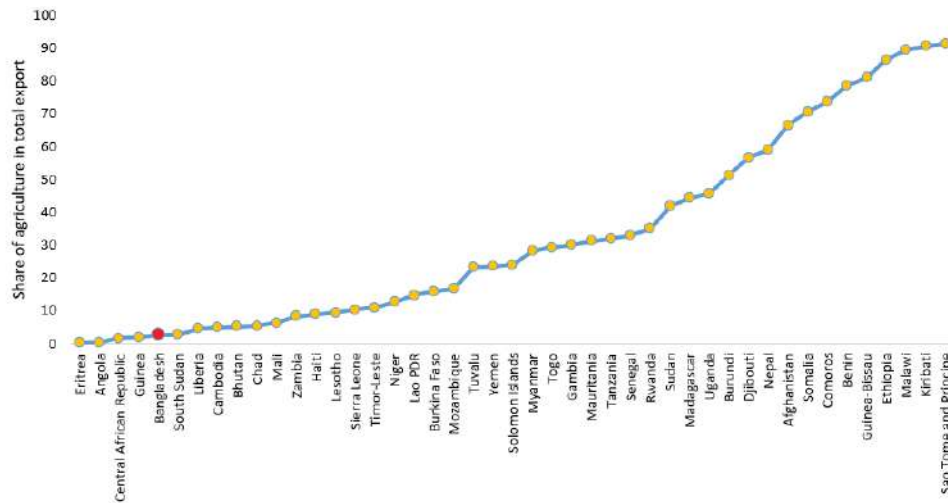
**Figure 2.2: Export growth of agricultural and non-agricultural products**



Source: Author's analysis using Export Promotion Bureau (EPB) data.

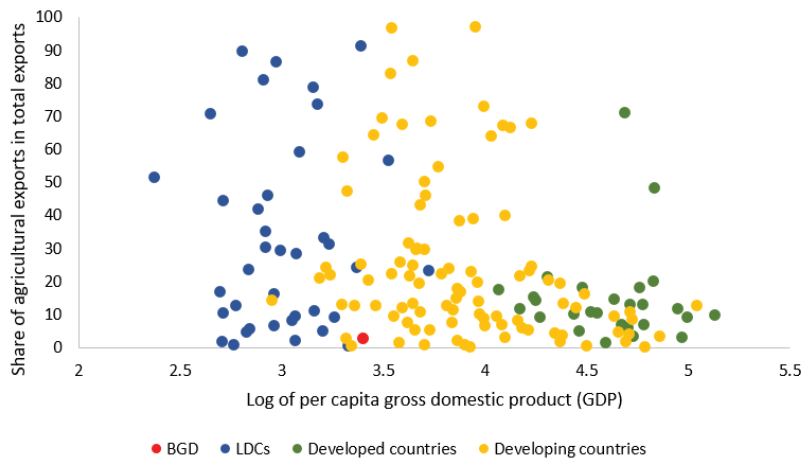
Among the LDCs, Bangladesh is one of the few countries with an extremely low share of agriculture in total exports (Figure 2.3). There are only four other LDCs with an agricultural export share less than that of Bangladesh. Despite wide variations across countries, rising per capita income is usually associated with the diminishing significance of farm exports (Figure 2.4). Bangladesh and several other countries portray an extremely low-level of dependence on agricultural exports at an early stage of development. It is, however, worth noting that even with a higher share of farm exports, as Figure 2.5 shows, it is possible to have higher growth of agricultural exports. The USA is the leading agricultural exporter globally, followed by the Netherlands, Brazil, and Germany. These countries have been able to maintain significant export growth. Bangladesh shows a fairly large average agricultural export growth rate of more than 8 per cent but with a small ratio of agriculture to total exports.

**Figure 2.3: Agriculture export share in total export among LDCs**



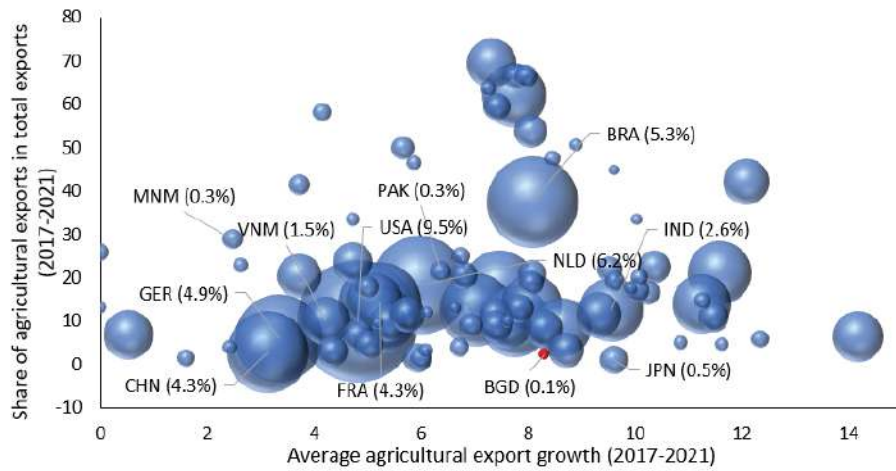
Source: Author's analysis using International Trade Centre (ITC) data.

**Figure 2.4: Per capita GDP and share of agriculture in total exports of respective countries**



Source: Author's analysis using World Development Indicators (WDI) and International Trade Centre (ITC) data.

**Figure 2.5: Agricultural export performance country wise**

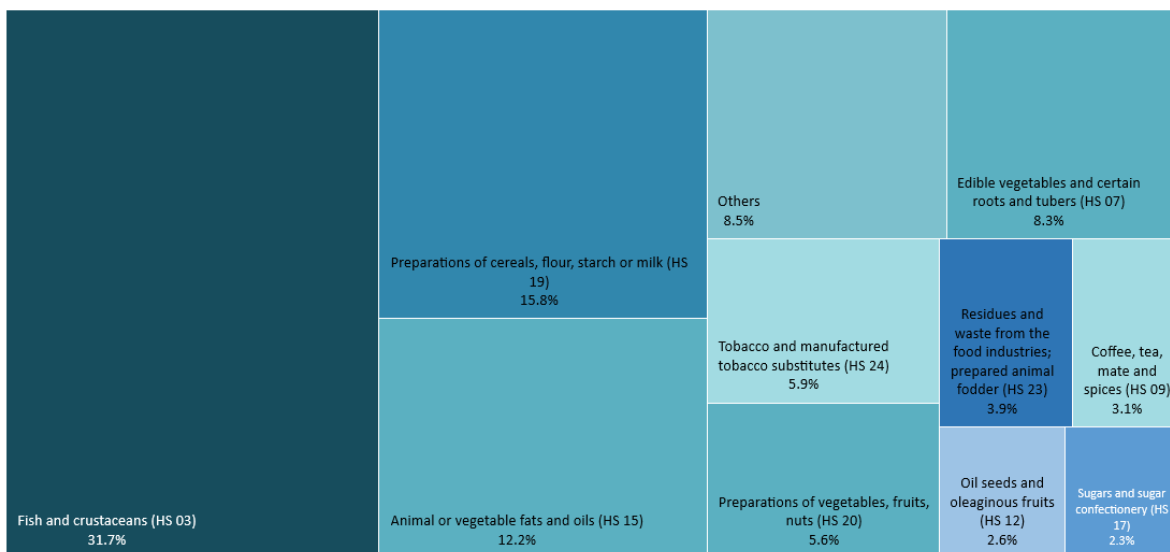


Source: Author's analysis using International Trade Centre (ITC) data.

**Note:** Bubble sizes represent each country's share in global agricultural exports in 2021. Countries are indicated as BGD – Bangladesh, CHN – China, FRA- France, IND – India, GER-Germany, MYM – Myanmar, PAK – Pakistan, NLD – Netherlands, VNM – Vietnam, and USA – United States of America.

Bangladesh's agricultural export is dominated by fish and fish products, accounting for 32 per cent of all such export receipts, followed by preparations of cereals, flour, starch, or milk (HS 19), contributing to more than 15 per cent of agricultural exports (Figure 2.6). Other notable products include animal or vegetable fats and oils (HS 15), edible vegetables (HS 07), tobacco (HS 24), and preparations of vegetables, fruits, and nuts (HS 20).

**Figure 2.6: Composition of Bangladesh's agricultural exports (average of 2020-22)**



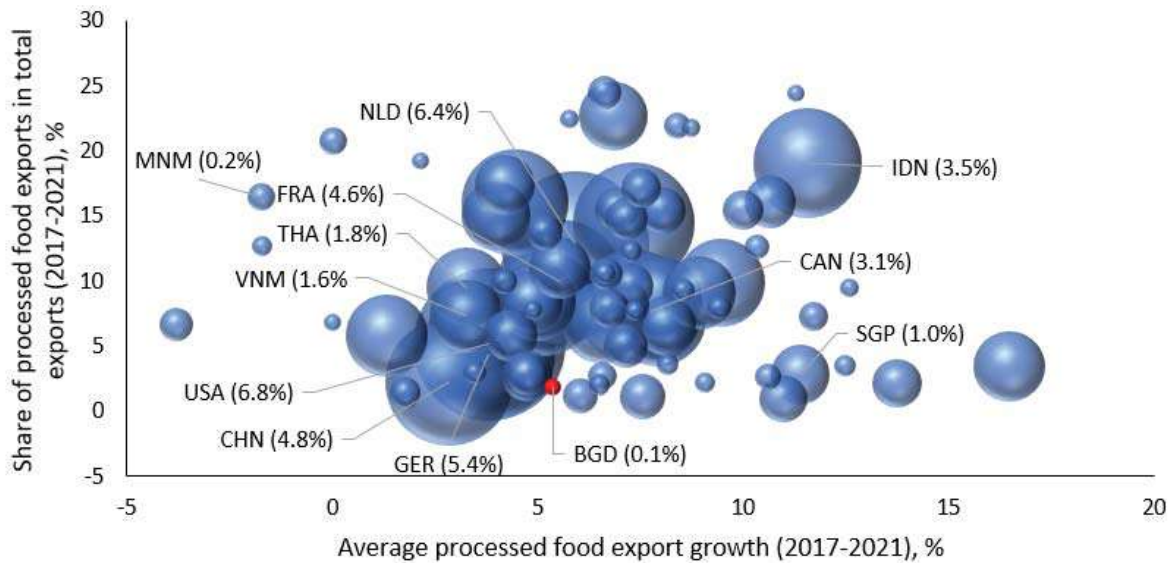
Source: Author's analysis using Export Promotion Bureau (EPB) data.

**Note:** The number below each product category represents the respective product's percentage share in Bangladesh's total average agricultural exports (FY20 to FY22).

The dominance of fish has, however, drastically declined from as high as 90 per cent of all agricultural exports in 2000, with the growing significance of preparations of cereals, flour, starch or milk (HS 19) and animal or vegetable fats and oils (HS 15). During 2012-13 to 2021-22, the average agricultural export growth of fish (HS 03) and cereals (HS 19) were -0.8 and 24.4 per cent, respectively (Table 2.1). Most of the top 20 items at the HS 6-digit level experienced increased shares in agricultural exports over the past decade (Table 2) at the cost of the declining significance of fish.

One of Bangladesh's fastest-growing sectors is agro-processed food. Globally the demand for processed food is on the rise due to consumer preference, urbanization, and population growth. Bangladesh exports around \$1 billion worth of processed food, showing great potential in this sector, which, when compared with other countries, as in Figure 2.7, Bangladesh currently has a relatively small share and a growth rate of just over 5 per cent.

**Figure 2.7: Processed food export performance country wise**



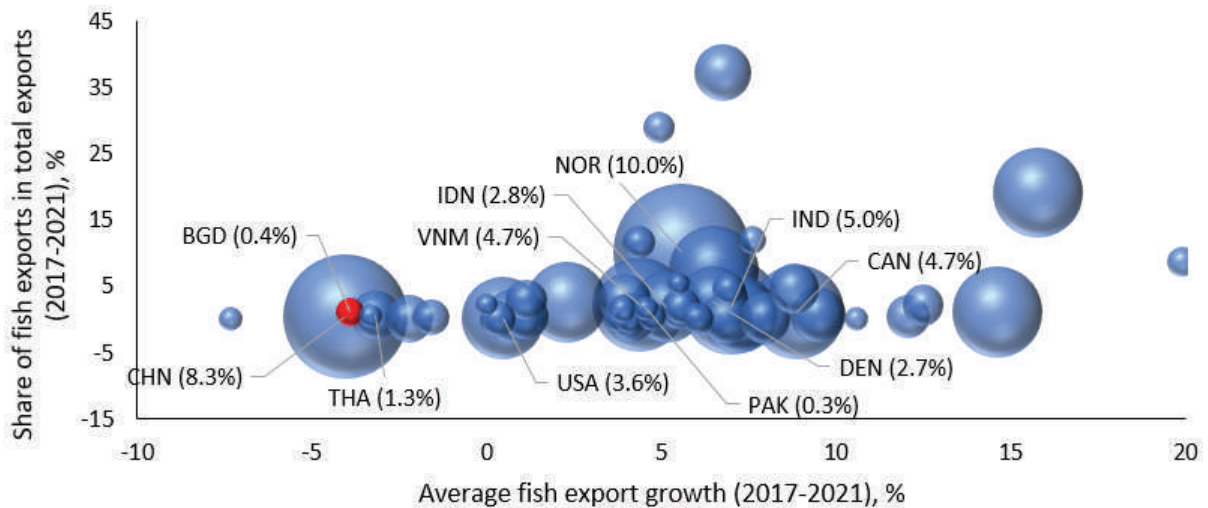
Source: Author's analysis using International Trade Centre (ITC) data.

**Note:** Bubble sizes represent each country's share in global processed food exports in 2021. Countries are indicated as ARG – Argentina, BGD – Bangladesh, CHN – China, FRA – France, GIN – Guinea, HTI – Haiti, IDN – Indonesia, IND – India, GER – Germany, MDV – Maldives, MYM – Myanmar, PAK – Pakistan, SGP – Singapore, THA – Thailand, TUV – Tuvalu, VNM – Vietnam, VUT – Vanuatu, USA – United States of America.



In the other key export product, fish, Bangladesh is experiencing negative export growth. The rising demand in the domestic economy and a lack of export preparedness are two factors behind this dismal performance. Pakistan, whose share of fish in global fish export is less than Bangladesh, is growing its annual fish exports by around 5 per cent on average. Most fish exporters have witnessed fairly sizeable growth (Figure 2.8), indicating opportunities in the global market.

**Figure 2.8: Export performance of fish**



*Note: Bubble sizes represent each country's share in global fish exports in 2021. Countries are indicated as ARG – Argentina, BGD – Bangladesh, DEN - Denmark, GIN – Guinea, HTI – Haiti, IDN – Indonesia, IND – India, NOR = Norway, MDV – Maldives, MYM – Myanmar, PAK – Pakistan, SGP – Singapore, THA – Thailand, TUV – Tuvalu, VNM – Vietnam, VUT – Vanuatu. Source: Author's analysis using International Trade Centre (ITC) data.*

**Table 2.1: Top ten agricultural export items at the HS 2-digit level**

HS code	Product description	FY00		FY10		FY15		FY22		Average growth during FY12 to FY22 (%)
		Exports (million \$)	Share in agricultural exports (%)	Exports (million \$)	Share in agricultural exports (%)	Exports (million \$)	Share in agricultural exports (%)	Exports (million \$)	Share in agricultural exports (%)	
03	Fish	380.4	90.2	537.1	63.4	565.6	48.2	532.3	30.8	-0.8
19	Preparations of cereals, flour, starch, or milk	0.8	0.2	21.9	2.6	94.2	8.0	250.0	14.5	24.4
15	Animal or vegetable fats and oils	0.7	0.2	7.2	0.9	16.8	1.4	230.1	13.3	43.9
23	Residues and waste from the food industries; prepared animal fodder	--	--	2.9	0.3	3.7	0.3	140.5	8.1	127.4
24	Tobacco and manufactured tobacco substitutes	3.1	0.7	73.0	8.6	68.5	5.8	107.2	6.2	5.9
07	Edible vegetables and certain roots and tubers	7.3	1.7	53.0	6.3	103.2	8.8	99.9	5.8	7.0
20	Preparations of vegetables, fruit, nuts or other parts of plants	0.1	0.0	22.4	2.6	83.6	7.1	82.9	4.8	10.7
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder	0.1	0.0	13.0	1.5	35.0	3.0	55.2	3.2	46.9
09	Coffee, tea, mate and spices	24.7	5.9	12.1	1.4	28.2	2.4	49.5	2.9	11.1
22	Beverages, spirits and vinegar	0.3	0.1	2.8	0.3	31.1	2.7	32.7	1.9	19.6

Source: Author's analysis using Export Promotion Bureau (EPB) data

**Table 2.2: Top 20 export items at the HS 6-digit level (million \$)**

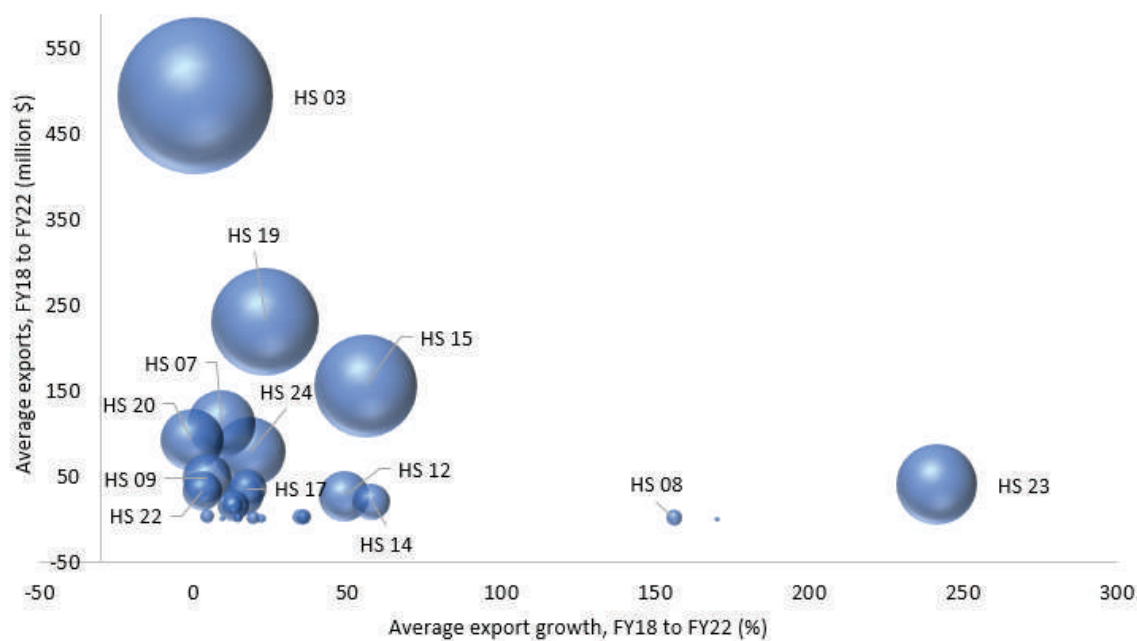
HS code	Product description	FY12		FY22	
		Exports (million \$)	Share in total agricultural (excluding fish) exports (%)	Exports (million \$)	Share in total agricultural (excluding fish) exports (%)
151590	Vegetable fats and oils and their fractions; fixed, n.e.s. in heading no. 1515, whether or not refined, but not chemically modified	10.9	2.5	182.8	15.3
230400	Oil cake and other solid residues, whether or not ground or in the form of pellets, resulting from the extraction of soya-bean oil	--	--	135.0	11.3
240120	Tobacco; partly or wholly stemmed or stripped	58.1	13.6	89.7	7.5
190590	Food preparations; bakers' wares n.e.s. in heading no. 1605, whether or not containing cocoa; communion wafers, empty cachets suitable for pharmaceutical use, sealing wafers, rice papers and similar products	5.1	1.2	68.3	5.7
071190	Vegetables and mixed vegetables; n.e.s. in heading no. 0711, provisionally preserved but unsuitable in that state for immediate consumption	8.4	2.0	60.5	5.1
190190	Food preparations; of flour, meal, starch, malt extract or milk products, for uses n.e.s. in heading no. 1901	8.6	2.0	58.5	4.9
200989	Juice; of any single fruit or vegetable n.e.c. in heading no. 2009, unfermented, not containing added spirit, whether or not containing added sugar or other sweetening matter	--	--	55.5	4.6
190531	Sweet biscuits; waffles and wafers: sweet biscuits	4.6	1.1	50.4	4.2
091099	Spices; mixtures of 2 or more products of the same heading	12.2	2.9	35.4	3.0
140490	Vegetable products; n.e.s. in chapter 14	0.3	0.1	28.6	2.4
170490	Sugar confectionery; (excluding chewing gum, including white chocolate), not containing cocoa	4.1	1.0	26.5	2.2

HS code	Product description	FY12		FY22	
		Exports (million \$)	Share in total agricultural (excluding fish) exports (%)	Exports (million \$)	Share in total agricultural (excluding fish) exports (%)
070190	Vegetables; potatoes (other than seed), fresh or chilled	8.3	1.9	25.9	2.2
190540	Food preparations; rusks, toasted bread and similar toasted products, whether or not containing cocoa	1.0	0.2	23.6	2.0
120740	Oil seeds; sesamum seeds, whether or not broken	4.5	1.1	23.0	1.9
220299	Waters, including mineral waters and aerated waters, containing added sugar of other sweetening matter or flavoured, and other non-alcoholic beverages, not including fruit or vegetable juices of heading 2009	--	--	22.3	1.9
190219	Uncooked preparations; pasta, uncooked (excluding that containing eggs), not stuffed or otherwise prepared	1.3	0.3	21.3	1.8
050400	Animal products; guts, bladders and stomachs of animals (other than Fish), whole and pieces thereof	2.8	0.7	14.7	1.2
150790	Vegetable oils; soya-bean oil and its fractions, other than crude, whether or not refined, but not chemically modified	--	--	14.6	1.2
120190	Soya beans, other than seed for sowing, whether or not broken, n.e.s	--	--	14.5	1.2
151499	Rape, colza or mustard oil and its fractions thereof, whether or not refined, but not chemically modified	5.3	1.3	13.9	1.2

Source: Author's analysis using Export Promotion Bureau (EPB) data.

Figure 2.9 plots the most important agricultural export items from Bangladesh by their average exports and growth over the past five years of 2018-22. It is obvious that despite its size, fish (HS 03) export growth has been stagnant (on average less than one per cent during 2018-22). A similar sluggishness is also associated with vegetable products (HS 20), cereal products (HS 19), vegetable oils (HS 23), and residues and wastes from the food industries (HS 23) have recently experienced very high growth.

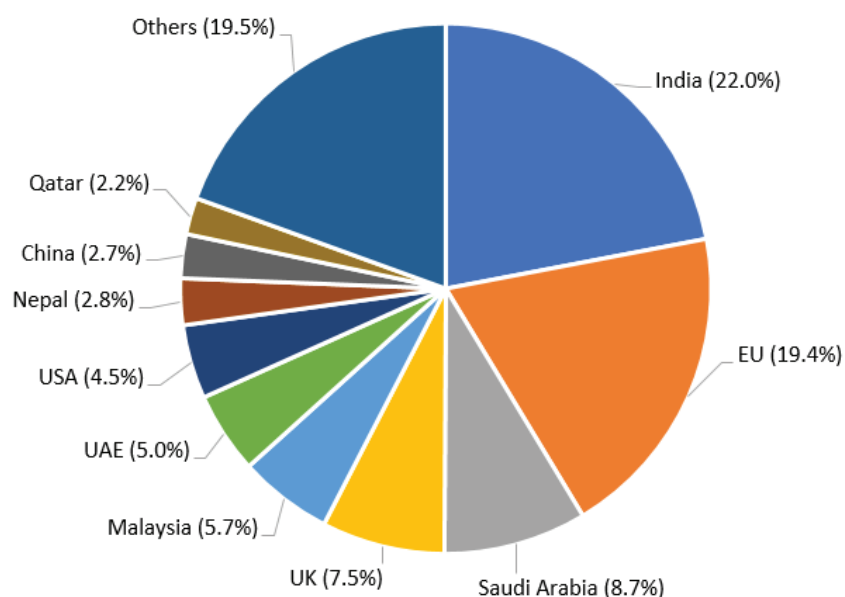
**Figure 2.9: Bangladesh's agricultural export share by destinations  
(average of FY18 to FY22)**



*Source and note: Author's analysis using Export Promotion Bureau (EPB) data. The size of the bubble represents the respective product's share in Bangladesh's total agricultural exports in FY22.*

India is the most important agricultural export destination, accounting for 22 per cent of such exports, followed by the European Union (EU) (19.4%), Saudi Arabia (about 9%), the UK (7.5%), Malaysia (5.7%) and the UAE (5.0%). In value terms, during 2018-22, on average, agricultural export earnings from India were \$283 million per year, while the corresponding figure for the EU was \$301. Together, the top three export destinations (viz., India, the EU, and Saudi Arabia) account for half of Bangladesh's all agricultural exports (Figure 2.10). Export to India significantly grew overtime. The agro-export to India was only \$1 million in FY00; however, it increased to \$448 million in FY22 (Table 2.3). Similar to India, exports to the EU, Malaysia, and the UK have risen over time. However, Export to the USA has decreased overtime.

**Figure 2.10: Bangladesh's agricultural (including Fish) export share by destinations (average of FY20 to FY22)**



Source: Author's analysis using Export Promotion Bureau (EPB) data.

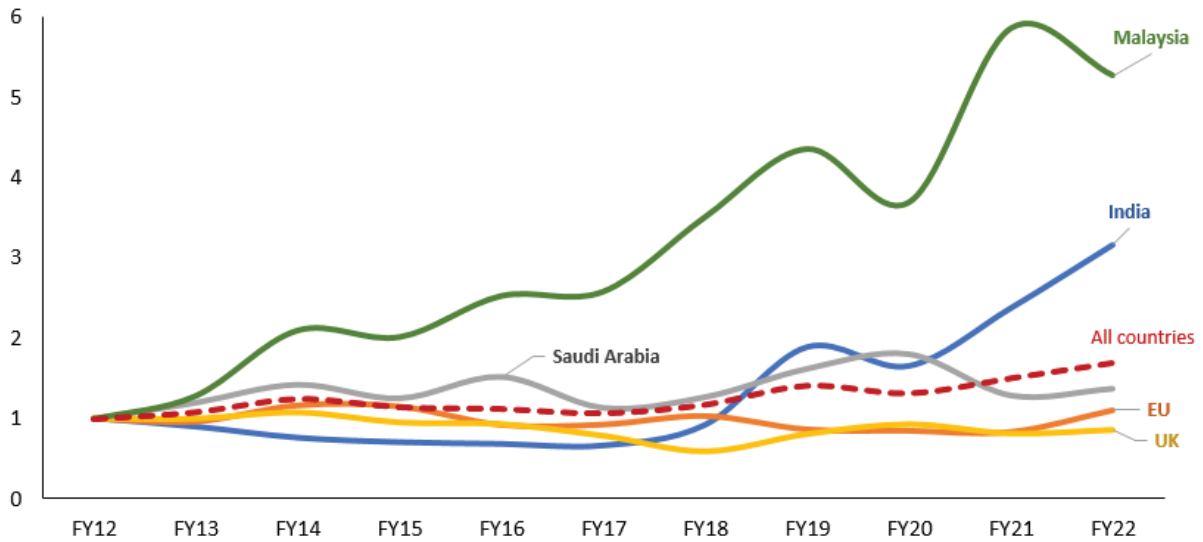
**Table 2.3: Bangladesh's agricultural export to top destinations**

Export destinations	Bangladesh's agricultural exports to different countries (\$ millions)				
	1990	2000	2012	2022	Average 2018-22
<b>India</b>	1	1	141	448	283
<b>EU</b>	8	113	323	357	301
<b>Saudi Arabia</b>	1	4	90	124	133
<b>UK</b>	30	61	134	114	107
<b>Malaysia</b>	2	0	18	94	81
<b>USA</b>	63	139	73	80	62
<b>China</b>	3	4	27	29	48
<b>Canada</b>	2	5	10	13	12
<b>Republic of Korea</b>	0	0	5	5	4

Source: Author estimation based on EPB and UN Comtrade data.

Malaysia, over the past decade, has grown fast as an important agricultural export market for Bangladesh. The growth of exports to this market has been faster than that of India (Figure 2.11). The index value for export to India rose over the past five years, buoyed by LDC-related trade preferences granted to Bangladesh. Export earnings from India grew by more than \$280 million in FY22 compared to FY18, nearly quadrupling exports (Figures 2.11 and 2.12). On the other hand, despite trade preferences, such exports to Europe lacked dynamism (Figures 2.11 and 2.12).

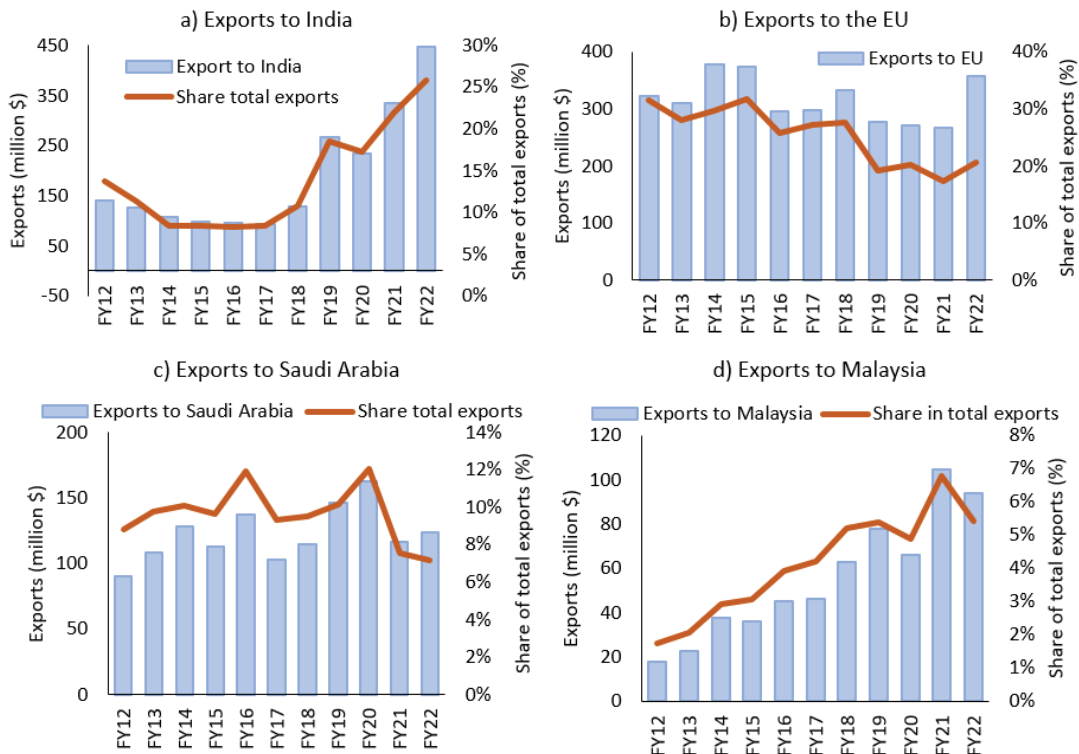
**Figure 2.11: Bangladesh’s agricultural exports, by major destination country (2011-2012=1)**



Source: Author's analysis using Export Promotion Bureau (EPB) data.

**Note:** Export values are normalised by setting 2011-12 = 1.

**Figure 2.12: Agricultural export & its share to major destinations**

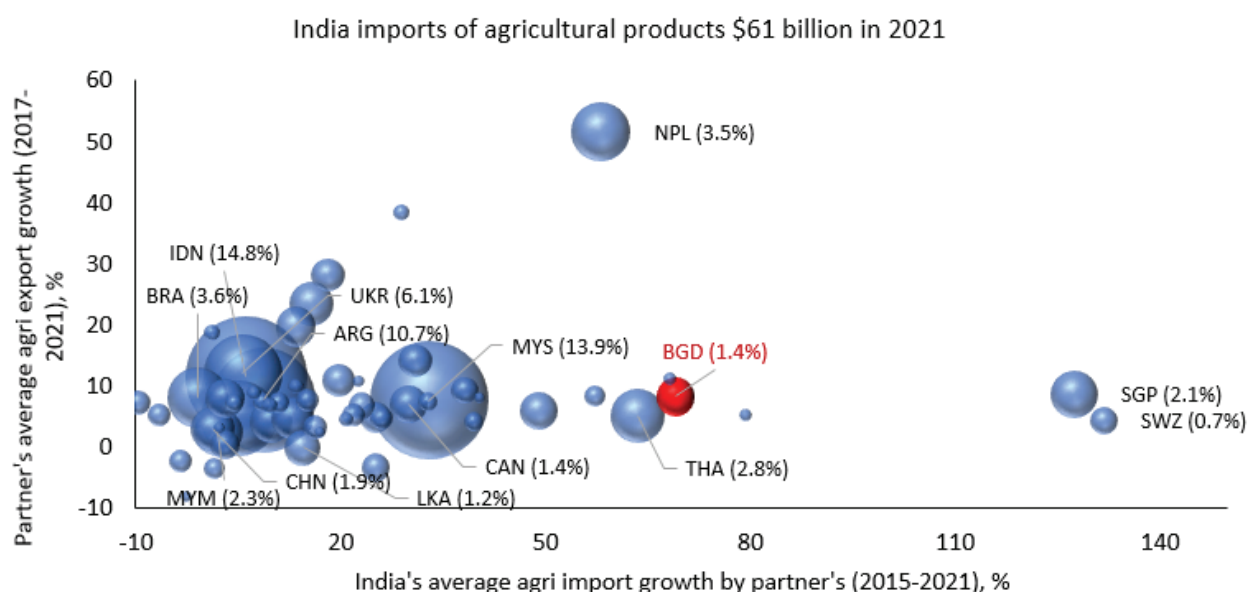


Source: Author's analysis using Export Promotion Bureau (EPB) data.

Figures 2.13 and 2.14 capture the dynamics of Bangladesh's agricultural export growth performance in comparison with all other global suppliers in the markets of India, the EU, and Saudi Arabia, respectively. This analysis is based on three primary factors: export growth rates of competing countries in the destination market, all supplying countries' export growth, and the market share of each supplier. The bubble sizes in the figures represent the share of exports by a supplier country in the destination market.

First, considering the market in India, which imported agricultural goods worth of \$448 million in 2022, it is found that Indonesia (with a market share of 14.8%), Malaysia (13.9%), Argentina (10.7%), and Ukraine (6.1%) are the most important suppliers. Bangladesh possesses a small market share of just 1.4 per cent, which is less than half of that of Nepal. However, Bangladesh's export growth into India during 2015-21 was much faster—albeit from a small base—than most countries.

**Figure 2.13: Export market for agricultural products in India**

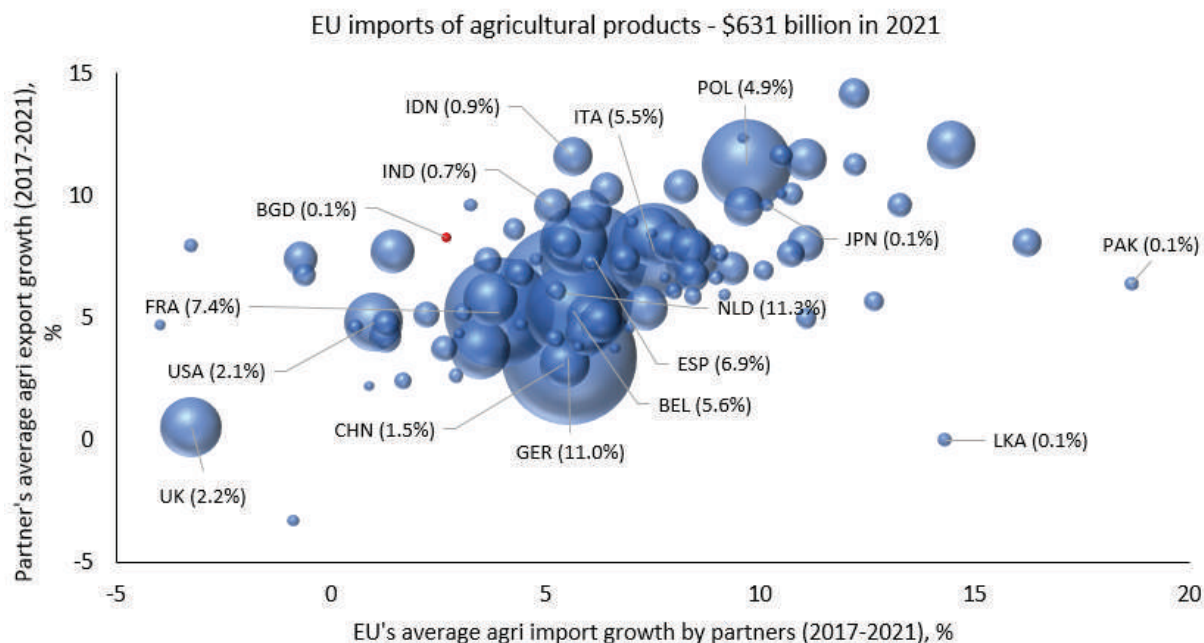


Source: Author's analysis using International Trade Centre (ITC) data.

**Note:** Bubble sizes represent the partner's share in India's imports in 2021. Countries are indicated as ARG – Argentina, BGD – Bangladesh, BRA – Brazil, BEL - Belgium, CAN – Canada, CHE – Switzerland, CHN – China, ESP - Spain, FRA- France, IND – India, JPN= JAPAN, GER = Germany, MYN – Myanmar, MYS – Malaysia, NLD -Netherlands, NPL – Nepal, POL – Poland, SGP – Singapore, THA – Thailand, UAE – United Arab Emirates, USA – United States of America, UK =United Kingdom, UKR – Ukraine, VNM – Vietnam.



**Figure 2.14: Export market for agricultural products in the EU**



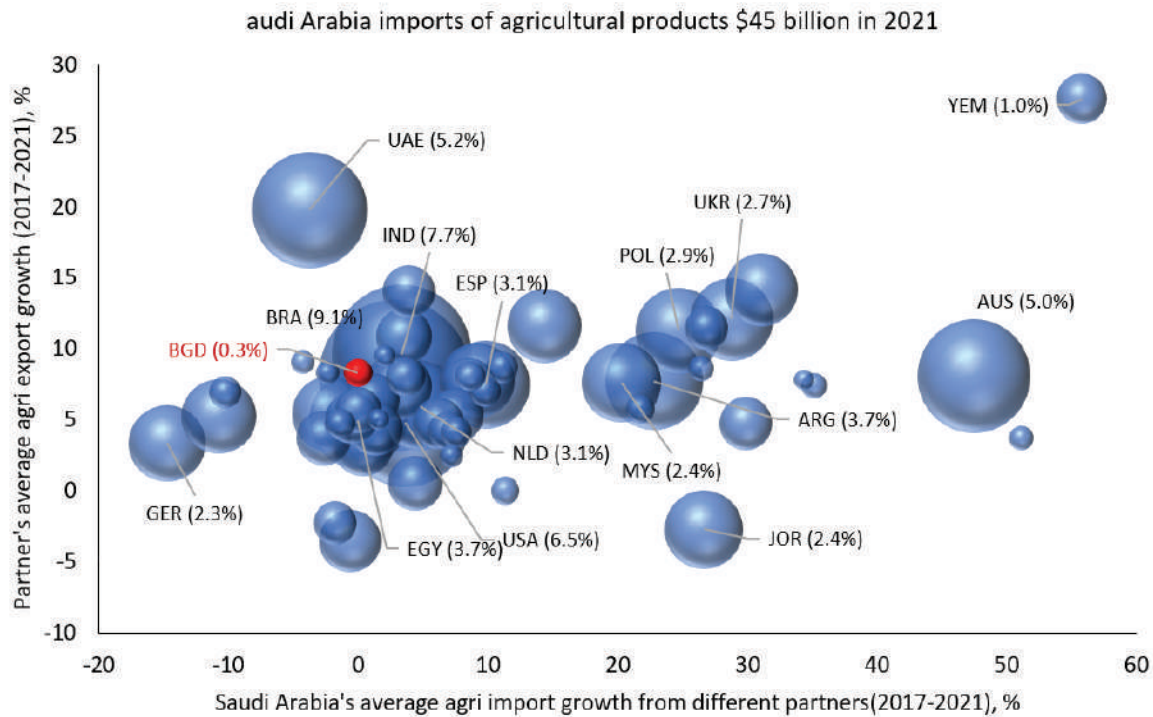
Source: Author's analysis using International Trade Centre (ITC) data.

Note: Bubble sizes represent the partner's share in the EU's imports in 2021. Countries are indicated as ARG – Argentina, BGD – Bangladesh, BRA – Brazil, BEL – Belgium, CAN – Canada, CHE – Switzerland, CHN – China, ESP – Spain, FRA – France, IND – India, JPN – Japan, GER – Germany, MYN – Myanmar, MYS – Malaysia, NLD – Netherlands, NPL – Nepal, POL – Poland, SGP – Singapore, THA – Thailand, UAE – United Arab Emirates, USA – United States of America, UK – United Kingdom, UKR – Ukraine, VNM – Vietnam.

In the European Union market, its members tend to trade more between themselves for agricultural goods, with Germany and Netherlands holding the largest market shares (Figure 2.14). Bangladesh's share is a minuscule 0.1 per cent, and its export growth to the EU (about 3% during 2017-21) is less than its overall global export growth rate. Therefore, LDC-related preferential market access has not resulted in export success.

In Saudi Arabia as well, Bangladesh has an insignificant market share (of 0.3%) along with a very weak export growth to that market for 2017-21 (Figure 2.15), which is picking up a large fall in export receipts due to Covid-19. Prior to the epidemic, Bangladesh saw double-digit growth in that market during 2018-2020.

**Figure 2.15: Export prospects for agricultural products to Saudi Arabia**



Source: Author's analysis using International Trade Centre (ITC) data.

**Note:** Bubble sizes represent the partner's share in Saudi Arabia's imports in 2021. Countries are indicated as ARG – Argentina, BGD – Bangladesh, BRA – Brazil, BEL – Belgium, CAN – Canada, CHE – Switzerland, CHN – China, ESP – Spain, FRA – France, IDN – Indonesia, IND = India, JPN = JAPAN, JOR – Jordan, GER = Germany, MYN – Myanmar, MYS – Malaysia, NLD –Netherlands, NPL – Nepal, POL – Poland, SGP – Singapore, THA – Thailand, UAE – United Arab Emirates, USA – United States of America, UK =United Kingdom, UKR – Ukraine, VNM – Vietnam. Source: Author's analysis using International Trade Centre (ITC) data.

## III. An Assessment on the Impact of LDC Graduation on Agricultural Goods Exports

Bangladesh, as an LDC, benefits from duty-free market access and relaxed rules of origin in about 50 developed and developing countries under the respective country's generalized system of preference (GSP) schemes. After LDC graduation, Bangladesh's exports could be adversely impacted in two major areas: loss of most generous unilateral trade preferences and constrained policy space arising from complying with WTO regulations. This section summarizes the post-graduation preferential schemes, rules of origin requirement, tariff structure for Bangladesh's agriculture exports in major destinations, and constrained policy space.

### 3.1 Loss of preferential market access in major destinations

The most important change from LDC graduation will likely be preferential market access for exporters. Post-graduation, the country will no longer benefit from the existing duty-free market access designed for LDCs, which will be replaced by either a less favourable GSP scheme or no preference. Graduated Bangladesh will also have to face stringent rules of origin (RoO) requirements to benefit from any preferential scheme. The market access conditions and tariff structure changes in major agricultural export destinations are summarized below.

#### India

India is the largest destination for Bangladesh's agricultural exports. Bangladesh currently enjoys Duty-Free Quota Free (DFQF) market access under the GSP for LDCs and the South Asian Free Trade Agreement (SAFTA) LDC scheme in the Indian market. After graduation, Bangladesh's market access in India will be considerably restricted under the SAFTA non-LDC arrangement (Table 3.1), the latter providing duty reduction for selected items. Under this preference scheme, Bangladesh will see a high preference erosion for agricultural products.

India offers duty-free access to around 1850 agriculture products at HS 8-digit level under the duty-free tariff-free scheme for LDCs.<sup>5</sup> The majority of the items are not included in SAFTA non-LDC preferences. The SAFTA non-LDCs have a large number of agricultural products in the sensitive lists compared to SAFTA LDC preferences (MOF, 2021). The number of agricultural products in the sensitive list will be expanded to 151 (including 9 fish products) for non-LDCs which is 25 for LDCs. Bangladesh exported 134 unique agricultural products at HS 8-digit level to the Indian market in the last three years, of which 125 items will see a tariff hike after graduation in 2026 (Table 3.2). Under the scheme, tariff rates on agricultural products will increase by 11 percentage points on average from the current tariff rates. Post-graduation, the average tariff rates for major export items, animal or vegetable fats and oils (HS 15), residues and waste from the food industries (HS 23), preparations of cereals, flour, starch or milk (HS 19), and fish and crustaceans (HS 03) will be 21.3, 13.5, 6.2, and 6.1 per cent under SAFTA non-LDC schedule (Table 3.4).

5. The classification for agriculture items follows WTO standard working definition.

**Table 3.1: Summary of preferential market access and rules of origin in key export destinations**

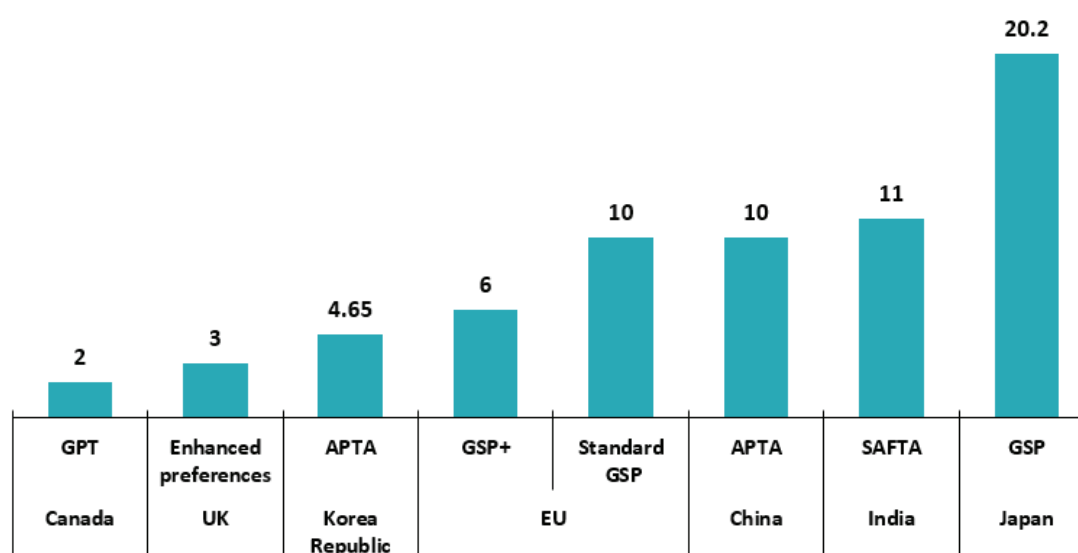
Country	Current LDC benefits			Post LDC graduation		
	Scheme	Tariff Concession	Rules of origin	Scheme	Tariff Concession	Rules of origin
<b>India</b>	LDC & SFATA LDC	Duty-free or concessional tariffs for 98.2% of tariff lines	General rule: Change of tariff sub-heading (CTHS) at the 6-digit level of the HS and 30 per cent value-added for LDCs.  SAFTA LDC: CTH+VA of 30% Regional cumulation: CTH+VA of 40%	SFATA Non-LDC	Tariff concession for selected products	SATFA non-LDC: CTH+VA of 40% Regional cumulation: CTH+VA of 50%
<b>European Union</b>	EBA	DFQF for all items except for arms and ammunition	General rule: None For selected products, VA is 30% One-stage transformation for textile and apparel Product-specific rules applicable for some products, including agriculture	Standard GSP	Duty-free or concessional tariffs for 66% of tariff lines	General rule: None For selected products VA: 50% One-stage transformation for textile and apparel Product-specific rules applicable for some products, including agriculture
				GSP+	DFQF for 66% of tariff lines	
<b>Canada</b>	Least Developed Country Tariff (LDCT)	DFQF market access for 98.9 per cent of tariff lines	General rule: VA of 40% Product-specific rules: "Specified process" (SP) for made-up textile articles and SP or SP+ minimum-value content of 25 per cent for apparel.	Generalised Preferential Tariff (GPT) designed for developing countries	Tariff preferences for selected agricultural and industrial products. <sup>1</sup>	General rule: Minimum value added of 60% for all products to benefit from GPT
<b>China</b>	Zero-Tariff	99% of products cover zero-duty tariff	General rule: change of tariff heading (CTH) or 40 per cent VA. APTA: VA 35 % regional cumulation value added is 50%	APTA	APTA preferences for 20% of tariff lines	The general rule for APTA: VA of 45% Regional cumulation value added of 60%

6. Most textiles and clothing, footwear, and chemical products are not included.

<b>United Kingdom</b>	Comprehensive Preference	DFQF for all items except for arms and ammunition	General rule: None For selected products VA: 25% One-stage transformation for textile and apparel Product-specific rules applicable for some products, including agriculture	Enhanced Preferences	Zero tariffs for more than 85% of tariff lines	General rule: None For selected products VA: 50% One-stage transformation for textile and apparel Product-specific rules apply for some products, including agriculture
<b>USA</b>	No preferences	MFN applicable	-	No preferences	MFN applicable	-
<b>Japan</b>	LDC Benefit	DFQF for close to 95% of tariff lines	Sufficient transformation resulting in a different product under HS tariff heading 4 digits.	GSP for developing countries	31% of products enjoy GSP preference	Sufficient transformation resulting in a different product under HS tariff heading 4 digits.
<b>Republic of Korea</b>	GSP	DFQF is available to LDCs for 95 per cent of tariff lines	VA:45 VS:35 (APTA)	APTA	Around 20 per cent of product lines will enjoy tariff concession	The general rule for APTA: VA of 45% Regional cumulation value added of 60%

Source: Author's estimates from respective country's GSP scheme and Razzaque (2022).

**Figure 3.1: Post-graduation average tariff increment in destination countries (percentage points)**



Source: Author estimation using tariff schedules of different countries and WITS data.

## European Union

The European Union, under its GSP regime, offers the most generous market access scheme, known as Everything But Arms (EBA), to LDCs, including Bangladesh. It offers two other trade preferences to non-LDC developing countries: the Special Incentive Arrangement for Sustainable Development and Good Governance (popularly known as GSP+) and the Standard GSP. Under the EBA, the EU provides duty-free access for all items except arms and ammunition, as such all agricultural exports of Bangladesh currently enjoy duty-free preference. After graduation in 2026, Bangladesh will get a three-year transition period until 2029 to benefit from the EBA. The European Commission has proposed a new GSP scheme for 2024-34, which will replace the current scheme in early 2024. Like the current GSP, the new GSP proposal retained the three-tier preference schemes for developing countries: the EBA, the GSP+, and the Standard GSP.<sup>7</sup> Post-graduation, Bangladesh will get preferences under GSP+ or Standard GSP contingent upon meeting the criteria.<sup>8</sup>

Qualifying for GSP+ depends on meeting vulnerability criteria and ratification and implementing 32 pre-specified international conventions effectively. As of 2022, Bangladesh has acceded to all of these international conventions and ratified 20 of them (Razzaque and Rahman, 2022). It also meets the vulnerability criteria (Razzaque, 2022). To qualify for GSP+, Bangladesh needs to ratify the remaining conventions and effectively implement all on or before 2029.

The EU has around more than 4,500 agricultural items at the HS 8-digit level. LDCs get duty-free tariff preference for all these products (Table 4). On the other hand, GSP+ provides duty-free or tariff concession for around 2,800 agricultural products. Under this scheme, the average tariff rate for agriculture exports will increase by 6 percentage points (from the EBA duty-free situation) on average.<sup>9</sup>

Over the past three years, Bangladesh exported 354 products to the EU, of which around 86 items will experience preference erosion under GSP+. Major agricultural items, fish and crustaceans (HS 03) will continue getting close to zero tariffs under GSP+ (Table 3.4).

The EU maintains thorough requirements to qualify non-originating agricultural goods for certification as the origin. The requirement for value addition varies across chapters and sub-headings. LDC beneficiaries enjoy less stringent rules of origin for some goods. Post-graduation, the general rules of origin requirement for some non-apparel and non-agricultural product exports to the EU will increase to 50 per cent from 30 per cent for LDCs. However, the rules of origin requirements for agricultural products for LDCs and developing countries are similar.

7. GSP+ provides tariff free access for 66 per cent of eligible tariff lines, while Standard GSP grants tariff concession or tariff removal for 66 per cent tariff lines.

8. According to the proposed GSP 2024-34, graduating LDCs will qualify for GSP+ preference contingent upon fulfilling the vulnerability and sustainable development criteria. i) Vulnerability criteria: The country has a non-diversified economy, defined when the seven largest GSP sections of its imports into the European Union represent more than 75 per cent in value of its total GSP-covered imports during the last three consecutive years (European Commission, 2021). ii) Sustainable development: A beneficiary country must ratify and effectively implement 32 international agreements and conventions on human rights, labour rights, environmental protection, and climate change, and good governance.

9. If Bangladesh gets Standard GSP in the EU, the average tariff rates for agro-exports will be around 10 per cent.

**Table 3.2: Number of product coverage in LDC and post-LDC scheme**

Country	Post-graduation scheme	Total No. of agricultural products in tariff line	No of agricultural products with zero MFN tariff	No. of duty-free products under LDC scheme	No. of products covered under the post-graduation scheme	No. of duty-free products under the post-graduation scheme	No. products Bangladesh exports <sup>10</sup>	No. of products will face tariff hike
India	SAFTA	1,841	54	1,746	1381	0	134	125
China	APTA	2,045	155	1,863	548	13	51	51
EU	Standard	4,607	480	4,213	2,715	163	354	271
	GSP+				2,790	2,308		86
UK	EP	2,624	554	2,070	1,923	1,860	237	41
Japan	GSP	2,476	513	1,890	461	160	86	59
Canada	GPT	1,678	955	586	257	68	238	80
Korea	APTA	2,302	100	1,148	61	0	56	34

Source: Author's computation from respective country's tariff schedule, tained from WITS database.

## United Kingdom

The United Kingdom recently introduced its new GSP called the Developing Country Trade Scheme (DCTS).<sup>11</sup> Bangladesh currently enjoys duty-free benefits for all exports, including agriculture, under Comprehensive Preference. The UK simplified the access criteria for the Enhanced Preferences<sup>12</sup> – the second most generous scheme after Comprehensive Preferences, therefore, Bangladesh will be entitled to Enhanced Preferences after graduation and three years transition period in 2029.<sup>13</sup>

Under DCTS comprehensive preference, the UK grants zero-tariff access for 2,624 agricultural products at HS 8-digit level. On the other hand, 1,923 agricultural products will enjoy duty-free access or concessional tariff under Enhanced preference. The average tariff rate for agro-exports will rise to 3 under enhanced preferences from the current zero tariff for LDCs. Of the 237 exported agriculture items at the HS 8-digit level, 41 products will see a tariff increment. Bangladesh's major agricultural exports to the UK, fish and crustaceans (HS 03),

10. No of unique products exported in last 3 years. Products estimated at tariff line. Agriculture products follows WTO's definition.

11. The DCTS provides GSP benefit under three schemes: the Comprehensive Preferences (designed for LDCs), the Enhanced Preferences (designed for vulnerable low- or lower-middle countries) and the Standard Preferences (for low- or lower-middle countries).

12. Under the DCTS, the UK removed the requirements to comply with the international conventions as a precondition for accessing the most generous preferences of non-LDC developing countries. The DCTS also suspends the conditionalities on export competitiveness (the import share criterion) leaving the export diversification criterion to be the sole determinant of DCTS Enhanced Preferences qualification. This means when export receipts emanating from the seven largest broad categories of goods from a beneficiary represent more than 75 per cent of its total shipment to the UK, the exporting country will be determined as economically vulnerable, and thus will be eligible for DCTS Enhanced Preferences. However, it reserves the right to suspend a country from the DCTS Enhanced Preferences (similar to GSP) on the ground of violation of labor and human rights.

13. The least generous GSP in the DCTS is the Standard Preferences scheme.

and preparations of cereals, flour, starch or milk (HS 19) will face zero per cent and 6.5 per cent tariffs under Enhanced Preferences. The DCTS simplified the rules of origin requirements for LDC, which will not be applicable for Enhanced Preferences. Therefore, Bangladesh will face a stringent rule of origin to get preferential access.

## United States

The United States is an important destination for export from Bangladesh. Under its GSP for least-developed beneficiary developing countries (LDBDCs), the United States provides preferential duty-free entry for more than 5,100 products out of around 12,000 tariff lines at the HS 8-digit level. There are 131 designated GSP beneficiary countries and territories, including 44 least-developed countries. Currently, Bangladesh is not a beneficiary of GSP in the United States and is subject to MFN tariffs. Therefore, graduation should pose no significant concerns for Bangladesh's agricultural exports to the US.

## China

China provides duty-free quota-free (DFQF) market access to Bangladesh for around 99 per cent of its tariff lines under its GSP for LDCs. It does not have a preferential scheme for developing countries. After graduation, Bangladesh may be entitled to Asia-Pacific Trade Agreement (APTA) non-LDC tariff concessions. China offers duty-free access to more than 1,800 products at the HS 8-digit level. APTA non-LDC preference provides a concessional tariff for 548 items. Due to the low coverage of products under APTA non-LDCs, and lower tariff reduction from the MFN rates, Bangladesh will experience considerably high preference erosion in this market. The tariff rate for agriculture products under APTA ranges from 4.6 per cent to 31.9 per cent. Bangladesh exported 51 agricultural items at the HS 8-digit level to China in the past three years. None of these is included in the APTA tariff schedule. Therefore, all agricultural exports will have to pay MFN tariffs. Post-graduation tariffs on major agricultural exports to China - fish and crustaceans (HS 03), and oil seeds and oleaginous fruits (HS 12) – will be 6.1 per cent and 7.3 per cent, respectively. Under APTA preference, the minimum value addition requirement will also increase to 45 per cent from 35 per cent for LDCs.

## Japan

Bangladesh enjoys duty-free and quota-free special preferential treatments for over 95 per cent of tariff lines in Japan. The post-graduation scheme – GSP for developing countries – provide less generous benefit for the designated countries. After graduation, Bangladesh will be eligible for the GSP scheme designed for developing countries.



The GSP for LDCs provides duty-free access for 1,890 agriculture and fishery products at the HS 9-digit level. This will be reduced to 163 products under the GSP for developing countries. As a result, Bangladesh's agricultural export would see a tariff increment and stiffer competition in the Japanese market. Of the 86 items exported to this market (based on the statistics over the past three years), about 60 will face MFN rates after graduation in 2026. The consequent tariff hike for agricultural products will be around 20 percentage points, on average. Fish and crustaceans (HS 03), products of the milling industry (HS 11), and oil seeds and oleaginous fruits (HS 12) – major agro-products exports to Japan – will face average tariff rates of 3.7 per cent, 13.3 per cent and 1.9 per cent, respectively. Since the RoO for LDCs and developing countries are similar to Japan, graduation will not have any impact arising from rules requirements for accessing any preferential treatment.

## Republic of Korea

The Republic of Korea provides preferential treatment to LDCs for more than 95 per cent of tariff lines. It, however, does not offer trade preference to developing countries, so bilateral or regional trade agreements will determine market-access conditions for LDC graduates. Post-graduation, Bangladesh will get tariff preferences under the Asia-Pacific Trade Agreement (APTA).

The Republic of Korea grants duty-free treatment for 1,148 agricultural products for LDCs. The APTA preferences have just 61 agricultural items providing concessional duties but no tariff removal. Bangladesh exports 56 agricultural items at the HS 6-digit level (based on the statistics for the past three years). Of these items, 34 will face MFN tariffs. Fish and crustaceans (HS 03), tobacco products (HS 24) and products of animal origin (HS 05) are major agricultural exports of Bangladesh to the Korean market, which will face 16.3 per cent, 31.6 per cent, and 10.2 per cent tariffs, respectively, in the Korean market under the APTA. The minimum value addition requirement under APTA preference will increase to 45 per cent (from 35 per cent for LDCs). Lack of product coverage and stringent rules of origin requirements in the Republic of Korea are thus expected to adversely affect Bangladesh's exports after graduation.

**Table 3.3: Changes in tariffs on Bangladesh’s agricultural products exports after graduation (percentage points)**

HS Code	Average exports FY17 to FY22 (million \$)	Percentage points changes in tariffs						
		India	EU (GSP+)	China	UK (EP)	Japan	Canada	Korea Rep.
03	500	6.0	0.03	6.1	0.06	3.67	0.2	6.9
19	211	6.2	6.64	9.1	6.51	19.3	2.6	4.5
15	139	32.0	9.31	12.75	5.04	1.5	1.6	5.7
7	107	19.0	2.2	9.5	1.62	5.5	1.5	12.9
20	92	5.0	0.26	4.8	5.45	14.0	5.1	17.7
9	47	9	0	10.3	0.0	0.0	0.0	5.3
23	34	15.0	0.0	4.6	3.76	0.0	0.5	2.7
17	33	5.0	12.0	8.2	0.08	11.7	3.1	4.0
12	25	11.3	10.0	6.75	4.85	1.9	0.0	3.8
14	20	5	0	9.9	0.00	0.0	0.0	2.8
5202	18	10	0	4.7		0.0	0.0	0.0
10	17	38.2	27	17.8	14.47	0.0	14.6	19
5	17	5.0	0.0	10.4	0.0	0.0	0.0	2.0
5203	7	30	0	6.3	0.0	0.0	0.0	0.0
16	4	5.1	8.0	5.2	10.5	10.7	3.6	5.8
18	3	5.0	2.5	11.3	4.4	15.9	2.0	6.8
11	2	15.3	28.4	18.9	0.00	13.3	0.1	2.6
8	2	7.8	2.1	18.1	1.06	4.8	1.0	0.0
4	2	32.5	23.89	13.9	3.1	23.4	5.7	5.7
13	2	5.3	0	9.2	0.0	2.7	0.0	6.2
21	1	5	2.5	11	0.1	12.4	3.9	5.4
6	1	8.1	0.0	5.8	1	5.5	2.1	7.9
2	1	10.3	6.3	19	4	9.0	2.9	9.2

Source: Author’s estimates from WITS and EPB.

## Canada

The Canadian GSP scheme for LDCs—called the Least Developed Country Tariff (LDCT)—provides duty-free access to 98.9 per cent of its tariff lines. Bangladesh is enjoying tariff-free access under this scheme. After graduation, Bangladesh will be entitled to the Generalised Preferential Tariff (GPT) scheme designed for developing countries that allows duty-free or tariff reduction for some selected agricultural and industrial products.

In the Canadian tariff schedule, there are 1,678 agricultural and fishery items, of which 955 products have zero MFN duty. Close to 600 agricultural and fishery products are allowed duty-free access under the LDCT. On the other hand, the GPT covers just 257 agricultural products, with 68 of them retaining tariff elimination. Over the past three years, Bangladesh exported 238 unique agricultural and fishery items to Canada, and around 80 of them will see a tariff hike after graduation.

Post-graduation, the average tariff increment will be 2 percentage points. Fish and crustaceans (HS 03), and preparations of cereals, flour, starch or milk (HS 19) are major agro-products exported that will see 0.5 per cent and 2.7 per cent tariffs, respectively (Table 3.4). The minimum value addition requirement to benefit from any preferential tariffs under GPT will increase to 60 per cent from the current 25 per cent for LDCs. The stringent RoO requirements are expected to affect Bangladesh's exports to this market.

### **Other Countries**

In the fiscal year 2021-22, Bangladesh exported a total of \$318 million worth of agricultural products to Saudi Arabia, the United Arab Emirates, Malaysia, and Qatar – none of them has any preferential scheme for least developed countries. The total export value in these countries is equivalent to more than one-quarter of Bangladesh's agriculture exports. As Bangladesh exports to these countries on MFN basis, graduation will not affect the terms of exports.

**Table 3.4: Tariff structure to be faced by Bangladesh after LDC graduation**

HS Code	European Union				India			UK			China			United States			Korea			Japan			Canada			
	MFN	GSP	GSP+	EBA	MFN	SAFTA	LDC	MFN	CP	EP	MFN	ASEAN	APTA	LDC	MFN	GSP	LDC	MFN	APTA	LDC	MFN	GSP	LDC	MFN	GSP	LDC
01	1.1	0.6	0	0	30	5	0	1	0	0.5	5.9	0	5.8	0	0.8	0.6	0	16.1	16.1	12.9	0.4	0.4	0.0	14.7	14.1	14.0
02	9.6	6.7	6.3	0	32	10.3	0	5	0	4	19	0	19	0	3.9	3.6	1.4	22.7	22.7	13.5	10.2	9.3	0.3	3.4	3.0	0.0
03	10.8	6.1	0.1	0	30	6.1	0.1	10.9	0	6.6	7.1	0	6.1	0	0.7	0.1	0	16.4	16.3	9.4	5.8	5.7	2.0	0.7	0.5	0.0
04	6.5	0.8	0	0	35.3	12	0	5.1	0	3.1	14.1	0	13.9	0	19.5	19.2	13	56.9	56.9	52.2	23.5	23.4	0.0	6.0	5.7	0.0
05	0.3	0.1	0	0	29.6	5.3	0	0	0	0	11.4	0	10.4	0	0.6	0.1	0	10.2	10.2	3.7	0.3	0.0	0.3	0.0	0.0	0.0
06	6.4	3.1	0	0	26.3	8.1	0	2.4	0	1	8.4	0	5.8	0	3.2	0	0	11.2	10.7	2.3	0.3	0.0	0.3	4.6	3.2	0.0
07	8.8	5.5	0.6	0	27.8	7.9	0	8.1	0	5.7	11.2	0	9.5	0	5.7	2.9	0.7	113.9	113.9	101	6.1	5.5	0.1	0.4	1.6	0.0
08	7.9	5.3	0.3	0	35.1	10.4	0	7.5	0	5.1	19.5	0	18.1	0	3	1.9	0.1	70.4	70.1	43.3	7.1	5.5	0.7	0.9	1.0	0.0
09	2.8	1	0	0	60.9	9	0	1.6	0	0.6	13.4	0.6	10.4	0	0.7	0.1	0	81.4	61.6	56.3	3.6	1.6	1.8	0.1	0.0	0.0
10	0.6	0.1	0.1	0	39.3	38.2	0	0.8	0	0.8	17.9	6.5	17.8	0	1.4	1.3	0.4	284.7	284.7	265.7	0.9	0.3	0.5	14.6	14.6	0.0
11	10.3	0.6	0	0	31.5	13.1	0	7.4	0	4.6	22.1	9.2	21.9	0	2.7	0.6	0	330.1	330.1	328.5	16.8	15.9	2.6	0.3	0.1	0.0
12	1.1	0.4	0.3	0	21.9	9.1	0	0.9	0	0.5	9.5	0	7.3	0	7.3	6.6	6.1	85.2	85	82.6	3.4	2.8	0.9	0.5	0.0	0.0
13	2.2	1	0	0	24.7	5.3	0	0	0	0	10.1	0	9.2	0	1.1	0.6	0	75.2	75.1	68.9	2.9	2.8	0.1	0.0	0.0	0.0
14	0	0	0	0	30	5	0	0	0	0	9.9	0	9.9	0	1.5	0.8	0	4.9	4.9	0.6	3.1	1.0	1.7	0.0	0.0	0.0
15	7.1	3.6	0	0	36.3	21.3	0	5.4	0	3.3	13.6	1.4	13.3	0	4	3	0.3	13.7	13.6	7.9	3.5	2.1	0.7	3.6	2.5	0.1
16	18.3	10.2	0	0	33	5.1	0	17.7	0	10.5	5.7	0	5.2	0	3.3	1.6	0	23	23	17.2	11.8	10.7	0.0	14.8	13.5	9.8
17	9.1	2.2	0.2	0	47	25.9	0	7.6	0	4.8	26.8	16.9	26.6	0	14.1	12.3	10.8	18	17.9	13.9	13.6	12.8	1.1	4.8	3.1	0.0
18	8	4.5	0	0	30	6.4	0	7.6	0	4.4	11.9	0	11.3	0	10.3	8.3	7.7	41.3	41.2	34.4	17.0	15.9	0.0	2.7	2.0	0.0
19	7.8	4.2	0	0	31.2	6.2	0	7.2	0	3.4	10.4	0	10.1	0	14.9	12.5	8.2	49.3	49.3	44.8	20.4	19.7	0.5	3.5	2.7	0.0
20	17.2	12.8	0	0	34.7	11.9	0	16.6	0	12	6.2	0.2	6	0	7.7	5.6	2.7	33.7	33.7	16	15.7	14.2	0.2	5.7	5.4	0.1
21	8.2	4.3	0.4	0	64.5	5	0	6.8	0	3.9	12.1	0.2	11.6	0	10.3	8.4	6.2	32.5	32.5	23.8	14.2	12.8	0.4	5.1	4.0	0.0
22	1.7	0.5	0	0	119.7	113.5	112.3	3.2	0	2.4	14.5	0	14.1	0	3.2	2.7	0.5	20.5	20.5	5.9	6.5	5.6	0.1	1.4	0.7	0.0
23	1.5	0.3	0	0	15.1	13.5	0	1.8	0	0.6	5.3	0	4.6	0	6.3	5.9	4.7	11.5	11.5	8.5	0.5	0.0	0.2	7.3	7.0	5.0
24	29.4	20.7	0	0	31.3	31.3	31.3	41.7	0	30.6	32.8	28.3	31.9	0	52	51.3	43	31.6	31.6	21.5	7.2	7.2	0.0	6.9	4.3	0.3
290543	17.7	17.7	17.7	0	20	5	0	31.5	0	31.5	8	0	8	0	4.6	0	0	8	8	0	2.8	0.0	0.0	0.0	0.0	0.0
290544	43	43	43	0	20	5	0	38.2	0	38.2	8	0	8	0	4.9	0	0	8	8	0	17.0	10.2	0.0	0.0	0.0	0.0
3301	2.9	0	0	0	20	5.6	0	0	0	0	18.9	0	17.7	0	1.7	0	0	39.8	39.4	33.4	1.8	0.4	1.4	0.3	0.0	0.0
3501	5.2	2.3	0	0	20	5	0	0	0	0	15	0	12.4	0	1.5	0	3	16	16	11.3	2.7	0.0	2.7	0.0	0.0	0.0

HS Code	European Union				India			UK			China			United States			Korea			Japan			Canada			
	MFN	GSP	GSP+	EBA	MFN	SAFTA	LDC	MFN	CP	EP	MFN	ASEAN	APTA	LDC	MFN	GSP	LDC	MFN	APTA	LDC	MFN	GSP	LDC	MFN	GSP	LDC
3502	2.4	1.1	1.1	0	20	5	0	2	1	0	6.8	0	6.5	0	4.2	4.2	0	8	8	0	5.5	3.2	1.5	5.0	3.2	0.0
3503	7.7	0	0	0	20	5	0	0	0	0	5	0	5	0	3.4	1.9	0	8	8	0	10.0	8.5	10.0	0.0	0.0	0.0
3504	3.4	0	0	0	23.3	5	0	2	0	0	5	0	5	0	4.5	0	0	8	8	0	4.4	0.0	4.4	0.0	0.0	0.0
3505	7.7	0	0	0	20	15	0	7.6	6.4	0	5	0	5	0	2.9	0	0	276.6	276.6	276.6	6.8	1.4	0.0	0.0	0.0	0.0
380910	8.3	0	0	0	20	5	0	8	8	0	10	0	10	0	5.02	0	0	8	8	0	0.0	0.0	0.0	0.0	0.0	0.0
4101	0	0	0	0	0	0	0	0	0	0	3.2	0	3.2	0	2.5	0.3	0	0.5	0.3	0	9.0	9.0	0.0	0.0	0.0	0.0
4102	0	0	0	0	0	0	0	0	0	0	3	0	2.4	0	0.6	0.6	0	1.2	1.2	0	0.0	0.0	0.0	0.0	0.0	0.0
4103	0	0	0	0	0	0	0	0	0	0	3	0	2.3	0	1.8	0.8	1	0.8	0.8	0	0.3	0.1	0.0	0.0	0.0	0.0
4301	0	0	0	0	12	12	0	0	0	0	5.9	0	4.9	0	0.9	0	0	3	3	0	0.8	0.0	0.8	0.0	0.0	0.0
5001	0	0	0	0	30	8	0	0	0	0	6.5	0	4.2	0	0	0	0	202.7	1	1	0.0	0.0	0.0	0.0	0.0	0.0
5002	0	0	0	0	15	8	0	0	0	0	6.5	0	4.2	0	0	0	0	31.5	31.5	29.5	0.0	0.0	0.0	0.0	0.0	0.0
5003	0	0	0	0	15	8	0	0	0	0	9.3	0	8.1	0	1.3	0	0	2	2	0	0.0	0.0	0.0	0.0	0.0	0.0
5101	0	0	0	0	2.5	2.5	0	0	0	0	7.6	0	7.3	0	1.7	1.7	1.7	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
5102	0	0	0	0	5	5	0	0	0	0	9.3	0	9.3	0	1.3	1.2	1.2	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
5103	0	0	0	0	10	5	0	0	0	0	11	0	9.8	0	2.9	2.3	2.3	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
5201	0	0	0	0	5	5	0	0	0	0	10	0	6.7	0	6.5	6.5	1.6	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
5202	0	0	0	0	10	10	0	0	0	0	6.7	0	4.7	0	2	2	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
5203	0	0	0	0	30	30	0	0	0	0	8	0	6.3	0	7.6	7.6	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0
5301	0	0	0	0	0	0	0	0	0	0	6	0	6	0	1	1	1	2	2	0	0.0	0.0	0.0	0.0	0.0	0.0
5302	0	0	0	0	30	5	0	0	0	0	9	0	9	0	0	0	0	2	2	0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Author's estimation using data from the EU tariff schedule, WITS, ITC market access map.

Note: Ad-valorem tariffs and ad-valorem equivalent tariffs are considered for computations.

Estimations are based on simple average tariff rates.

## 4.1 Impact arising from the loss of policy space

As an LDC, Bangladesh is exempted from undertaking many WTO commitments and implementing various provisions. Therefore, it is important to consider if LDC graduation will require making any necessary adjustments to be compatible with the WTO system. Two WTO agreements are of particular interest: the Agreement on Agriculture (AoA) and the Agreement on Subsidies and Countervailing Measures (SCM). The AoA governs the rules and regulations related to domestic support and export subsidies for agricultural goods, while the SCM specifies provisions for supporting exports of fish and other industrial goods.

### **Tariff cuts, domestic support, and export subsidies under the Agreement of Agriculture**

The Agreement on Agriculture (AoA) maps out the ambit of policy support measures for the agricultural sector. The three major policy areas where the AoA provides rules and regulations are market access, domestic support, and export competition.

Under market access, WTO members converted all non-tariff measures to equivalent bound tariffs and did undertake some tariff cuts as agreed under the Uruguay Round of trade talks leading to the establishment of the WTO. According to the AoA, members are committed not to impose import quotas and bans, variable import levies, minimum import prices, discretionary import licensing, voluntary export restraints, and non-tariff measures as part of their general trade policy options. Bangladesh is already in compliance with these provisions, and thus LDC graduation will not restrict trade policy space in this respect.

Any further tariff reduction commitments by WTO members will be contingent upon the successful conclusion of a round of trade talks. As an LDC, the WTO's Doha Round, which began in 2001, would not require to undertake tariff liberalization. If WTO members would agree on non-LDC members to cut tariffs, Bangladesh would be prepared to do so upon graduation from the group of LDCs. As the Doha Round is stalled and unlikely to be successfully concluded, it is inconceivable that any multilateral tariff liberalization commitment will occur any time soon through WTO processes.

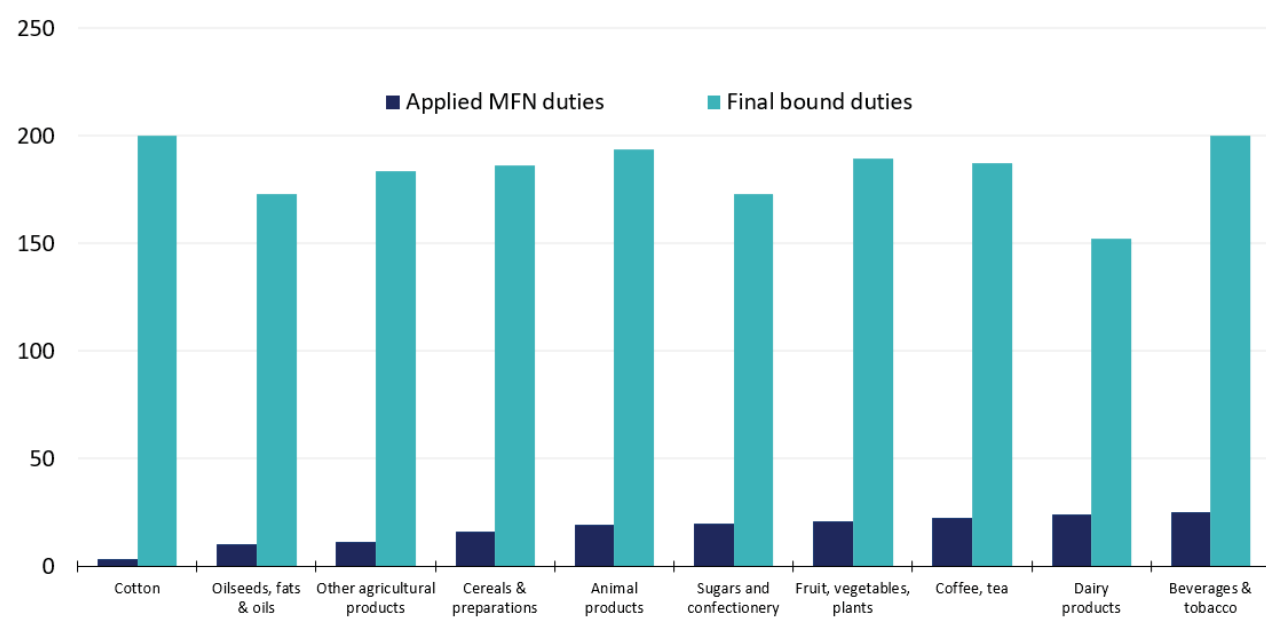
Also, any tariff cuts due to WTO commitments are usually made on the bound tariff rates (World Trade Organization, 2011), which Bangladesh specified at much higher levels than the currently applied MFN tariff rates. That is, even if Bangladesh would be required undertaking tariff liberalization commitments, any reasonable reduction in tariffs that could be agreed upon by WTO members would not have any impact on Bangladesh's applied tariff rates exerting no consequences whatsoever.

While customs duties (tariffs) are used for protecting domestic industries, the trade policy regime in Bangladesh, unlike most other countries, is also characterized by certain other trade taxes known as para-tariffs. Some of these taxes are supposed to be trade-neutral (i.e., to be imposed on both imports and import-competing domestic production), but in practice, they discriminate against imports. These include supplementary duty (SD), regulatory duty (RD), advance trade VAT and advance income tax (AIT), and even VAT.

According to the World Tariff Profile 2022, Bangladesh's applied MFN tariff on agricultural products ranges from 3.5 per cent to 25 per cent. The average applied tariff is highest for beverages & tobacco (25%), followed by dairy products (24%), coffee and tea (22.5%), and fruit, vegetables, and plants (21.2%) (Table 3.5)<sup>14</sup> (WTO, 2022). As seen in Figure 3.2, the applied MFN tariff rates in Bangladesh is much lower than its final bound tariff rate for all broad categories of agricultural goods.

After graduation, WTO members could raise issues about Bangladesh's para-tariffs. If so, it will be possible to absorb the current para-tariffs by raising the customs duties should Bangladesh want it to adjust without undermining its current level of tariff protection. Only in those circumstances of undertaking free trade agreements will Bangladesh's potential FTA partners ask for lowering tariffs from the current applied rate level.

**Figure 3.2: MFN duty and bound tariff rates on agricultural products in Bangladesh**



Source: WTO and author's calculation based on the data from the National Board of Revenue (NBR), Bangladesh.

**Note:** Average import duties at the HS 2-digit level are provided in Table 3.6.

14. The WTO calculated the average in following way: All simple averages are based on pre-aggregated HS six-digit averages. Pre-aggregation means that duties at the tariff line level are first averaged to HS six-digit subheadings. Subsequent calculations are based on these pre-aggregated averages. To the extent possible, non-ad valorem duties are converted into ad valorem equivalents.

**Table 3.5: Product category-wise MFN tariff rates, bound tariff rates, and total tax incidence of Bangladesh**

Product Category <sup>1</sup>	Applied MFN duties		Final bound duties		Total tax incidence
	Average	Duty-free in %	Average	Binding in %	Average
Animal products	19.3	7.7	193.8	100	57.0
Dairy products	24.0	0	152.5	100	63.4
Fruit, vegetables, plants	21.2	2.1	189.7	100	64.1
Coffee, tea	22.5	0	187.5	100	79.5
Cereals & preparations	16.3	13.2	186.1	100	54.4
Oilseeds, fats & oils	10.3	23.9	172.8	100	34.2
Sugars and confectionery	19.8	0	172.9	100	82.2
Beverages & tobacco	25.0	0	200.0	100	278.2
Cotton	3.5	30.0	200.0	100	24.8
Other agricultural products	11.4	15.1	183.4	100	34.5

Source: WTO and author's calculation based on NBR data.

**Note:** The total tax incidence is calculated considering all para-tariffs and VAT that apply to imports.

**Table 3.6: HS code-wise import taxes in Bangladesh, by duty type (%)**

HS code	CD	SD	VAT	AIT	RD	AT	TTI	Average bound tariff
01	9	0	0	4	1	0	19	187
02	25	13	8	5	3	3	65	200
03	24	13	9	5	3	3	65	50
04	24	6	12	5	3	4	61	200
05	10	0	2	4	0	1	18	190
06	15	0	8	3	11	3	45	200
07	21	5	9	5	2	3	50	191
08	25	12	14	5	14	5	90	182
09	24	9	10	5	3	3	61	183
10	7	0	4	4	3	2	23	160
11	16	0	14	5	5	5	49	200
12	5	0	6	4	0	2	25	166
13	9	0	0	5	1	0	15	169
14	10	0	3	5	0	1	20	200
15	15	1	15	4	1	5	44	172
16	25	0	15	5	3	5	59	104
17	24	11	15	5	3	5	73	162
(Except 1701)								

15. The definition of product category against HS codes are provided in Annex Table A1.



HS code	CD	SD	VAT	AIT	RD	AT	TTI	Average bound tariff
1701	BDT 4200 per MT	0	15	2	30	5		200
18	18	16	15	5	2	5	74	200
19	24	26	15	5	3	5	97	188
20	25	9	15	5	3	5	72	200
21	21	15	15	5	2	5	76	200
22	25	250	15	11	3	5	448	200
23	3	0	4	1	1	4	15	186
24	25	105	15	5	3	5	220	200
290543	10	0	15	5	0	5	37	200
290544	10	0	15	5	0	5	37	200
3301	10	0	15	5	0	5	37	200
3501	8	0	15	5	3	5	38	200
3502	5	0	15	5	0	5	31	200
3503	10	0	15	5	0	5	37	200
3504	8	0	15	5	0	5	34	200
3505	10	0	15	5	0	5	37	200
380910	5	0	15	5	0	5	31	200
4101	5	0	0	5	0	0	10	200
4102	5	0	0	2	0	0	7	200
4103	5	0	0	3	0	0	8	200
4301	25	0	0	5	3	0	33	200
5001	5	0	0	5	0	0	10	200
5002	25	0	15	5	3	5	59	200
5003	25	0	15	5	3	5	59	
5101	5	0	0	5	0	0	10	15
5102	5	0	0	5	0	0	10	200
5103	5	0	15	5	0	5	31	200
5201	0	0	0	0	0	0		200
5202	4	0	13	4	0	5	27	200
5203	5	0	15	0	0	5	26	200
5301	6	0	15	5	0	5	32	200
5302	25	0	15	5	3	5	59	200

**Note:** CD= Custom Duty, SD = Supplementary Duty, VAT = Value Added Tax, AIT = Advance Income Tax, RD =Regulatory Duty, AT = Advance Tax, TTI = Total Tax Incidence.

## Domestic Support

Various domestic support measures characterize Bangladesh's agriculture. In the most recent national budget of 2022-23, close \$1.5 billion has been allocated for agricultural support (Ministry of Finance, 2022). These subsidies are given to keep the prices of production inputs, viz. fertilizers, seeds, and diesel (fuel used for irrigation), within producers' purchasing capacity and boost crop productivity in a country where farmland is decreasing. In addition, there are support measures such as financial assistance for storage and processing, preferential interest rates for farming, subsidies on exports, etc.

The WTO's Agreement on Agriculture (AoA) categorizes agricultural subsidies into three main types: Amber box, Blue box, and Green box subsidies. The domestic support measures considered minimally trade-distorting, such as research and development, disease control, and environmental programmes, fall under the Green box and are exempted from reduction commitments. Blue box subsidies are domestic support measures that are considered less trade-distorting than Amber box subsidies, but still subject to reduction commitments. The subsidies include payments based on production limiting programmes, such as acreage reduction programmes. Most trade-distorting subsidies fall into the Amber box and are subject to reduction commitments by member countries. These subsidies include measures that provide support to agricultural producers, such as price support measures, direct payments, input subsidies, etc. The Amber box support is allowed up to the so-called de minimis threshold level, which is set at 5 per cent of the value of agriculture production for developed countries and 10 per cent for developing countries. However, some exemptions for developing countries in providing domestic support fall into the development box. This box includes investment subsidies and agriculture input subsidies available to low-income or poor farmers (Table 3.7).

The Aggregate Measurement of Support (AMS) is the indicator that is used to measure the supports that fall under Amber Box. The support can be product-specific and general in nature, such as support provided to the agriculture sector. Product-specific subsidies relate to the overall amount of subsidy offered for a given agricultural commodity. The difference between the local and global market prices is multiplied by the quantity of output to determine the product-specific subsidy. Non-product-specific subsidies refer to the total level of support given to the agricultural sectors as a whole. For instance, non-product-based subsidies cover inputs like seeds, energy, irrigation, and fertilizers.

According to a recent calculation submitted to the Committee on Agriculture, Bangladesh's current aggregate measurement of support (AMS) is 1.33 per cent, which is much below the de minimis threshold of 10 per cent specified for developing countries. Therefore, Bangladesh will not have to undertake any reduction in domestic support for the agricultural sector.

Members are required to notify the Committee on Agriculture of the extent of their domestic support measures. The notification must contain the supports that fall under the exempt category (Green box, Blue Box, and Development box) and de minimis category. Members who have planned domestic assistance reduction obligations must also do AMS calculations when the presence of measures requires it, and the current total AMS must be informed.

When a member does not have such planned obligations but nevertheless needs assistance, a notification demonstrating that such non-exempt assistance falls under the applicable de minimis levels must be submitted. The notifications must be submitted annually. However, LDC members are excluded from this requirement and are permitted to submit the notification once every two years. Members from developing nations may also ask the Committee to waive the yearly notice requirement for actions that don't fall within the Green Box, the developmental box, or the Blue Box.

**Table 3.7: Agricultural subsidies and support measures in the multilateral trading system**

Green Box	Development Box	Blue Box	Amber Box
<p>Subsidies that have minimum distortions are in Green Box. It does not involve price support to producers and transfers from consumers. According to annex 2 of the AoA, these subsidies mostly include:</p> <ul style="list-style-type: none"> <li>- Government service programmes.</li> <li>- Direct payments to producers (not linked with production limits).</li> </ul>	<p>Article 6.2 of AoA allows developing countries additional flexibility in providing domestic support. These include investment, crop diversification, and input subsidies for the development of poor farmers.<sup>1</sup></p>	<p>Domestic support measures on which members are yet to reach an agreement.</p> <p>Not subject to reduction commitments.</p>	<p>Support measures that are very distortionary and not covered by other boxes. Includes all price supports or subsidies based on output levels.</p> <p>Subject to "de-minimis" level of protection or reduction commitments.</p>

Source: *Agreement on Agriculture (WTO)*

### Export competition/subsidies

Bangladesh provides incentives to certain sectors with a view to promoting exports and helping with export diversification. Some of the provided support measures (such as cash assistance to various exporters) are open to being interpreted as the WTO's definition of export subsidies. The impending graduation will have implications on various incentives, including cash incentives on export and schemes that target specific sectors or based on export performance. Bangladesh provides export subsidies to several agricultural products, including meat and processed meat, potato, crop and vegetable seed, tea, etc. (the list of products and rate of subsidies are provided in Annex Table A2). Post-graduation, these incentives can be non-compliant with the WTO's AoA.

16. *Absence of strict guideline regarding the definition of "poor farmers" does provide some degree of flexibility to policymakers.*

According to AoA, export incentives are referred to as subsidies which are contingent on export performance. This list covers direct export subsidies, cash assistance support for agriculture products and processed items, subsidies to reduce the cost of marketing exports of agricultural products, including handling, upgrading, and other processing costs, and internal transport and freight charges on export shipments provided by the government.

The AoA restricts export subsidies; no country, even LDCs, cannot provide export subsidies for agricultural products. It is, however, important to note that subsidies for fish and fish products are not under the purview of the WTO' AoA rather is guided by the provisions specified in the Agreement on Subsidies and Countervailing Measures (SCM).<sup>17</sup>

Bangladesh currently provides up to 20 per cent cash subsidy/assistance on exports of different agricultural and food products. So far, WTO members have not objected to Bangladesh's providing such export subsidies. After LDC graduation, trade policy practices could come under increased scrutiny, making it difficult to continue with export subsidies.

The WTO considers the possible adverse effects of trade liberalization on LDCs and the net food-importing developing countries (NFIDCs). Considering this, WTO members called for ensuring a level of food aid commitments to meet the needs of developing countries, food aid being available in full grant form, technical and financial assistance, and S&DT provisions in dealing with export credits.

The Nairobi Ministerial of the WTO offered further elaborated S&DT provisions for LDCs and NFIDCs. Under this, LDCs and NFIDCs will have the opportunity to subsidize certain export-related activities, including marketing, handling, and upgrading, as well as internal and international transportation until 2030. Also, LDCs and NFIDCs can enjoy 36-54 months repayment terms for imports benefiting from export financing support compared to 18 months for developing countries. Any developing country member of WTO can be considered as an NFIDC if the country has been a net importer of basic foodstuff in three years of the most recent five years. Bangladesh is currently not included in the list of the WTO's NFIDCs.<sup>18</sup> The recent trade data of Bangladesh shows its agricultural goods exports surpassing imports, and the government has officially requested the WTO to include the country within the group of NFIDCs. If included in the list, Bangladesh will be able to retain some policy space until 2030 in providing support to certain export related activities of agricultural exports.

17. The SCM is a multilateral agreement which deals with the use of subsidies and possible measures a member nation can take to counter the trade-distorting effects of subsidies. According to this agreement, a measure falls under the definition of subsidy if it contains any of the three elements: i. a financial contribution, ii. provided by a government or any public body within the territory of a member state, and iii. the contribution confers a benefit.

18. As per the provisions used by the WTO, a country can be recognised as a net food-importing country if its imports of agricultural and food products exceed their exports of similar products in three out of five consecutive years. All types of edible items are considered food products by the WTO. Bangladesh imported food products worth of about \$11 billion in 2021-22 as against its exports of only US\$ 796 million such food items.

## Trade policy measures under the Agreement on Subsidies and Countervailing Measures

The AoA covers the policy options for the agricultural sector, but it does not cover fish and fish products, for which the policy-related options are covered under the Agreement on Subsidies and Countervailing Measures (SCM). According to this agreement, a measure falls under the definition of subsidy if it contains any of the three elements: (i) a financial contribution, (ii) provided by a government or any public body within the territory of a member state, and (iii) the contribution confers a benefit. The WTO-led system considers 'specific' subsidies distorting the allocation of resources in the global economic system and should be subject to international regulatory discipline.

According to the agreement, there are two types of subsidies: Prohibited and Actionable. Prohibited subsidies are most trade-distorting and affect other countries. Export subsidies and the provision of the use of local content fall under prohibited subsidies. Actionable subsidies are not prohibited, but members can be held accountable if other members complain to the WTO. Subsidies targeting specific enterprises, industries, sectors, and regions can be considered violations of the SCM Agreement and may fall under the category of actionable subsidies.

WTO members can either choose to take unilateral measures (such as issuing countervailing duties on imports) or seek remedial measures through the WTO's dispute settlement mechanism if the provisions are violated. Articles 3 to 6 of the SCM Agreement outline the prohibited and actionable subsidies and possible remedies to challenge such elements. But Article 27 of the SCM agreement acknowledged the importance of prohibited subsidies to foster export and growth of domestic industries in the most underdeveloped economies (including LDCs).

To support LDC and several developing whose, GNP per capita lower than \$1,000 in 1990 prices are exempted from the obligation under prohibitive subsidies unless a beneficiary is globally competitive in any specific product (i.e., it has a share of 3.25 per cent of global export at HS 4 digit for two consecutive years). These developing countries are known as Annex VII (b) countries. The WTO annually evaluates their economic performance. If a member exceeds GNP per capita of \$1,000 in 1990 prices based on the latest World Bank data for three consecutive years, it will have to follow the provisions of the SCM agreement.

**Table 3.8: Support measures covered by prohibited and actionable subsidies**

Prohibited subsidies	Actionable subsidies
<p>Subsidies that are:</p> <ul style="list-style-type: none"> <li>Contingent upon export performances (export subsidies).</li> <li>Based on the use of domestic over imported goods (local content subsidies).</li> <li>Can only be utilized by LDCs, given the subsidized industry has a less than 3.25 per cent share in world trade of that product for two consecutive years.</li> </ul>	<p>Subsidies that cause:</p> <ul style="list-style-type: none"> <li>Injury to the domestic industry of another member.</li> <li>Nullification or impairment of benefits accruing directly or indirectly.<sup>19</sup></li> <li>Serious prejudice to the interests of another Member.<sup>20</sup></li> </ul>

Source: WTO Agreement on SCM.

As an LDC, Bangladesh benefits from the special and differential treatment under the Agreement on SCM. Otherwise, export incentives for fish and fish product exports would usually be interpreted as prohibited subsidies. Post-graduation, these support measures will be non-compliant with the WTO Agreement on SCM. However, Bangladesh could extend the use of the S&DT if it can be included as an Annex VII (b) country. Although Bangladesh's GNI per capita in current dollars was \$2,570 in 2021, it is likely to take several more years beyond 2026 to cross the threshold of \$1,000 GNP per capita in 1990 prices. Currently, no official exercise for Bangladesh's per capita GNI in 1990 prices is undertaken as it is not included in Annex VII (b). A recent exercise shows that it might take until 2028 or 2030 to cross the threshold level of income (Razzaque et al., 2020). To be included as an Annex VII(b) country is not straightforward as it involves WTO processes for securing members' approval. Bangladesh has made an official notification in this regard, but a decision has been pending.

19. Failure of another contracting party to carry out its obligations, or the application by another contracting party of any measure that nullifies or impairs possible benefits of the agreement are under actionable measures.

20. According to Article 6 of Agreement on SCM, subsidies that fall under serious prejudice are: more than 5% ad valorem subsidy, covering operating losses of an industry or enterprise.

## IV. A Quantitative Impact Assessment of LDC Graduation on Agricultural Exports

### 4.1 Impact of tariff preference erosion on exports

Post-graduation, Bangladesh's agricultural exports will see the loss of tariff preference (or, experience preference erosion) in major destination markets. As followed from the discussion in the above section, the consequent rise in tariffs in some cases can be significantly high. Any preference erosion could potentially be translated into a loss of competitiveness resulting in a loss of export earnings. This section attempts to estimate the potential loss of agricultural export earnings due to the resultant tariff hikes after LDC graduation.

Economists employ various methods to analyze the likely implications of tariff changes. One popular approach is to make use of partial equilibrium models that utilize the information on the value of individual export products, the associated tariff rate changes, the nature of the demand for the product, and other supply-side characteristics. The demand and supply side features are usually assumed based on the available secondary sources. While these models focus only on the relevant sector rather than the entire economy, they allow a more detailed analysis using the information at the highest level of product disaggregation (e.g., at the HS 8-digit level). Along with a partial equilibrium model, this section also uses the Global Trade Analysis Project (GTAP) general equilibrium model in assessing the impact of tariff rise on Bangladesh's agricultural exports. The GTAP model is a widely used ex-ante analytical framework for analyzing the effects of international trade and policies on national and global economies while capturing the interdependence between different economic sectors and countries in a consistent way. Although the general equilibrium features are quite appealing, this kind of model can usually work with aggregate data (rather than the disaggregated product and tariff level data).

#### The partial equilibrium model

The partial equilibrium model that is employed here comes from a paper developed by the Commonwealth Secretariat. (Commonwealth Secretariat, 2018). The advantage of this model is its simplicity – the data requirements are minimum, and the simulations results are plausible in the sense that tariff rises are associated in falling exports. The potential impact of graduation from LDC status in this model is transmitted through the following path: <sup>21</sup>

- Price effects – an increase in the price of goods because of graduation, which increases tariffs.
- This will result in potential substitution between exports from graduate and other countries.
- The results are dependent on market share elasticities and thus the extent of price sensitivities.

21. This section is adapted from Razzaque and Rahman (2019).

The trade effect of graduation from LDC status can be estimated by comparing the unit price received by the preference-receiving country with that of the MFN exporters:

$$P_k^i = P_k^W (1 + m_k^i) \text{ or } m_k^i = \frac{P_k^i}{P_k^W} - 1$$

where  $P_k^i$  is the unit price of product k received by country i (i.e., preference recipient), and  $P_k^W$  is the world unit price of the same product.  $m_k^i$  is the preference margin received by country i. It is assumed that markets are perfectly competitive and there is no product differentiation. The above equation can be expressed as:

$$P_k^i = P_k^W (1 + T_k^{MFN} - T_k^i)$$

$$m_k^i = T_k^{MFN} - T_k^i$$

where  $T_k^{MFN}$  is ad valorem equivalent MFN tariff for product k, and  $T_k^i$  is the export-weighted preferential tariff faced by country i. The percentage changes in exports as a result of changes in the price of exports is given by:

$$\frac{\Delta X}{X} = \frac{\Delta P}{P} + \varepsilon \frac{\Delta P}{P} \left[ \frac{\Delta P}{P} + 1 \right]$$

where X is exports and  $\varepsilon$  is price elasticity of demand for exports. The formula can be utilised to estimate the effect of abolishing tariff preferences resulting from graduation from LDC status. As a country graduates from the group of LDCs, its tariff preference regime changes, as it has to pay a higher tariff. The changes in export revenue as a result of graduation can be estimated from the following equation:

$$\frac{\Delta X}{X} = \mu_k^i \frac{\Delta m_k^i}{1 + m_k^i} + \varepsilon \left( \mu_k^i \frac{\Delta m_k^i}{1 + m_k^i} \right) \left( \mu_k^i \frac{\Delta m_k^i}{1 + m_k^i} + 1 \right)$$

Where,  $\mu_k^i = \frac{\Delta m_k^i}{m_k^i}$  indicates the changes in preference margin. The first component in the above equation computes the changes in unit price resulting from changes in tariff preference. The second component calculates the impact on export revenue for the given changes in price.

In the estimation, it is assumed that post-graduation Bangladesh will be eligible for General Preferential Tariff (GPT) in Canada, Asia-Pacific Trade Agreement (APTA) preferences in China and the Republic of Korea, GSP+ in the EU, South Asian Free Trade Area (SAFTA) developing country tariffs in India, GSP for developing countries in Japan, and Enhanced Preferences in the UK. The model is simulated using a range of price elasticities of demand between 0.5 and 1.<sup>22</sup>

22. The price elasticity of demand can vary depending on factors such as the type of product, geographical regions, the data used, and the models employed for estimation. Research conducted by Cornelsen et al (2014) indicates that the own price elasticity of agricultural products can range from 0.42 to 0.80, depending on the specific type and countries examined. A meta-analysis by Green et al (2013) shows that own price elasticity of cereals ranges from 0.43 to 0.61 and of meat lie between 0.60 and 0.78, depending on the country category. Another research by Femenia (2019) uses meta regression results to show the average price elasticity of fish and mean is 0.57. For the sake of simplicity, this study has simulated the results considering elasticity values in the range 0.5–1.



## Estimated results from the partial equilibrium model

Bangladesh, on average over the past three years, exported around half a million-dollar worth of agricultural goods (including fish) to the seven largest GSP granting countries, namely Canada, China, the EU, India, Japan, the Republic of Korea, and the UK. The partial equilibrium results show that Bangladesh's agricultural exports (including fish) to these countries will decline by 6 to 11 per cent due to tariff hikes after LDC graduation (Table 4.1). The profound most impact is arising from the Indian market, where exports of agricultural products are projected to decline by about 11 to 22 per cent. High tariffs rise in India (from 0 per cent to 11 per cent, as shown in the previous section) in combination with relatively large exports contribute to this outcome. Exports to China and the Republic of Korea will shrink by 4.1 to 8.4 per cent and 2.7 to 5.3 per cent, respectively. Potential loss in agricultural exports will be in the range of 0.85-3 per cent in Canada, the EU, Japan, and the UK.

**Table 4.1: Potential loss in agricultural export earnings (including fish) after LDC graduation – results from the partial equilibrium model**

Destination	Impact on agricultural exports (excluding fish)			Impact on fish exports			Impact on overall agricultural exports (including fish)		
	Initial exports (million \$)	Potential loss in exports after graduation (million \$)	Potential loss as % of current exports	Initial exports (million \$)	Potential loss in exports after graduation (million \$)	Potential loss as % of current exports	Initial exports (million \$)	Potential loss in exports after graduation (million \$)	Potential loss as % of current exports
<b>India</b>	162	20.5-41.7	12.80 – 25.7%	34.1	0.66 – 1.3	2.00% - 3.9%	196.1	21-43	11.0% - 21.9%
<b>EU</b>	76	0.5-1.1	0.7% - 1.4%	8.6	0.15 – 0.3	1.8% - 3.6%	84.6	0.7-1.4	0.85% - 1.7%
<b>UK</b>	30	0.31-0.6	1% - 2%	69.9	1.1 – 2.1	1.5% - 3%	99.9	1.3-2.7	1.3% - 2.7%
<b>China</b>	15	1.0-2.1	7% - 14%	51.7	1.8 – 3.5	3.4% - 6.8%	66.7	2.5-5.6	4.1% - 8.4%
<b>Canada</b>	5.9	0.11-0.2	1.7% - 3.4%	3.1	0	0.00%	9	0.1-0.2	1.1% - 2.2%
<b>Japan</b>	2.45	0.15-0.3	6.10% - 12.2%	17.8	0.1 – 0.2	0.6% - 1.1%	20.25	0.2-0.5	1.3% - 2.7%
<b>Korea Republic</b>	4.5	0.15-0.3	3.40% - 6.7%	1.4	0.0 – 0.01	0.25% - 0.5%	5.9	0.15-0.31	2.7% - 5.3%
<b>Total (exports to major 7 GSP donors)</b>	295.85	22.72 – 46.3	7.7% - 15.6%	186.6	3.7 -7.41	2% - 4%	482.45	26.3-53.71	5.8% - 11.1%

Source: Author's estimation based on a partial equilibrium model.

As fish is the largest agricultural exporting good, two separate simulations are undertaken – one for the WTO-defined agriculture sector and one for the fish sector only. Bangladesh exported about \$300 million worth of agricultural items (excluding fish) and around \$200 million fish products to the seven GSP granting markets. The partial equilibrium results show that:

- The LDC graduation impact will be much higher for general agricultural exports compared to that of fish and fish products. Agricultural exports excluding fish would decline by 7.7 to 16 per cent while the same reduction for fish products is estimated to be 2 to 4 per cent.
- Agricultural exports to India are estimated to shrink by a quarter due to high MFN tariff rates for these items and a narrow coverage of SAFTA non-LDC preferences.
- The same exports to China and Japan are estimated to shrink by 7 to 14 per cent and 6 to 12.2 per cent, respectively.
- In the Republic of Korea and Canada, Bangladesh's agricultural exports could see 3.40 to 6.7 per cent and 1.7 to 3.4 per cent reductions.
- On the other hand, LDC graduation and the consequent preference erosions are shown to reduce fish exports by 3.4 to 6.8 per cent to China, and 2-4 per cent in India, the EU, and the UK.
- Exports of fish are found to remain unaffected by LDC graduation in the Canadian market, as there will be no significant tariff changes.

Table 4.2 provides the estimated impact of graduation on major exporting agricultural products of Bangladesh at the HS 2-digit level. The most impacted product will be animal or vegetable fats and oils (HS 15) as its exports to major GSP-granting countries decline by more than one-third. It will be followed by residues and waste from the food industries (HS 23), preparations of cereals, flour, starch or milk (HS 19), and cereals (HS 10). Fish exports to major GSP donor countries could see an 1.5 to 3 per cent reduction after LDC graduation.

**Table 4.2: Loss in export earnings at the HS 2-digit level in selected destinations**

HS Code	Total exports ('000 \$)	Exports to seven major GSP donors ('000 \$)	Exports loss in destination countries (%)							Total export loss in major GSP donor countries (%)
			EU	India	China	UK	Japan	Canada	Korea Republic	
03	504,520	186,577	1.8% - 3.5%	1.9% - 3.9%	3.4% - 6.8%	1.5% - 3.0%	0.5% - 1.1%	0%	3.5% - 7.0%	1.5%-3%
15	162,841	97,314	0.2%-0.5%	19.4%-38.8%	6%-12%	0%	3.5%-7%	4%-8%	2%-4%	19%-38%
24	123,180	57,913	0%	0%	12.6%-25%	0%	0%	0%	10%-20%	1%-2%
19	90,781	36,824	5.3% - 10.6%	2.8%-5.6%	4.5%-9%	2%-4%	6%-12%	3%-6%	2%-4%	3%-6%
23	50,585	7,866	0%	7.5%-15%	-	-	-	0.5-1%	1.5%-3%	7.5%-15%
07	46,114	8,628	0.3%-5%	12.4%-24.8%	-	0%	2%-4%	0%	4.5%-9%	0%
09	36,552	1,914	0%	-	5.5%-11%	0%	0.5%-1%	0%	2%-4%	0.5%-1%
22	34,298	18,540	0%	2.5%-5%	2.1%-4%	0%	-	3.5%-7%	-	2.5%-5%
12	26,129	8,024	0.9% - 1.9%	2.9%-5.8%	4.5%-9%	0%	3%-6%	0%	2%-4%	4.5%-9%
52	23,337	16,758	0%	5.0%-10%	-	-	-	0%	0%	5%-10%
10	20,198	2,699	12.5% - 25%	-	-	11.4%-23%	0%	0%	-	9.5%-19%
20	17,295	2,653	0%	2.5%-5%	2.5%-5%	0%	5%-10%	1.5%-3%	1.5-3%	0.5%-1%
08	15,111	7,782	0.4% - 0.7%	2.7%-5.5%	-	0%	3.5%-7%	0%	0%	0.5%-1%
16	13,173	10,005	0.1% - 0.2%	-	-	0%	-	0%	-	0%
17	12,470	6,544	0.4% - 0.7%	2.5%-5%	2%-4%	0%	22.5%-45%	1.5%-3%	2%-4%	2.1%-4%
14	8,956	342	0%	2.5%-5%	-	0%	-	0%	1.5%-3%	1%-2%
04	7,564	1,033	14.8%-29.7%	2.9%-5.8%	-	-	14.7%-29%	0%	-	7.5%15%
05	6,081	3,450	0%	2.5%-5%	6%-12%	-	-	0%	1%-2%	3.5%-7%
18	5,048	1,666	3.1%-6.2%	2.5%-5%	3%-6%	0%	-	2%-4%	-	2.5-5%
21	4,690	1,902	0.5%-1.0%	2.5%-5%	5.5%-11%	0%	1.5%-3%	2.5%-5%	3%-6%	1.5%-3%

Source: Author's estimation based on partial equilibrium model.

**Note:** Agricultural products are considered for HS 52 using the WTO definition. The model assumed Bangladesh will get GSP+ in EU and Enhanced Preference in the UK

## General equilibrium analysis

One limitation of the partial equilibrium model is that it does not take into account the interactions between various sectors (i.e., inter-sectoral input/output linkages) and markets. On the other hand, general equilibrium models analyse the simultaneous equilibrium in different sectors. It captures the linkages between markets in which goods from one sector can be used as inputs for production as forward and backward linkages. The impact of the reallocation of resources between sectors as a result of tariff changes in one sector can also be studied under this framework. The Global Trade Analysis Project (GTAP)—a computable general equilibrium (CGE) model comprising global economies is one of the most widely used tools for analysing changes in global trade policies. The GTAP analytical structure is a comparative, static, global general equilibrium model that brings together global economies (known as regions) and all production and trading activities, including policy instruments affecting production and trade (Hertel, 1997).

The GTAP model is based on neoclassical theories,<sup>22</sup> is linearized, and uses a common global database for the underlying CGE analysis. The model assumes perfect competition in all markets, constant returns to scale in all production and trade activities, and profit- and utility-maximizing behaviour among firms and households, respectively. The GTAP framework used in this exercise incorporates all standard features of the model, including competitive markets and homogeneous technology. The Armington assumption is employed for traded commodities (i.e., goods are imperfect substitutes). Consumers maximize their utility following a constant elasticity of substitution (CES) function and a linear budget constraint. Factors of production include land, labour, capital, and natural resources, with labour disaggregated as skilled and unskilled.

The full-employment closure of the standard GTAP model is relaxed to allow for unemployment in Bangladesh resulting from shocks but is kept unchanged for partner countries. The GTAP model comes with an integrated database with the current version (version 10) having the base year as 2014. The accompanying MyGTAP software has built-in flexibility to update the base data. In the current exercise, the GTAP 2014 data are updated to 2020 using the Bangladesh Social Accounting Matrix 2020, and the cumulative growth rate of real GDP for remaining countries/regions. The updated database is also cross-checked with the real data for validation purposes. Then the updated 2020 data are considered as the baseline. There are 65 sectors (45 goods and 20 services sectors) and 141 regions/countries in the latest version, aggregating 23 regions/countries and 57 sectors (Table 4.3) to reflect the Bangladesh situation closely.

22. Full documentation of the GTAP model and the database can be found in Hertel (1997) and in Dimaranan and McDougall (2002).

**Table 4.3: GTAP sectoral aggregation**

#	Sector Name	#	Sector Name
1	Paddy rice	28	Petroleum, coal products
2	Wheat	29	Basic pharmaceutical products
3	Cereal grains nec	30	Rubber and plastic products
4	Vegetables, fruit, nuts	31	Metals nec
5	Oil seeds	32	Machinery and equipment nec
6	Sugar cane, sugar beet	33	Motor vehicles and parts
7	Plant-based fibers	34	Transport equipment nec
8	Crops nec	35	Manufactures nec
9	Bovine cattle, sheep and goats	36	Other Manufacturing
10	Animal products nec	37	Electricity
11	Raw milk	38	Gas manufacture, distribution
12	Wool, silk-worm cocoons	39	Water
13	Fishing	40	Construction
14	Bovine meat products	41	Trade
15	Meat products nec	42	Transport nec
16	Vegetable oils and fats	43	Water transport
17	Dairy products	44	Air transport
18	Processed rice	45	Communication
19	Sugar	46	Financial services nec
20	Food products nec	47	Insurance
21	Beverages and tobacco products	48	Real estate activities
22	Oil	49	Business services nec
23	Other extraction	50	Recreational and other service
24	Textiles	51	Public Administration and defence
25	Wearing apparel	52	Education
26	Leather products	53	Human health and social work
27	Paper products, publishing		

**Note:** *nec – not elsewhere classified*

**Simulation designs:** Using the GTAP model, the simulations have been designed to reflect the tariff structures in the post-graduation market access conditions in major export destinations of Bangladesh, namely Canada, China, the European Union, India, the Republic of Korea, Japan, and the United Kingdom. The GTAP website provides the HS 6-digit codes for each sector. Using this data, the post-graduation tariff rates against GTAP sectors have been computed using weighted average tariff rates from each country's tariff schedule. The post-graduation tariff structure is provided in Annex Table A10. The simulation was run comprising all the tariff shocks simultaneously.

**Table 4.4: Simulation design in the GTAP model – post-graduation tariff rates are based on these market access provisions**

Country	Post-graduation market access condition to be determined by
Canada	General Preferential Tariff (GPT)
China	Asia-Pacific Trade Agreement (APTA)
European Union	GSP+
India	South Asian Free Trade Area (SAFTA)
Korea Rep.	Asia-Pacific Trade Agreement (APTA)
Japan	GSP for developing countries
United Kingdom	Enhanced Preferences under the Developing Countries Trading Scheme (DCTS)

### Estimated results from the general equilibrium model

Figure 4.1 summarises the impact of LDC graduation on Bangladesh’s export and import trade. The GTAP simulation results show that the rise in tariff rates after graduation will have a disproportionate adverse impact on agricultural exports.<sup>23</sup> While the overall export of Bangladesh is shown to be subject to a just 1 per cent decline, agricultural exports are picking up an adverse impact of 3.8 per cent. This is due to the fact that agricultural products have been subject to more protectionist policies across the world, especially in developed countries. Most agricultural products are not included in the GSP for developing countries, although they have zero duty rates for exports from LDCs.

Table 4.5 summarizes the impact on exports in major destinations where Bangladesh enjoys trade preferences under various schemes. The GTAP simulation suggests that the largest agricultural export loss will be experienced in China, with Bangladesh’s agricultural export earnings from China depicting a decline of about 19 per cent due to post-graduation tariff hikes. In the largest destination of Bangladesh’s agricultural exports, India, exports could fall by 9 per cent. Similarly, exports to Canada, the Republic of Korea, the EU, and the UK will shrink between 7 and 10 per cent in each case. It is worth noting that the zero duty for apparel exports in the EU and UK under GSP+ and Enhanced Preferences, respectively, will cause an expansion of exports of apparel products in these markets.<sup>24</sup>

23. The model assumes that Bangladesh will get General Preferential Tariff (GPT) in Canada, the Asia-Pacific Trade Agreement (APTA) in China and the Republic of Korea, GSP+ in the EU (with duty-free market access for apparel exports continuing), the South Asian Free Trade Area (SAFTA) in India, GSP for developing countries in Japan, and Enhanced Preferences in the UK. The disproportionate high impact on agricultural product exports is accountable to the protectionist policies for the agriculture sector. Many agricultural products are not included in the GSP for developing countries, but they have zero duty rates for LDCs.

24. It is important to note that accessing GSP+ in the EU after LDC graduation is not settled yet. Bangladesh will have to fulfil various conditions for accessing GSP+ preferences. On the other hand, preferential market access into the UK will be straightforward as per the DCTS provisions. It is worth pointing out that in both markets (i.e., in the EU and UK) Bangladesh’s garment as well as other exports will be subject to more stringent rule of origin requirements. The modelling exercise undertaken here do not consider the RoO requirements.

**Figure 4.1: Impact of LDC graduation on Bangladesh’s exports and imports (% deviation from the baseline)**



Source: Author’s estimates from GTAP model.

**Note:** Simulations consider that after LDC graduation Bangladesh get GSP+ in the EU with garment products maintaining its current market access conditions.

**Table 4.5: Impact of LDC graduation on exports, by sectors and destinations (% deviation from the baseline)**

	Agricultural products (including fish)	Industrial exports (including manufacturing)	Total exports
<b>Canada</b>	-7.4	-64.2	-63.6
<b>China</b>	-18.6	-19.8	-19.1
<b>India</b>	-9.3	-11.5	-3.8
<b>Japan</b>	-4.1	-43.8	-42.4
<b>Korea Rep.</b>	-10.7	-43.3	-42.0
<b>EU 27</b>	-10.0	3.8	3.4
<b>United Kingdom</b>	-7.6	3.8	3.2

Source: Author’s estimates from GTAP model.



Table 4.6 shows the impact of graduation on agricultural exports by subsectors. These results need to be interpreted with caution as general equilibrium effects are being captured. Sugar, processed rice, animal products, etc., are associated with large shocks. Exports from these categories are small relative to the overall export basket of Bangladesh. On the other hand, vegetables, fruits, nuts; crops; and dairy products are found to be associated with a positive impact. These results reflect general equilibrium effects as resources from one sector (due to the adverse shocks) are reallocated to other sectors. Exports from these sectors are currently very small or negligible. In reality, the impact could vary due to various adjustment factors that cannot be captured and because of the inherent assumptions of the model. However, the products that are shown to be associated with export expansion after graduation have lower post-graduation tariffs.<sup>25</sup>

**Table 4.6: Impact of LDC graduation on exports by sectors  
(% deviation from the baseline)**

Sector	Impact (%)
Wheat	4.71
Cereal grains	1.74
Vegetables, fruit, nuts	16.65
Oil seeds	-10.94
Sugar cane, sugar beet	-15.44
Plant-based fibers	-2.89
Crops	5.03
Bovine cattle, sheep and goats	3.1
Animal products	-10.98
Raw milk	5.76
Wool, silk-worm cocoons	2.98
Fish	-11.49
Bovine meat products	3.25
Meat products	2.07
Vegetable oils and fats	-43.72
Dairy products	7.15
Processed rice	-18.15
Sugar	-18.61
Food products	-5.91
Beverages and tobacco products	1.6

Source: Author's estimates from GTAP model.

25. Industrial sector will also experience a negative export earnings due to rising tariff after LDC graduation. However, these are behind the scope of this paper.

## 4.2 Assessment of tariff reductions by Bangladesh on agricultural imports

As mentioned earlier, according to WTO agreements, Bangladesh is not required to undertake tariff cuts after graduation. However, as bilateral and regional free trade agreements are being considered as options for improved market access opportunities, the negotiation of such trading arrangements would demand Bangladesh to reduce its tariff rates on a reciprocal basis for the trading partners with which trade agreements are intended. Also, there is evidence that their tariff rates tend to decline as countries develop. Also, there are suggestions that Bangladesh's unilateral tariff rationalization will help curtail the existing high level of anti-export bias, boosting investment in the export-oriented sectors and, thus, the export response. An attempt is made here to see the impact of Bangladesh's unilateral tariff cuts.

**Simulation designs:** Two separate simulations have been designed to assess the impact of tariff reduction: i) Bangladesh cuts tariffs on all imports (including agriculture) by a uniform 25 per cent, and ii) A higher tariff cuts by 50 per cent is considered.

### Estimation results

The GTAP estimation shows that a 25-per-cent-cut in import tariff will result in around 8 per cent increase in export earnings and a 4.4 per cent increase in imports (Table 4.7). On the other hand, if Bangladesh reduces its tariff by 50 per cent, overall export earnings can expand by 17.1 per cent, while imports will rise by 9.4 per cent. In both cases, agricultural exports and imports will grow less than proportionately. In the first scenario, agricultural exports and imports are simulated to expand by 1.4 per cent and 2.2 per cent, respectively. On the other hand, manufacturing exports and imports are estimated to increase by 8.4 per cent and 5.4 per cent, respectively. The increase in manufacturing exports will be driven by the apparel sector, which is estimated to rise by 8.6 per cent. The lower impact on the agricultural sector is accountable to the small supply capacity of Bangladesh and higher tariffs in major destination countries.

**Table 4.7: Impact of tariff cut on Bangladesh's exports and imports  
(% deviation from the baseline)**

Sectors	25% tariff cuts		50% tariff cuts	
	Exports	Imports	Exports	Imports
<b>Agricultural products (including fish)</b>	1.43	2.17	2.96	4.60
<b>Industrial products (including manufacturing)</b>	8.36	5.36	18.09	11.49
<b>Total</b>	7.93	4.38	17.13	9.38

Source: Author's estimates from GTAP model.

Table 4.8 provides the results of tariff cuts on exports and imports of different agricultural products. The largest agricultural export item, fish, is estimated to increase by half a per cent for a 25 per cent tariff reduction and 1.1 per cent for a 50 per cent tariff cut. Among other major export items, food products will expand by 1.6 per cent, plant-based fibers will expand by 1.3 per cent, vegetables, fruit, nuts by 1.2 per cent, oil seeds by 1.8 per cent for a 25 per cent tariff reduction. These products are estimated to rise by 3.2 per cent, 2.7 per cent, 2.6 per cent, and 3.7 per cent for a 50 per cent tariff reduction.

Simulations suggest 2-4 per cent increment in imports of vegetable oils and fats – the largest agricultural import item. Among other major importing items, vegetables, fruit, and nuts will increase by 2.2 per cent, wheat by 0.25 per cent, sugar by 2.2 per cent, food products by 4.4 per cent, dairy products by 8.4 per cent, processed rice by 5.6 per cent under a 25 per cent tariff reduction. Imports of some agricultural products, including oil seeds, paddy rice, cereal grains, and plant-based fibers are estimated to decline if any tariff cuts are undertaken.

**Table 4.8: Impact of tariff cuts on agricultural exports and imports  
(% deviation from the baseline)**

Sector	Exports		Imports	
	25% tariff cut	50% tariff cut	25% tariff cut	50% tariff cut
Paddy rice	1.86	3.9	-1.0	-2.0
Wheat	3.36	6.97	0.2	0.4
Cereal grains nec	0.73	1.51	-0.4	-0.7
Vegetables, fruit, nuts	1.23	2.58	3.5	7.6
Oil seeds	1.76	3.65	-1.6	-3.2
Sugar cane, sugar beet	2.68	5.57	0.0	0.0
Plant-based fibers	1.3	2.65	-1.0	-2.0
Crops nec	2.6	5.48	9.1	19.5
Bovine cattle, sheep and goats	0.78	1.65	0.0	0.0
Animal products nec	0.6	1.25	2.8	5.7
Raw milk	2.39	5.12	0.0	0.0
Wool, silk-worm cocoons	8.05	16.99	1.2	2.4
Fish	0.52	1.09	6.4	13.6
Bovine meat products	3.38	7.09	8.7	20.8
Meat products	3.55	7.44	13.3	31.6
Vegetable oils and fats	3.18	6.67	2.2	4.6
Dairy products	2.59	5.39	8.4	17.8
Processed rice	1.14	2.37	5.6	11.6
Sugar	2.49	5.19	2.0	4.1
Food products nec	1.56	3.22	4.5	9.5

Source: Author's estimates from GTAP model.

**Note:** nec – not elsewhere classified

## Limitations of the quantitative assessments

There are some limitations of quantitative exercises that need to be acknowledged. First and foremost, modelling exercises (including GEMs) cannot capture the implications arising from the changes in rules of origin provisions. Graduation out of LDC status will be associated with more stringent RoO requirements in some export destinations to get any preferences. Second, the assumptions underlying the modelling exercise can be different from actual market and international trade dynamics. When the current exports are too low, market access conditions alone cannot determine export supply response. Modelling the supply side is far more complex, where there are various challenges associated with production processes and exporting. Modelling exercises are much more simplified than real-world scenarios. Nevertheless, the results reported in this section of the report suggest that losing trade preferences would put pressure on Bangladesh's export competitiveness, and this should be held as a plausible finding given the widespread empirical evidence showing that tariff hikes tend to reduce imports from a supplier faced with rising import duties.

## V. A Review of Experiences of Recently Graduated Countries

After the introduction of the LDC group in 1971, only six countries have graduated from the group. Of them, Botswana graduated in 1994, Cape Verde in 2007, the Maldives in 2011, Samoa in 2014, Equatorial Guinea in 2017, and most recently, Vanuatu in 2020. These countries vary widely in terms of the size of agricultural exports (Figure 5.1) and the products they export (Table 5.1). They are also vastly different from Bangladesh. While it might be difficult to draw lessons for Bangladesh, this section provides a summary of the graduated countries' major agricultural products, top export destinations, challenges faced after graduation, and policies undertaken by their respective government to counter those.

### **Major export-earning sectors**

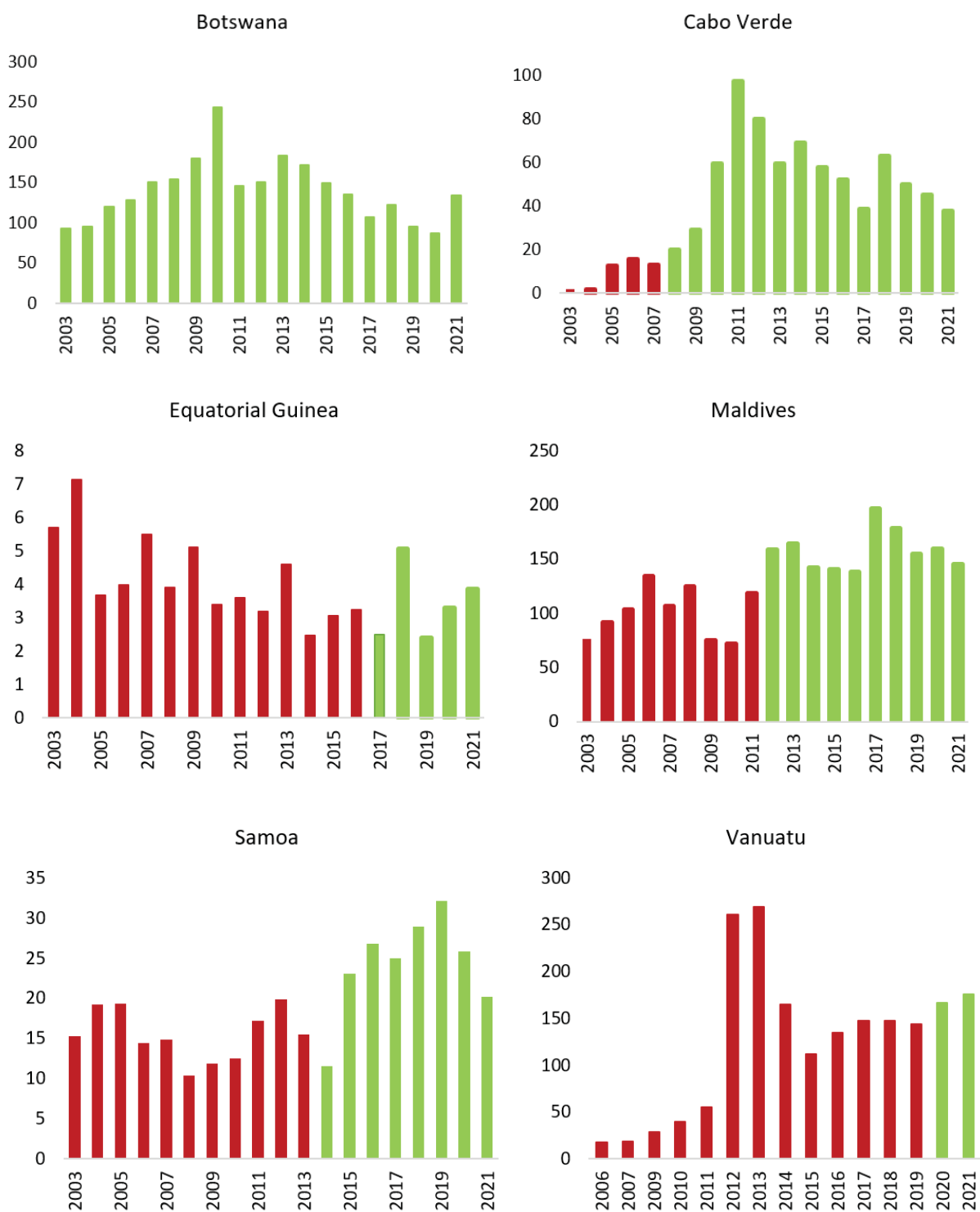
Samoa, the Maldives, and Cabo Verde primarily rely on agriculture and tourism for their exports, whereas Botswana and Equatorial Guinea concentrate on extraction-based activities. Agricultural products comprise a substantial share of total exports in the first three countries. Around 95 per cent of Maldivian exports are primary products, with fish (tuna) being the single most important activity. For Cabo Verde, agriculture accounts for 20 per cent of its workforce and more than 80 per cent of exports. More than two-thirds Samoa's exports and more than half of Vanuatu's are due to agricultural products. Botswana and Equatorial Guinea economic activities are concentrated in mining, with diamonds and oil being their most important export items, respectively.

**Table 5.1: Summary matrix of the graduated countries**

Country	Top agriculture products and their share	Major export destinations	Agriculture shares in total exports in 2021 (%)	Graduation Year	Erosion of LDC-specific preferential market access	Challenges facing by the country	Policies adopted to mitigate the challenge
<b>Maldives</b>	-Fish (HS03) (73%) -Preparations of meat, fish, and crustaceans (HS 16) (22%) -Animal fodder (HS 23) (2%) -Edible fruit and nuts (HS 08) (0.01)	-Thailand (43%) -EU (26%) -UK (7%)	95%	2011	-Japan-2011 -EU-2014	-Export earnings mainly derived from fisheries sector facing tariff hikes after graduation	- Included as NFIDC in 2011 - Provide domestic support to agriculture through direct payments and indirect payments. - Direct payments were replaced by insurance schemes and concessional loans for farmers to support agriculture development. - SAFTA provides special provisions for Maldives - Government promotional activities for investing in Maldives and buoyant tourism activities helped contain the negative impact of LDC graduation.
<b>Botswana</b>	-Live animals (HS 01) (0.75%) -Meat and edible meat offal (HS 02) (0.56%) -Edible vegetables and certain roots and tubers (HS 07) (0.11%) -Animal fodder (HS 23) (0.07%)	-South Africa (69%) -EU (13%) -Namibia (4%)	1.8%	1994	-	Its economy is heavily dependent on the mining sector.	- Included as NFIDC in 1997 - The government invested in the ICT sector to support agriculture, tourism and other sectors. - Building an effective governance system - Duty-free access in the USA under African Growth and Opportunity ACT (AGOA)
<b>Cabo Verde</b>	-Preparations of meat, fish, and crustaceans (HS 16) (66%) - Fish (HS03) (12%) 2. Animal fodder (HS 23) (3%) 3. Beverages, spirits and vinegar (HS 22) (1%)	-EU (94%) -USA (5%) -Morocco (0.4%)	83%	2007	-Lost preferential market access in GSP-granting countries except in the EU - EU EBA benefit extended till 2012	- Difficulty in accessing concessional loans. - The economy slowed down due to the financial crisis, and the LDC graduation year coincided	- Included as GSP+ beneficiary in 2014 - Duty-free access in the USA under African Growth and Opportunity ACT (AGOA)

Country	Top agriculture products and their share	Major export destinations	Agriculture shares in total exports in 2021 (%)	Graduation Year	Erosion of LDC-specific preferential market access	Challenges facing by the country	Policies adopted to mitigate the challenge
<b>Samoa</b>	<ul style="list-style-type: none"> <li>- Fish (HS03) (30%)</li> <li>-Animal or vegetable fats and oils (HS 15) (8.4%)</li> <li>-Edible vegetables and certain roots and tubers (HS 07) (8.1%)</li> <li>-Preparation of vegetables (HS 20) (5.9%)</li> <li>-Beverages, spirits and vinegar (HS 22) (5.4%)</li> </ul>	<ul style="list-style-type: none"> <li>-American Samoa (40%)</li> <li>-USA (17%)</li> <li>-New Zealand (16%)</li> </ul>	70%	2014	<ul style="list-style-type: none"> <li>-Lost GSP facility in all major markets in 2014 except the EU, and China</li> <li>-Lost preferential market access in the EU and China in 2017.</li> <li>-Enjoys preferential bilateral market access in Australia and New Zealand</li> </ul>	<ul style="list-style-type: none"> <li>-Limited export basket, heavily relies on agriculture and tourism</li> </ul>	<ul style="list-style-type: none"> <li>- The EU, China, and Japan extended zero-tariff treatment for agricultural and fish items</li> <li>- Included as NFIDC in 2020</li> <li>- Agriculture diversification and upgradation.</li> <li>-Exploit new opportunities through active negotiations and use measures available for developing countries.</li> <li>-Joined the EU-Pacific (Interim) Economic Partnership Agreement (EPA) in 2018.</li> </ul>
<b>Equatorial Guinea</b>	<ul style="list-style-type: none"> <li>-Cocoa and cocoa preparations (HS 18) (0.028%)</li> <li>-Beverages, spirits and vinegar (HS 22) (0.025%)</li> <li>-Cotton (HS 5203) (0.004%)</li> <li>-Cereals (HS 10) (0.003%)</li> </ul>	<ul style="list-style-type: none"> <li>- Cameroon (41%)</li> <li>-EU (40%)</li> <li>3. Sao Tome (11%)</li> </ul>	0.07%	2017	<ul style="list-style-type: none"> <li>-Lost EBA benefit in 2021</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of diversification in the export basket</li> <li>-Oil-dependent country, making vulnerable to price shocks.</li> </ul>	<ul style="list-style-type: none"> <li>-Adopted policies to diversify export and reduce dependency on oil</li> </ul>
<b>Vanuatu</b>	<ul style="list-style-type: none"> <li>-Fish (HS03) (55%)</li> <li>-Oil seeds (HS 12) (11%)</li> <li>-Cocoa and cocoa preparations (HS 18) (2%)</li> </ul>	<ul style="list-style-type: none"> <li>-Thailand (32%)</li> <li>-Japan (30%)</li> <li>-Korea Republic (10%)</li> </ul>	56%	2020	<ul style="list-style-type: none"> <li>-Lost LDC preferences in major agricultural export destinations, including Thailand, Japan, and the Republic of Korea</li> <li>-Enjoying three years transition periods for EBA benefits in the EU, and Comprehensive Preferences in the UK</li> <li>-DFQF in New Zealand and Australia under SPARTECA</li> </ul>	<ul style="list-style-type: none"> <li>-A disaster-prone area</li> </ul>	<ul style="list-style-type: none"> <li>-Government invested in digital infrastructure to provide government services</li> </ul>

**Table 5.1: Trends of agricultural exports of graduating countries**



Source: Author's presentation using ITC data.

**Note:** Green bar represents exports in the post-LDC graduation period.



## Post-LDC challenges and adaptation strategies

As LDCs, these countries enjoyed preferential market access in developed and developing countries, and these benefits were unavailable after graduation. Although Maldives graduated in 2011, it benefited from a three-year extension of trade preference under the EU GSP for LDCs. However, Japan, which was an important destination for Maldives' fishery products, did not extend the preferences. After 2014, as the country was classified as an upper middle-income country, the EU removed the Maldives from the GSP beneficiary list (Zada et al., 2019).<sup>26</sup> After graduation, its agricultural exports stabilized before they started declining.

After graduating from the group LDC in 2014, Samoa lost preferential market access immediately in most countries except for the EU and China. China extended a three-year transition period to Samoa to benefit from LDC preferences following its graduation (WTO-EIF, 2020). Post-graduation, it was entitled to Standard GSP in the EU. However, the EU removed Samoa from the Standard GSP beneficiary list in January 2021, as it is a member of the EU-Pacific States Economic Partnership Agreement (EPA) (European Commission, 2020). Samoa's exports declined in 2014, then started increasing. Its agricultural exports declined sharply during the outbreak of Covid-19.

After graduation, Cabo Verde initially experienced robust growth in agricultural exports and then experienced a downward trend. Botswana and Equatorial Guinea faced preferential losses in major markets. Botswana's mining industry, however, boomed for reasons unrelated to graduation mitigating any adverse consequences. Vanuatu's graduation coincided with the worldwide economic shock arising from Covid-19. As such, its agricultural exports declined sharply. Vanuatu lost LDC-specific preferential access in major agricultural export destinations – Thailand, Japan, and the Republic of Korea – immediately after graduation. However, it will continue to access LDC preferences to the EU and UK until 2023.

The graduated countries adopted various policy measures to mitigate LDC graduation challenges. Among five, three graduated countries enlisted themselves as NFDIC. Before 2014, the government of the Maldives used to provide support to local producers through direct payments to compensate for the loss due to natural disasters. However, direct payments were replaced (after 2014) with insurance schemes for farmers as well as concessional loans to support agriculture (WTO, 2016). Through tax and non-tax incentives, subsidies were given to the fisheries sector to support fuel expenditure, a minimum income level during the off-season, installation of equipment for onboard ice-producing facilities, and the conversion of larger fishing vessels to engage in longline fishing. The Maldives also managed to retain SAFTA LDC benefits in India under special provisions.

26. Full documentation of the GTAP model and the database can be found in Hertel (1997) and in Dimaranan and McDougall (2002).

**Table 5.2: Share of agriculture exports in total exports of graduated countries**



Source: Author's presentation using ITC data.

Note: Green line represents exports in the post-LDC graduation period.

Cabo Verde experienced stable economic growth even after graduation. Effective policy measures to promote tourism generated investment inflow and high growth (Brian, 2019). The country is a beneficiary of GSP+ in the EU, which allows them generous market access opportunities after EBA. Cabo Verde's exports in the EU. GSP utilisation increased substantially compared with before graduation (UNCTAD, n.d.). Also, under the African Growth and Opportunity Act (AGOA), Cabo Verde has duty-free market access in the USA. This free-market access applies to agricultural goods, footwear, and other goods. Apart from duty-free market access, AGOA provides technical assistance and capacity building support to help African countries.

After graduating from LDC status in 2014, Samoa became strongly engaged in trade negotiations seeking for best available options as a developing country. It joined the EU-Pacific (Interim) Economic Partnership Agreement (EPA) in 2018 to secure duty-free access to the EU market for all goods. The country is also a member of the Pacific Island Countries Trade Agreement (PICTA), and South Pacific Regional Trade and Economic Co-operation Agreement, and the Pacific Agreement on Closer Economic Relations (PACER) Plus. The government extended its support for agricultural upgrading and diversification, extension services for product development, specific product-based management plan, and investment support for infrastructure development (UN, 2016).

Botswana was the first country to be graduated from the LDC group in 1994. It is one of the wealthiest countries in Africa, with a GNI per capita of \$16,650 (PPP, current international). It is in the list of NFDIC and is an existing beneficiary of AGOA.<sup>27</sup> The literature shows that it adopted economic diversification to reduce its dependency on diamonds (UN Committee for Development Policy, 2018). It is also regarded as a role model for its large investment in human assets, contributing to its productive capacity enhancement.

Thus, there appears no clear pattern of agricultural export trends after graduation. The size and nature of exports of previously graduated countries being significantly different from that of Bangladesh make it challenging to draw any concrete conclusions from their experiences. But three issues stand out. First, enlisting as an NFIDCs is an important consideration. Second, proactive engagements with major GSP donors result in bilateral or multilateral trade agreements with major trade partners. The conversion of subsidies into insurance schemes for farmers in the case of Maldives provides a potential policy option that could be used in other countries.

27. Due to unavailability of data and information, examining the impact of graduation on agricultural exports is quite difficult.

## VI. Conclusions and Policy Recommendations

While graduation from the group of least developed countries should be regarded as an important development achievement for Bangladesh, it also gives rise to concerns about the loss of various international support measures, potentially affecting export competitiveness including that of agricultural goods. The most important change due to LDC graduation will be associated with forgone preferential market access for exporters. Within the set of LDC-related international support measures, Bangladesh has primarily benefited from duty-free market access granted by many countries including Australia, Canada, China, the EU, India, Japan, and the UK. Upon graduation, Bangladesh's exporters will be subject to either less favorable preferential arrangements or no preferences at all. The loss of tariff preferences could trigger serious competitiveness pressure for agricultural exports from Bangladesh.

This study finds that post-graduation average tariffs on agricultural exports will increase by 11 percentage points in India, 6 percentage points in the EU, 3 percentage points in the UK, 10 percentage points in China, and 5 percentage points in the Republic of Korea. A partial equilibrium analysis shows Bangladesh's agricultural exports (including fish) to seven major GSP donor countries could decline by 11 per cent due to these tariff hikes. Similarly, simulations from a general equilibrium model suggest overall agricultural exports falling by 4 per cent, with fish being the hardest hit sector.

Another potential consequence of LDC graduation would be constrained policy space to support agriculture. The sector currently enjoys export incentives and domestic support, but such assistance could be incompatible with the trade rules as stipulated in the Agreement on Agriculture of the World Trade Organization (WTO). Bangladesh's current aggregate measurement of support (AMS) for agriculture is 1.33 per cent, which is much lower than the threshold of 10 per cent allowed for developing countries according to the above WTO agreement. Therefore, Bangladesh will not have to undertake any reduction in domestic support measures. However, the same Agreement on Agriculture does not allow WTO members to provide export subsidies for agricultural products. Members of the WTO are generally reluctant to raise concerns or lodge official complaints about individual LDCs' policy support measures. However, graduation from the group of LDCs would almost certainly trigger closer scrutiny to ensure conformity.

Export subsidies for fish, on the other hand, are not under the purview of the WTO's AoA but rather are guided by the provisions specified in the Agreement on Subsidies and Countervailing Measures (SCM). Under SCM, LDCs are not barred from providing export subsidies that would be prohibited for other members. After graduation, providing such assistance would be incompatible with the SCM agreement.

While the loss of tariff preferences and shrinking policy space will be new realities for Bangladesh's exports, there are other longstanding concerns about agricultural growth and exports. These include, among others, the impact of natural disasters and environmental degradation, limited productive capacity, lacklustre export supply response, quality and standards of agricultural outputs, inadequate infrastructure, etc. While these issues are beyond the scope of this paper, preparatory measures for LDC graduation should address these problems to improve competitiveness.

## LDC graduation-specific recommendations

**Bangladesh must make the most of the available duty-free market access and policy space in the remaining period prior to LDC graduation.** Bangladesh has about four years before its graduation. In the EU and UK, LDC-related preferences will last until November 2029, while changes in all other markets will start from November 2026. This time period can be used to tackle many supply-side bottlenecks to boost competitiveness. The deepening of incentives for promoting exports can be considered as a policy option to expand the base of agricultural exports and export market connections before Bangladesh leaves the LDC group.

Bangladesh must proactively engage with major GSP-providing countries for extended preferences and favourable terms **in the post-LDC graduation period.** LDC graduation does not mean the end of preferences. In some countries e.g., in the EU and UK, preference schemes for non-LDC developing countries exist. Therefore, effective utilization of existing preferences through enhanced supply response should be the key objective. Bangladesh must engage with trading partners for favourable

terms for post-graduation preferential trade regimes and, where possible, negotiate LDC-like treatment.

- UN systems and development partners emphasize smooth graduation and transition processes for which an extended transition period can be helpful for graduating countries. It is also possible for GSP-providing countries to extend the same LDC preferences beyond graduation. Australia has already indicated keeping preferences for graduated countries; China extended the preferences for Samoa; India has allowed the Maldives to retain the same LDC preferences even after the latter's graduation in 2011. As mentioned above, the EU and UK provide an additional three-year transition period after graduation. Furthermore, the UK's recently announced Developing Countries Trading Scheme (DCTS) has made trade preferences for non-LDC developing countries more liberal than the previous regime. These precedents can be referred to while engaging with important GSP donor countries such as, Canada, China, India, Japan, and the Republic of Korea, etc., urging them to offer a transitional period beyond the official LDC graduation and make the non-LDC preferences more liberal.
- Bangladesh must secure preferential market access in the European Union's second-best preferential trade regime, GSP+, which allows duty-free access in 66 percent of tariff lines, including many agricultural products. Accessing the GSP+ scheme requires Bangladesh to ratify and implement 32 prespecified international conventions.

Bangladesh should prepare to comply with these requirements, if needed, by seeking assistance from various international organizations. In addition, Bangladesh should request the EU to provide the UK DCTS-type conditionalities to access the second-best preferential scheme as the UK has removed the requirement to implement international conventions to qualify for the DCTS Enhanced Preferences (preferential scheme for vulnerable non-LDC developing countries).

**Given the significance of India for agricultural exports, it is extremely important to proactively pursue the continuation of duty-free access in that market.** India unilaterally granted the Maldives, which graduated from LDCs, to continue with the LDC-equivalent market access. On the other hand, because of their respective bilateral FTAs with India, two other South Asian countries, Bhutan and Nepal, enjoy preferential market access in the Indian market, which is not linked to the two countries' LDC status. Bangladesh and India are currently assessing the feasibility of a Comprehensive Economic Partnership Agreement (CEPA). However, completing CEPA or FTA negotiations can take several years. Therefore, Bangladesh could negotiate for continuing with duty-free access pending a CEPA agreement.

**Bangladesh can consider its options for bilateral and regional free trade agreements to maintain duty-free market access for exports.** FTAs or RTAs with major agricultural export destinations can help ensure market access agricultural products. Trade talks are currently underway for a possible bilateral trade agreement with India. If materializes, it can

protect tariff preference in Bangladesh's largest agricultural export destination. Bangladesh could engage with China, the EU, Japan, and other strategic trade partners to negotiate free trade agreements. The possibility of acceding to the Regional Comprehensive Economic Partnership (RCEP) should also be explored, which will allow duty-free exports for almost all products to ten East Asian countries. A feasibility study on China-Bangladesh free trade agreement has been initiated. Furthermore, a joint study to assess the feasibility of a bilateral agreement between Bangladesh and Japan is on the cards. It is, however, worth pointing out that striking bilateral or regional FTAs will require domestic preparedness both in terms of opening the local market to partners and foregone tariff revenue due to preferential access given to FTA partners. Trade agreements these days also call for undertaking reforms and commitments in such areas as services and investment regulations, intellectual property protection, enforcement of labour rights, and compliance with Environmental, Social and Governance (ESG) issues.

**Being enlisted as a net food-importing developing country will help retain some policy space to support agricultural goods exporters.** The decision reached at the Nairobi Ministerial Conference of the WTO allows NFIDCs to provide certain subsidies for marketing-related activities of agricultural products. Bangladesh, currently, is not included within the group of NFIDCs, although recent statistics show the country's agricultural goods imports surpassing its exports of the same. Bangladesh should coordinate with the WTO Committee on Agriculture by providing relevant statistics (on aggregate and food imports) to justify its inclusion in

the NFIDC group. Inclusion into the group will allow Bangladesh to provide export incentives for marketing-related activities of agricultural products even after graduation. It will also allow longer repayment terms for imports benefiting from export financing support.

**Bangladesh should consider developing export assistance that complies with the WTO.** Export subsidies are not compatible with the WTO Agreement on Agriculture. Export support will have to be devised in a manner so those are consistent with WTO provisions. Export support measures for fish (and manufactured goods) are governed by the WTO Agreement on Subsidies and Countervailing Measures (SCM). Upon graduation, the current export subsidy programme of Bangladesh will become WTO-incompatible. Therefore, necessary adjustments will have to be considered. Instead of subsidies targeting export performance, support for productive capacity development, improvement of standards, adopting sustainable production practices, R&D, etc., could be consistent with multilateral rules and regulations, and more effective means for supporting medium-to-long-term export prospects.

**Effectively use the aggregate measurement of support (AMS) to enhance domestic production and expand agricultural exports.** As discussed above, the export subsidy is non-compatible with the WTO agreement. Bangladesh thus should seek alternative measures to support agriculture and improve competitiveness and boost exports. Bangladesh's current domestic support for agriculture is far below the WTO threshold for developing countries. There is, therefore, room for enhancing support for production capacity and

productivity improvement, which can help export expansion.

## General policy recommendations

**Boosting competitiveness and improving the productive capacities of agricultural producers are crucial for expanding exports.** The low productive capacity of the agriculture sector in Bangladesh hinders export expansion and affects competitiveness in the global market. Limited access to modern technology and quality inputs, inefficient land use, poor cultivation methods, and lack of proper knowledge of Good Agricultural Practices (GAP) are some of the major factors behind low productivity.

To improve the productive capacity of agriculture and promote export expansion, it is important to attach priorities for implementing policies and programs that address these challenges. This can be achieved by leveraging technology, advancing research in agriculture, and investing in labor training. The government can provide incentives for farmers to adopt modern farming techniques and use high-quality inputs, and support research and development to develop new, high-yielding varieties of crops that are better suited to local conditions. Additionally, the government can work to promote sustainable land use practices and increase investment in the agriculture sector to support productivity improvements. Strengthening productive capacity can also position local firms for success in the global market but requires a concerted effort in areas such as branding, marketing, retailing, and research and development. Given the heightened competition that comes with graduation from low-income status, prioritizing

capacity building for firms is essential for addressing post-graduation challenges.

**Bangladesh should focus on export diversification within the agriculture sector.** While the share of agriculture in total exports is meager, it is further concentrated in selected items within fish and cereals. The share of the top 10 items accounts for almost two-thirds of agriculture exports. This narrow focus on a limited range of products is one of the factors affecting export expansion. Bangladesh needs to diversify its agricultural products and explore new markets.

Diversification policies in the agriculture sector can include support measures for producers at various stages of production. Quality control for domestic consumption purposes can also positively impact export performance. Improving storage facilities and strengthening Sanitary and Phytosanitary (SPS) measures are also important for export. Bangladesh can enhance its competitiveness and expand exports in the global market by taking a comprehensive approach that encompasses both diversification and quality control.

**Developing a proper supply chain for agricultural products is necessary for export promotion while ensuring product quality.** Developing a cold chain system is critical for agricultural export expansion while maintaining export quality because it helps preserve the quality and freshness of perishable agricultural products during transportation and storage. A cold chain system is a series of refrigerated storage, transportation, and distribution facilities designed to maintain a consistent temperature range for products such as fruits, vegetables, meat,

and dairy products. This system helps extend the shelf life of these products and ensure they reach their destination in good condition. In the absence of a cold chain system, many agricultural products are more likely to degrade during transportation and storage, resulting in a loss of quality, value, and marketability. This can lead to lower prices and reduced demand for the products, ultimately affecting the income of farmers and exporters.

In Bangladesh, exporters often fail to maintain the cold chain due to inadequate infrastructure. Although the country has over 400 cold storages, there is a lack of a proper cold chain system that maintains refrigeration facilities from production to consumption. Farmers suffer massive losses for being unable to store their products. According to industry sources, some exporters have created cold chain facilities independently but are now incurring high maintenance and operating costs. Therefore, a proper cold chain network should be developed throughout the country, which can help export promotion. By developing a cold chain system, exporters can ensure that their products are delivered to customers in fresh condition, meeting the stringent quality and safety standards required by international markets. Developing a cold chain system can also help reduce post-harvest losses, thus supporting food security.

**Improving product quality and ensuring required compliance and standards are prerequisites for export success.** Product quality and ensuring required compliance and standards are crucial for export success. Exporting goods requires meeting the standards and requirements of the importing countries, which are often much



higher than domestic standards. This involves upgrading the quality of the products to meet the specific requirements of the importing countries, including food safety regulations, environmental standards, and phytosanitary requirements. To ensure compliance with these regulations, exporters often need to undergo certifications such as International Organization for Standardization (ISO), Hazard Analysis Critical Control Points (HACCP), or organic certification, British Retail Consortium (BRC), depending on the product and market requirements. These certifications demonstrate that the products meet the necessary standards and requirements and can enhance the credibility and reputation of the exporters. However, most farm producers do not have the basic knowledge of these compliance and standards-related issues. Small and medium-sized firms also find it difficult to bear the high cost of maintaining standards and accreditation.

Farmers in Bangladesh often use toxic pesticides excessively to increase crop yields and prevent pests. This results in high levels of chemical contamination in agricultural products, failing quality tests. Also, Bangladesh often lacks adequate testing facilities and labs with skilled technicians. The standards often change frequently, as some exporters mention.

Improving agricultural production practices, ensuring compliance with international standards and certifications, and strengthening quality control and testing are essential for agricultural export success. There is no choice but to increase product quality and ensure the requirements for export to increase agricultural export earnings. Product quality can also be improved by adequately training the farmers and making them

aware of the negative side of pesticide overuses.

**Addressing anti-export bias through tariff rationalization is crucial for ensuring the profitability of agricultural exports.** Bangladesh has a highly protected economy, with significant tariffs and para-tariffs in place to safeguard the local producers. This protectionism encourages producers to focus on the domestic market, as import tariffs and other trade taxes make the local market more profitable. With high levels of protectionist tariffs in Bangladesh, exporting becomes less attractive relative to domestic sales. This creates a policy-induced anti-export bias. To overcome this problem, tariff rationalization could be a policy option by adjusting import duties while providing a reasonable level of protection for the domestic suppliers.

**Extending bonded warehouse facilities to the agricultural sector could help improve competitiveness.** Bonded warehouse facilities in Bangladesh are severely restricted for non-RMG sectors. These facilities enable exporters to import intermediate inputs duty-free. Many agro-product exporters claim they cannot access bonded warehouse facilities. For processing food, exporters need to acquire a variety of ingredients, including margarine and sodium polyphosphate. These imported items have a total tax incidence ranging from 31 per cent to 60 per cent. Some other items are subject to even higher tariff incidences. Due to a high tariff on raw materials, they often cannot compete with others in international markets. Exporting firms must source intermediate inputs at world prices without being subject to any tariffs. As cash incentives for the export sectors are

unlikely to remain available, duty-free raw materials import facilities for all exporting sectors, including agriculture, could help with competitiveness.

**Tackling the high costs of doing business and improving connectivity and trade facilitation will be important to boost export competitiveness.** There exist significant challenges due to weak and inadequate infrastructure, as well as inefficiencies in inland road transportation, customs procedures, and trade logistics. These issues result in longer lead times and increased business costs. As Bangladesh prepares for its LDC graduation, it is crucial to make improvements in these areas to support the export of agricultural products. Addressing these challenges will require a concerted effort from both the public and private sectors, as well as investment in infrastructure development and trade facilitation initiatives.

**Table 6.1: LDC graduation-specific recommendation matrix**

Issues	How agricultural exports of Bangladesh could be affected	Recommended policy options
<b>Change in market access conditions under various countries' GSP provision</b>		
<b>Market access conditions in the EU</b>	Bangladesh exports 354 agricultural and fish items (at the HS 8-digit level) to the EU, and 86 of these would face tariff increases—on average of 6 per cent—under GSP+, which is the most attractive EU preference system for a country that graduates from LDC status. Bangladesh's leading agricultural export items to the EU are tobacco and shrimp. Although tobacco will not face any tariff hikes under GSP+, shrimp products will face tariff rises of around 3.6 per cent. Export earnings from shrimp were worth of \$269 million in FY22. The quantitative assessment shows that around 10 per cent of the total agricultural export earnings to the EU could be lost due to LDC graduation even if Bangladesh can secure GSP+ in the EU.	Bangladesh must effectively engage with the EU to secure more favorable terms after LDC graduation than those specified in GSP+.
<b>Market access conditions in India</b>	In 2022, Bangladesh exported agricultural products worth \$450 million to India, which is about 26% of total agricultural export revenue. After graduating from LDC status, Bangladesh will be eligible for the SAFTA Non-LDC scheme. Of the 134 agricultural items, including fish, are now exported to India, 125 would face tariff increases after LDC graduation. The tariff rate for some products in India will increase by around 35 percentage points. One such product is animal or vegetable fat and oil (HS15). This is the largest item exported to India, with export receipts of more than \$200 million in FY22. These products do not get any tariff preference under SAFTA, while Bangladesh, as an LDC beneficiary, has enjoyed zero tariff on those. Some of the currently exported products, such as honey, potato, guava, and mango will fall under the sensitive list, which is now excluded from the list for LDC beneficiaries. These products face MFN tariffs of up to 60 per cent. The rules of origin criteria will also change. The local value addition requirement will increase to 40 per cent from the existing 30 per cent for accessing any tariff preferences.	Bangladesh needs to proactively seek for the continuation of duty-free access in India. There is a precedent that India unilaterally granted the Maldives to continue with the LDC-equivalent market access after the latter's graduation in 2011. Bangladesh and India are currently assessing the feasibility of a Comprehensive Economic Partnership Agreement (CEPA). Negotiating such a trading arrangement can take several years. One option for Bangladesh is to seek for the continuation of the existing duty-free access pending a CEPA agreement.

Issues	How agricultural exports of Bangladesh could be affected	Recommended policy options
<b>Market access conditions in China</b>	China offers DFQF market access to Bangladesh for 99 per cent of its tariff lines. After graduation, Bangladesh may be eligible for the APTA non-LDC scheme. Currently, Bangladesh exports just over 50 agricultural products at the 8-digit level to China. In FY22, sesame seeds worth \$12 million, the highest among all the agricultural goods, were shipped to China. This product will face a tariff hike of 9 per cent after LDC graduation. Fish exports were \$17.5 million, and graduation will mean a rise of tariff of 6.4 per cent on this product category. In addition, under APTA preference, the minimum value addition requirement will increase to 45 per cent from the current 35 per cent.	Bangladesh should engage with China and ask for an extension of the current preferences for several years after LDC graduation. The UK's DCTS scheme provides duty-free access for 85 per cent of tariff lines for graduated LDCs. China can be requested to offer similar preferential treatment. Both parties had initiated a joint feasibility exercise for a potential FTA although not much progress could be made. This can be revived. However, as FTA negotiations usually take several years, Bangladesh should ask for the continuation of the LDC market access pending the FTA deal.
<b>Market access conditions in the UK</b>	Bangladesh exports about 240 agricultural items (at the HS 8-digit level) to the UK, generating export receipts of \$115 million in FY22. Under the UK's Developing Countries Trading Scheme (DCTS), Bangladesh as an LDC currently enjoys Comprehensive Preferences. After graduation, "Enhanced Preferences" will be available for graduated LDCs. This will result in the rise of tariffs for 41 export items. Bangladesh exported shrimp worth \$53 million to the UK in FY22. Under Enhanced preferences, a 3.6 per cent tariff will be levied on this product. Export receipts from vegetables amounted to \$23 million in FY22. It will not face significant tariffs under enhanced preferences.	The UK DCTS offers a more favourable post-LDC trade preference regime for Bangladesh and graduated LDCs. However, Bangladesh can engage with the UK to seek further liberal terms for agricultural items of export interest. It is important to point out that trade preferences may not be the sole factor in expanding agricultural exports. For any advanced economy market, standards and certifications, quality, and product sophistication are an important determinants of export success.
<b>Market access conditions in Japan</b>	Bangladesh enjoys LDC benefits in Japan, with duty-free access to over 9000 products. After graduation, Bangladesh will get GSP designed for developing countries. As a result, the average tariff rate for graduated LDCs will increase by 2.5 per cent. Bangladesh exports 86 agricultural goods, including fish. Under the available post-graduation scheme, 59 products will face tariff hikes. In the scheme for non-LDC developing countries, Japan offers low preferential coverage of agricultural and fish products.	There have been some discussions about negotiating a free trade agreement with Japan. However, like with any other country, this option is not an easy one. In the immediate term, Bangladesh should ask for an extension of the LDC-specific preferences after graduation. The UK and the EU provide an additional three-year extension, and this could be a mode for Japan to follow. In subsequent negotiations, Bangladesh should aim for obtaining UK DCTS-type preferences after graduation.

Issues	How agricultural exports of Bangladesh could be affected	Recommended policy options
<b>Market access condition in the Republic of Korea</b>	Bangladesh may get APTA preferences after LDC graduation in this market. Some 60 agricultural export items, at the HS 6-digit level, go to RoK, and 34 of these will face tariff hikes after LDC graduation. The average tariff rate rise will be 6.6 per cent. The most important product is tobacco, which will face a 20 per cent tariff under APTA (after LDC graduation).	The coverage and preference under APTA are low. Bangladesh should ask for an extension of the LDC-specific preferences after graduation. In subsequent negotiations, Bangladesh should aim for obtaining UK DCTS-type preferences after graduation.
<b>Stringent Rules of origin</b>	As an LDC beneficiary, Bangladesh is required to comply with relaxed and liberal rules of origin. After graduation, rules of origin will be much more stringent in almost all destination markets.	For most agricultural products, rules of origin may not be major problems given that these products usually have large domestic value addition. Nevertheless, developing a strong supply chain with high-quality products can help generate greater export earnings including through high-value-added products. In any negotiations, a prudent approach will be to ask for less stringent rules of origin.
<b>Compliance issues under the WTO</b>		
<b>Export incentives</b>	Bangladesh provides generous export incentives for selected agricultural products. Although such subsidies will be deemed non-compliant with the Agreements on SCM and AoA. WTO members rarely complain about LDCs. However, after LDC graduation, Bangladesh may face stricter scrutiny of its trade policies by WTO members.	As per WTO provisions, it is difficult to justify any export subsidies on agricultural exports. Export incentives for fish and fish products are not incompatible with the Agreement on SCM but will need to be ceased by the graduation deadline. Bangladesh could provide certain types of export marketing-related subsidies for agricultural products it could be enlisted as a net food-importing developing country (NFIDC). This is one of the outcomes of the 10th WTO Ministerial (Nairobi) Conference.
<b>Domestic support</b>	Price support or subsidies directly related to agricultural production is subject to the so-called 'de minimis' provision of the Agreement on Agriculture. Subsidies on seeds, fuel, energy, and fertilizers also fall under this. A developing country can provide domestic support up to 10 per cent of the value of agriculture production.	Bangladesh currently provides domestic support for agriculture, which is much lower than 10 per cent of the total production value. Therefore, there will be room for domestic support in agriculture.

Issues	How agricultural exports of Bangladesh could be affected	Recommended policy options
<p><b>Incentives for fish exports</b></p>	<p>According to the Agreement on SCM, subsidies based on export performance are strictly prohibited with exceptions being considered for LDCs and a handful of other developing countries whose per capita gross national incomes are lower than \$1,000 in 1990 prices.</p>	<p>As an LDC, Bangladesh can provide subsidies on fish exports until graduation. It could be that Bangladesh would remain a developing country with per capita income less than \$1,000 in 1990 prices. However, this will not automatically allow Bangladesh to be included in the group of those non-LDC developing countries not being prohibited from providing export subsidies. It will require a WTO decision for Bangladesh's inclusion in the group. Bangladesh has already notified to the WTO, pending any decision.</p>
<p><b>Reduction of import tariffs on agricultural goods</b></p>	<p>Bangladesh is not required to undertake any tariff reductions because of LDC graduation per se. However, Bangladesh may need to rationalize its own tariff structures as part of its domestic reform agenda. Tariff reductions will also be the consequence of negotiations resulting in FTA deals. However, depending on the nature of those negotiations, tariff cuts will be determined. Simulation exercises undertaken as part of this study indicate that if Bangladesh cuts import duties by 25 per cent (across the board), agricultural imports will increase along with the rise in exports. However, the growth in imports will be higher than that of exports. When considering all merchandise goods, the export performance due to tariff cuts improves over import growth.</p>	<p>The tariff reduction idea after LDC graduation is a hypothetical one. There are concerns about the loss of government revenue arising from import liberalization. The demand for protecting import-competing sectors remains very strong. How strongly Bangladesh wants to pursue FTAs with major trade partners will eventually determine the extent of tariff-cuts.</p>

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# Annex

**Table A1: Product group definition**

Product Group	HS Code 2007
<b>Animal products</b>	Ch. 01, Ch. 02, 1601-02
<b>Dairy products</b>	0401-06
<b>Fruit, vegetables, plants</b>	Ch. 07, Ch. 08, 1105-06, 2001-08 0601-03, 1211, Ch. 13, Ch. 14
<b>Coffee, tea</b>	0901-03, Ch. 18 (except 1802), 2101
<b>Cereals and preparations</b>	0407-10, 1101-04, 1107-09, Ch. 19, 2102-06, 2209 Ch. 10
<b>Oilseeds, fats and oils</b>	1201-08, Ch. 15 (except 150410, 150420), 2304-06, 3823
<b>Sugars and confectionery</b>	Ch. 17
<b>Beverages and tobacco</b>	2009, 2201-08 Ch. 24
<b>Cotton</b>	5201-5203
<b>Other agricultural products</b>	0904-10 Ch.05 (except 0508, 051191), 0604, 1209-10, 1212-14, 1802, 230110, 2302-03, 2307-09, 290543-45, 3301, 3501-05, 380910, 382460, 4101-03, 4301, 5001-03, 5101-03, 5301-02
<b>Fish and fish products</b>	Ch. 03, 0508, 051191, 150410, 150420, 1603-05, 230120

**Table A2: Export incentive rate in Bangladesh**

SL	Product Name	FY21	FY22	FY23
1.	Agriculture products and processed agro items	20%	20%	20%
2.	Meat and Processed Meat	20%	20%	20%
3.	Frozen Shrimp	7% to 10%	7% to 10%	7% to 10% <sup>1</sup>
4.	Frozen Fish	2% to 5%	2% to 5%	2% to 5% <sup>28</sup>
5.	Potato	20%	20%	20%
6.	Crop and Vegetable Seed	20%	20%	20%
7.	Rice	15%	15%	15%
8.	Tea		4%	4%
9.	Crabs and crutches (live, frozen)	10%	10%	10%
10.	Cattle horn, omasum less bone	10%	10%	10%
11.	Agar and atar	20%	20%	20%
12.	Export-oriented RMG (instead of duty drawbacks)	4%	4%	4%
13.	Incentives for the small & medium apparel (RMG) rms (in addition to the existing policy)	4%	4%	4%
14.	New product/new market expansion assistance - except for markets in the EU, Canada, the USA (Apparel Industry)	4%	4%	4%
15.	Additional cash assistance for apparel exporters to the Eurozone	2%	2%	2%
16.	Special cash incentive on RMG sector	1%	1%	1%
17.	Hand-made articles of hogla, straw, sugarcane/ coconut shell, tree leaf, waste of garments etc.	10%	10%	10%
18.	Light engineering	15%	15%	15%
19.	Articles of leather	15%	15%	15%
20.	Export of crust and finished leather exported from the relocated firms in Savar)	10%	10%	10%
21.	Ships/trawlers and ocean-going vessels	10%	10%	10%
22.	Pet bottles flex	10%	10%	10%
23.	Polyester staple bre produced from pet bottles flex	10%	10%	10%
24.	Furniture	15%	15%	15%
25.	Carbon and jute particle board from jute stalks	20%	20%	20%
26.	Articles of plastic	10%	10%	10%
27.	Paper and paper products	10%	10%	10%
28.	Diversied jute products	20%	20%	20%
29.	Hessian, sacking and CBC	12%	12%	12%
30.	Yearn and twine	7%	7%	7%
31.	Software, ITES and hardware	10%	10%	10%
32.	Synthetic and fabrics made footwear	15%	15%	15%
33.	Pharmaceuticals (including medical/surgical instruments and appliances)	10%	10%	10%
34.	Active pharmaceuticals ingredients (API)	20%	20%	20%
35.	Accumulator batteries (HS 8507.10 and 8570.2)	15%	15%	15%

28. The rate depends on the level of ice cover.

SL	Product Name	FY21	FY22	FY23
36.	Photovoltaic module	10%	10%	10%
37.	Motorcycle	10%	10%	10%
38.	Chemical goods (chlorine, hydrochloric acid, caustic soda, hydrogen peroxide)	10%	10%	10%
39.	Razor and razor blade	10%	10%	10%
40.	Articles of ceramic	10%	10%	10%
41.	Hat	10%	10%	10%
42.	Galvanised sheet/coils (coated with Zinc, coated with Aluminum and Zinc and color coated)	10%	10%	10%
43.	Consumer electronics, electrical home and kitchen appliance	10%	10%	10%
44.	MS Steel Products		4%	4%
45.	Bicycle and parts		4%	4%
46.	Cement Sheet		4%	4%

Source: Bangladesh Bank.

**Table A3: Major agricultural exporting goods to India and tariff rates under MFN,GSP and SAFTA**

HS code	Average exports 2019-21 ( '000 \$)	MFN	SAFTA	LDC
15159000	138,586	35	35	0
23040000	84,787	15	15	0
15149100	19,253	35	35	0
22029900	18,640	30	5	0
15079010	15,807	45	45	0
15119090	11,026	54	54	0
52021000	97,73	10	10	0
52029990	9,631	10	10	0
23069000	9,291	15	15	0
19054000	9,178	30	5	0
19059000	7,284	30	5	0
17049010	6,948	30	5	0
18069000	2,654	30	5	0
15155000	1,645	35	35	0
19023000	1,510	30	5	0
17049090	1,477	30	5	0
19053100	1,365	30	5	0
23099090	1,302	15	15	0
04039000	905	30	5	0
11052000	827	30	8	0
20099000	775	50	5	0
35030090	770	20	5	0
15151100	538	35	35	0
04090090	538	60	60	0
23024010	399	15	15	0

Source: Author's estimates based on data from WITS and EPB.

**Table A4: Major agricultural exporting goods to EU and tariff rates under MFN and GSP schemes**

HS code	Average exports 2019-21 ( '000 \$)	MFN	GSP	GSP+	EBA
24012000	3,570	11.2	3.9	0	0
24021000	1,447	26	9.1	0	0
24013000	892	31.15	3.9	0	0
24011000	838	8.8	3.9	0	0
07119000	708	9.6	6.1	0	0
19021900	496	21.93	17.89	13.69	0
16052100	362	20	7	0	0
19019020	254	7.6	4.1	0	0
16052900	199	20	7	0	0
19059000	172	24.63	20.13	20.13	0
52010000	172	0	0	0	0
19012000	168	7.6	0	0	0
52021000	135	0	0	0	0
52029100	111	0	0	0	0
20098900	110	18.87	11.33	0	0
19054000	92	9.7	6.2	0	0
33012900	89	1.63	0	0	0
10063010	85	19	19	19	0
09109110	83	0	0	0	0
51022000	72	0	0	0	0
19053100	71	9	5.5	0	0
19049000	69	19.75	16.25	11.45	0
07102190	65	14.4	10.9	0	0
07109090	65	14.4	10.9	0	0

Source: Author's estimates based on data from WITS and EPB.

**Table A4b: Bangladesh status of 32 pre-specified international conventions to qualify for GSP+**

SL no	International convention to qualify for GSP+	Accession	Ratification
1	Convention on the Prevention and Punishment of the Crime of Genocide (1948)	5-Oct-98	
2	International Convention on the Elimination of All Forms of Racial Discrimination (1965)	11-Jun-79	
3	International Covenant on Civil and Political Rights (1966)	6-Sep-00	
4	International Covenant on Economic Social and Cultural Rights (1966)	5-Oct-98	
5	Convention on the Elimination of All Forms of Discrimination Against Women (1979)	6-Nov-84	
6	Convention Against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment (1984)	5-Oct-98	
7	Convention on the Rights of the Child (1989)		3-Aug-90
8	Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflict (2000)		6-Sep-00
9	Convention on the Rights of Persons with Disabilities (2007)		30-Nov-07
10	Convention concerning Forced or Compulsory Labour, No 29 (1930)		22-Jun-72
11	Convention concerning Freedom of Association and Protection of the Right to Organise, No 87 (1948)		22-Jun-72
12	Convention on Labour Inspection No 81 (1947)		22-Jun-72
13	Convention concerning the Application of the Principles of the Right to Organise and to Bargain Collectively, No 98 (1949)		22-Jun-72
14	Convention concerning Equal Remuneration of Men and Women Workers for Work of Equal Value, No 100 (1951)		28/01/1998
15	Convention concerning the Abolition of Forced Labour, No 105 (1957)		22-Jun-72
16	Convention concerning Discrimination in Respect of Employment and Occupation, No 111 (1958)		22-Jun-72
17	Convention concerning Minimum Age for Admission to Employment, No 138 (1973)		22-Mar-2022
18	Convention on Tripartite Consultations No 144 (1976)		17-Apr-1979
19	Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour, No 182 (1999)		12-Mar-2001
20	Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973)		20-Nov-1981
21	Montreal Protocol on Substances that Deplete the Ozone Layer (1987)	2-Aug-90	
22	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (1989)	1 Apr 1993	
23	Convention on Biological Diversity (1992)		3 May 1994
24	The United Nations Framework Convention on Climate Change (1992)		15-Apr-94
25	Cartagena Protocol on Biosafety (2000)		5-Feb-04
26	Stockholm Convention on Persistent Organic Pollutants (2001)		12-Mar-07
27	The Paris Agreement on Climate Change (2015)		21-Sep-16
28	United Nations Single Convention on Narcotic Drugs (1961)	25-Apr-75	
29	United Nations Convention on Psychotropic Substances (1971)	11-Oct-90	
30	United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988)		11-Oct-90
31	United Nations Convention against Corruption (2004)	27-Feb-07	
32	United Nations Convention against Transnational Organised Crime (2000)	13-Jul-11	

Source: Author's compilation from the United Nations and International Labour Organisation (ILO).

**Table A5: Major agricultural exporting goods to China and tariff rates under MFN, APTA GSP schemes**

HS code	Average exports 2019-21 ('000 \$)	MFN	APTA	LDC
12074090	7,706	10	9	0
05010000	1,969	15	15	0
24022000	1,371	25	25	0
19021900	1,340	10	10	0
15155000	1,218	12	12	0
05119100	812	12	0	0
52021000	746	10	10	0
19053100	423	10	8.2	0
15141100	252	9	9	0
05051000	222	10	7.5	0
05069090	216	12	12	0
17049090	190	10	8.2	0
05080000	156	12	12	0
05040000	108	18	9	0
05119990	98	12	12	0
20079900	80	5	2.5	0
18069000	78	8	6.4	0
19019020	56	10	10	0
09024000	51	15	7.5	0
12119029	43	6	3	0
02062290	33	12	12	0
20098900	29	5	3.14	0
52029100	27	10	10	0
02109990	20	25	25	0
09022000	20	15	7.5	0

Source: Author's estimates based on data from WITS and EPB.

**Table A6: Major agricultural exporting goods to the UK and tariff rates under MFN & DCTS schemes**

HS code	Average exports 2019-21 ('000 \$)	MFN	Standard Preference	Enhanced Preference	Comprehensive Preference
07099990	3,048	12	8.5	0	0
19012000	2,923	6	0	0	0
08109020	2,729	0	0	0	0
19059080	2,034	8	4.5	0	0
19059055	1,667	8	4.5	0	0
07108095	1,447	14	10.5	0	0
16052110	1,102	20	7	0	0
19021910	993	18.2	18.2	18.2	0
19054090	879	8	4.5	0	0
08134065	797	0	0	0	0
08045000	750	0	0	0	0
19053199	611	8	4.5	0	0
16052190	585	20	7	0	0
07109000	565	14	10.5	0	0
08059000	558	12	8.5	0	0
19049010	489	20.2	20.2	20.2	0
19030000	487	0	0	0	0
21069098	376	8	4.5	0	0
17049071	354	8	4.5	0	0
19041030	346	20.5	20.5	20.5	0
20098936	317	20	7.3	0	0
22029919	288	8	4.5	0	0
07102900	285	14	10.5	0	0
19021990	275	16.3	16.3	16.3	0

Source: Author's estimates based on data from WITS and EPB.



**Table A7: Major agricultural exporting goods to Japan and tariff rates under MFN & GSP schemes**

HS Code	Average exports 2019-21 ( '000 \$)	MFN	GSP	LDC
12074090	527	0	0	0
11052000	515	20	20	0
19019020	443	13.6	13.6	0
04090090	386	25.5	25.5	0
07101010	156	8.5	8.5	0
19059000	122	17.78	13.86	0
20049000	120	14.27	13.6	0
09109110	77	7.2	3.6	0
19012000	75	21.41	21.41	0
09041190	74	1.5	0	0
12099100	69	0	0	0
15159000	52	2.04	2.04	0
07119000	40	8.25	8.06	0
09042190	36	3	0	0
08043010	35	12.1	12.1	0
09103010	35	3.6	0	3.6
07109090	34	8.3	8.3	0
04059000	33	38.23	38.23	0
09109910	32	1.2	0	0
19049000	28	27.14	27.14	7.5
20081900	26	12	12	0
09024000	25	6.67	6.5	0
09109990	23	3.6	0	0
06049000	22	3	0	3
24039100	20	0	0	0

Source: Author's estimates based on data from WITS and EPB.

**Table A8: Major agricultural exporting goods to the Republic of Korea and tariff rates under MFN & GSP schemes**

HS_8	Average exports 2019-21 (Thousand USD)	MFN	APTA	LDC
05119100	1,199	8	8	8
24012000	1,155	20	0	0
14049099	183	4	4	1
19049000	175	8	8	8
19059000	174	8	8	3
15159000	100	12	12	7
19012000	94	345	345	342
07119000	55	128	128	118
52021000	53	0	0	0
20049000	50	30	30	0
10063010	48	513	513	513
19019020	39	36	36	36
19019099	33	163	163	163
07101010	32	27	27	0
52010000	31	0	0	0
19054000	27	8	8	0
07109090	26	27	27	0
19053100	26	8	8	0
20081100	24	57	57	57
08119000	23	30	30	30
19041000	14	5	5	0
23099090	8	5	5	5
20019000	6	30	24	0
09109990	4	8	8	0

Source: Author's estimates based on data from WITS and ITC.

**Table A9: Major agricultural exporting goods to Canada and tariff rates under MFN & GSP schemes**

HS code	Average exports 2019-21 (‘000 \$)	MFN	GPT	LDC
0306170011	1,299.7	0	0	0
1905905998	1,123.7	9.5	7	0
1902304090	492.3	6	4	0
2401209090	478.0	8	0	0
1902200090	424.7	11	10	0
0304990090	418.3	0	0	0
0709999090	374.7	0	0	0
0303890080	311.3	0	0	0
0303890090	288.0	0	0	0
0306170090	244.0	0	0	0
2202999090	237.7	11	7	0
1006300019	205.3	0	0	0
0301990090	189.3	0	0	0
0709930000	183.3	0	0	0
0511990090	160.3	0	0	0
1006300091	140.3	0	0	0
0511990030	128.7	0	0	0
1905909090	124.3	11	5	0
0303390000	115.7	0	0	0
0910910000	112.3	0	0	0
0304620000	110.3	0	0	0
0805500011	98.3	0	0	0
2106909999	84.3	10.5	5	0
1514990000	80.0	11	11	0
1901201520	76.0	12	12	0

Source: Author's estimates based on data from WITS and ITC.

**Table A10: GTAP sector wise tariff**

Sector	Canada	China	EU	India	Japan	Korea Rep.	UK
Paddy rice	0.0	33.0	49.8	80.0	400.0	513.0	45.5
Wheat	31.5	33.0	14.8	77.5	103.6	2.6	0.0
Cereal grains nec	0.0	3.6	12.7	14.3	8.3	355.6	8.1
Vegetables, fruit, nuts	1.7	2.5	2.4	5.1	17.8	179.8	0.6
Oil seeds	0.0	4.5	0.0	30.0	0.0	624.2	0.0
Sugar cane, sugar beet	0.0	13.3	81.1	5.0	0.0	2.0	68.4
Plant-based fibres	0.0	5.0	0.0	5.0	0.0	3.9	0.0
Crops nec	0.2	11.3	0.0	7.5	1.6	8.2	0.0
Bovine cattle, sheep and goats	0.0	5.0	8.3	5.0	37.6	24.8	6.2
Animal products nec	0.0	10.4	0.0	5.6	23.7	12.8	0.0
Wool, silk-worm cocoons	0.0	3.5	0.4	4.7	15.7	8.0	0.0
Fishing	0.0	6.0	0.0	12.5	1.8	8.9	0.0
Bovine meat products	3.3	16.0	61.8	8.1	12.9	25.9	27.9
Vegetable oils and fats	9.3	11.4	0.0	32.2	3.6	10.8	1.6
Dairy products	125.8	12.0	7.7	5.0	103.0	63.4	22.7
Processed rice	0.0	23.8	24.9	76.7	203.2	513.0	23.0
Sugar	2.9	24.0	19.6	5.0	28.1	66.8	0.2
Food products nec	3.0	6.5	3.4	6.8	1.9	16.3	2.9
Beverages and tobacco products	10.2	24.4	0.0	5.1	0.0	20.0	4.2
Oil	0.0	3.0	0.0	2.5	0.0	3.3	0.0
Textiles	16.2	5.2	0.0	6.9	3.0	11.3	0.0
Wearing apparel	16.7	4.5	0.0	1.8	9.5	12.1	0.0
Leather products	15.8	5.0	0.1	15.0	26.8	6.9	0.0
Paper products, publishing	0.4	5.4	0.0	6.5	0.0	0.0	0.0
Petroleum, coal products	0.0	7.7	0.0	8.0	1.2	5.8	0.0
Basic pharmaceutical products	0.0	0.3	0.0	5.0	0.0	6.6	0.0
Rubber and plastic products	2.2	6.1	0.0	18.1	0.1	6.0	0.0
Metals nec	0.9	2.5	0.0	3.6	0.0	0.9	0.0
Machinery and equipment nec	0.0	2.7	0.0	5.0	0.0	4.2	0.0
Motor vehicles and parts	2.6	3.3	0.0	5.2	0.0	4.7	0.0
Transport equipment nec	6.4	5.2	0.0	2.9	0.0	6.5	0.0
Electricity	0.0	0.0	0.0	0.0	0.0	5.0	0.0
Gas manufacture, distribution	0.0	5.0	0.0	5.0	0.0	5.0	0.0

Source: Author's estimates.

Note: nec – not elsewhere classified. Weighted average tariff rates have been calculated.

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