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The Textile-Clothing Value Chain in India and Bangladesh

How Appropriate Policies Can Promote (or Inhibit)
Trade and Investment

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Abstract

There are significant value chain linkages between India and Bangladesh, particularly in the textile and apparel sector. India specializes in the upstream segment, supplying such intermediate inputs as silk, cotton, yarn, and fabrics to Bangladesh. Bangladesh specializes in the downstream final apparel segment, exporting worldwide as well as to India. Tariffs and nontariff barriers in both countries inhibit the growth of value chain linkages. In addition, subsidies and

other industrial policies in India distort incentives away from the natural pattern of specialization. The results of a new survey of textile and clothing firms in both countries corroborate these findings. Reforms in trade policy (including rules of origin), trade facilitation, trade-related standards, and institutions could help both countries better take advantage of value chain linkages.

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The Textile-Clothing Value Chain in India and Bangladesh: How Appropriate Policies Can Promote (or Inhibit) Trade and Investment¹

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Abbreviations

ASEAN Association for South East Asian Nations

BBIN Bangladesh, Bhutan, India, Nepal

BEPZA Bangladesh Export Processing Zones Authority

BEZA Bangladesh Economic Zones Authority

BIDA Bangladesh Investment Development Authority

BIPPA Bilateral Investment Promotion and Protection Agreement

BIS Bureau of Indian Standards

BoP Balance of Payment

BSTI Bangladesh Testing Standard Institute
BTMA Bangladesh Textile Mills Association
BTMC Bangladesh Textile Mills Corporation
CAGR Compounded Annual Growth Rate

CGST Central Goods Service Tax
CFS Container Freight Station
CVD Countervailing Duty
DDS Duty Drawback Scheme
DFQF Duty Free Quota Free

DSB Dispute Settlement Mechanism

DTA Domestic Tariff Area

DTAA Double Tax Avoidance Agreement

EPC Export Promotion Council

EPCG Export Promotion for Capital Goods

EPZ Export Processing Zone
FDI Foreign Direct Investment
FTA Free Trade Agreement
FTP Foreign Trade Policy

GSP Generalized System of Preference

GVC Global Value Chain

ILO International Labour Organization IMF International Monetary Fund

ISDS Integrated Skills Development Scheme

IWW Inland Waterway L/C Letter of Credit

LDC Least Developed Country
LPI Logistic Performance Index

MEIS Merchandise Export from India Scheme

MFA Multi-Fibre Agreement
MFN Most Favored Nation
MMFY Man-Made Filament Yarn
NMI National Manufacturing Policy
MRA Mutual Recognition Arrangement
MSME Micro, Small and Medium Enterprise

MVA Motor Vehicles Agreement NOC No Objection Certificate NTB Non-Tariff Barrier

PPP Public Private Partnership

PTB Para Tariff Barrier
PTS Primary Textile Sector
RMG Readymade Garments
RoO Rules of Origin

RTA Regional Trade Agreement SAFTA South Asian Free Trade Area SEZ Special Economic Zone

SGST States Goods and Service Tax

SITP Scheme for Integrated Textile Parks

SME Small and Medium Enterprise
SPS Sanitary and Phyto-Sanitary
SSI Small Scale Industries
T&C Textile and Clothing

TBT Technical Barrier to Trade

TUFS Technology Upgradation Fund Scheme

YFR Yarn Forwarding Rule

1. Introduction

Global Value Chains (GVCs) in the textiles and clothing (T&C) sector have emerged as vital elements of international trade and investment. GVCs have created new opportunities for firms in emerging and developing economies to participate in global markets and achieve economies of scale by specializing in specific activities involved in designing, producing and bringing to market complex goods.

The T&C sector is one of the pillars of GVCs, and has emerged as a robust driver of the trade-led industrialization in emerging and developing economies. The growth of global T&C trade was accelerated by the abolition of the Multi-Fibre Arrangement (MFA) in 2005, which had previously restricted market access of developing-country products to high-income countries, as well as by unilateral and multilateral trade liberalizations. This development has created new trade and investment opportunities in developing countries and has enabled their participation in global T&C value chains.

Global T&C value chains include a range of actors that include global lead firms, intermediate players, and suppliers that are positioned at different stages of T&C value chains. Global large firms (buyers) concentrate more on high value-added activities (research & development, design, distribution and branding) while intermediate players and suppliers focus more on manufacturing operations, such as production of yarn and made fabric.

In South Asia, T&C is one of the largest manufacturing sectors that play a vital role in employment generation and exports. It employs over 55 million people directly and nearly 90 million indirectly in this region. This sector plays an important role in cross-border trade flows in the South Asian region. Over the period 2007-14, intra-South Asia trade in the T&C sector has grown at a Compounded Annual Growth Rate (CAGR) of 15.91 percent, while its trade with the world has grown at a CAGR of 10.17 percent. In addition, the intra-South Asia textile trade has experienced much faster growth than the region's trade with the world. The inter-industry trade in the T&C sector offers crucial insights on specialization in different product lines that could play a pivotal role in fostering backward and forward linkages. Such value chains could be powerful drivers for developing regional production networks.

This study analyzes the bilateral T&C value chains between India and Bangladesh with a focus on policy related issues. The issues include tariff, non-tariff barriers (NTBs), industrial policies, trade facilitation, and rules of origin (RoO). Based on the comprehensive analysis of both primary and secondary data, it provides a set of recommendations which include common inextricably linked areas of reforms where India and Bangladesh can work together to strengthen bilateral T&C value chains. It also delves into areas of domestic reforms to enhance the competitiveness of their domestic T&C value chains and their subsequent integration into Global T&C value chains.

2. Profile of T&C Value Chains between India and Bangladesh

India and Bangladesh enjoy strong bilateral economic and trade relations, and a gamut of factors have contributed to the sustained growth of trade between the two countries. These factors include a long open border, similar value systems, geographical contiguity and common linguistic competencies. Bilateral trade in T&C products gives a reasonable understanding about the existing value chains in T&C products between the two countries. India's key exports of T&C exports include raw cotton (not carded or combed), silk, cotton yarn, denim fabrics, woven and knit fabrics, twill weave cotton, textured yarn, etc. Bangladesh's key T&C exports to India include yarn of jute, men and boys' trousers, sacks and bags, jute and other textile bast-fibers, woven fabrics of jute, T-shirts and singlets, men/boys' jackets, and blazers.

The nature of bilateral trade in T&C demonstrates that India and Bangladesh specialize in different segments. India specializes in the upstream textile segment and it is an important supplier of key raw material inputs to Bangladesh. Bangladesh specializes in the downstream textile segment and it exports mainly readymade garments (RMG), the finished products, to India and the world. The extent of textile-clothing trade indicates that both countries possess comparative advantages in different product lines of the T&C sector and it has contributed to the growth of bilateral trade fostering value chain links in the T&C sector. The existing value chain links in the T&C sector could act as a catalyst to deepen trade and investment linkages between the two countries.

Trade profiles of India and Bangladesh differ significantly from each other. India's export basket is dominated by primary and manufactured products, and its top exports to Bangladesh include cotton, vehicles (other than railway), machinery appliances, cereals, and mineral fuels. On the other hand, Bangladesh's exports are dominated by manufactured products from the labor-intensive sectors. Its key exports to India include vegetables textile fiber, articles of apparel and clothing accessories, articles of apparel, knit lead articles and other made textiles. While T&C exports form one-third of India's total shipments to Bangladesh, it constitutes more than half of the latter's exports to India (Tables 1 and 2).

Bilateral trade in T&C products at a disaggregated level offers a reasonable understanding about existing value chains in these items between both the countries. India's top 10 exports of T&C exports include cotton (not carded or combed), single cotton yarn, denim, woven fabrics, textured filament yarn of polyester. Bangladesh's top 10 T&C exports to India include men or boys trousers, jute and other textile fibers, woven fabrics of jute, cabled yarn, single yarn, used or new rags, men or boys t shirts and women and girl's trousers (Tables 3 and 4).

Existing bilateral value chains between India and Bangladesh offer valuable inputs on global T&C value chains. In this context, there are two important developments:

(i) Pre-2005 quota period: During this period, as a developing country India was exposed to quotas under MFA that restrained its T&C exports beyond a prescribed limit. This resulted in an exodus of Indian T&C manufacturers and exporters into Bangladesh to access the quota-free global market. This also helped them develop strong backward and forward linkages. Soon they started importing cheap raw materials, such as yarn, fabric

and denim fabric from India, processed them in Bangladesh and began exporting the finished products to the rest of the world. Therefore, the quota regime has strengthened the T&C sector of Bangladesh.

(ii) Preferential Market Access: Being a Least Developed Country (LDC), Bangladesh enjoys better market access under the Generalized System of Preference (GSP) compared to India. Bangladesh has significant labor cost advantages vis-à-vis India and other Asian countries in the T&C sector. The monthly wages applicable to the garment sector in India are higher than that in Bangladesh (Figure 1). This gives an added advantage to Bangladesh in global market, thus improving the cost competitiveness of Bangladeshi T&C firms in global markets. On the other hand, the United States (US) has challenged the export promotion programs of India in the WTO Dispute Settlement Mechanism (DSB) as it has recently crossed the threshold limit of US\$1,000 per-capita income for the last three years. Therefore, India may have to review its export promotion programs to make them WTO-complaint. However, a reduction in export incentives may affect the export competitiveness of India's T&C products.

2.1 Institutions in the Value Chain

India and Bangladesh have bilateral value chains due to their inherent comparative advantages, trade complementarities, and varying degree of specialization. The T&C value chain between India to Bangladesh is composed of the following (Figure 2):

- a) Input suppliers: For yarn and fabric producers in India, the input suppliers are basically cotton ginners and man-made fiber and chip suppliers. These raw materials are largely sourced locally.
- b) Producers: They include cotton yarn spinners and textile mills for both woven and knits, and processing units.
- c) Intermediary traders: The key intermediary actors in this chain are yarn and fabric traders.
- d) Exporters: Yarn exporters and fabric exporters are either the mills themselves or the traders.
- e) Importers: There are mainly two key types of importers in Bangladesh. First, merchant importers, who are traders or importers in Bangladesh. They import yarn and fabrics for selling locally to RMG factories. Merchant importers may also be in the form of wholesalers and distributors who work with exporters or mills in India. These wholesalers further sell on to stockists, online trading companies, and other formats of sellers of fabric and yarn. The second group of importers are RMG manufacturers. They import yarn and fabric from India. In the most cases, RMG manufacturers work with nominated mills provided by international clients.
- f) Meso level support institutions: (Figure 3) As the industry is clustered around India, several regional and product-specific institutions play the role of representation, trade promotion, and lobbying. Most of the associations are private and member-driven. They have a key focus on cluster development and work very closely with the government to set up weaving and apparel technology parks through Public-Private Partnership (PPP) (Ganguli, 2013).

2.2 Profile of T&C Sectors in India and Bangladesh

India

The T&C sector occupies an important place in the Indian economy through its contribution to national income and job creation. It contributes 4 percent to GDP, 12.5 percent to the foreign exchange earnings, and provides jobs to more than 35 million people. It is the second largest employment generating sector in the country after agriculture, contributing a large chunk to indirect employment generation. The sector plays a crucial role in the livelihood of millions who are directly and indirectly engaged in the sector. It also creates strong positive externalities leading to the overall economic development of the country.

The T&C sector is highly fragmented and unorganized, comprising mostly Micro, Small and Medium Enterprises (MSMEs). They contribute a significant portion to the overall output and are also considered to be a key pillar of the T&C sector. The sector continues to grow despite lack of economies of scale and outdated technology. It has emerged as the best performer within the manufacturing sector of the Indian economy. The export of the T&C sector was strongly supported by the buoyancy in global economic growth and the abolition of the MFA regime. Other supply side factors, such as improved cost competitiveness, expansion of the multi-fiber base, and the rapidly growing production capacity of fiber and fabrics have all played a vital role in the growth of the sector. Broadly, the T&C sector is segregated into four sub-sectors: a) spinning/yarn, b) weaving/knitting/fabrics/grey fabrics, c) processed fabrics, and d) apparel manufacturing.

The spinning sector holds a prominent place in the Indian economy as it is a highly consolidated and technically advanced sub-sector of the Indian T&C industry. The deregulation of the sector has substantially contributed to the consolidation of the spinning sector. The most important feature of the spinning sector is that 92 percent of the yarn is produced by an organized sector and only a fraction of 8 percent is produced by SMEs.

India's weaving sector is highly unorganized, dispersed, and is controlled by Small Scale Industries (SSI). Only 5 percent of its production takes place in the organized sector. There are about 3.9 million handlooms and 1.8 million power-looms in India. The sector has the highest weaving capacity in the world (61.6 percent of the global weaving capacity), with the presence of 2.2 million power looms, and 3.5 million handlooms. The sector enjoys a distinct advantage in employment generation in the country. However, it has been crippled by successive governments through restrictive policies. These include plant size regulations, labor restrictions, discriminatory tax policies, they have wholly eliminated the competitive environment and led to its failure. Moreover, restrictive policies have affected the productivity and competitiveness of the weaving sector. Due to these factors, the sector faces severe

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³Strategic Plan (2011-12 – 2015-16) of the Ministry of Textiles, Government of India.

constraints in terms of supplying high quality fabrics to the domestic and export units in the country.

Despite these impediments, India continues to enjoy a distinct position in terms of its global ranking of installed capacity of looms. The sector is placed at first position in the global ranking, both in shuttle-looms⁴ and handlooms. However, shuttleless looms⁵ are weaker and are placed at fourth position. The sector faces numerous challenges in the form low productivity, absence of shuttleless looms, poor technology, restrictive policies and limited market access (Commonwealth Secretariat, 2011).

India is a leading player in the production of fabrics and holds a distinct position in T&C value chains. The power-loom sector has contributed 83 percent to the production of fabrics, followed by 11.4 percent to handlooms and 3 percent to mills. In terms of CAGR, mills have registered moderate growth rate of 1.62 percent between 2011 and 2015. Others, including mill and handloom have registered a moderate CAGR (Table 5). Meanwhile, power loom weaving has registered a negative growth rate of (0.25) percent.

The garment sector has played a crucial role in the overall growth of the T&C sector. It is characterized by a large number of independent small firms located in different regions across the country. The sector controls almost 24 percent of the world's spindle capacity and 8 percent of rotor capacity. India has abundant raw materials and a skilled workforce, which helped the country emerge as a major sourcing hub of garments. Current growth of the sector was strongly supported by robust domestic consumption and increasing export demand.

Bangladesh

Textile Policy of Bangladesh has given emphasis in increasing the domestic production of T&C raw materials. The Government of Bangladesh has been pursuing this policy mainly for two reasons: (i) to increase the domestic value addition through increasing production capacity and (ii) to reduce lead time in export-oriented RMG production. There are two other indirect benefits of this policy: (a) the country also produces raw materials (e.g., yarn and fabric) for direct export and (b) attainment of self-sufficiency in domestic production of all-important inputs of the T&C sector.

The textile sector of Bangladesh is sub-divided into a number of activities, which include spinning, weaving and fabric processing. The public sector and private sectors are active in the textile segment with all public-sector mills coming under the control and regulation of the Bangladesh Textile Mills Corporation (BTMC) that acts more as a regulator than as a producer (UNCTAD, 2012). Investment in the Primary Textile Sector (PTS) is more than US\$4 billion in Bangladesh. Currently, the PTS is able to meet 85 to 90 percent of knit and 40 percent of the fabric demand of the export-oriented RMG firms. It meets 90 percent of domestic fabrics and 100 percent of yarn

⁴The conventional loom utilizes a shuttle that contains a bobbin of filling yarn which emerges through a hole in the side.

⁵Shuttle-less looms use a different method of picking, which provides specific characteristics and applications.

requirements of knit garments handloom. It is also critical in generating around 0.2 million jobs in fiber and fabric waste recycle industry related to the RMG industry.

Bangladesh has made notable progress in the production of different types of yarn, although imported yarn still plays significant role in the RMG sector, especially in woven garments. The ratio of domestically produced yarn to imported yarn used in Bangladesh (through domestic production and imports) shows a declining trend from 83 percent in 2009-10 to 64 percent in 2011-12 and then it again went up to 80 percent in 2014-15 (Figure 4). This shows that domestically produced yarn has the potential to significantly reduce its import dependence. On the other hand, the ratio of the value of domestically produced fabrics to total use of fabrics has been increasing steadily, which was 92 percent in 2014-15. These dynamics indicate that textile sector has developed notable capacity to cater to the needs of both domestic market and exportoriented RMG. Nevertheless, in terms of volume, the locally produced yarn currently meets around 90 percent of the yarn demand for knit and 35-40 percent of the yarn demand for woven RMG while local fabrics meet 62 percent of demand from the domestic market and RMG industries.

The textile spinning sub-sector of Bangladesh experienced exceptional growth both in terms of units and capacity over the last two decades. At the end of 2017 the total number of spinning mills under Bangladesh Textile Mills Association (BTMA) stood at 425 (including 17 synthetic and 8 acrylic spinning mills) with a combined capacity of 12.41 million spindles, compared to only 84 and 1.7 million, respectively in 1995 (Table 6). This has also resulted in the increase of yarn production by more than seven times and cloth production by three times over the 1995–2017 period. Production of fabrics has doubled from 2.85 billion meter in 2006-07 to 5.85 billion meter in 2014-15. In 2017, the installed production capacity of these mills are 2.5 billion kg. Besides, about 796 weaving mills are under operation with the production capacity of 2.58 billion meter. Moreover, there are 240 dyeing, printing and finishing mills with 3.173 billion meters annual fabric processing capacity (Bangladesh Cotton and Products Annual, 2017 and 2018).

Bangladesh has come to the fore as an attractive destination for RMG production. RMG exports from the country grew because their firms were able to better respond to declining prices post-MFA than others due to reducing profits that enabled them to maintain cost competitiveness and also strengthen ties with buyers. The country's RMG sector has also experienced important restructuring and upgrading with regards to production processes, capabilities and backward linkages, which reinforced Bangladesh's competitive position (Lopez-Acevedo and Robertson, 2012).

Textiles and clothing items overwhelmingly dominate the export basket of Bangladesh. In fiscal year 2017-18 the value of these items was about US\$36.68 billion, which was around 89.65 percent of its total exports. Most of the export receipts came from woven garments and knitwear (83.49 percent), which were RMG products. On the other hand, the value of textile exports was merely at 6.16 percent (Export Promotion Bureau, 2017). Nevertheless, textiles are used as inputs to the RMG products as well.

The import of textiles and clothing items is quite significant in Bangladesh. The import value of these items was about US\$9 billion in fiscal year 2016-17, which was 20.8 percent of total imports (Table 8). The majority of imports included cotton and cotton yarn or thread, which was about 14 percent of the total imports in the same year. The other textile items are man-made staple fibers; knitted or crocheted fabrics; and man-made filaments, strip and the like of man-made textile materials.

3. Policies in T&C Value Chains

3.1 Trade Policy of India

In the 1990s, India took a radical step towards economic liberalization as the country faced a severe balance of payments (BoP) crisis. The Indian government unveiled a comprehensive package of economic and trade reforms by quashing the import quota system, followed by the abolition of 'license raj' and deregulation of key sectors. The emphasis was given to FDI to infuse competitiveness in key sectors of the economy. These steps completely overhauled the trade and investment environment in India. Several schemes were introduced or amended to eliminate regulatory bottlenecks and discretionary controls impinging the growth of trade. The systematic opening up of the economy helped India achieve a growth rate of 8 percent on a sustained basis from the year 2000 onwards.

The current Indian trade policy on T&C allows export and import of all items. Schedule 1 of the import policy⁷ exhibits that most T&C products have been placed in an open category for trade and only a few products are put under restricted categories. These include worn clothing and other worn articles, woollen rags, synthetic rags and gunny cuttings. Schedule 2 of the export policy⁸ delineates that all T&C products are in open categories and allowed for export. The overall framework of the trade policy on T&C is flexible and compatible with the global trading system.

The Government of India has given substantial attention to its trade policy due to the strong linkages of the T&C sector with the domestic economy, as well as its role in exports of the country. The Foreign Trade Policy⁹ (2015-20) includes several schemes aimed at promoting exports of the T&C sector. The Merchandise Export from India Scheme¹⁰ (MEIS) provides promotional incentives in the form of duty credit scrip to the T&C sector. The other schemes are duty exemption/remission, export promotion for capital goods (EPCG), duty free import for export production.

For effective export promotion of T&C products, there are 11 dedicated export promotion councils (EPCs) representing all segments of the sector — RMGs, cotton, silk, jute, wool, power-loom, handloom, handicrafts and carpets. These councils work closely with the Department of Commerce (Ministry of Commerce and Industry) and the Ministry of Textiles to promote exports. EPCs organize international

 $^{10}Ibid.$

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⁶It was a kind of system of licenses, regulations and accompanying red-tape that were required to run businesses in India between 1947 to 1990.

⁷The Import Policy Regime 2012, Directorate General of Foreign Trade, Government of India.

⁸The Export Policy Regime (2012) Schedule-2, Directorate General of Foreign Trade, Government of India.

⁹ Foreign Trade Policy -2015-20, Ministry of Commerce, Government of India.

exhibitions/fairs, coordinate buyer-seller meets abroad, and offer financial assistance to traders to explore international markets.

India has 15 trade pacts to promote T&C exports to non-traditional markets. However, India's FTA engagement has not been successful in boosting the growth of T&C exports. The current FTAs only cover 7 percent of India's total apparel exports under duty-free access in the global market, and the remaining products face higher duties. Conversely, China, Bangladesh and Vietnam have 30 percent of their T&C exports which enjoy duty-free access to the global market (Adhikari and Yamamoto, 2007).

India's policy makers have not secured balanced deals for T&C products in FTAs. Under the SAFTA, India provides DFQF facility to other LDC countries without placing any sourcing restrictions. Most of Bangladeshi garment manufacturers use Chinese fabrics and exports finished garment products to India. This is affecting the entire T&C value chain comprising of fibre, yarn, fabrics and garments. This demands for urgent modification in sourcing rules under the SAFTA. Therefore, it is important for India to renegotiate SAFTA and emphasis on the inclusion of 'Yarn Forwarding Rule' (YFR). This will make mandatory to source yarn, fabric and other inputs from SAFTA partner countries to avail the benefits of DFQF. This will incentivize Bangladeshi garment manufacturers to source their inputs from India and other member countries thereby strengthening bilateral and regional T&C value chains.

3.2 Investment Policy of India

India has become a more promising destination due to its liberalization of FDI rules. With its consistent economic performance and a large pool of relatively cheaper semi-skilled workforce, both domestic as well as international investors have found immense opportunities in the Indian economy. India has been one of the most attractive destinations for FDI in the T&C sector, allowing for 100 percent foreign equity. The government has also set up a special FDI Cell in the Ministry of Textiles that provides advisory support to foreign firms.

India has also undertaken a number of initiatives to promote investment in the T&C sector. Some of the key initiatives undertaken by India are Technology Up-gradation Fund Scheme (TUFS), Scheme for Integrated Textile Park (SITP), and Integrated Skill Development Scheme (ISDS). The TUFS was introduced in 1999 to enable T&C firms to acquire access to low-interest loans for technology up-gradation and improve cost competitiveness. The SITP scheme was introduced in 2005 to provide world-class infrastructure facilities for setting up their textile units to improve the quality and competitiveness of T&C products. The ISDS scheme was announced in 2010 to address concerns related to the shortage of skilled workforce. The key objective of the scheme was to increase the employability in certain designated areas through training and development programs.

Despite a liberal investment regime, foreign capital inflows have remained minimal in the T&C sector. FDI inflows in the T&C sector have witnessed a modest increase from US\$0.02 billion in 2008 to US\$0.23 billion in mid-2015 (Table 9). Although the overall framework of the investment policy in the T&C sector is liberal and provides a significant amount of thrust to FDI. The low level of FDI inflows in T&C is due to

poor quality of infrastructure, fragmented structure of industry, lack of congenial business environment, complex regulatory environment high transaction costs, stringency in labor rules, and sectoral caps on FDI in the retail sector, among others. Other than this, lack of synergy between the National Manufacturing Policy (NMP) and FDI policy as the former underpins the importance of large and thriving market of manufactured goods to benefit from FDI led technology transfer. One of the instrumentalities of the NMP was fostering "joint ventures between foreign companies and Indian partners" (Rao and Dhar, 2018). Instead of aligning the FDI policy with the objective of NMP, the policy makers allowed 100 percent FDI in all manufacturing sector under the automatic route. There thus remain some tensions between the FDI policy, which is aimed at attractiveness for foreign investors, and the NMP, which aims to promote technology spillovers through joint ventures.

3.3 Trade Policy of Bangladesh

A couple of policies, initiated in 1980, played a significant role in the development of Bangladesh's RMG sector. First, the system of bonded warehouses¹¹ helped in the growth of the T&C sector in Bangladesh. Under this privilege, firms can delay the payment of tariffs until they are ready to consume inputs imported earlier and they are not required to pay the tariff if the inputs are used for producing exports (Ahmed, 2009). Second, RMG firms are allowed to open up back-to-back Lettesr of Credit (L/C) based on their export order and they can source import of duty free input for their manufacturing. Thus, firms get credit to pay for imported inputs by showing the export order. These policies were particularly instrumental for establishing local firms in the apparel sector (Lopez-Acevedo and Robertson, 2012).

Bangladesh's trade policy gives considerable focus on promoting exports of T&C. The preamble of Export Policy (2015-2018) focuses on three aspects of the T&C value chain: (i) strong forward and backward linkage within the industry, (ii) easy access to raw materials for export items and (iii) overall improvement of Chittagong and Mongla sea ports with easy loading-unloading capacity of the port. The main aim of the policy is to modernize and liberalize the trading regime in tandem with the subregional connectivity arrangement, such as the Bangladesh, Bhutan, India, Nepal (BBIN) Motor Vehicles Agreement (MVA). It is important to mention that Bhutan has withdrawn from this sub-regional connectivity initiative and this may end up widening the scope of both bilateral and sub-regional regional integration. Furthermore, high-end RMG has been accorded the highest priority for which necessary initiatives have been undertaken to attract FDI. The policy is also aimed at improving port management and ease of shipping methods. The other proposed initiatives in the pipeline are the provision of institutional support to Bangladesh Bank and customs, modernization of Chittagong and Mongla sea ports, and bringing in dynamism in the activities of the land customs authority.

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¹¹ Government of Bangladesh has given "bonded warehouse" benefit for wide range of industries to expedite the export. Almost all items are entitled to get bonded warehouse. A 100 percent export-oriented manufacturing unit can get bonded warehouse.

3.4 Investment Policy of Bangladesh

Bangladesh has a liberal FDI regime that allows full foreign equity with free exit policy, easy remittance of royalties, technical assistance fees, and repatriation of profits. There are additional ex post facilities, such as tax holidays, tax exemptions, duty concessions and accelerated depreciations to attract foreign investment. The policy has welcomed India's investment in almost all major areas, both in joint-venture and in full foreign ownership in export-oriented industries, export processing zones (EPZs) and special economic zones (SEZs).

Bangladesh ensures legal protection to foreign investors against nationalization and expropriation. This privilege is provided under the Foreign Private Investment (Promotion & Protection) Act, 1980. Investors get the protection and support of international organizations as Bangladesh is a signatory to a number of international agreements related to foreign investment. Moreover, Bangladesh also has bilateral investment promotion and protection agreement (BIPPA) and Double Taxation Avoidance Agreement (DTAA) with India. The India-Bangladesh BIPPA includes provisions such as the promotion and protection of investment, national treatment, most favored nation (MFN), expropriation of investment, compensation of losses and dispute settlement between investors, etc. (Table 10).

Despite a range of legal provisions, India's investment in Bangladesh is perhaps lower than one might expect, given its economic size and geographic proximity. India was the ninth largest FDI investor in Bangladesh at the end of 2017 with equities logging US\$491.39 million (Figures 5 and 6). Out of this, US\$73.38 million (14.9 percent) was meant for the T&C sector. However, India's position was eighth in terms of gross FDI inflow with US\$119.32 million in July 2016-June 2017. Of this, the share of FDI in textiles and apparel is about a quarter (US\$30.54 million) (Bangladesh Bank, 2017).

Bangladesh has successfully institutionalized foreign investment in the T&C sector by embracing a two-pronged strategy, while the Bangladesh Investment Development Authority (BIDA) (previously known as Board of Investment) has been instrumental in facilitating foreign investment in the domestic tariff area (DTA), the Bangladesh Export Processing Zones Authority (BEPZA) was set up as a lead agency for investment in the export-processing zones. In addition to this, the government had also set up a Bangladesh Economic Zones Authority (BEZA) in 2012 for facilitating investment in SEZs. The government has identified a total of 30 locations to set up SEZs by private and public foreign investors and till date the BEZA has completed assessment of five locations. These are - Mongla, Sirajganj, Anwara, Mirsorai, and Moulvi Bazar. It needs to be noted that the BEZA has formulated separate policies for public and privately-owned SEZs. Bangladesh has also offered two SEZs to India – Mongla (Bagerhat district) and Bheramara (Kushtia district) – during the first visit of Indian Prime Minister Narendra Modi in June 2015. The development of physical facilities at the SEZs is currently being undertaken, in which Indian firms have shown active interest in establishing their manufacturing units.

4. Trade Barriers and Trade Facilitation: Implications for T&C Value Chains between India and Bangladesh

Trade policies are inextricably intertwined with GVCs, having an all-pervasive influence on their functioning. The increasing inter-dependence of trade policies has been an integral part of "trade policy formulation and negotiations" across the countries for a long time (OECD, 2014). The emergence of GVCs in global trade has transformed the role of trade policies and their impact on the functioning of GVCs. Traditionally, goods were being produced in one country and then exported to other countries. The global trade framework was simpler and competition took place between domestic and foreign goods with their own national characteristics. Consequently, countries levied high tariffs on imported products to protect domestic producers and this was largely motivated by the state of the domestic political economy that generally favored protectionist policies to cater to the interests of domestic producers even at the cost of consumer welfare. Customs tariffs and other charges were seen as major contributors to public revenue. Thus, high tariffs served the dual purpose of protectionism and public revenues.

Liberalization of global trade under the WTO and regional trade agreements (RTAs) has undeniably reduced the significance of tariff barriers across the world. The average applied tariffs on manufactured goods have reduced drastically in both developed and developing countries. Tariffs are no longer as much of a barrier to international trade as they once were, though some developing countries have been relatively slow to reduce tariffs. It is important to note that tariffs can create significant frictions in GVC-led trade as goods are largely produced in different geographies and even a miniscule amount of duty or tax while moving a product from one place to another will have an adverse impact on the production process at a later stage. Empirically, protectionist measures in GVC-led trade have proven to be more harmful as compared to the pre-GVC era when production processes were relatively simpler, taking place in only a handful of countries.

The impact of tariffs is higher when firms are vertically integrated and rely on low-cost intermediate inputs which come from different locations. The potential negative impact of a marginal increase in tariff is much higher in GVC-led trade as compared to simple international trade transactions (Wignaraja,2016). In GVC-led trade, goods cross international borders several times in different forms (raw material, intermediate items and finished goods) incurring some amount of tariff at each stage. This may have a much higher impact on the final value of the goods (Bruhn, 2014). Therefore, the total cost of delivering the final product to the consumer jumps significantly as the manufacturing of a product involves different stages of production at multiple locations. The overall magnification effect is further compounded by the fact that tariffs are applied to gross imports and not just on their value-added components even though value added by a direct exporter may be only a fraction (Bruhn, 2014). In short, tariffs in GVC-led trade weaken the ability of firms to procure imported inputs. It also narrows their chances to participate in global production networks.

4.1 Tariff Barriers and T&C Value Chains between India and Bangladesh

The current tariff structure between India and Bangladesh in the T&C sector has profound implications to the growth of bilateral T&C value chains and their subsequent integration with global T&C value chains. The average ad valorem applied tariff rates imposed by Bangladesh on India's exports are high across all categories of T&C except uncarded wool. Tariffs applied by India on Bangladesh's T&C products are relatively low except for certain products, such as articles of apparel, knit and articles of apparel not knit (Figure 7). The existing tariff structure on T&C products acts as a barrier to backward and forward integration in T&C sectors.

India and Bangladesh have introduced various schemes that have enabled them to eliminate, reduce or refund tariffs for exporters through schemes. These include duty drawback, duty remission, advance license schemes, cash subsidy, bonded warehouses, SEZ and EPZ. The Foreign Trade Policy 2015-20 (FTP) of India contains a plethora of duty exemption and remission schemes that helps exporters to jump the tariff wall. Similarly, the trade policy of Bangladesh provides duty-free imports of raw materials (e.g., cotton, yarn and fabric) under bonded warehouse as well as duty drawback benefits for export-oriented firms.

Duty drawback schemes perform better in Bangladesh than India. Traders in India experience obstacles while utilizing duty drawback schemes. One of the major obstacles is complex documentation wherein exporters are required to prove the quantum of imports that is used for exports (Lopez-Acevedo and Robertson 2016). This is a cumbersome and time-consuming exercise. Delays in refunds create serious cash flow problems for the exporters, especially the ones from SMEs. Another reason responsible for poor performance of duty drawback schemes in India is declining duty drawback rates vis-à-vis custom duties that have remained more or less same. In fact, in some cases custom duties have actually witnessed an increase. Moreover, the widening gap results in additional costs on the finished product. It becomes difficult even for the firms to neutralise the incidence of effects of duty paid on imported raw material. This also stultifies the value chain networks because duties cannot be exported.

4.2 Non-tariff measures (NTBs) and trade facilitation

NTBs have seen a substantial surge with the decline of quintessential tariff barriers in global trade. NTBs include a variety of trade impediments and regulations, such as technical barriers to trade (TBT), sanitary and phyto-sanitary (SPS) standards, administrative measures, custom procedures, arbitrary export bans, licensing, mandatory trading through state agencies, stringent labeling and packaging,

¹² Manisha Choudhari (2016), 'Duty Drawback- Drawing back Exporters', The Dollar Business, accessed on 15 November 2016.

¹³ This could be well understood through a numerical example. Suppose an exporter has imported an article worth of US\$1,000,000 for manufacturing an export item. The article faces the duty of 10 percent and the total duty paid on imported article is US\$100,000. In order to neutralize the incidence of duty, it uses a duty drawback scheme and drawback rates are 10 percent. The total refund through duty drawback is US\$10,000 but the actual duty paid on imported article is US\$100,000. It effectively states that duty drawback has not allowed the exporter to take full refund of the duty paid on the imported article.

infrastructural barriers, and export and price-based measures (quotas and voluntary export restraints, state level taxes, antidumping and countervailing duties) among others.¹⁴

The expansion of global trade through GVCs and cross-border investment has also given rise to NTBs. Currently; NTBs are present in GVCs for two important reasons. Firstly, different types of NTBs exist at various stages of production which impacts the supply chain efficiency. Secondly, the cumulative effect of NTBs is harmful in supply chains as they lead to trade distortions. Various policies and procedures are applied at different stages of the supply chain and any cost associated with these procedures amplify trade costs along the supply chain at each stage and produce erratic effects on the functioning of GVCs (Ferrantino, 2012). Furthermore, the regulatory effects of NTBs also have a bearing on different stages of supply chain: (i) production stage (increase the cost of production because of higher product standards) (ii) emergence of different types of standards (environmental, labor and ethical standards, and (iii) export-import stage (inspection, testing and other formalities can add cost and time to goods).

India and Bangladesh levy different types of NTBs that act as major impediments to the growth of bilateral trade and value chain engagement. Both countries put a number of NTBs on T&C products despite the agreement of cooperation between the Indian Bureau of Standards (BIS) and Bangladesh Standards and Testing Institution (BSTI). For example, India has imposed a testing requirement for RMG products which is very complex due to the divergent testing procedures for specific ingredients of the product at the laboratory level in each country. Furthermore, India also imposes a CVD of 16 percent on RMG exports from Bangladesh to protect its domestic garment industry. Due to this, exports of RMGs from Bangladesh are yet to achieve effective market access in India. In addition to this, India has also amended the registration rules for importing raw jute and jute products. The new rule has made it mandatory for all importers to obtain a No Objection Certificate (NOC) from the Jute Commissioner of India for each consignment. The entire procedure of obtaining NOC is fraught with complexities and uncertainty, thus restricting the import of raw jute and jute products from Bangladesh.

There are para-tariff barriers (PTBs) in India that affect import of inputs for the exportoriented RMG industry of Bangladesh. For instance, while India imposes a 1 percent service tax on all imported items, Bangladesh charges a pre-inspection fee.

Prevalence of disguised trade barriers between the two countries inhibits the capacity of T&C firms to engage efficiently in bilateral value chains. Frequent changes in

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¹⁴ NTMs are now an important feature of the international trading system. The total number of NTMs notified to the WTO has tripled from 1995 to 2010 and quadrupled by 2012; because of gaps in the notification system, there are likely many more. While some of these measures, such as SPS and TBT measures, may serve legitimate public policy instruments, such as consumer or worker safety or human, animal, and plant health, others are likely to be more overtly trade-restrictive. Even legitimate regulatory measures can be implemented in such a way as to be more trade-restrictive than necessary.

regulations, procedural issues, lack of regulatory convergence and information asymmetry act as major barriers for the T&C manufactures on both sides. The existing NTBs indicate that both countries need to put due emphasis on promoting the convergence of trade and technical standards, certification requirements, and testing requirements through mutual recognition agreement (MRA). This can help both countries assuage the high cost of compliance and can improve the cost competitiveness of small T&C manufacturers.

4.3 Trade Facilitation and T&C Value Chains between India and Bangladesh

Importance of effective trade facilitation has increased with the growth of global supply chains. Approximately one-third of global trade takes place in intermediate goods. Goods are largely produced in different countries and cross international boundaries several times before reaching their final destinations. Therefore, quick export and import clearance is critical to GVC operations. GVCs require efficient production processes which include efficient export-import clearances at each stage of the supply chain, so that all firms operate at real-time production and supply schedules. Any delay at port or customs clearance can disrupt the efficient functioning of the entire supply chain.

Functioning of global supply chains depends on two important factors, viz. the state of infrastructure and the trade regulatory framework. Quality of infrastructure is critical for the seamless movement of goods in a rapid, reliable and cost-efficient manner. Robust logistical support enables the smooth flow of inputs and outputs between local production sites and transportation modes (i.e., road, water and railway; land, sea and airports). Efficient administrative, regulatory and customs clearance procedures have positive effects on the operation of value chains, which are produced in spatially dispersed networks. Any additional cost due to cumbersome trading procedures and inefficient border infrastructure creates uncertainty, which in turn hinders the ability of firms to engage in highly sophisticated production networks or respond quickly to demand shifts when intermediate inputs travel through multiple countries. This underscores the importance of effective trade facilitation policies to reduce such costs and delays in the movement of intermediate inputs. Developing countries are making consistent and collective efforts to address regulatory and administrative impediments to make value chains more efficient at both regional and global levels.

The current state of trade facilitation between India and Bangladesh is sub-optimal. The World Bank report (2019) – Trading Across Borders – calculates the time (excluding tariffs) related to the export and import of standardized cargo. India and Bangladesh ranked at 80 and 176 out of 190 countries. On the other hand, Malaysia, Vietnam and Cambodia ranked at 48, 100 and 115 respectively in 2019 (Table 11). It is pertinent to note that India has made substantial progress on various parameters of trading across borders in 2019. However, it will be interesting to see how this impacts the efficacy of export-import operations at ports and facilitates the integration of Indian T&C firms in GVCs.

Bangladesh and India are lagging behind their comparable countries in Southeast Asia in logistical performance. The World Bank's logistics performance index (LPI) is used to compare the performance among India, Bangladesh Cambodia, Malaysia and Vietnam on various parameters, including - efficiency of the customs clearance process, quality of trade and transport-related infrastructure, ease of arranging competitively priced shipments, quality of logistics services, tracking and tracing consignment, and timeliness. The sub-parameters of the LPI show that Malaysia and India perform relatively better than Bangladesh, Cambodia and Vietnam (Figure 8). The dismal performance of Bangladesh on various sub-parameters of the LPI implies severe supply side constraints for the smooth functioning of global and bilateral value chains.

Lack of an effective multi-modal transport agreement and the absence of a harmonized transport system undermine the development of strong bilateral supply chains between India and Bangladesh. They also inhibit the countries from integrating with Southeast and East Asian production networks. Delays at border points due to poor infrastructure, regulatory and procedural bottlenecks, and inefficient customs clearance escalate the cost of intermediate products, which crosses multiple borders before it reaches their final markets. Given that India and Bangladesh are at different stages of T&C value chains, the prevailing inefficiencies in their supply chains may create the risk of being left out of global T&C value chains. However, the recent development of BBIN MVA and its effective implementation potentially a gamechanger for India and Bangladesh in improving the efficiency of value chains.

5 Role of Industrial Policies in GVCs

Participation of firms in global GVCs hinges on policies and the institutional contexts in which they operate. Policies have the potential to facilitate the integration of countries into GVCs if they are in line with the operational principles of GVCs (OECD, 2014). Different policies apply to different stages of GVCs and they either facilitate or hinder the entry of firms into GVCs (Stephenson, 2014). Therefore, it is critical for policy makers to formulate policies that focus on the creation of capabilities, productivity, institutions, and incentives and augment the participation of firms into GVC-led markets. Globally, there are two types of policies, viz. horizontal and vertical policies that play a vital role in the emergence of GVCs. Horizontal polices focus on eliminating inefficiencies in a productive system, thereby stimulating the overall competitiveness of the economy. Such policies emphasize streamlining administrative procedures, simplifying rules and regulations, infrastructure development, capacity building of trade-related institutions and reducing the cost of doing business (Low et al., 2013). Horizontal policies are even less contentious under the WTO-led multilateral trading system and pose a lower level of risk in terms of unpredictable consequences of policy-induced price relationships. Vertical policies are policies that target a specific sector, either through protection from foreign competition, subsidies, export promotion measures, local content requirements, or other incentives (Baldwin, 2013).

5.1 Industrial Policy of India

India embarked on the path of calibrated economic and trade liberalization in July 1991 when the economy was experiencing the chilling effects of their BoP crisis. The introduction of economic reforms in India was supplemented with a new industrial policy to accelerate the growth of a slackening economy. Thus, the new industrial policy of India underscored the importance of resuscitating sectoral competitiveness of the economy and move on to the path of a higher growth trajectory. The policy emphasized eliminating distortions of the pre-liberalization period, dispensing industrial licensing, easy access to public capital, establishing an export development center, creating integrated infrastructure development and facilitating foreign investment and technology imports. At the same time, efforts were also made to strengthen indigenous technological capabilities, amplify human resource development, augment the congenial business and regulatory environment, and facilitate research and development in the country.

India's industrial policy underwent a paradigm shift to align with the global trading system. As part of their broader economic and trade reforms, it emphasized those policies that allowed Indian firms to leverage the benefits of their traditional comparative advantage and integrate with global and regional production networks. India has been using a combination of vertical and horizontal policies to boost its competitiveness in the world economy. India relies more on vertical policies than on horizontal policies to encourage competitiveness among sectors that are laborintensive. The overall policy framework in India is tilted in favor of vertical policies. On the other hand, horizontal policies have received relatively less attention despite their role in boosting competitiveness and productivity of the whole economy.

Industrial policies proved to be ineffective in transforming the country into a manufacturing hub. This happened due to inadequate structural reforms, such as labor market regulations, goods market reforms, taxation, and business and regulatory reforms. India's efforts to modernize the economy have emphasized incremental solutions to discrete problems rather than fundamental transformation. The country had built up a complicated web of regulations till 1990, most of which are yet to be dismantled. The industrial policy in India has concentrated on specific sectors such as textile and leather, and it has focused on picking winners based on their traditional comparative advantage, as well as targeting specific sectors for preferential treatment (Sahoo, 2014). The policy of picking winners is unlikely to be successful in the everchanging realties of the world, as the configuration of trade has shifted from sectors to firms. In today's world of value chains, sectors do not engage in trade, firms do. The overall focus on industrial policies in India remained on sectors other than on firms.

In 2015, India launched 'Make in India' – with the objective of transforming India into a global manufacturing hub and its new industrial policy will be unveiled soon. The Make in India program recognizes the realities of the globalized market and the growing interdependence between trade, services, investment,

technology and GVCs that shape domestic capacities and productive systems (Singh, 2015). With a special focus on liberalization of capital mobility, the 'Make in India' program has also attempted to overhaul the country's FDI policy framework by permitting 100 percent foreign investments in some of the key sectors through the automatic route, wherein the government's approval is not required. Coupled with the program, India has also sought to put special focus on 'Ease of Doing Business' through simplification and rationalization of rules and regulations.

'Make in India' is a reflection of the industrial policies of East Asian countries having considerable reliance on export-led industrialization. The export-led model has proved to be efficacious in achieving high growth rates in East Asian countries for almost two decades. However, the prevailing global economic order does not support export-oriented industrialization due to various factors. As a result, the linkage between growth of global trade and global income has undergone a fundamental change. Global trade has become less responsive to changes in global income, jeopardizing the growth of export-led economies. Also, global trade takes place through value chains in which developing and developed countries are major players. The decline in the growth of global trade is due to the globally synchronized postponement of purchases, especially of durable consumer and investment goods (and their parts and components). The impact was triggered by compositional and synchronicity effects in which global supply chains played a central role (Baldwin, 2009). The recent vociferous backlash against globalization and free trade agreements in the developed world, especially in the United States and the European Union, has further dampened the global economic outlook. The growth of global trade is also expected to be tepid. Against such a gloomy backdrop, it is difficult to ascertain whether or not India will be able to leverage the benefits of an export-led industrialization in the present politico-economic environment of the world. However, India can improve its competitiveness by upping its share in global trade through domestic reforms. This could help India truly realize the goal of 'Make in India'.

5.2 Industrial Policy of Bangladesh

Bangladesh undertook a massive reform program ably guided by the World Bank and the International Monetary Fund (IMF) that was triggered by a crisis in the 1980s, which had led to stagnation in export performance. This included reforms in trade, industrial, monetary, fiscal, and exchange rate policies, privatization of the state-owned enterprises, and the promotion of foreign direct investment (Mahmud, 1995). Although its trade landscape was moderately liberalized in the early 1980s, this was followed by a large-scale relaxation of its trade and commerce sector in the early-1990s. This resulted in a substantial reduction in quantitative restrictions, the opening up of trade in many restricted items, the rationalization and diminution of import tariffs, and the liberalization of the foreign exchange regime. Promotional measures were also introduced for exports, which included subsidized rates of interest on bank loans, duty free import of machinery and intermediate inputs, cash subsidies, and exemption from value-added and excise taxes, among others (Razzaque and Raihan, 2007).

Liberalization programs and incentive schemes jointly produced significant synergy in export performance. The country saw a steep rise in its export earnings that surged to US\$31 billion in 2015 from US\$0.75 billion in the 1980s. This was mainly due to the phenomenal performance of the export-oriented RMG industry, which could successfully utilize the facilities under the MFA quotas, GSP, limiting competition and providing 'protected' or 'reserved' markets for Bangladesh, along with other RMG producing LDCs. Nevertheless, the MFA also provided a sound base for Bangladesh's RMG industry that helped sustain the magnificent performance of this industry even after the elimination of the MFA in 2005.

To stimulate export-led industrialization, Bangladesh allows the duty-free import of raw materials to manufacture export products. The government imposed a concessionary duty rate of 7.5 percent on imports of capital equipment for several years. Recently, special bonded warehousing licenses have improved the concessionary duty arrangement by allowing the exporters to have their local banks stand as guarantor with one-third liquidated during installation of the equipment and another to be liquidated at a later stage. The industry also received exchange rate benefits before 1992 to bridge the gap between the official and market exchange rates (Younus and Yamagata, 2012).

Despite attractive policy measures, the volume of FDI from India in the T&C sector has failed to increase due to poor infrastructure and weak support services. Bangladesh has so far allocated two SEZs for India for setting up RMG units or supporting industries. Apart from this, the lack of a clear timeline to improve infrastructure, sharing of utilities (especially gas and power), and inadequate port facilities in Bangladesh have also proved to be detrimental in attracting Indian investments into Bangladesh.

6. Evidence from a Firm-Level Survey

In order to support our preliminary findings, we conducted a directed survey and generated primary data from informed parties. These included firms involved in the value chain; government officials from the Ministry of Commerce and Industry, Customs, Directorate of Textiles; researchers; and academia. Information gathered from each source was cross-checked with other sources to ensure verification and validity.

Primary information was generated mainly from T&C firms of both countries. A total of 40 firms (20 in each country) were interviewed in 2016 to generate both quantitative and qualitative information. The firms are spread across India (Coimbatore, Bhilwara and Ludhiana) and Bangladesh (Dhaka, Narayanganj and Gazipur districts). Two sets of comprehensive structured questionnaires were used to collate information. The questions were related to firm size, items traded, quality of infrastructure and institutional services, impact of tariffs and taxes, NTBs, time taken in trade by stages, the role of trade policy and South Asia Free Trade Area (SAFTA), RoO, constraints related to value chains, and others. In addition, interviews were conducted with a

smaller number of firms in order to obtain anecdotal evidence from the traders and exporters. Information generated from literature review and firm level interviews were cross-checked and elaborated through interviewing policymakers, government officials, and experts. It helped in developing an in-depth understanding of the trade and tax policies, the functioning of ports, trade-related infrastructure and services, government programs to improve the capacity of domestic firms in producing inputs, development of the T&C sector, and strengthening and upgrading the value chains.

6.1 India

High tariffs on imported intermediate inputs (yarn and fabric) are a major barrier and impede the development of backward and forward linkages between the T&C sectors of India and Bangladesh. The provisions and procedures to refund the paid duties on imported intermediate inputs are complicated. Firms experience difficulties in getting the refund under Goods and Service Taxes. Under the current structure of GST, there is central GST (CGST) and state GST (SGST). Goods consumed within states are subject to both kind of taxes. There is no tax on exported goods as per the cardinal principle. But this does not happen in practice. Exported goods move within states in India are subject to both CGST and IGST. For exports, since consumption is outside the country, they should not be taxed as per the cardinal principle (Ranade, 2018). The current design of GST, exporters have to pay tax and get the refund after exports. Given the fact that there is always a delay of three to four months in getting refunds. Most importantly, the cost of capital which is locked up, is a non-reimbursed cost. The cost of delay may have serious implications for firms which usually operate in waferthin margins of profit. Recognizing the gravity of the problem, the Government of India has introduced the provisions of a bank guarantee or letter of credit in lieu of actual payment of IGST. But this option seems unviable as there is always a fee for bank guarantee.

Firms stated that the benefits of the duty drawback scheme are realized by exporting firms only if they are used as inputs for manufacturing items to be exported. However, such a strategy is ineffective for domestic suppliers if the nominal tariff rates are high. The main suppliers of these firms cater only to the domestic market and cannot avail drawback on duties paid. Even if they are able to do so through complicated procedures, then domestic suppliers using domestic inputs would be at a disadvantage, since the nominal protection would increase the domestic price of all tradable products irrespective of whether they are imported. Moreover, nominal protection indirectly affects the production cost of service (Escaith and Inomata, 2015). They further stated that high tariffs on intermediate inputs have adverse implications on not only the manufacturing of RMG for domestic consumption, but also for the expansion of the domestic fabric sector. The current duty drawback system in Bangladesh is structured in a manner that curtails the integration of Bangladeshi fabric suppliers into the regional T&C value chains. Bangladeshi apparel firms can claim duty drawback on their exports only if they have imported fabric from foreign suppliers. The duty drawback is not available where the fabric has been locally sourced. In effect, the duty drawback instrument acts as an incentive for RMG export firms in Bangladesh to source fabric from foreign suppliers.

MEIS is not beneficial due to inadequate export promotion benefits. It has retrenched several benefits of duty credit scrip and received strong criticism from the trading community. The withdrawal of the benefits of duty credit scrip under the trade policy has significantly impacted the competitiveness of yarn spinning firms in global markets. Most of the firms found that TUFS, SITP, ISDS, ISPSD and DDS are beneficial to the T&C through boosting productivity and competitiveness of the T&C firms. However, the TUFS has received criticism due to its inefficient disbursement of payment, which forced many firms to hold up their expansion plans. Furthermore, the TUFS has benefited limited segments of the T&C industry. Spinning units get a small amount of total loans disbursed under TUFS, and the low-end weaving and processing units have had limited access to funds under this scheme. Conversely, the SITP scheme has not been entirely successful in India as the idea of having integrated textile parks is not pragmatic given the highly-fragmented nature of the T&C industry.

Central Warehousing Corporation of India levies different charges on imported and exported products. Firms reported discriminatory treatment between the export and import of intermediate inputs. Charges on storage of exported cargo are free for 14 days while charges on storage of imported cargo is 20 per metric ton per day. Charges on storage of imported cargo increases much faster than exported cargo. The discriminatory treatment of the export and import of intermediate inputs is harmful, particularly in value-chain led trade where intermediate inputs come from different locations and the competitiveness of the final product largely hinges on competitive imported inputs.

Access to trade finance is an area of concern in case of imported intermediate inputs, where firms have to make the payment in foreign currency. The high cost of trade finance for imported intermediate inputs puts an additional burden on firms and restricts their potential to upgrade in value chains. Furthermore, the prolonged global credit crunch has significantly affected suppliers' financial stability and they are contending to prove their financial stability in order to become eligible suppliers. Smaller firms are particularly hard hit. Inadequate access to trade finance inhibits the participation of these firms as well as their graduation into T&C value chains.

Firms reported that lead firms tend to put pressure on suppliers to adhere to higher standards, which in turn inhibit their capacity to upgrade in T&C value chains. A diverse range of standards-related requirements put an additional burden on T&C firms and directly impacts their linking with global T&C value chains. For example, safety standards for textile factories recommended by the EU-based buyers are different from those of the United States. A majority of firms reported that the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) is an official EU standard that is aimed at phasing out harmful chemical over 10 years by employing better production techniques. With the implementation of REACH, firms need to make necessary changes in production processes so that they can provide the details of inputs used in the production of the final product. Other associated compliance costs for REACH come in the form of independent accreditation and

¹⁵ Storage Tariff, Ground Rent and Misc Tariff at Central Warehousing Container Freight Station, Mudra http://cewacor.nic.in/Docs/STORAGE%20TARIFF-CFS%20MUNDRA-2018 250418.pdf.

verification, for which some amount of fee is to be paid. Lead firms are very specific about permissible limits of using chemicals and a small increase in the usage of chemicals leads to consignment rejection. Furthermore, buyers are also meticulous in nominating the agency for inspection of quality technical and safety-related standards. The nominated agency for inspection is either foreign or located far from the factory, and it usually takes more than three weeks to conduct inspection-related formalities.

The rise of private standards in global T&C value chains and their potential implications to India-Bangladesh T&C value chains has created significant concerns among the Indian firms. Private standards can completely transform global T&C value chains and they could act as de facto global standards. Global lead firms based in the United States and EU are extensively using private standards as a sole parameter in their sourcing decision. The Global Organic Textile (GOT) is a private standard developed by the United States, Japan and some countries of the EU and is gaining global popularity with over 3,000 textile manufacturers certified in over 60 countries. The GOT standard encompasses the whole supply chain from restricting the use of GMO crops such as cotton, and calls for strict compliance requirements for the sustainable use of water and energy. Firms categorically pointed out that they face difficulties in complying with the prescribed requirement of the GOT. The growing usage of private standards in global T&C value chains is likely to hit smaller T&C firms the hardest.

Trade clearance at the Petrapole land port takes considerable time due to the plethora of procedural and regulatory requirements. Petrapole land port accounts for more than 70 percent of cross-border trade between India and Bangladesh. It takes about 18 days to carry the imported inputs from Petrapole port to an importers' factory through this port. In addition, a multitude of taxes (inter-state taxes, entry tax and octroi) and procedural requirements need to be completed while crossing the borders of other states, which make the movement of trucks through the internal corridor very slow. The current capacity of the Petrapole land port is inadequate in its capacity to handle the high volume of trade and traffic within the narrow approach road that links the Petrapole land port with Kolkata. In addition, local administration imposes certain charges, such as park fees, municipal development fees and hidden charges which add additional costs to the consignment. Lack of IT-enabled integration among operating agencies at cross points coupled with frequent internet failure act as a major obstacle for T&C firms. Testing agencies and customs are not fully integrated.

The procedures of completing various customs clearances and other formalities consume a considerable amount of time at the Mumbai and Tuticorin ports, which create hindrances while exporting intermediate inputs to Bangladesh. Substantial delays make supply chains inefficient and affect timely delivery of their consignments. Inadequate container handling capacity, inefficient customs clearance, capacity constraints, and lack of improved trade-related infrastructure hinder the efficient clearance of goods at Indian sea ports. India's ports are overburdened and they are working at 85 percent of capacity where 70 percent is considered to be ideal. Jawaharlal Nehru Port (JNPT) in Mumbai accounts for 70 percent of India's international trade. The highest draft at JNPT port is 14 meters, which is inadequate for mother vessels, and the unavailability of such drafts has diverted mother vessels

to Gujarat. Diversion in traffic from JNPT to the Gujarat port is causing significant losses to private terminal operators, which dampens the interest of private players to make investments in port infrastructure development.

Tuticorin port has the infrastructural problems of draft limitations, high dredging costs, insufficient gate capacity, evacuation problems, and high port charges. A large number of T&C firms in Coimbatore use the port for their exports to Bangladesh and other international markets. However, the average time of transporting the cargo from Tuticorin to Chittagong is 19 days. The cumulative effects of unpredictable delays due to cumbersome customs, port procedures, and the frequent loading and unloading at border points perturb the efficient functioning of supply chains which in turn, reduce the competitiveness of T&C firms to explore potential opportunities in linking with bilateral, regional and global T&C value chains.

SAFTA has not been successful in terms of facilitating the growth of regional T&C value chains. Due to the Sensitive List, the T&C firms are compelled to procure their raw materials from the cheapest possible source in order to remain cost-competitive. Besides, trade in T&C products under SAFTA is subject to various technical and standard related regulations. Discriminatory RoO act as major obstacles for T&C firms. The current RoO for T&C products under SAFTA stipulates differential RoO for the LDC and non-LDC members. The RoO for non-LDC countries states that in order to seize the benefits of the preferential market access under SAFTA a product should undergo substantial transformation from the non-originating inputs, and it should have at least a 40 percent value addition as a percentage of the Free on Board (FoB) value. However, the minimum value addition is slightly lower and should not be less than 35 and 30 percent, in the case of LDC countries. While the agreement states that within the aggregate regional content of 50 percent for regional value content, at least 20 percent value added must come from the final exporting country of the FoB value plus Change in Tariff Heading (CTH) at four-digit level.

Lack of uniformity in RoO across trade agreements of India compel the firms to set up separate production lines for production to different markets, or they have to choose one specific market and thus sacrifice economies of scale. The cost associated with RoO influences the decision of firms with respect to sourcing and diverts trade linked investment plans. Restrictive and complex RoO persuade firms to locate plants in those markets where it is easy to satisfy RoO, despite the fact that those countries or regions may not be the best locations from an economic rationale.

Industrial parks and SEZs would foster T&C value chains through infrastructure, taxes, and other benefits. These zones provide numerous benefits, such as tax holidays, duty free imported inputs and better infrastructural facilities, which foment the ability of firms to link with global T&C value chains.

6.2 Bangladesh

Tariff and NTBs generally affect the T&C value chain between Bangladesh and India. Although an import duty mainly affects the importers who target the local market, its impact has been reported to be low. However, Value Added Tax (VAT), which is imposed indiscriminately, discourages strengthening T&C value chains. Surcharge

has also been detracting from the benefits the value chain could have otherwise provided, leaving a negative impact upon the value chain. Firms encounter problems due to divergent procedures at land and sea ports. The overall domestic tax regime (VAT), the supplementary duties, and the import duties for local use are unfavorable for strengthening the bilateral T&C value chain.

Among the NTBs India's temporary ban on the export of cotton was mentioned as a significant barrier in enduring trade relations. As Bangladesh is largely dependent on India for its bulk volume of cotton, an uncertainty or sudden unilateral ban can have a considerable impact upon its economy.

Overall institutional services are marked as 'bad' in Bangladesh by the responding firms. Banks are identified as the worst service providers, followed by the Directorate of Textiles and the Bangladesh Railway. The majority of the respondents also identified the Land Port Authority, the Customs and Chittagong Port Authority, and the Customs Bond Commissionerate as bad service providers. Banks demonstrate the problems of complicated, cumbersome and costly procedures in opening letter of credit (L/C) and doing business. The Directorate of Textiles does not provide expected assistance and it has not yet started a 'One-Stop Service'.

Bangladesh Railway has container terminal and shipment services, but this has not help reduce the lead time for the T&C firms. Recently, the Ministry of Railway has taken notable initiatives, including their modernization and outreach program, to make their railway services more popular among traders. It has also been trying to improve goods trade by increasing their capacity and improving their quality of services. However, the interviewees expressed negative sentiments regarding the guaranteed space in shipment, the use of container terminals, and timeliness in transportation. All the interviewees reported that that they use their own transport to carry traded goods with India in order to avoid corrupt practices (e.g., bribing and favoritism), uncertainty, and delays.

Services at Chittagong Sea Port and Benapole Land Port are characterized by congestion, delays in unloading and clearance, and an overall low quality of service. The average time of importing, as reported by Bangladeshi firms, is almost similar to that of their Indian counterparts due to massive congestion and poor port capacity. An importing firm needs at least 2 days to provide an import order to Indian firms, while it takes about 3 days to open an L/C. However, it takes about a week for the imported items to arrive via the land port (Benapole), and thereafter about 15 days to reach the Chittagong port. One of the major problems with the Chittagong Port is the draft capacity, which is 9.2 meters — definitely not deep to accommodate many modern container ships. This significantly increases the time and cost of transfer operations because smaller ships and vessels are required to transport cargo to and from megasized ships anchored distantly from the port. As the RMG industry is highly dependent on the Chittagong port — being the only transport route — it faces severe bottlenecks. This limits the efficiency of firms to participate in global T&C value chains. The port is highly congested, as its capacity for handling containers is falling behind demand and increasing the total time taken for the clearance of consignments. Other problems, such as low productivity due to manual processing and limited number of cranes, have

increased the lead time for sea freight. In addition, container transport from Dhaka to Chittagong through the road network is much more expensive than either rail or inland waterways in terms of both cost and time. Thus, alternative modes of transport, such rail and inland waterways, need to be used by the traders to increase the efficiency in the value chain through the reduction of time and cost.

The SAFTA in general and its preferential route has benefitted T&C firms of Bangladesh as they have been able to procure raw materials under preferential agreements. However, the RoO clause embodied in SAFTA act as a major barrier in the case of RMGs. Knitwear garments of Bangladesh face difficulties in achieving requisite value addition in these products as prescribed in SAFTA. The RoO under SAFTA agreement does not consider the particularities of individual products, which in turn proves ineffective in capturing opportunities provided by value-chain-led trade.

Establishing two Indian SEZs and facilitating Indian investment in the proposed industrial parks would benefit the T&C value chain. It is subject to establishing T&C industries and associated businesses in these locations. However, Bangladesh needs to connect industrial parks with land and sea routes and explore possibilities for investment from India.

7. Policy Recommendations

Trade policy-related reforms

- There is a need for the gradual reduction of tariffs through necessary reforms in the trade policy of Bangladesh. The prevailing tariff on the import of inputs, such as yarn and fabric in Bangladesh, is high and impacts forward linkages of Bangladeshi RMG firms. Restrictive trade policies prove counterproductive particularly in value-chain led trade where the competitiveness of the firms hinges on competitive imported inputs. This, in turn, could affect forward linkages of Bangladeshi firms. Bangladesh falls in the downstream segment of the T&C value chain and can benefit through further integration by freeing the flow of inputs for both exported-oriented T&C items and domestic consumption.
- Bangladesh should take advantage of specialization in producing clothing as a downstream country. Bangladesh and India have comparative advantage in finished RMG products and raw materials, respectively. Hence, both countries can benefit in engaging through value chain led trade based on specialization. Therefore, Bangladesh should undertake policy measures to strengthen its specialization in clothing taking advantage from India's specialization in textiles. This would benefit both countries in the value chain and gradually leave the domestic production of T&C input to the market to gain efficiency in this sector. However, it would depend largely on the gradual reduction of tariff in general on yarn and fabric.
- India, on the other hand, should undertake policy reforms to gradually eliminate incentives and subsidies, and gradually remove NTBs to improve efficiency and reduce distortions in the T&C value chain. The export promotion benefits (e.g., duty credit scrip) in the country's trade policy are tilted in favor of the downstream segment

of the domestic T&C value chain, such as garment manufacturing. The trade policy does not consider the importance of the upstream segment (cotton, yarn, cotton blended yarn and fabric) in which India holds traditional comparative advantage - one which is fully integrated with global T&C value chains through bilateral and regional value chains. The policy induced distortion could hit the production of upstream segments, thereby causing serious supply-side shocks to the downstream segments of both domestic and global T&C value chains. Furthermore, the policy induced distortions also disrupts the level playing field between domestic and exporting firms. Therefore, it is imperative for the government to improve efficiency of the whole T&C value chain. One of the options is to undertake comprehensive horizontal reforms, such as infrastructure development and promoting the ease of doing business. These reforms will have economy-wide implications and will boost the competitiveness of the economic system of the country. It will help the government to gradually eliminate incentives and subsidies that result in distortions and inefficiencies in the bilateral value chain. In addition, India should undertake policy reforms to gradually reduce domestic taxes and non-tariff barriers on readymade garments coming from Bangladesh for smoothing the functioning of the bilateral T&C value chain.

- The duty drawback scheme under the trade policy of India needs to be overhauled in the view of GVC-led trade. Duty drawback schemes are unable to recover the total duty paid on imported inputs. This is particularly important in the case of intermediate products. This significantly impacts the competitiveness of firms which conduct business in GVC networks and creates potential risks of moving out of such networks. In this context, it is important for India to do a comprehensive mapping of imported inputs of T&C products used for manufacturing exports. It should try to explore policy options to neutralize the effects of duty paid on imported inputs. One of the options could be reducing the tariff to zero or giving 100 percent drawback on imported inputs on those products, which are produced in value chain networks. This exercise could also be conducted in other product categories, which are largely produced in value chain networks.
- The current design of GST needs to be revamped to enhance the participation of firms in T&C value chains. As per the existing rule, exported goods that move within states in India are subject to IGST as it involves sale and purchase of intermediate products within the country. This rule is opposed to the cardinal principle of trade. In the view of this, it is important to modify this rule with a new zero-rate for all exports and this will enable exporters to get all the input tax credits.

Trade facilitation

 Both the governments should explore all possible measures for trade and transport facilitation related reforms for easy clearance of goods and seamless cross-border movement of cargo. Export and import clearance at land and sea ports in both the countries is filled with procedural and administrative complexities. A gamut of factors including inefficient customs clearance, excessive use of paperwork, absence of testing agencies and failure of internet links creates uncertainty and delays in the clearance of goods and affects the functioning of the whole supply chain. Constitution of a special task force could be one of the options to address issues relating to the clearance of export-import clearance related concerns.

- The capacity of JNPT Mumbai has to be improved significantly as it encounters constraints related to its limited capacity in managing its high volume of traffic, availability of mother vessels, insufficient drafts for handling mother vessels and obstacles in choosing Container Freight Stations (CFSs). Such concerns need to be addressed to improve the overall efficiency of the JNPT port given its importance towards the promotion of international trade in India. The government needs to expand capacity of the port so that it could handle large volumes of traffic with enhanced draft capacity.
- The limitations of draft, high dredging costs and insufficient space for the movement of mother vessels at the Tuticorin sea port should be addressed immediately, as it is one of the most important ports for T&C traders due to its proximity to Coimbatore. Goods are generally transhipped through Colombo port to deliver them at Chittagong port. This process is time-consuming and costly. Keeping these challenges in mind, it is important for the Government of India to take cognizance of these issues through appropriate policy response.
- The Government of Bangladesh should undertake necessary measures to improve IWT infrastructure and increase vessels to facilitate transportation of T&C items through the waterways. Trade-related infrastructure in Bangladesh, especially the transportation networks and port facilities, is very weak and costly in nature. Road transportation is the costliest in terms of fare and time, followed by railway. IWT is the cheapest and least time consuming, but it has not yet received considerable attention in T&C trade between the two countries. Improving IWT facilities and increasing vessels would reduce the cost of production and increase competitiveness of RMG items. Also, port infrastructures (e.g., approach road, container handling) and load-unloading capacities have to be improved to reduce delays.
- The Government of Bangladesh should come with an output- and time-based policy for the T&C sector. Logistics, trade financing and institutional support services, which include services of relevant government departments, customs and private agencies, are weak in Bangladesh. It has been discouraging the bilateral trade flow in T&C, increasing lead time, and increasing the cost of doing business. However, the Government of Bangladesh has been adopting various policy initiatives to address these issues by setting up a single-window clearance mechanism. Interest rates in the banks are now low, along with adequate liquidity to finance trade, although various procedural complications lead to unnecessary delays and increase the cost of trade financing. Bangladesh should also set a timeline in trade facilitation for the T&C sector to address these barriers.

- It is important for India and Bangladesh to encourage the movement of goods through other cheaper modes of transportation, such as Inland Waterway (IWW) and Sea. Cost of transportation through road transportation is very high in India and Bangladesh. The cost of transportation can be brought significantly down by promoting inland waterways, thereby improving the efficiency of bilateral T&C value chains. A remarkable development has happened in 2015 when India and Bangladesh signed 'Protocol on Inland Water Transit and Trade' (PIWTT) to boost cross border trade. In order to leverage the benefits of inland waterways transport, both countries should emphasize harmonization of technical and regulatory standards and develop necessary trade infrastructure to facilitate cross-border trade.
- RoO under SAFTA needs to be modified. The current RoO under SAFTA does not place any restriction on sourcing T&C intermediate inputs from non-member countries. Bangladeshi garment manufacturers use Chinese fabrics in manufacturing of garments and export finished products to the Indian market. The existing flexibility in sourcing rules under SAFTA provides backdoor entry to Chinese fabrics in the Indian market. This is adversely affecting both upstream and downstream manufacturers in India and other SAFTA member countries. Therefore, it is important for South Asian countries to renegotiate RoO and emphasize the inclusion of a 'Yarn Forwarding Rule' in the SAFTA. This will place restriction on using intermediate inputs from non-FTA partner countries and will incentivize firms to source from SAFTA partner countries.
- RoO under SAFTA needs to be made dynamic to capture the realities of value chain led trade. The existing RoO provision under SAFTA proposes different thresholds and does not work well for the T&C firms which rely on imported T&C intermediate inputs. Divergent RoO force T&C firms to develop different production lines to cater different markets in order to avail the benefits of preferential markets. Otherwise, they have one specific market and thus sacrifice economies of scale. Therefore, India and Bangladesh can negotiate uniform RoO across trade agreements to improve the utilization of trade agreements. It would also help India and Bangladesh to utilize their traditional comparative advantages in different segments of T&C products and nurture the deeper backward and forward linkages with global and regional T&C value chains.

Standards

- Bangladesh Standards and Testing Institution (BSTI) and Bureau of Indian Standards (BIS) should work closely with standards related institutions of developed countries for the harmonization of regulatory standards through MRAs. A plethora of trade, technical, private and voluntary standards act as major barrier in bilateral, regional and global T&C value chains. Standards prescribed by lead firms of the United States and the EU are divergent and create compliance related impediments for T&C firms. In this context, efforts should be made to make them more streamlined and consistent across the value chain.
- India and Bangladesh should actively engage with institutions which are involved in framing private and voluntary standards, and efforts should be made to take technical

assistance from these institutions in understanding the intricacies of these standards. The BIS and BSTI should approach multinational T&C buyers and request for conducting comprehensive technical capacity building programs for small T&C firms. Such a program must be financially backed by the respective governments. This could help India and Bangladesh meet challenges arising from private and voluntary standards and reduce the potential risk of moving out of global T&C value chains.

Institutions

- The current policy in Bangladesh should be reformed to allow the banks to open L/C for exporters without receiving the export order. Opening L/C has become cumbersome for Bangladeshi T&C exporters because the Government of Bangladesh follows back-to-back L/C procedures. Currently, the exporters cannot open L/Cs for importing inputs meant for exporting RMG unless they receive orders from the foreign buyers. This puts extra pressure on the RMG exporters, especially when they are compelled to maintain the stringent lead time. It is also a likely reason for the emergence of subcontracting. Therefore, allowing the exporters to open L/C without export order would help the input suppliers in India and RMG firms in Bangladesh to engage more deeply by encouraging flexibility and predictability in the T&C sector.
- The discriminatory treatment of imported goods over exported goods in India should be eliminated in order to provide better access to imported intermediate inputs. Currently such discrimination is occurring because institutions involved in international trade have very limited knowledge about value chain led trade. The Central Warehousing Corporation of India charges a higher price on the storage of imported goods as compared to exported inputs/goods. Charges on storage of exported cargo are free for 14 days, but there are charges on storage of imported cargo. It is important to mention here that charges on storage of imported cargo increase with the passage of time. In view of this, it is therefore important for policy makers to understand that such a policy is counterproductive and harmful for the export-oriented T&C industry, which relies on competitive imported inputs. A marginal increase in trade cost due to high storage charges or any hidden cost could erode the competitiveness of firms in value chain led networks. Therefore, it is recommended that the Government of India pay the utmost attention to these issues and identify possible ways to address them. Capacity building programs to explain the basic tenets of value chain led trade could also be useful for the officials of trade-related institutions.
- Revamping SITP is critical to develop integrated textile parks in India. This is due to two reasons: Firstly, the T&C value chains are highly fragmented and thus it is difficult to consolidate these in a cluster format. Secondly, the scheme is operated under the public private partnership (PPP) mode and many of the key activities, such as knitting and dyeing, cannot be brought under the cluster due to wet processing requirements. Obtaining pollution clearance certificates is a nightmarish ordeal. Therefore, promoters prefer going without wet processing inside the SITPs, failing the whole concept of integrated textile parks. Hence, it is important for the government to revitalize the scheme by making suitable changes to integrate the whole T&C value

chain in India. One of the options could be mapping the whole domestic T&C value chain on the basis of comparative cost advantage of states and identifying selective activities which can be clustered in one particular state. This could help in achieving economies of scale and garnering higher benefits for the SITPs. In addition, the government must ensure single-window clearance for all kinds of legal and business-related procedures so that there is no delay in getting clearance certificates for setting up textile parks.

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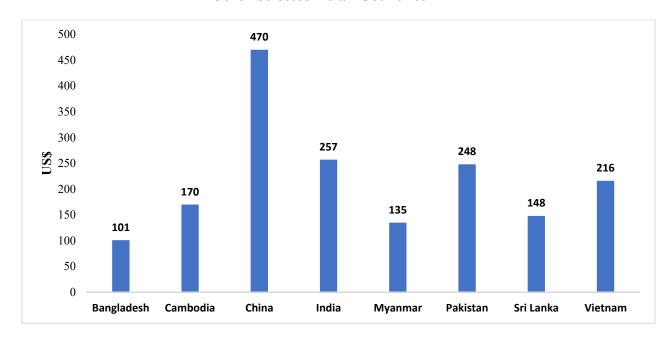
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Figure 1 Monthly wages applicable to the Garment sector of India, Bangladesh and Other Selected Asian Countries



Source: Japan External Trade Organization, surveys 2017-18

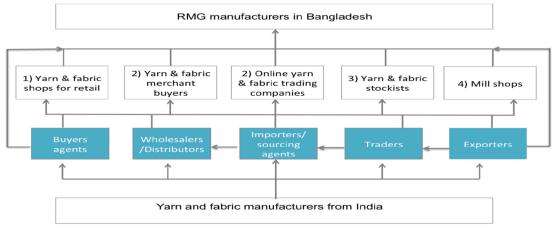
EU and US = 2/3rd of total export Rest of the Bangladesh Local RMG manuf Merchant importers RMG Manufacturer importers Import / Fabric exporters Distribn Yarn exporters Fabric Knitting units Export Manuf Yarn spinning mills Cotton ginners and farmers * Weaving and knitting together = 2.4mill

Figure 2 India's yarn and fabric for RMG Value Chain

Source: Ganguli (2013).

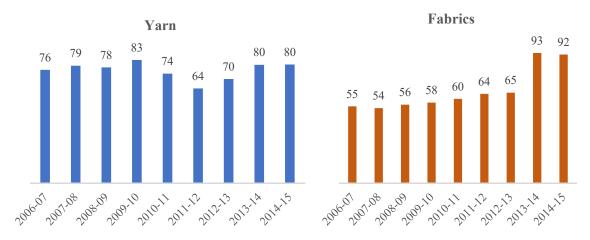
Key: Texprocil (The Cotton Textiles Export Promotion Council), SIMA (Southern Indian Mill Association), ILF&S (Infrastructure Development Corporation Limited), BGMEA (Bangladesh Garment Manufacturers and Exporters Association), BKMEA (Bangladesh Knitwear Manufacturers and Exporters Association) and DCCI (Dhaka Chamber of Commerce and Industry)

Figure 3 Import segmentation map for textiles and yarns from India to Bangladesh



Source: Ganguli (2013).

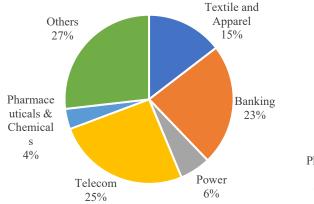
Figure 4 Domestically produced yarn as % of imported yarn (left) and domestically produced fabric as % of imported fabric (right)

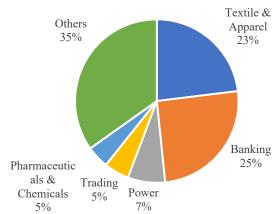


Source: Bangladesh Cotton & Products Annual 2017. Available at https://gain.fas.usda.gov.

Figure 1 FDI Stock of India in Major Sectors in End-June 2017

Figure 6
FDI Gross inflow by Major Sectors during FY 2017



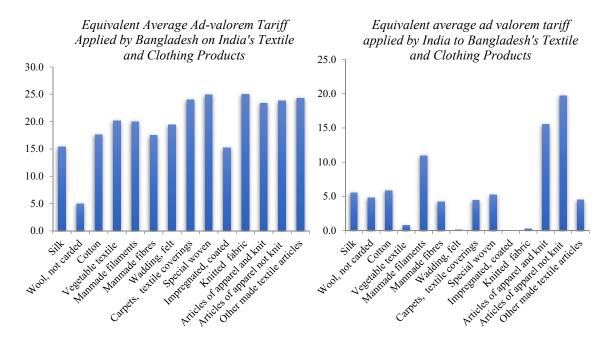


Note: 1. Stock of Indian FDI is US\$516.71 million Note: 1. Gross inflow of Indian FDI is US\$135.71 million.2. India's position is 9th in terms of stock of FDI.

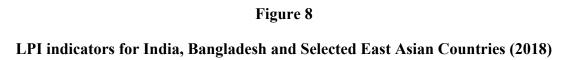
2. India's position is 8th in terms of gross inflow of FDI.

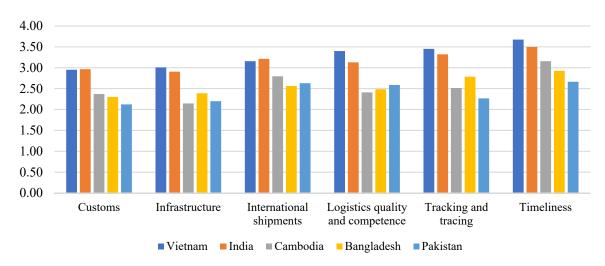
Source: Bangladesh Bank, Foreign Direct Investment (FDI) in Bangladesh: Survey Report July-December, 2017.

Figure 7 Average Ad Valorem Tariff Applied in T&C Products



Source: ITC calculation based on UN-COMTRADE Trade Statistics, 2015.





Source: Logistic Performance Index, the World Bank, 2018 Logistics performance index: Overall (1=low to 5=high)

	Table 1 Top Five Products in Bilateral Trade between India and Bangladesh (US\$ million)										
	1			xports to			- 6		,		
HS Code	Product Label	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
'52	Cotton	711.37	367.61	936.37	958.40	1389.22	1662.04	1647.11	1590.5 5	1446.94	1735.28
'87	Vehicles and arts	196.19	213.72	249.89	262.20	412.69	459.47	590.45	544.86	663.42	946.39
'84	Machinery, mechanical appliances	177.84	63.71	91.22	169.81	272.53	282.83	333.69	358.92	450.24	534.37
'10	Cereals	508.38	101.11	157.13	257.89	451.98	765.19	800.16	332.58	36.84	401.39
'27	Mineral fuels, mineral oils and products	127.62	134.99	110.11	120.39	97.08	161.95	181.05	148.09	150.30	382.83
	1		Bangl	adesh's E	xports to	India					
HS Code	Product Label	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
'53	Vegetable textile fibers nes, paper yarn, woven fabric	25.99	59.75	76.43	137.70	123.34	99.80	83.92	129.07	198.76	123.00
'62	Articles of apparel and clothing accessories, not knitted or crocheted	2.98	5.17	11.32	26.51	42.80	71.54	84.55	99.05	114.59	116.35
'61	Articles of apparel, accessories, knit or crochet	1.12	1.29	4.75	15.33	10.84	15.11	27.72	33.60	35.33	41.00
' 78	Lead and articles thereof	3.99	0.00	0.05	0.00	3.50	1.89	13.96	13.38	28.27	34.13
'63	Other made-up textile articles;	58.25	43.29	51.60	65.58	79.15	62.59	47.19	65.66	56.38	22.40

Bilateral Tra	ide Betwe	en India	and Bang	Table 2 gladesh ar		ve Share	of T&C (US\$ in mi	illion)	
	India's	Exports t	to Bangla	desh						
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	3243.38	2177.38	3016.58	3405.52	4936.67	5993.95	6255.24	5521.52	5668.79	7208.56
T&C	837.59	493.46	1099.98	1138.51	1652.06	2000.31	2085.38	2084.28	1919.22	2254.17
Percentage Share of T&C	25.82	22.66	36.46	33.43	33.46	33.37	33.34	37.75	33.86	31.27
	Bangla	desh's Ex	ports to l	ndia						
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total	329.78	234.42	357.90	579.13	567.31	530.75	517.28	639.90	677.10	591.00
T&C	99.55	122.66	162.79	267.35	277.14	278.89	268.12	361.65	438.18	336.94
Percentage Share of T&C	30.19	52.32	45.49	46.16	48.85	52.55	51.83	56.52	64.71	57.01

	Table 3 India's Top 10	Exports of	of T&C P	roducts	to Bang	adesh at six	c-digit HS	code (US\$	'000')		
HS Code	Product Label	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
'520100	Cotton, neither carded nor combed	263994	114089	333813	364758	542878	734517	692253	677652	511747	729253
	Single cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear	21954	29001	101983	118810	120001	141198	180906	188124	201153	224527
	Single cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear	50430	45145	162289	197904	137746	152030	162756	151483	164187	172299

'520942	Denim, containing >= 85% cotton by weight and weighing > 200 g/m², made of yarn of different	75143	47289	50544	11362	136682	147010	154955	130194	119861	134444
'551612	Woven fabrics containing >= 85% artificial staple fibres by weight, dyed	6	0	0	17	434	4092	163	29451	46953	78512
'521142	Denim, containing predominantly, but < 85% cotton by weight, mixed principally or solely with	9013	1794	1404	868	7518	13803	25642	34242	37076	57150
'540233	Textured filament yarn of polyester (excluding that put up for retail sale)	4491	2527	4195	10927	18811	37860	40306	47921	53753	50943
'520522	Single cotton yarn, of combed fibres, containing >= 85% cotton by weight and with a linear	26920	16996	37482	58996	52779	52685	40259	44187	41432	46804
'551511	Woven fabrics containing predominantly, but < 85% polyester staple fibres by weight, mixed	4334	3131	2664	4286	20728	25855	25748	25565	27774	36428
'520512	Single cotton yarn, of uncombed fibres, containing >= 85% cotton by weight and with a linear	5829	4109	28108	25663	31763	44262	38537	37987	41154	34114

	Table 4 Banglades	h Top 10	T&C Exp	orts to In	dia at six-c	digit HS c	ode (US\$	'000')			
HS Code	Product Label	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	Men's or boys' trousers, bib and brace										
	overalls, breeches and shorts, of cotton										
'620342	(excluding	713	2263	2579	6218	13609	30767	36057	37708	55064	56250
	Jute and other textile bast fibres, raw or										
	retted (excluding flax, true hemp and										
'530310	ramie)	13178	37987	44038	95160	73949	38422	17688	40482	99053	43768
	Woven fabrics of jute or of other textile										
'531010	bast fibres of heading 5303, unbleached	2681	3313	12632	5992	8957	12084	13120	22563	12869	36333
	Multiple "folded" or cabled yarn of jute										
	or of other textile bast fibres of heading										
'530720	5303	0	0	0	0	24	789	1954	3861	22164	21974
	Single yarn of jute or of other textile										
<u>'530710</u>	bast fibres of heading 5303	10089	18047	19624	36544	40343	48312	45451	55059	58943	20135
	Used or new rags, scrap twine, cordage,										
	rope and cables and worn-out articles										
<u>'631010</u>	thereof, of textile	2414	2296	2331	1482	6051	9749	12721	13010	14412	16474
	Men's or boys' shirts of cotton										
	(excluding knitted or crocheted,										
'620520	nightshirts, singlets and	330	1559	577	2022	18792	21334	14358	16560	20125	14314
	T-shirts, singlets and other vests of		• • •	4400							
'610910	cotton, knitted or crocheted	322	308	1189	2279	3526	4293	12023	12529	13411	12708
	Plain woven fabrics of cotton,										
1500044	containing >= 85% cotton by weight	0	22	0	2.40	0000	1.50.50	7 0.60	40450	7 011	11000
'520841	and weighing <= 100 g/m ² ,	8	22	0	340	9098	15372	7962	10458	5014	11030
	Women's or girls' trousers, bib and										
1620462	brace overalls, breeches and shorts of	212	41.5	c 4 =	20.40	00.7	22.44	5 005	6202	10600	10525
'620462	cotton (excluding	313	415	647	2048	905	2241	5096	6392	10620	10727

	Table 5 Production of Fabrics (million sq. mtrs.)									
Sector	2008	2009	2010	2011	2012	2013	2014	2015	CAGR	
Mill Sector	1796	2016	2205	2313	2418	2531	2486	2315	0.04	
Handloom	6677	6806	6907	6901	6952	7104	7203	7638	0.02	
Powerloom	33648	36997	38015	37445	38038	36790	37749	36984	0.01	
Hosiery	12077	13702	14634	12946	14541	16199	16894	17647	0.06	
Total	54198	59521	61761	59605	61949	62624	64332	64584	0.03	

Source: Textile Commissioner's Office, Mumbai, 2018

	Table 6 Growth in spinning of the PTS										
Calendar Year	No. of Mills	Spindle Capacity	Growth in No.	Growth in Spindle							
		(million kg)	of Mills (%)	Capacity (%)							
1995	84	1.70	10.52	19.56							
2000	116	2.29	38.09	34.52							
2005	230	4.94	98.28	115.67							
2006	260	5.5	8.7	11.39							
2007	283	6.0	8.85	9.09							
2008	341	7.2	20	20							
2009	350	7.6	2.6	5.6							
2010	373	8.7	6.6	14.5							
2011	392	9.6	5.6	10.3							
2012	392	9.8	-	2.1							
2013	394	9.8	0.51	-							
2014	407	10.3	3.3	5.1							
2015	413	11.05	1.47	7.28							
2016	424	11.65	2.66	8.28							
2017	425	12.41	0.24	6.12							

Source: Bangladesh Cotton & Products Annual 2011, 2018. The latest report is available at https://gain.fas.usda.gov.

Table 7 Export	Value of Tex	tiles and Clot	thing (Millior	US\$)	
HS Code (2-digit) and Product	2013-14	2014-15	2015-16	2016-17	2017-18
50: Silk	0.42	0.04	0.02	0.01	0.00
51: Wool, animal hair, horsehair yarn and fabric thereof	0.39	1.08	0.14	0.32	0.04
52: Cotton	115.60	107.04	102.76	109.49	124.85
53: Vegetable textile fibers nes, paper yarn, woven fabric	714.44	729.08	797.05	834.89	902.73
54: Manmade filaments	33.92	38.48	44.28	38.55	45.72
55: Manmade staple fibers	40.38	28.38	26.18	20.61	23.58
56: Wadding, felt, nonwovens, yarns, twine, cordage, etc.	28.36	30.57	41.71	40.86	31.78
57: Carpets and other textile floor coverings	11.68	18.90	17.94	17.50	17.00
58: Special woven or tufted fabric, lace, tapestry, etc.	73.74	47.36	56.26	52.19	49.20
59: Impregnated, coated or laminated textile fabric	11.27	13.12	16.06	15.99	16.63
60: Knitted or crocheted fabric	23.75	46.51	36.40	37.96	44.21
61: Articles of apparel, accessories, knit or crochet	12,049.81	12,426.79	13,355.42	13,757.25	15,188.51
62: Articles of apparel, accessories, not knit or crochet	12,442.07	13,064.61	14,738.74	14,392.59	15,426.25
63: Other made textile articles, sets, worn clothing, etc.	902.58	943.79	875.54	926.67	1001.51
Total Export	30,061.93	31,076.40	34,105.35	34,835.09	36,668.17
Textile % of Total Merchandised Exports	3.51	3.41	5.91	6.01	6.16
Knitwear % of Total Merchandised Exports	40.08	39.99	39.16	39.49	41.42

Woven % of Total Merchandised	41.39	42.04	43.22	41.32	42.07
Exports					
Textile, Articles & Clothing % of	87.98	88.48	88.28	86.82	89.65
Total Merchandised Exports					

Data source: Export Promotion Bureau of Bangladesh.

Table 8 Imp	ort Value	of Textiles	and Cloth	ning (Million	n US\$)			
Major Commodities	2016-17	% of Total	2015-16	% of Total	2014-15	% of Total	2013-14	% of Total
Cotton (all types), cotton yarn/thread and cotton fabrics	6,099.6	14.0	5,554.2	13.9	5,389.1	13.3	5,423.2	14.9
Man-made staple fibers	943.6	2.2	941.4	2.3	840.4	2.1	793.6	2.2
Knitted or crocheted fabrics	604.8	1.4	556.7	1.4	495.5	1.2	552.7	1.5
Man-made filaments; strip and the like of man-made	723.1	1.7	660.4	1.6	601.3	1.5	543.3	1.5
textile materials								
Articles of apparel and clothing accessories, not knitted	233.0	0.5	254.5	0.6	281.2	0.7	290.6	0.8
or crocheted								
Special woven fabrics; tufted textile fabrics; lace;	165.9	0.4	175.6	0.4	166.3	0.4	165.6	0.5
tapestries; trimmings; embroidery								
Other T&C products	310.8	0.7	377.5	0.9	298.0	0.7	239.4	0.6
Textiles & Textile Articles	9,080.8	20.8	8,520.3	21.2	8,071.825	19.9	8,008.4	22.0

Data source: Bangladesh Bank, Import Payment (various years).

	Table 9									
FDI Inflows in India (US\$ bn)										
		Textiles								
	Total	(including dyes,	Percentage of							
Years	(all sectors)	printed)	FDI in Textile							
2008	37.09	0.2	0.54							
2009	27.04	0.21	0.78							
2010	21.01	0.08	0.38							
2011	34.62	0.15	0.43							
2012	22.79	0.17	0.75							
2013	22.04	0.13	0.59							
2014	28.78	0.17	0.59							
2015 (Jan-June)	19.39	0.23	1.19							

Source: Department Industrial Policy & Promotion, Ministry of Commerce

	Table 10
	Issues and Provisions Related to Indian Investment in Bangladesh
Issues	Provisions
Promotion and protection	Bangladesh encourages condition for investment.
of investment	Treatment of investment and return to India.
National and MFN treatment	Equal treatment for Bangladeshi and Indian investors.
Exclusion of principals in future integration	Provisions of equal treatment are not applicable in case of any future integration (free trade area, custom union or international agreement).
Expropriation of investment	Indian investments are not to be expropriated except for public purpose according to the law; in which case compensation will be made equal to the market value of investment.
	In case of any expropriation of investment of any Indian company, the said can approach for a review by the judicial or administrative authority for confirmation on such expropriation.
Compensation for losses	Loss faced by any Indian investor in Bangladesh territory due to war or armed conflict will be subject to compensation.
Repatriation of investment	Complete repatriation.
and return	Currency transfer is permitted in the currency of original investment or any other convertible currency; at prevailing market rate of exchange.
Application of other rules	If the provisions of laws and regulations of either contracting party, or obligations under international law existing at present in addition to the present agreement contain rules, contain more favorable

	provisions for the investor than is provided for by the present Agreement, then these rules shall also prevail.				
Dispute settlement between investor and a contracting party	Settlement will be done on the basis of negotiation between the contracting parties				
	In case of the dispute not settled within six months, it will be submitted to either of the following:				
	 Judicial, arbitral or administrative body of the contracting party which has admitted the investment; 				
	International conciliation under the UN rule Commission on International Trade Law.				
	Arbitration in any of the following ways:				
	Through procedure of International Centre for the Settlement of Investment disputes;				
	 In accordance with the Arbitration Rules of the United Nations Commission on International Trade Law, 1976. 				
Dispute settlement between contracting parties	Dispute to be settled through negotiation.				
	If not settled within six months, upon the request of either of the contracting party, the dispute shall be forwarded to an arbitral tribunal.				
	Appointment of members by the contracting parties and a Chairman for the tribunal from a third state.				
	In case of failure of the above appointment process, the President of the International Court of Justice will make the appointment.				
	The decision of the arbitral tribunal shall be binding on the contracting parties.				
Subrogation	If either of the contracting parties make any payment under an indemnity in respect of an investment in the territory of the other party, then the latter party shall recognize the assignment and the former party is entitled by virtue of subrogation to exercise the rights and enforce the claims of such a party.				

Entry of Personnel	Personnel employed by companies of the contracting parties shall be permitted to enter and remain in the territory where investment is made, for the purpose of engaging in activities connected with investments.
Denial of Benefits	A Contracting Party may deny the benefits under the agreement to an investor of the other Contracting Party if the investor is owned by a non-Party and the contracting party does not maintain diplomatic relations with such non-Party.
	A Contracting Party may deny the benefits of an agreement to an investor of the other Contracting Party that is an enterprise if the enterprise has no substantial business activities in the territory of the other Contracting Party.

Source: Moazzem et al. (2014).

Table 11 Trading Across Borders (2018)								
Comparison between India, Bangladesh and Selected Southeast Asian Countries								
Indicators		Bangladesh	Malaysia	Vietnam	Cambodia			
Trading across Borders rank (out of 190)		176	48	100	115			
Time to export: Border compliance (days)		7.0	1.2	2.3	2.0			
Cost to export: Border compliance (US\$)		408.2	213	290	375			
Time to export: Documentary compliance (days)		6.1	0.4	2.1	5.5			
Cost to export: Documentary compliance (US\$)		225	35	139	100			
Time to import: Border compliance (days)		9.0	1.5	2.3	0.3			
Cost to import: Border compliance (US\$)		900	213	373	240			
Time to import: Documentary compliance (days)		6.0	0.3	3.2	5.5			
Cost to import: Documentary compliance (US\$)		370	60	183	120			

Source: World Bank (2018), Doing Business 2019.