

8. Development of the value chain in the textile and clothing sector of Bangladesh: Is there a role for regional trade agreements?

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8.1. Introduction and objectives

During the past few decades the remarkable change in the pattern and trend of international trade has increased the interconnectedness of production processes in a vertical trading chain that has expanded across different regions, with each specializing in particular stages of a production process (Hummels, Ishii and Yi, 2001; and Umemoto, 2005). Consequently, trade in intermediate products and, more specifically, trade of components between countries has substantially increased compared with the rise of trade in final products. The development of global value chains and international production networks (IPNs) strengthens the links between various domestic and international enterprises operating in different territories in producing or delivering goods and services. More importantly, these networks ensure the involvement of the most efficient enterprises in the value chain, thus providing an optimum level of return for enterprises, high quality and reasonable prices for consumers, the efficient allocation of resources, for example.

In the textiles and clothing (T&C) sector, a strong value chain exists between suppliers of raw materials and intermediate products in different countries, and manufacturers and buyers of these products at the retailers' level, both in developed and developing countries. In the initial stage of development of the T&C sector, outsourcing was mainly based on locational advantage, i.e., close geographical proximity of the final market to the producing countries; due to its highly capital-intensive and automated nature particularly of the textiles industry, the T&C industry is less flexible in adjusting locational choice or position in the global value chain (Nordås, 2004).

In the gradual liberalization of the T&C industry, fragmentation decisions have been influenced by (a) the level of skill and flexibility of the workforce, (b) the availability of capital, (c) the level of technology, transportation and communication infrastructure, and (d) to some extent, supportive domestic policies. Poor developing countries have entered the manufacturing process by giving entrepreneurs special incentives and facilities to set up backward and forward linkage industries, together with various incentives offered by the developed countries in the form of preferential market access for various textile and clothing products. Since the production process of garments is still dominated by the one machine-one operator technique, developing countries with their available supply of low-cost labour are able to take advantage of production fragmentation.¹

¹ According to Jinmin and Wei (undated), the rapid expansion of China's exports of T&C products has been linked to the phenomenon of industrial clustering of T&C firms at the Yangtze River delta, Pearl River delta and Bohai Rim since the 1990s. This industrial agglomeration has important economic and social implications with the creation of a large number of enterprises, entrepreneurs and employment.

In Bangladesh, the T&C value chain has been developing gradually since the early 1980s. Initially, the low cost of production due to very low wage levels motivated foreign firms to shift the relatively labour-intensive part of the production process to Bangladesh. The opportunity to supply apparel under the quota facility to the markets of the developed countries, particularly in the United States of America and the European Union, has also played a major role in the relocation of production units from developing countries.² Entrepreneurs from the Republic of Korea, Taiwan Province of China and Hong Kong, China invested in export processing zones (EPZs) during the early 1980s. Later, the sector developed under local entrepreneurship where various domestic policies (i.e., easy bank loans, availability of ready-to-operate factories for rent, effective low-cost technology and back-to-back letters of credit facilities) as well as international policies, (i.e., the quota facility under the Multi-Fibre Arrangement (MFA) until 2004, duty-free, quota-free market access in the European Union under the Everything but Arms (EBA) initiative since 2001) have contributed substantially to the development process.

Nonetheless, the role of foreign firms in filling the gap in marketing and management skills, together with a good technological base was also vital, particularly in the initial development phase of the sector in Bangladesh. At present, foreign-owned companies account for a share of less than 5 per cent of total companies operating in the T&C sector. Available information shows that these companies do not maintain a strong production linkage with their parent companies.

The objectives of the study detailed in this chapter were to clarify value chain development in the export-oriented T&C sector of Bangladesh and the factors responsible for its development since its inception in the early 1980s. An in-depth analysis was carried out that covered: (a) the pattern of trade in T&C products between Bangladesh and other countries, (b) the dynamics and changes of the trade pattern and (c) the role of trade policies that focus on regional trade agreements (RTAs). Based on the analysis, the study makes policy suggestions for effective IPN operation in the T&C sector of Bangladesh.

8.2. Literature review: Role of regional trade agreements in the development of global value chains and international production networks

Although a liberal trade policy is considered a major instrument for enhancing trade and investment, its role in the development of the value chain and IPNs is not substantial. According to Baldwin and Martin (2004), if trade among the regions was free, then firms would be indifferent when deciding whether to agglomerate.³ This view was supported by

² Under the Multi-Fibre Arrangement, less-developed countries including Bangladesh have enjoyed the quota facility for duty-free exports of apparel to the United States and the European Union. This is evident from the fact that Daewoo of the Republic of Korea has relocated its textile and clothing factories to Bangladesh in order to enjoy the duty-free market access facility.

³ Referring to the models of geography and growth, the study concluded that the cost of moving capital across borders (capital mobility) and the cost of moving ideas across borders (learning spillovers) are important aspects of economic integration, which can also mitigate or extenuate the stabilizing aspects of freer trade.

Rajan (2005) and Lorena (2005), as multilateral trade liberalization has a more profound effect than RTAs do on growing international production fragmentation.⁴ On the other hand, Yeung (2008) opposed the above views regarding the role of RTAs on the value chain and IPNs, and noted that on the broader regional scale, industrial clusters could be fostered through bilateral or trilateral free trade agreements (FTAs).

The literature includes more than a few reports on attempted empirical investigations of the role of RTAs and import tariffs in the decision to fragment production internationally. Yi (2003), using a two-country dynamic Ricardian trade model, disagreed on the role of tariff reductions in influencing IPNs and added that the standard models had difficulty in generating non-linear features of IPN development. According to Yi, worldwide tariff barriers had only decreased by about 11 percentage points since the early 1960s. He noted that tariff declines were much larger prior to the mid-1980s than after, yet trade growth was less during the former period. However, according to Hummels, Ishii and Yi (2001), vertical specialization may be large within regional trading blocs because of tariff preferences and geographic proximity.

Based on the European Union's situation, Navaretti, Haaland and Venables (2002) attempted to define the relationship between multinational corporations and production networks in economic activities. They reached the conclusion that restrictive trade policy at any stage of a production network (intermediates or final products) would hinder its development. Fragmentation of production mostly takes place between areas with low trade barriers and/or transportation costs. They cited the example of the phenomenal increase of European networking in Central Eastern Europe, followed by the Europe Agreement or the United States-Mexico Agreement after the implementation of NAFTA. Thus, they concluded, liberalization of international trade, geographical proximity among the trading partners and differences in factor costs in the trading countries could individually or jointly provide strong incentives for multinational corporations to fragment their production process in different geographical regions.

With regard to the effect of regional trade arrangements in the ASEAN region, Ando and Kimura (2003) stated that if the scope of such arrangements were limited to tariff removal, the results would also be limited, as simple tariff reductions only provide a competitive environment for import-substituting industries. However, they also noted that the reduction of cross-border tariffs was not sufficient to promote the formation of international production/distribution networks and that, in terms of welfare effects, their role was controversial. In a general equilibrium setting, Arndt (2004) found that an FTA that incorporated production sharing raised the likelihood of welfare improvement since, with improved market access due to trade liberalization, both the volume of trade and the fragmentation of the production process increased; as a result, final products were traded in

⁴ Based on a study on Croatia, Lorena (2005) pointed out that although according to the economic theory removal of trade barriers through bilateral and multilateral negotiations had positive impacts on IIT, the results did not support the hypotheses, especially where IIT decreased as the integration process proceeded. However, in the same study, Lorena mentioned that with low transaction costs, similar culture, history, language or some other important element, the integration process that reduced the trade barriers could strongly influence IIT.

different countries. According to Johansson and Quigley (2004), one of the distinguishing features of the development of regionalism in recent times was the sharp rise of agglomerative economies and their spread through network building across different geographical areas.

Kharas and Gill (2007) found that the most dynamic production networks and value chains were sectors where tariffs were lowest. According to Kimura (2006a), in East Asia, most production network-related components were already being traded without any tariffs because of the removal of tariffs on semiconductor-related parts in the late 1990s as well as extensive usage of various duty drawback systems. Kimura, Takahashi and Hayakawa (2007) gave the same example of the APEC-led trade liberalization initiative on electronic parts and components to indicate its crucial role in successful fragmentation of IPNs in the ASEAN region.

By using the O-Ring Theory of production, Umemoto (2005) found in his empirical analysis that trade in components of machinery industries was highly sensitive to the level of trade facilitation measures; thus, with the improvement of trade facilitation measures, fragmentation of production internationally could be encouraged. In this regard, a common regional approach to improving the regional trade facilitation system is considered to play an important role in the East Asian region to fragment production processes among different geographical boundaries.

Although liberal trade policies play a positive role in the development of IPNs, the role of RTAs in that development is ambiguous. In the literature, there are a number of examples of factors determining the development of IPNs in specific sectors, such as machinery components and equipment, in South-East Asia. However, not many studies have found this to be the case in the development of IPNs in the T&C sector. Therefore, a thorough analysis is required in order to understand the role (if any) of RTAs in IPN development in that sector. Bangladesh is taken as a sample case because of the increasing importance of T&C sector IPNs.

8.3. Methodology

In order to understand the development of the T&C sector of Bangladesh, a trend analysis of selected raw materials and components traded with major trading partners was carried out by using data available in the World Integrated Trade Solution (WITS) database. The analysis provides a comparison of historical trade patterns of major T&C related products in different years, such as 1995, 2000, 2002, 2004 and 2006. This trend analysis has been extended to 2008, based on the data collected from the Bangladesh National Board of Revenue (NBR). Intra-industry trade (IIT) indices for selected products of raw materials as well as intermediate and final products of the value chain have been calculated to appreciate the nature and extent of the relationship of IIT in these products with major trading partners.

An attempt was made to carry out a gravity analysis to identify the nature and extent of the influence of different factors responsible for IPNs, using the IIT index as a dependent variable. Since the value of the IIT index in most instances is very low, particularly for major importing countries, the results were not particularly significant; therefore the analysis was not concluded.

In-depth interviews were conducted with seven entrepreneurs who have a great deal of experience in manufacturing knitted and woven products; a structured questionnaire was used for the survey. Major issues highlighted in the survey included the nature of changes in production, sourcing of raw materials, export and destinations of various products, the development of backward linkages in textile units, and factors responsible for the growth and development of the T&C sector of Bangladesh.

8.4. Bangladesh's trade policy and participation in various bilateral, regional and multilateral trading arrangements

Bangladesh is currently following a liberalized trade regime with very limited restrictions on imports in terms of tariff rates and the list of restricted products. Under Import Policy Order (IPO) 2009-2012, import restrictions have been further relaxed on all but nine items compared with 25 in the previous IPO. The restricted items include health, environmentally hazardous items and items that may hurt the religious sentiment of the people. On the other hand, Export Policy 2009-2012 announced nine highest priority sectors in order to boost their production and export, such as: agro-products and agro-processed products; pharmaceutical products; software and ICT products; home textiles; sea-bound ship building industries; and toiletries products.

It should be noted that the current liberal trade regime was arrived at only after a long process of reform and restructuring. After independence in 1971, Bangladesh followed a public sector-led, import-substituting industrialization strategy. During the early 1980s, Bangladesh started to take various reform measures with the objectives of improved competitiveness, enhanced economic efficiency, and the dismantling of state interventions in order to create conditions for promoting export-led growth. As a part of this process, significant reforms have been implemented in terms of liberalization of external trade and foreign exchange regulations as well as the introduction of deregulatory measures to facilitate increased participation of the private sector. Tariff and non-tariff barriers have been reduced together with the dismantling of quantitative restrictions on imports and the deregulation of import procedures. Since the early 1990s, the process of liberalization has continued with the objective of achieving adequate export growth and employment generation; this is expected to have a direct impact on poverty alleviation. Under this changing scenario, private sector-led development has taken place, particularly in the T&C sector.

Bangladesh is actively involved in various bilateral, regional and multilateral trading arrangements (table 8.1). The South Asian Free Trade Area (SAFTA) is the most recent trading arrangement under which Bangladesh, together with other South Asian countries, has started trading goods under a duty-free arrangement, although on a limited scale.

Table 8.1. Bangladesh in major regional and global trading arrangements

Name of arrangement	Signing date	Date of enforcement	Scope	Type	Member countries	Tariff measures	Rules of origin
GSTP	1988	1989	Global (developing countries)	Preferential Trade Agreement	Algeria, Argentina, Bangladesh, Benin, Bolivarian Republic of Venezuela, Bolivia, Brazil, Cameroon, Chile, Colombia, Cuba, Ecuador, Egypt, Former Yugoslav Republic of Macedonia, Ghana, Guinea, Guyana, India, Indonesia, Islamic Republic of Iran, Iraq, Democratic People's Republic of Korea, Republic of Korea, Libyan Arab Jamahiriyah, Malaysia, Mexico, Morocco, Mozambique, Myanmar, Nicaragua, Nigeria, Pakistan, Peru, Philippines, Romania, Singapore, Sri Lanka, Sudan, Tanzania, Thailand, Trinidad and Tobago, Tunisia, Viet Nam and Zimbabwe.	Positive list for tariff concessions	Minimum value of content not less than 50% FOB value of the goods produced or obtained, for LDCs not less than 40%; accumulation where aggregate contents originating in members is not less than 60% FOB value of the goods produced or obtained; Single certificate of origin
APTA	1975	1976	Regional	Preferential Trade Agreement	Bangladesh, China, India, Republic of Korea, Lao People's Democratic Republic and Sri Lanka	Positive list (with each country's National List of Concessions – Annex 1). Concessions effective upon signature of the agreement. Possibility of further tariff reductions through negotiation (annual reviews)	No tariff heading change necessary; minimum content: 45% (35% for LDCs); no specific manufacturing process required
BIMSTEC	1997	1997	Regional	Framework Agreement	Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand	Negative list. Tariff elimination by 2012 (2017 for LDCs)	RoO on the agenda for further negotiation

Table 8.1 (continued)

Name of arrangement	Signing date	Date of enforcement	Scope	Type	Member countries	Tariff measures	Rules of origin
SAFTA	2004	2006	Regional	Free Trade Agreement	Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Sri Lanka and Pakistan	Negative list (sensitive list). Tariff reduction to zero to 5% in seven years (eight years SLK, 10 years LDCs). Calls for accelerated reductions. Trade Liberalization Programme in effect since 1/1/2006 except for Nepal (from 1/8/2006) and Sri Lanka (16/9/2006).	Minimum content 40% (30% for LDCs) Diagonal cumulation
SAPTA	1993	1995	Regional	Preferential Trade Arrangement	Bangladesh, Bhutan, India, Maldives, Nepal, Sri Lanka and Pakistan	Four rounds of trade negotiations were concluded under SAPTA, covering more than 5,000 commodities. During the first and the second rounds, trade negotiations were conducted on a product-by-product basis. In the third and fourth rounds, negotiations were conducted chapter-wise.	
TPS-OIC	2004	Pending country ratification	Cross-Continental Plurilateral	Framework Agreement	Bangladesh, Cameroon, Egypt, Guinea, Jordan, Lebanon, Libya, Maldives, Pakistan, Senegal, Syria, Tunisia, Turkey, United Arab Emirates, Islamic Republic of Iran, Uganda and Malaysia	Protocol on the Preferential Tariff Scheme (PRETAS) covers 7% of the total tariff lines with tariffs above 10%. Tariff reduction under normal track with tariffs above 25% to be reduced to 25%; 15-25% reduced to 15%; and 10-15% reduced to 10%.	Harmonized set of RoO as agreed under the agreement are used to grant concessions, until the new set of RoO is adopted by TNC.

Table 8.1 (continued)

Name of arrangement	Signing date	Date of enforcement	Scope	Type	Member countries	Tariff measures	Rules of origin
PTA-D-8	2006	Pending country ratification	Cross-Continental Plurilateral	Preferential Trade Agreement	Bangladesh, Indonesia, Islamic Republic of Iran, Egypt, Malaysia, Pakistan, Turkey and Nigeria	Reduction covers 8% of tariff lines with tariff rates above 10%. Tariffs above 25% to be reduced to 25%; 15-25% to be reduced to 15%; and 10-15% to be reduced to 10%.	

Source: Asia-Pacific Trade and Investment Agreement Database, ESCAP, Bangkok; accessed on 20 March 2009 at www.unescap.org/tid/ptiad/agg_db.aspx.

Other important initiatives include: the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC); the Asia-Pacific Trade Agreement (APTA) (formerly known as the Bangkok Agreement); the Global System of Trade Preferences (GSTP); the Framework Agreement on Trade Preferential System among the Member States of the Organization of the Islamic Conference (TPS-OIC); and the Preferential Tariff Arrangement – Group of Eight Developing Countries (PTA-D-8). Of these initiatives only PTA-D-8 is currently not in operation.

8.4.1. SAFTA

Bangladesh was actively involved in establishing the SAARC Preferential Trading Arrangement (SAPTA) and thereafter, SAFTA, which became effective in July 2006. According to the SAFTA accord, developing country members will reduce their tariffs to 0-5 per cent in 7 years, while Sri Lanka will reduce it in 8 years, while member least-developed countries (LDCs) will reduce it in 10 years. With regard to duty-free market access, the minimum content requirement is fixed at 40 per cent and for LDCs at 30 per cent. However, three years have passed since the enforcement of SAFTA with no major shifts in the size and volume of intraregional trade except for that with India. It is important to note that Bangladesh's trade with India has accelerated in recent years, rising from US\$ 89.3 million in 2004 to US\$ 304.6 million in 2010. A large part of this rise is perhaps related to the reduction of import duty on related products as per the SAFTA accord along with export demand for diversified products.

One of the major limitations is the inclusion of major tradeable items in a member country's sensitive list.⁵ SAFTA members have reduced the number of products on the sensitive list in order to make the accord meaningful. India's sensitive list for LDCs contains 101 items while Bangladesh's sensitive list for non-LDCs and LDCs contains 1,233 items and 1,241 items, respectively. The number of products on the sensitive lists of other member countries include (for LDCs): Sri Lanka, 1,065; Pakistan, 1,191; and Maldives (an LDC), 671. Under the special and differential treatment facility of the SAFTA accord, India has provided an annual tariff rate quota of 8 million pieces for apparel from Bangladesh.⁶ This could have a long-term positive impact on the efforts of the T&C sector of Bangladesh to enter the large Indian market.

8.4.2. BIMSTEC

Bangladesh is a member of BIMSTEC, another regional trading initiative, together with Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand. A number of sectors have been identified for preferential trading between BIMSTEC member countries, such as textiles and clothing, drugs and pharmaceuticals, gems and jewellery, horticulture and floriculture, processed food, automobiles and components, rubber, tea and coffee, coconuts

⁵ Despite these limitations, exports from Bangladesh to India will increase in the future as India has agreed to provide a special and differential treatment facility to Bangladesh and will import 8 million pieces of clothing without any duty.

⁶ India has recently decided to extend the quota to 10 million pieces. However this amount is highly insignificant considering Bangladesh's total yearly export of about 5,570 million pieces.

and spices. As per the BIMSTEC agreement, developing country members will reduce their tariff rates by 2012 while LDC members will reduce them by 2017. At present, the member countries are negotiating their negative lists.

BIMSTEC also places emphasis on trade facilitation between member countries; thus, individual member countries have been assigned specific projects related to trade facilitation, such as customs procedures (Bangladesh); standards and conformity (Thailand); banking arrangements (Sri Lanka); e-BIMSTEC (India); intellectual property rights (India); mobility of business people (Sri Lanka); and promotion of intra-BIMSTEC investment (India). However, trade between the member countries of BIMSTEC is not so encouraging; this could be partly attributed to the dividing of sectors and subsectors of cooperation, which may no longer fit current global circumstances.

8.4.3 APTA

Formerly known as the Bangkok Agreement, APTA is another regional trading initiative of which Bangladesh is a member together with India and China. As an LDC, Bangladesh enjoys tariff concessions in other member countries, such as tariff concessions on 48 products (HS 6-digit level) in the Indian market with a margin of preference ranging from 14 per cent to 100 per cent. Under APTA, a minimum local content of 45 per cent is necessary in order to enjoy preferential market access, and 35 per cent in the case of LDCs. However, member countries are currently negotiating the expansion of the existing base of products that enjoy preferential tariffs. After the third round of bidding, the number of products under the preferential scheme totalled 4,270, compared with the previous total of 1,721 products (table 8.2).

8.4.4. GSTP

Bangladesh signed the GSTP in 1994 together with 49 other countries. Under the trade preference scheme the agricultural sector was provided with special preferences. Current applied tariff rates in GSTP countries are significantly lower than the WTO bound

Table 8.2. Number of products under APTA preferential schemes

Country	Number of products under Preferential Scheme (before third round)	Number of products under Preferential Scheme (after third round)
Bangladesh	129	209
China	902 (18)	1 697 (161)
India	188 (33)	570 (48)
Republic of Korea	214 (29)	1 367 (306)
Sri Lanka	288 (32)	427 (72)
Total	1 721 (112)	4 270 (587)

Source: ESCAP, Bangkok.

Note: Figures in parentheses are additional special concessions for LDC members only.

rates. The local content requirement for non-LDC members is 50 per cent and 40 per cent for LDC members.

Under the different preferential schemes, various types of T&C – related products are taken into account by member countries for preferential tariffs (table 8.3). Under APTA, India offered preferential tariffs to other countries on 11 products, of which LDCs receive a special preferential tariff on one product. Under SAFTA, India is currently providing tariff rate quota (TRQ) to Bangladesh's T&C related products. Similarly, China offered special preferences on 20 T&C – related products, while the Republic of Korea offered preferential tariffs on 17 products and a special tariff for LDCs on one T&C – related product. However, such offers only cover a limited number of products, and the markets are not large compared with the preferential market access offered by developed countries and the huge volume of products imported under these schemes every year.

8.4.5. Bilateral FTAs

Slow progress in effective operation of RTAs led Bangladesh to negotiate bilateral trade agreements within and outside the region. Bangladesh is currently discussing various aspects of bilateral FTAs with India and Pakistan. Bangladesh's participation in various regional and subregional trading arrangements with special preferences for being an LDC has made it advantageous, at least from a trade point of view. Effective operations of these arrangements would make regional investors consider investing in Bangladesh to target intraregional and extraregional markets.

8.4.6. Multilateral trading initiatives

Bangladesh, together with other LDCs, has duty-free market access to the European Union, Canada, Japan, Australia and several other countries. After the end of phase out of Multi-Fibre Arrangement (MFA) in 2005, Bangladesh has no preferential market access for its apparel products in the United States market.⁷ Under WTO, if the Hong Kong Ministerial Declaration is finally enacted, LDCs will get duty-free market access for 97 per cent of their products in the markets of developed countries. This access will not fulfill the interests of Asian LDCs, and especially Bangladesh with its very narrow export base as the remaining 3 per cent may cover most of Bangladesh's exportable items. It is therefore important to include some of Bangladesh's major exportable items in the 97 per cent listing. However, negotiations on NAMA under WTO will have a negative impact on Bangladesh's exports since major exportable products will face the problem of preference erosion, mainly in the European Union market. On the other hand, the TRIPs agreement exempts LDCs from following certain obligations regarding the pharmaceutical industry until 2016, which will help

⁷ After the MFA phase-out in 2005, the United States Congress created a Bill called Tariff Relief Assistance for the Developing Economies (TRADE) in 2007 in order to provide preferential support in trade of developing countries with the United States. However, the bill was later revised and titled "New Partnership for Development Act (NPDA) 2007" but was not passed in the previous sessions of the United States Congress. A revised version of the Bill titled "New Partnership for Trade and Development 2009" is now under consideration.

Table 8.3. List of textiles and clothing-related products given preferential treatment by member countries in different RTAs

Partner countries	APTA	SAPTA	SAFTA	BIMSTEC	GSTP
MERCOSUR					28, 29, 32
Republic of Korea	25, 28, 29, 32, 38, 39, 51, 52, 54, 55, 56, 59, 60, [61], [[62.19]]				25, 58 (5801 B), 62 (6202)
India	25, 28, 29, 32, 34, 35, 38, 39, 52, [[60. 57]]	11, 19, 25, 28, 32, 34, 35, 38, 39, 52, 54, 56, 58, 61, 62			25 (2505.10), 55 (5505.11 to 5505.45)
Indonesia					39 (3902.313)
Malaysia					56 (5607.206)
Thailand					53 (5306, 5306.02), 55 (5509, 5509.39)
Islamic Republic of Iran					57 (57.03, 57.04, 57.06, 57.10)
Iraq					
Libyan Arab Jamahiriya					28 (28.17A), 29 (29.44.1), 51 (51.01), 55 (55.09)
Morocco					56 (56.07), 60 (60.05)
Pakistan		11, 19, 25, 28, 29, 34, 38, 39, 51, 52, 54, 59			32 (32.09.A), 55 (55.07) 29 (29.23)
Sri Lanka	28, 35, 38, 39, 61	25, 39, 54			32 (32.07)
Trinidad and Tobago					11 (1101)
Venezuela					25 (2510.01.00, 2520.20.00, 2520.10.00), 28 (2836.20.00)

Table 8.3 (continued)

Partner countries	APTA	SAPTA	SAFTA	BIMSTEC	GSTP
China	11, [19], 25, 28, 29, 32, [34], 35, 38, [39], 51, 52, 54, 55, [56], [58], [59], [60], [61], [62]				
Bhutan		11, 19, 25, 34, 51			
Maldives		25			
Nepal		19, 25, 39, 52, 55, 58			

Source: Compilation based on agreement-specific documents in WTO-RTA database accessed 15 May 2009 at <http://rtais.wto.org/UI/Public/MaintainRTAHome.aspx>.

Note: Numbers in parentheses are special concessions for LDCs beyond the general concession. Numbers in double parentheses are special concessions only for LDCs.

Bangladesh to develop its own pharmaceutical industry. Since various facilities have been mentioned in different trade agreements, foreign investors should find it worthwhile to invest in various types of projects to enjoy those facilities.

Most market access schemes are less effective from Bangladesh's point of view; these are mostly at different stages of negotiations in regards to tariff concessions and product identification for preferential schemes (table 8.4). The share of total exports by Bangladesh under these various schemes did not even pass 5 per cent, and there has been no improvement over time under these preferential schemes. However, a large proportion of imports have been from within these trading areas. Bangladesh imported about 32 per cent of its total imports from the APTA region in 2007, particularly China and India; its share of imports from this region is increasing. On the other hand, Bangladesh imported about 17 per cent of its total imports from BIMSTEC and 15.6 per cent from the SAFTA region during 2007, and the volume of imports from these regions has been increasing. A large volume of imports has been from the APTA region in the form of various types of raw materials and intermediate items for the T&C sector. Likewise, a relatively large volume of imports from BIMSTEC and SAFTA, which are not mutually exclusive to APTA, has also comprised T&C related items; in fact, Bangladesh's imports from within these regions substantially increased by about three times from 1990 to 2007. However, it is important to examine to what extent such imports were due to RTAs between member countries.

Table 8.4. Pattern of Bangladesh exports and imports under different RTAs

Region	Exports (as percentage of world exports)			Imports (as percentage of world exports)		
	1990	2000	2007	1990	2000	2007
APTA	3.37	1.32	3.38	12.54	21.88	32.38
BIMSTEC	2.32	1.64	1.91	5.91	12.98	17.03
SAFTA	3.66	1.66	2.35	6.83	11.71	15.57
World (millions of United States dollars)	1 670.50	5 589.60	12 717.10	3 656.10	9 000.80	18 476.03

Source: Computed based on data from International Monetary Fund Direction of Trade Statistics 2008.

Note: Export data taken at F.O.B. value and import data at C.I.F. value.

8.5. Global textiles and clothing market: Position of Bangladesh

The global market for textiles and apparel is increasing, mainly because of growing imports by developed countries. The United States and Canada as well as members of the European Union accounted for 70 per cent of total world imports (table 8.5) comprising some US\$ 193.6 billion worth of knitwear (HS 61) and woven-wear (HS 62) products during 2000; this figure increased to US\$ 361.1 billion in 2007. Although the United States has continued to account for the largest share of knitwear and woven-wear imports, its share of total imports has been declining compared with that of the European Union, which

Table 8.5. Trend in global imports of textiles and clothing products

Region/country	HS 61 (articles of apparel and clothing accessories, knitted or crocheted)			HS 62 (articles of apparel and clothing accessories, not knitted/crocheted)		
	2000	2004	2007	2000	2004	2007
World imports (billions of United States dollars)	87.16	116.03	150.58	106.40	134.89	165.48
Canada (%)	1.67	1.86	2.22	1.69	1.87	2.15
European Union-25 (%)	36.73	42.48	44.60	37.43	43.73	46.15
United States (%)	31.56	28.47	26.33	32.17	27.38	23.73

Source: Computed based on data from WITS.

maintained a share of 44.6 per cent in the case of knitwear and 46.2 per cent in the case of woven-wear imports during 2007. Although not large, Canada's textile and apparel imports (knitwear, 2.22 per cent and woven-wear, 2.15 per cent in 2007) are increasing, albeit at a slow pace. Thus, these three markets are considered to be the most important export destinations for T&C manufacturing countries.

The composition and structure of manufacturing sources of T&C products has changed over time. China alone maintained export shares of 39 per cent of knitwear and 30 per cent share of woven-wear products in 2007, up from 17 per cent and 19 per cent, respectively, in 2000. China's huge manufacturing T&C base has been used at a substantially higher level since the end of the quota regime in January 2005; as a result, its export share has shown a rapid and substantial rise (table 8.6). Several other countries

Table 8.6. Trend in global exports of textiles and clothing products

Region/country	HS 61 (articles of apparel and clothing accessories, knitted or crocheted)			HS 62 (articles of apparel and clothing accessories, not knitted/crocheted)		
	2000	2004	2007	2000	2004	2007
World exports (billions of United States dollars)	77.26	112.55	155.66	96.29	131.15	155.54
Bangladesh (%)	1.55	2.67	3.00	3.03	2.46	2.87
China (%)	17.38	22.93	39.40	19.59	22.10	30.42
India (%)	2.35	2.20	2.65	4.00	2.80	3.37
Viet Nam (%)						
Turkey (%)	4.78	5.56	5.15	2.58	3.46	3.50

Sources: Computed based on data from WITS; Bangladesh data for 2007 from the National Board of Revenue, Dhaka.

have also been able to increase their export shares of T&C products, including Bangladesh, India and Turkey. Increasing export shares among a limited number of countries indicates higher market concentration with better competitiveness in the production of various types of textile products.

Bangladesh is one of the world's top manufacturers and exporters of knitwear and woven-wear products. In 2008, Bangladesh exported some US\$ 5.53 billion worth of knitwear and US\$ 5.17 billion worth of woven-wear products, mainly to the European Union and the United States. However, export destinations have not remained constant (table 8.7). The United States was the single largest destination for Bangladesh's apparel exports in 1990 at about 65 per cent of knitwear and 59 per cent of woven-wear products. This was mainly due to Bangladesh having an MFA quota facility for its exports to the United States. Bangladesh's exports to European Union countries have increased gradually, mainly because of the inclusion of new European Union members in which Bangladesh has a GSP facility. However, the country's exports to the European Union jumped after the implementation of the European Union-EBA scheme under which Bangladesh, together with other LDCs, has duty-free market access.

Table 8.7. Trend of textiles and clothing exports by Bangladesh

(Unit: Per cent)							
Country	HS 61 (articles of apparel and clothing accessories, knitted or crocheted)			Country	HS 62 (articles of apparel and clothing accessories, not knitted/crocheted)		
	1990	2000	2008		1990	2000	2008
Germany	10.17	17.57	20.94	United States	58.61	53.51	47.36
United States	65.39	26.38	15.16	Germany	9.22	11.40	14.05
France	6.68	12.41	10.81	United Kingdom	6.34	7.78	8.58
United Kingdom	6.09	9.32	11.00	France	7.66	5.60	4.42
Spain	0.00	1.84	6.72	Canada	3.21	2.30	4.75

Sources: Computed based on data from WITS and, for 2008 data, the National Board of Revenue, Dhaka.

Bangladesh exports a limited number of products under the knitted and woven categories. Just five products – shirts, trousers, jackets, T-shirts and sweaters – account for about 80 per cent of the total exports of knitted and woven products (table 8.8). However, there have been some changes in the relative importance of individual items. Shirts were a major export item in the 1990s, with a share of more than 50 per cent of total exports; however, that share steadily declined to 20 per cent in 2002 and 13.4 per cent in 2006. Faster increases in exports of other categories in conjunction with a declining unit value, especially of shirts, is perhaps one reason for the increasingly lower share of shirts in overall exports (Rahman, Bhattacharya and Moazzem, 2008). On the other hand, the share of trousers had increased to 27 per cent by 2005/06 while the share of sweaters was 13.2 per cent in 2005/06, a significant rise from 7.8 per cent in 1999/2000. Changes in the relative importance of various types of ready-made garments indicate growing intra-ready-made

garments diversification of products. In the United States, of 10 apparel products, nine are from the woven category, which reflects the predominance of woven products in Bangladesh's export basket to the United States (table 8.9).

Table 8.8. Main items of apparel exported by Bangladesh

(Unit: Millions of United States dollars)

Year	Main apparel items							Total export earnings from RMG	Share of top five items in total RMG exports
	Shirts	Trousers	Jackets	T-Shirt	Sweaters	Total	Others		
1994	805.34	80.56	126.85	225.90	1 238.65	317.14	1 555.79	79.60
2001	1 073.59	656.33	573.74	597.42	476.87	3 377.95	1 481.90	4 859.83	69.50
2005	1 053.34	1 667.72	430.28	1 349.71	893.12	5 394.17	1 023.90	6 418.07	84.00
2006	1 056.69	2 165.25	389.52	1 781.51	1 044.01	6 436.98	1 462.80	7 900.80	81.50

Source: www.bgmea.com/data.htm; accessed 6 January 2007.

Note: RMG = ready-made garments.

Table 8.9. Top 10 exports of apparel from Bangladesh to the United States, 2008

Item No.	Item	Exports (millions of United States dollars)
6203424051	Men's shorts of cotton, not knitted, NEOSI	230.77
6203424016	Men's trousers and breeches, cotton, not knitted, NEOSI	193.88
6204624021	Women's trousers and breeches, cotton, not knitted, NEOSI	189.90
6205202051	Men's shirts, cotton, two-colour warp/fill, not knitted, NEOSI	152.93
6203424011	Men's blue denim trousers and breeches, cotton, not knitted	114.07
6205202066	Men's shirts, cotton, not knitted, NEOSI	111.68
6203424046	Boys' trousers and breeches, cotton, not knitted, NEOSI	109.21
6203424061	Boys' shorts, cotton, not knitted, NEOSI	104.35
6110202069	Men's/boys' pullovers, cotton, 36 per cent flax fibres, NEOSI	100.01
6203424036	Boys' blue denim trousers etc., cotton, not knitted, NEOSI	85.54

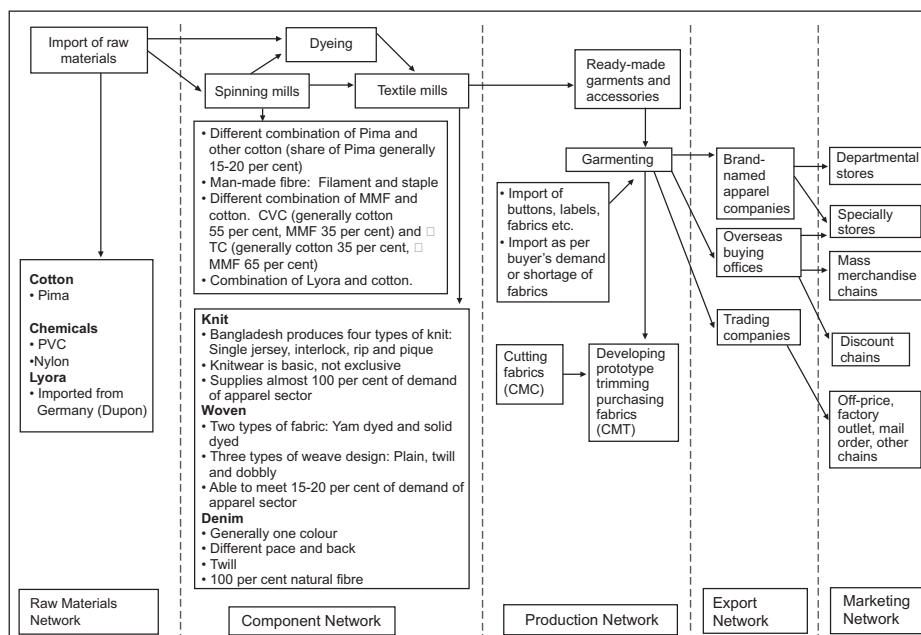
Source: United States International Trade Commission, 2009.

Note: NEOSI =

8.6. Bangladesh's linkage with textiles and clothing global value chain

Bangladesh's involvement in the value chain of the apparel sector is presented in figure 8.1. Thus far, Bangladesh has specialized, at least to some extent, in a component network by manufacturing yarn, textiles and accessories, and more prominently in a value chain by manufacturing garments. It does not have specialization in a raw material network since it has to depend on imported materials. Similarly, Bangladesh is predominantly dependent on buyers and their buying agents for exporting and marketing manufactured products.

Figure 8.1. Value chain of the textiles and clothing sector of Bangladesh



Source: Based on Rahmna, Bhattacharya and Moazzem, 2008.

8.6.1. Raw material network

Major raw materials used in preparing fabrics, natural fibres and cotton fibres are either imported or manufactured in apparel- and textile-producing countries. These raw materials are cotton, wool and silk (in the case of natural fibres), and natural gas and oil (in the case of synthetic fibres). The apparel-producing countries get the required raw materials from various sources based on price, quality and lead time etc. In view of the quota phase-out, some apparel manufacturing countries have changed their sources of raw materials. Bangladesh is highly dependent (about 80 per cent) on raw materials suppliers

for its apparel manufacturing process; therefore, any shortage of cotton in the international market may affect overall production in Bangladesh.⁸

Four major raw materials (at the HS 2-digit level) were taken into consideration when analysing the import pattern based on their importance in the backward linkage of the textile industry. These items included: an inorganic chemical compound of rare-earth and precious metals (HS 28); tanning/dyeing extract, tannins and derivatives (HS 32); cotton (HS 52); and plastics and plastic articles (HS 39). In the analysis, a group of countries was identified based on their relative shares of overall imports; however, South Asian countries were added to this list in order to understand the importance of RTAs in the sourcing of raw materials.

Bangladesh's major source of cotton is Uzbekistan; about 50 per cent of Bangladesh's total cotton imports originate from this single source (table 8.10). India is the next most important source of cotton. Together, these two countries provide more than 70 per cent of total cotton demand in Bangladesh. It is interesting to note that during the 1990s and even in early 2000, Uzbekistan was not the major source of cotton for Bangladesh; instead, India, Pakistan and China were the main suppliers. A number of crucial factors are involved in making major shift in sourcing cotton.

Table 8.10. Trend of cotton imports (HS 52) by Bangladesh from selected countries

(Unit: Percentage of total imports)

Country	1995	2000	2002	2004	2006	2008
Uzbekistan	0.00	2.19	6.71	21.00	36.10	48.60
India	13.20	9.80	24.45	14.36	20.80	23.81
Pakistan	13.60	6.77	4.06	5.04	8.67	2.79
China	13.10	20.84	13.89	20.76	8.58	0.20
United States	3.74	5.65	8.18	4.97	3.42	6.68
Republic of Korea	5.18	1.86	2.66	1.86	0.96	0.20
United Kingdom	0.20	0.53	0.60	0.07	0.04	0.13

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

First, the price and quality of cotton is considered. Uzbekistan's cotton was considered to be better compared to that of other countries (according to the entrepreneurs who were interviewed).

Second, the availability of the required standard of cotton on a large scale is considered. During the early 1990s, while the backward linkage textile sector in Bangladesh was at the rudimentary stage, a small amount of the required level of cotton was procured

⁸ Some entrepreneurs in Bangladesh claimed that the supply of cotton during early 2005 was inadequate because China accepted a large volume of advanced booking of cotton from major cotton suppliers.

from neighbouring countries such as India, Pakistan and China. After about two decades, when the demand for cotton had substantially increased from the large domestic-based backward-linkage textile sector, those countries could not meet the increased demand of Bangladesh after meeting their domestic requirements. However, it is important to examine whether geographical proximity still needs to be considered as a major determinant in cotton imports from India.

In sourcing of raw materials for T&C items, such as HS 39 (plastics and plastic articles), Bangladesh mainly imports from Thailand, China, India and the Republic of Korea, which together previously comprised about 46.9 per cent of the total imports of these items (table 8.11). However, some of these sources are becoming increasingly more important, such as India and China. In 1995, the shares of these two countries were only slightly higher than 2 per cent and 4 per cent, respectively; in 2008, their shares had risen to 11.7 per cent and 10.9 per cent, respectively. A similar situation prevailed in the case of imports of inorganic chemicals as well as tanning (HS 28) and dyeing materials (HS 32) (tables 8.12 and 8.13).

Table 8.11. Trend of imports of plastics and plastic articles (HS 39) by Bangladesh from selected countries

(Unit: Percentage of total imports)						
Country	1995	2000	2002	2004	2006	2008
Thailand	4.16	10.70	14.56	13.81	12.34	13.09
India	2.01	2.58	10.86	13.37	11.65	11.67
Republic of Korea	19.22	16.17	10.91	12.12	9.35	11.25
Singapore	15.20	13.78	13.23	6.88	8.44	3.28
Malaysia	0.74	7.90	6.77	6.36	7.25	6.12
China	4.07	2.37	2.48	3.83	6.55	10.86
United States	0.67	1.24	0.93	1.76	1.36	1.85
United Kingdom	1.23	1.07	1.37	1.01	0.43	0.40

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

8.6.2. Component network

Local textile mills are able to supply only 20 per cent of factories' fabric requirements for woven products, while local spinning and knitting mills can supply about 70 per cent of the yarn for spinning and 95 per cent for weaving textiles (Gherzi, 2002). In contrast, India and China are reaching self-sufficiency level in manufacturing these components, which clearly places them in a favourable position in terms of dealing with leading apparel importers with full package.⁹ Countries that have a low level of self-sufficiency, such as Bangladesh, Indonesia and Sri Lanka, are forced to depend on imported fabrics.

⁹ China and India import about 40 per cent of their fabric demand, but that figure is decreasing. Under China's immediate past 5 years plan, the intention was for the industry to be 80 per cent self-sufficient in woven finished fabrics by 2005 with a very large modernization and expansion programme. (Gherzi, 2002)

Table 8.12. Trend of imports of inorganic chemicals and compounds of precious metals (HS 28) by Bangladesh from selected countries

(Unit: Percentage of total imports)

Country	1995	2000	2002	2004	2006	2008
China	24.32	37.11	38.48	35.24	45.24	48.79
India	9.78	15.87	24.75	28.40	16.70	13.30
Philippines	0.00	0.01	0.01	0.00	5.49	0.00
Germany	10.80	3.75	2.66	3.20	3.06	2.31
Republic of Korea	6.09	6.03	4.99	4.87	2.92	1.10
United States	1.19	2.06	1.35	0.63	0.93	1.30
United Kingdom	2.59	3.34	2.31	2.00	0.90	0.16

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Table 8.13. Trend of imports of tanning/dyeing extract – tannins and derivatives (HS 32) by Bangladesh from selected countries

(Unit: Percentage of total imports)

Country	1995	2000	2002	2004	2006	2008
India	24.70	21.40	28.87	25.15	22.19	31.09
China	6.81	8.98	9.51	12.61	18.36	23.30
Republic of Korea	1.69	5.28	5.55	4.84	7.33	3.98
Germany	14.46	11.93	8.84	6.92	6.96	5.46
Singapore	4.99	12.43	12.14	8.48	5.59	1.88
United Kingdom	10.44	5.86	5.11	4.93	2.74	0.98
United States	0.39	0.81	0.37	0.41	0.35	0.39

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

In the case of imports of man-made filaments (HS 54), China is now the single largest source, accounting for some 50 per cent of total requirements of the country (table 8.14). The other important sources are India and Thailand. However, the Republic of Korea was the single largest source of man-made filament during the 1990s, but has since lost its importance. The reasons for the focus being on China in recent times are not only related to price and availability of required types of filaments, but also because it is able to meet buyers' instructions regarding the use of specific types of filament for particular types of fabric.

In the case of imports of man-made staple fibres, the largest amount originates in the United States (24.8 per cent of total imports), India (23.1 per cent) and Thailand (17.9 per cent) (table 8.15). There has been a structural change in import sources; for example, the Republic of Korea, which in the 1990s was considered a major source of man-made staple fibres, has since lost its importance. Similarly, for knitted and crocheted fabrics, the

Table 8.14. Trend of imports of man-made filaments (HS 54) by Bangladesh from selected countries

(Unit: Percentage of total imports)

Country	1995	2000	2002	2004	2006	2008
China	7.29	14.24	15.82	25.79	29.41	49.34
Republic of Korea	41.38	22.37	19.32	15.08	12.09	6.90
Thailand	1.54	2.72	2.79	6.82	9.39	12.65
India	2.61	3.06	3.43	3.20	5.48	14.36
Japan	0.30	0.57	3.50	3.12	5.38	0.43
United Kingdom	0.01	0.10	0.45	0.91	0.46	0.00
United States	0.20	0.26	0.82	0.61	0.29	0.20

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Table 8.15. Trend of imports of man-made staple fibres (HS 55) in Bangladesh

(Unit: Percentage of total imports)

Country	1995	2000	2002	2004	2006
China	11.97	23.31	24.33	32.23	70.09
India	2.80	3.02	8.17	5.84	5.56
Republic of Korea	36.04	10.42	11.12	9.85	3.82
Thailand	3.33	4.70	6.61	9.48	3.79
Indonesia	7.33	6.14	8.23	5.19	3.03
United States	1.34	0.74	1.17	0.98	0.64
United Kingdom	0.07	0.07	0.82	0.33	0.53

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Table 8.16. Trend of imports of knitted or crocheted fabrics (HS 60) in Bangladesh from selected countries

(Unit: Percentage of total imports)

Country	1995	2000	2002	2004	2006
Republic of Korea	5.65	5.17	4.26	5.13	37.17
China	6.20	9.40	7.69	31.16	32.60
Hong Kong, China	32.09	34.52	48.60	23.30	17.63
Thailand	0.34	0.90	0.62	1.42	1.80
Malaysia	0.50	0.97	0.96	0.43	0.76
Pakistan	1.78	0.72	0.40	0.62	0.71
India	10.92	0.62	14.75	4.33	0.22

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Republic of Korea, China and Hong Kong, China are the major sources of imports by Bangladesh, while imports from Thailand and India are sources on a limited scale.

An analysis of the raw material and component networks of the Bangladesh T&C industry revealed that the sources of imports had changed over time. The countries that were considered as major sources in the 1990s and early 2000s have gradually lost their importance as major suppliers. In the case of the raw material network, supplies of cotton mainly originated in Uzbekistan, while a major share originated in India. On the other hand, although China was a major source of various components for the T&C industry, a number of other countries were considered important. Although in most instances they were Asian countries, that scenario has changed. A number of important reasons are behind this shifting of sources, such as price and quality of products, availability of adequate supplies of large volumes of products, buyers' specifications in sourcing raw materials and components, and geographical proximity. However, regional trading arrangements are not considered as major determinants in the changes in sourcing patterns; however, the lack of effective implementation of RTAs, due to various reasons, is a related issue in this case.

8.6.3. Production network

Of the four stages in the production process, i.e., outward processing traffic (OPT), original equipment manufacturing (OEM), original brand manufacturing (OBM) and original design manufacturing (ODM), Bangladeshi manufacturers are currently involved only in OPT and OEM. Manufacturers' involvement in a particular stage depends on the level of development of their enterprises in terms of technology, skills profile, expertise in fashion and design etc. Initially, a buyer supplied cut fabrics, threads, buttons, zips and trims, with everything to be assembled according to the design prepared by the buyer, for re-importing after assembling (i.e., OPT). However, production technology has improved in Bangladesh, and most of the entrepreneurs are now involved to a considerable extent in the second stage of production (OEM). Thus, manufacturers undertake additional tasks within the production process, including cutting according to the patterns supplied by buyers, or preparing and grading the patterns according to prototypes supplied by buyers, or even purchasing the inputs for OEM production. This stage involves different steps: cut and make (CM), and cut, make and trim (CMT). Bangladesh has almost no expertise in OBM and ODM. In a more advanced stage, manufacturers develop their own brand (OBM) and sell it in domestic, regional and international markets. In the final stage of achievement, manufacturers influence global fashions (ODM) by developing their original designs rather than imitating global trends, and transform themselves into well-known and recognizable worldwide brand-manufacturers.

With regard to exports of finished T&C products, the major markets for Bangladesh are the United States and some large economies in Europe (tables 8.17 and 8.18). Here, in case of market dynamism for export items one remarkable feature is that Germany, as a single country importer, is becoming more important. In contrast, although the United States still accounts for the highest amount of imports from Bangladesh, its share is falling gradually.

Table 8.17. Trend of exports of apparel and clothing accessories, knitted or crocheted (HS 61) from Bangladesh to selected countries

(Unit: Percentage of total exports)

Country	1995	2000	2002	2004	2006	2008
Germany	17.42	17.57	17.57	24.40	24.69	20.94
United States	30.24	26.38	27.28	15.46	16.70	15.16
France	13.54	12.41	11.94	13.00	11.34	10.81
United Kingdom	12.43	9.32	11.01	11.93	10.20	11.00
Spain	0.49	1.84	4.04	6.35	7.23	6.72
China	0.00	0.02	0.00	0.01	0.02	0.05
India	0.00	0.00	0.00	0.00	0.01	0.02

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Table 8.18. Trend of exports of apparel and clothing accessories, not knitted/ crocheted (HS 62) from Bangladesh to selected countries

(Unit: Percentage of total exports)

Country	1995	2000	2002	2004	2006	2008
United States	52.30	53.51	52.82	41.66	49.58	47.36
Germany	9.41	11.40	11.75	18.51	16.23	14.05
United Kingdom	9.66	7.78	9.25	10.50	8.25	8.58
France	7.09	5.60	5.68	5.93	4.84	4.42
Canada	2.70	2.30	1.91	5.41	4.47	4.75
China	0.01	0.01	0.01	0.05	0.10	0.07
India	0.00	0.06	0.01	0.06	0.04	0.15

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Bangladesh was able to improve its production techniques, which allowed it to move up from the early stage of production (assembly) to OEM. Under the OEM stage, Bangladesh has gradually improved its position from CM to CMT. After the phasing out of quotas, under pressure from competition, Bangladesh has increasingly moved towards the F.O.B form of production where buyers and retailers place their orders directly by contacting the manufacturers. With the development of networks between retailers and manufacturers, especially in recent years, manufacturers in many countries can work as major contractors or subcontractors of overseas major contractors.

8.7. Trend of intra-industry trade in textiles and clothing-related products from Bangladesh

An intra-industry trade (IIT) analysis of a selected number of products was carried out in order to understand the nature and extent of the relationship between exporting and

importing countries, and to examine the possible reasons for linkages between countries. A selected set of countries was chosen based on their importance in overall trade of specific products with Bangladesh.

8.7.1. Raw materials

Bangladesh has a very low level of IIT in raw materials used in manufacturing T&C products (tables 8.19 to 8.22). IIT in raw materials such as inorganic chemicals, organic or inorganic compounds of precious metals, rare-earth metals, radioactive elements or isotopes (HS 28) and organic chemicals (HS 29) is relatively higher for several countries such as India (0.87) and Thailand (0.43). In the case of HS 29, IIT with Belgium, France, Germany, the Netherlands and Pakistan is relatively high.

On the other hand, countries that are major sources for Bangladesh's imports, such as India and China, have a low level of IIT in all the products mentioned above. This is due in particular to the unidirectional nature of trade between Bangladesh and its trading partners. Thus, there is no strong relationship between those countries that are the major source of Bangladesh's imports and which are important in terms of IIT. In most instances no specific trend was observed in IIT trade of raw materials with those countries.

Table 8.19. Trend of IIT Index for raw materials (HS 28)

Country	1995	2000	2002	2004	2006	2008
India	0.696190	0.705385	0.467016	0.918458	0.716144	0.871704
Germany	0.000000	0.000000	0.000000	0.000000	0.172037	0.000000
China	0.000000	0.000000	0.000887	0.000000	0.000000	0.078371
Thailand	0.000000	0.000000	0.000000	0.000000	0.000000	0.434702
United Kingdom	0.000000	0.000000	0.014069	0.000000	0.000000	0.025391
United States	0.000000	0.000000	0.000200	0.008716	0.000000	0.011929

Source: Compiled based on data from WITS and, for 2008, from the National Board of Revenue.

Table 8.20. Trend of IIT Index for raw materials (HS 29) for selected countries

Country	1995	2000	2002	2004	2006	2008
Pakistan	0.003931	0.000000	0.456288	0.225335	0.959774	0.864962
Germany	0.000000	0.000000	0.000000	0.000000	0.044189	0.000000
Thailand	0.000000	0.000000	0.000000	0.000000	0.010991	0.000000
India	0.000000	0.078189	0.000000	0.000619	0.008440	0.000175
Singapore	0.000000	0.000000	0.000367	0.000941	0.006502	0.005050
Republic of Korea	0.000000	0.000000	0.000000	0.000000	0.003510	0.005719

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Table 8.21. Trend of IIT Index for raw materials (HS 39) for selected countries

Country/area	1995	2000	2002	2004	2006	2008
Netherlands	0.086330	0.412565	0.410093	0.455904	0.914252	0.712430
Belgium	0.000000	0.082110	0.119682	0.885331	0.852703	0.869349
Turkey	0.000000	0.252285	0.197513	0.229949	0.726365	0.001264
Germany	0.277372	0.113216	0.074196	0.290792	0.584552	0.772569
France	0.812929	0.324961	0.187472	0.738885	0.535184	0.894211
Sri Lanka	0.000000	0.907327	0.110053	0.743489	0.424658	0.044120
Hong Kong, China	0.000000	0.003160	0.011204	0.204714	0.421604	0.464254
Pakistan	0.000000	0.045618	0.003962	0.192533	0.381980	0.832713
China	0.000000	0.014130	0.032700	0.727692	0.366326	0.330931

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Table 8.22. Trend of IIT Index for raw materials (HS 52) for selected countries

Country	1995	2000	2002	2004	2006	2008
Italy	0.050269	0.240022	0.136600	0.841550	0.962215	
United Kingdom	0.000000	0.261198	0.077219	0.933793	0.908764	0.789992
Sri Lanka	0.134422	0.357506	0.509374	0.988260	0.677864	0.001852
Germany	0.107801	0.305418	0.700793	0.292941	0.466425	0.244317
France	0.281065	0.197901	0.276994	0.164420	0.443802	0.821886
China	0.000316	0.004381	0.003313	0.001487	0.264676	0.974236
India	0.000099	0.011477	0.002141	0.012671	0.009538	0.016233

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

8.7.2. Intermediate products

The IIT indices for major intermediate T&C products with major countries are increasing. However, countries with which Bangladesh has a high value of IIT are not the same countries from which Bangladesh procures the highest level of intermediate products (tables 8.23 to 8.25). However, those countries that are major sources for imports by Bangladesh are very gradually increasing their IIT value. Among the South Asian countries, Sri Lanka – which is not a major source or destination for trading of intermediate items with Bangladesh under HS section 55 – appears to be the country with which most IIT happens.

8.7.3. Finished products

The level of the IIT Index for finished items, such as HS 61 and HS 62, is increasing, although, not with the countries where most of the exports are directed (tables 8.26 and 8.27). A part of this rise is associated with increasing demand for imported apparel in the domestic market. These products are sourced mainly from neighbouring countries because of ethnic similarity, proximity and affordable price.

Table 8.23. IIT index trend for intermediate products (HS 54) for selected countries

Country	1995	2000	2002	2004	2006	2008
Canada	0.000000	0.000000	0.000000	0.649072	0.857608	0.000000
United States	0.332448	0.597200	0.096867	0.097310	0.552459	0.163672
France	0.000000	0.000000	0.072308	0.000000	0.343498	0.000000
Italy	0.000000	0.000000	0.075115	0.000000	0.296198	0.482017
India	0.000000	0.012935	0.000000	0.004978	0.085412	0.047331
China	0.000000	0.000333	0.009691	0.015386	0.028005	0.000000

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Table 8.24. IIT Index trend for intermediate products (HS 55) for selected countries

Country/area	1995	2000	2002	2004	2006	2008
Sri Lanka	0.000000	0.053001	0.037388	0.238803	0.516653	0.001125
United States	0.784107	0.030747	0.105382	0.348803	0.055394	0.085163
Singapore	0.000000	0.009149	0.000000	0.030713	0.044295	0.997773
Italy	0.444661	0.081271	0.057281	0.000000	0.036901	0.031380
Hong Kong, China	0.000931	0.008558	0.005986	0.018100	0.027222	0.075981
China	0.000390	0.003664	0.004254	0.003082	0.000438	0.062766
India	0.000000	0.004863	0.005286	0.001980	0.000393	0.018327

Source: Compiled based on data from WITS and, for 2008, from the National Board of Revenue.

Table 8.25. IIT Index trend for intermediate products (HS 60) for selected countries

Country/area	1995	2000	2002	2004	2006	2008
Singapore	0.000000	0.614724	0.451611	0.636578	0.534985	0.802340
Hong Kong, China	0.000000	0.014148	0.002399	0.012531	0.468070	0.000906
Germany	0.000000	0.000000	0.030371	0.000000	0.390031	0.000000
France	0.000000	0.000000	0.000655	0.000000	0.350675	0.000000
Indonesia	0.000000	0.000000	0.137650	0.000000	0.301709	0.714849
Canada	0.000000	0.000000	0.000000	0.183034	0.225698	0.000000
China	0.000000	0.000000	0.000000	0.000554	0.004869	0.001825
India	0.000000	0.171983	0.003622	0.037233	0.000000	0.020209

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Table 8.26. IIT Index trend for finished products (HS 61) for selected countries

Country/area	1995	2000	2002	2004	2006	2008
China	0.000000	0.982563	0.023435	0.200522	0.983171	0.586335
Philippines	0.000000	0.000000	0.000054	0.140565	0.751471	0.407686
Hong Kong, China	0.103917	0.736360	0.810382	0.873374	0.452032	0.077973
Nepal	0.000000	0.000000	0.402718	0.102992	0.436672	0.209252
India	0.000000	0.036400	0.095115	0.121529	0.368073	0.623799
United Kingdom	0.032687	0.025183	0.013868	0.004068	0.001466	0.000394
Canada	0.000000	0.027359	0.000143	0.000017	0.000016	0.000005

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

Table 8.27. IIT Index trend for finished products (HS 62) for selected countries

Country/area	1995	2000	2002	2004	2006	2008
Pakistan	0.536423	0.968767	0.008004	0.880643	0.911993	0.941641
Malaysia	0.000000	0.190787	0.840105	0.729440	0.762875	0.140152
China	0.031216	0.083312	0.077965	0.117008	0.397944	0.838240
India	0.014691	0.339452	0.171544	0.411135	0.291698	0.889874
Japan	0.136151	0.353359	0.170269	0.322751	0.267263	0.000156
Hong Kong, China	0.501157	0.163142	0.131839	0.070455	0.227216	0.107460
United Kingdom	0.008924	0.017560	0.018519	0.005330	0.003164	0.000779
Canada	0.001933	0.005550	0.000442	0.001881	0.002132	0.000300
United States	0.000164	0.012469	0.003220	0.000834	0.001385	0.000073

Source: Compiled based on data from WITS and, for 2008, the National Board of Revenue.

8.8. Factors responsible for the development of the value chain in the textiles and clothing sector of Bangladesh

8.8.1. Gravity analysis

A gravity analysis was carried out in order to examine the nature and extent of the influence of different factors in the development of the value chain in Bangladesh by using the IIT Index as a dependent variable. However, the results of this exercise were found to be less satisfactory than expected, possibly due to very low IIT index values among the major trading partners of Bangladesh, resulting from having unidirectional trade. On the other hand, most of the countries that have high IIT index values were not major trading partners of Bangladesh. Hence, the results of this analysis were not taken into consideration.

8.8.2. Findings from interviews with sample entrepreneurs

Interviews were carried out with seven entrepreneurs with knitwear and/or woven-wear manufacturing units either in DTA or EPZ areas (see annex to this chapter). Enterprises having experience in manufacturing and exporting T&C products for more than 20 years were selected in order to gain a good understanding of the dynamics and changes in the T&C sector of Bangladesh. A structured questionnaire was prepared that focused on:

- (a) Changes in production and exports since the 1980s;
- (b) Major sources of raw materials and intermediate products used by these enterprises;
- (c) Factors responsible for production decisions of firms together with procurement of raw materials from different sources;
- (d) Export destinations of finished products;
- (e) The entrepreneurs' perception of Bangladesh's competitiveness in the global T&C market;
- (f) The importance of various domestic and international policies, including RTAs in the development of IPNs in Bangladesh;
- (g) The possible adverse impact of the global financial crisis on production networks or value chains.

The interviewed entrepreneurs also identified five external factors that influence the development of value chains in Bangladesh. The most important factor is the preferential market access facility under which Bangladesh's T&C sector emerged in the 1980s and developed thereafter.

Second is a long-term relationship with business partners, both in the backward and forward linkages of the industry. Most importantly, a long-term relationship with the buyers substantially contributed to maintaining a steady business linkage, especially at times of critical transitions such as the MFA phase-out in 2005.

Third is trade facilitation at the domestic and international levels. A gradual improvement of the physical infrastructure for facilitating trade, especially at Chittagong seaport, has substantially contributed to the development of value chains. At the same time, the infrastructure at cross-border points of trading partners needs to be improved. Entrepreneurs complained about: (a) the poor condition of offices at the border, with inadequate space for loading and unloading products; (b) the lack of adequate officers and staff in those offices; and (c) the lack of modern equipment for checking consignments, which increased transaction costs substantially.

Fourth, geographical proximity is considered vital in the procurement of raw materials and intermediate products from different sources in order to maintain timely supplies of materials to factories and timely deliveries of finished products. However, geographical proximity appears to be less important in the case of low-end, less fashionable products exported from Bangladesh, possibly because of having a predictable time line for such goods.

Fifth, tariff structure is also considered important. Given today's highly competitive markets and the continuous pressure to decelerate CM, low levels of duty on raw materials and intermediate products used by the T&C industry is always an important issue. In recent years, the Government of Bangladesh has reduced duties on imported raw materials; currently, such duty is fixed at zero per cent for export-oriented industries. Interestingly, "service links" comprising costs of transport, telecommunications etc., were not identified as significantly important factors, possibly because of the relative advantage of low-cost labour, which accounts for a substantial part of total production costs.

Foreign investors who invest in the T&C sector of Bangladesh are mainly attracted by the availability of adequate labour at low wages as well as GSP facilities. According to the foreign entrepreneurs interviewed, weak enforcement of environmental regulations was considered an added advantage in establishing factories in Bangladesh. EPZs are considered as areas for investment by foreign entrepreneurs mainly because of having various fiscal facilities (such as tax holidays, duty drawback, duty-free imports of raw materials and capital machinery) and other facilities (internal security, dedicated utility services and simplified customs procedures). According to the entrepreneurs, trade union-related activities, if allowed, would have a negative impact on business activities at EPZs.

8.9. Impact of global financial crisis on the textiles and clothing sector of Bangladesh

Since mid-2008, the global economic crisis has adversely affected Bangladesh, particularly its external sector. During 2008/09, overall export growth slowed down, compared with the same period in the previous year, and declined to 10.3 per cent. Most of the export-oriented industries experienced negative growth: frozen food (-19.7 per cent), leather and leather manufactures (-19.1 per cent), raw jute (-13.4 per cent) and jute goods (-6.2 per cent). However, a robust growth of ready-made garments exports (17.4 per cent) for knitwear and 13.2 per cent for woven garments) was recorded. Still, the textiles and ready-made garments sector remained in a vulnerable situation due to buyers' demands for further reductions of CM as well as discounts on, and deferment of orders. Focus group discussion with entrepreneurs (conducted as a part of another study carried out by the Centre for Policy Dialogue) revealed that some factories had closed down (47 knit factories and 66 woven factories) and workers had been retrenched in the recent past. However, it is still not clear whether that was due to the global financial crisis or was a general phenomenon of exit and entry in the sector. Nevertheless, factory owners reported that fresh recruitment of workers had slowed down significantly since mid-2008; if the recession continues, entrepreneurs will be compelled to consider job cuts.

A significant number of textile and spinning mills in Bangladesh have experienced difficulties because of the global financial crisis. This is highlighted by the existence of large yarn stockpiles in recent months. Earlier information showed that as many as 12 out of the 341 operational spinning mills had shut down; most of the mills currently in operation have reduced their level of operation by about 30 per cent. This has resulted in workers being

retrenched or underemployed. Large subsidies provided by the Government of India to that country's yarn sector have resulted in Bangladesh losing its competitiveness vis-à-vis India in yarn sales (Centre for Policy Dialogue, 2009). This has induced many Bangladeshi ready-made garments factory owners to import yarn from India rather than procure supplies locally.

8.10. Policy implications

The T&C sector of Bangladesh has come a long way in the past three decades and has reached its current stage after a long process of restructuring in technology, operation and management. The domestic export-oriented T&C sector has strengthened its links with major manufacturers of raw materials and intermediate products in other countries. This development is attributable to the availability of low-cost labour, favourable policies, development of an entrepreneurial class and preferential market access facilities in developed countries in favour of LDCs. In the initial phase, the various types of policy support by the Government of Bangladesh, together with market access facilitation in the developed countries, was critical to the emergence of the sector (back-to-back letters of credit, a duty drawback facility and bonded warehouses); later, access to the markets of developed and developing countries became more important to expansion and graduation to higher stages of development of this industry. The role of trade polices in general also contributed to the development of the T&C sector of Bangladesh.

Although Bangladesh is a member of a number of RTAs, it has yet to receive any substantial benefit under these agreements. SAFTA, which is currently in operation, is less contributory to the development of the value chain. Although India has allowed Bangladesh to export 8 million pieces of apparel annually under the special and differential treatment clause of SAFTA, in view of the huge production and export capacity of Bangladesh such opportunities are not significant. The development of the value chain in raw material networks, component networks and finished product networks is attributable to various non-RTA factors.

The development of the value chain in the T&C sector of Bangladesh is largely unidirectional. Although backward linkages of the textiles sector in Bangladesh have developed over time, the industry remains largely dependent on imported raw materials, particularly in the case of woven-wear products. Some product-specific trends can be seen in imports of raw materials and intermediate products from different sources; however, these have changed over time. Some of the countries that were earlier considered major sources have since become less important, while others have become important at a later stage. At the earlier stage, a large part of the required raw materials and intermediate inputs were imported from the Republic of Korea, India and the United States, whereas at present a large share is being imported from India and China. Uzbekistan, which is at present the major source of cotton for Bangladesh, was not considered as an important source earlier.

Changes in the sources are attributable to geographical proximity, adequate supplies, long-term relationships, price and quality of products, and buyers' specifications. Sources of raw material imports by Bangladesh are, however, not the destinations of final

products. The analysis described above shows that RTAs have either had minimal or no influence in the selection of sources for importing of various T&C-related products. Thus, the importance of RTAs to the development of value chains is less evident. However, Bangladesh's exports have largely benefited from various preferential schemes provided by developed countries, such as quota facilities under MFA until 2005, duty-free market access under the Europe Union's EBA, GSP facilities in Australia, Canada and Japan, and a tariff rate quota in India.

Since different sources have been chosen by entrepreneurs for the procurement of raw materials and intermediate products, a network between major sourcing countries can be strengthened through an integrated initiative between those countries, with product-specific issues being kept in mind. A commodity-specific trade agreement can be signed where countries in the network will take the initiative in reducing the cost of imports by reducing duties, and by developing trade facilitation measures aimed at reducing transportation costs and the time required for raw material procurement and the shipment of products.

A number of other issues need to be taken into consideration in order to strengthen the value chain network between countries. First, member countries should take measures to simplify customs procedures between each other in order to speed up the trading process.

Second, long-term, multiple-entry business visas should be provided and visa formalities simplified for businessmen.

Third, the cross-border trade infrastructure at border points needs to be improved. In particular, those countries that share a border with Bangladesh should take adequate trade facilitation measures (such as speeding up and modernizing customs clearance procedures, providing adequate areas for product transfers and ensuring availability of officers at border points).

Fourth, non-tariff barriers often hinder trade between two countries. Therefore, countries working within the value chain should jointly identify non-tariff barriers and take the necessary measures to eliminate those barriers.

At the domestic level, the business environment is considered less conducive to T&C sector entrepreneurs; therefore, the business environment needs to be improved on an urgent basis. First, steps should be taken to reduce the interest rates on long-term project loans and working capital. Second, the Government of Bangladesh should introduce measures for ensuring adequate supplies of electricity and gas for industrial units. Third, both the public and the private sectors jointly need to take the initiative to develop the logistic facilities required for the T&C sector of Bangladesh (such as the development of human resources and R&D facilities, and improvement of worker compliance with standards at the factory level).

The Government of Bangladesh has announced stimulus packages for the jute, leather and frozen food industries, among others, which have been adversely affected by the global financial crisis. Although the T&C sector has not been included in the Government's additional support package because of its robust performance, entrepreneurs have demanded support in the form of low-cost financing for their businesses. About 25 per cent of the respondents who participated in the Centre for Policy Dialogue's survey for another study urged a reduction of the interest rate on working capital, while 21 per cent wanted the provision of credit facilities at a subsidized interest rate. Financial institutions have since agreed to reduce the rate of interest on working capital and long-term loans to not more than 13 per cent. However, immediate and effective implementation of this agreement is needed in order to ensure support for the affected industries.

ANNEX

Profile of sample enterprises

Sample No.	Total employment	Major products	Major raw materials used and their sources	Major markets for finished products	Major factors identified for development of T&C industry in Bangladesh
1	6 000	Sweaters	<ul style="list-style-type: none"> • Synthetic fibres • Local sources 	<ul style="list-style-type: none"> • European Union 95% • Canada 5% 	<ul style="list-style-type: none"> • GSP facilities • Low wage costs • Government incentives
2		Woven (formal shirt) Casual shirts Ladies' wear Knitted garments	<ul style="list-style-type: none"> • Woven fabrics 90% • Imported from Far-East • Accessories 50% local 	<ul style="list-style-type: none"> • North America 50% • European Union 50% 	<ul style="list-style-type: none"> • Low wage costs • GSP facilities • Tariff structures
3	1 000	Knitted garments, various items	<ul style="list-style-type: none"> • 15% imported • Yarn from India 	<ul style="list-style-type: none"> • Sell to the local market 	<ul style="list-style-type: none"> • Low wage costs • Lead time • GSP facilities
4	2 000	Sweaters	<ul style="list-style-type: none"> • 25% yarn from China 	<ul style="list-style-type: none"> • European Union 100% 	<ul style="list-style-type: none"> • Low wage costs • Lead time • Government incentives
5		Terry towels	<ul style="list-style-type: none"> • 95% from local sources 	<ul style="list-style-type: none"> • North America 70% (United States 65%) • European Union 30% 	<ul style="list-style-type: none"> • Low wage costs • Product quality • Long-term relationship
6	6 500	Knitted (both flat and fine)	<ul style="list-style-type: none"> • 20% from China 	<ul style="list-style-type: none"> • European Union 75% • North America 25% 	<ul style="list-style-type: none"> • GSP facilities • Low wage costs
7	55	Weaving	<ul style="list-style-type: none"> • Yarn from local sources 	<ul style="list-style-type: none"> • European Union 100% 	<ul style="list-style-type: none"> • Low wage costs • GSP facilities • Government incentives