

# Promoting Backward Linkage in Textile & Clothing

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## *Abstract*

*The paper highlights the importance of and constraints faced by the country's primary textile sector (PTS), which comprise of backward linkage industries serving the export-oriented RMG sector. It discusses the present state—strength and weaknesses – of the various sub-sectors of the textile industry. Given the close complementarity between PTS and RMG sector, the paper recommends for extending appropriate policy support to the PTS and addressing its weaknesses.*

## **1. Introduction**

Backward linkage in the Textile Sector involves the Primary Textile Industries spanning from conversion of raw cotton to yarn through Spinning, yarn to grey fabrics through Weaving, and finishing grey fabrics through Dyeing, Printing, and Finishing. In addition to these, it covers also Knitting & Knit Dyeing. Primary Textile Sector (PTS) is the basic industry in the overall chain of textile processing. In textiles and clothing (T&C) we have to compete with formidable competitors like China, India, Pakistan, Vietnam, and Cambodia. All these countries are trying to have a bigger slice of the T&C global market. Bangladesh being a non-cotton producing country has to compete with countries which are not only cotton producers, but are also textile machinery manufacturers having abundant labour due to large population. Owing to such advantages of the competing countries, an initial cost difference surfaces. Besides these, when the capping of some Chinese exports under the EU safeguard measures would be withdrawn, things might further aggravate. Therefore Bangladesh needs to have an all out effort to develop its primary textile sector. Supportive policy option accompanied by concerted move both from Government and the Private Sector will ensure an appropriate and enabling environment to meet all the challenges. To put the issue in its proper

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perspective, sections 2 through 5 of the paper discuss the present state of the different sub-sectors of the country's textile industry. The relationship between PTS and the promotion of T&C exports is discussed in section 6. Section 7 makes some policy suggestions and concludes.

## **2. Spinning**

Spinning is the first state of the backward linkage industry. In 1947 there were only 11 spinning mills. By 1972 it increased to 74 mills. After liberation of the country all textile mills were nationalized. That was the first blow to the PTS. By the time the move to de-nationalize the public sector mills was made, they were all identified to be sick units. However, Government in 1982 opted for an open market policy, which gave a new boost to private sector investment in the textile sector. Demand for domestically produced yarn and fabrics to avail of the benefits of preferential trading arrangements reanimated the potential investors, who came forward to meet the challenges of the RMG units by investing in PTS. At the time of the MFA Phase-out, there were 310 Spinning mills in the country, of which 290 mills are in the private sector.

Since 2001 there has been a boost in investment in Spinning which resulted in a significant expansion in production capacity. To meet the continuous demand of knitted fabrics, new spinning mills are being set-up. Spinning Mills in the private sector can now meet around 100 percent demand for yarns at the domestic level and 85% of the yarn demand for export oriented knit fabrics mills.

In addition to that, 35% to 40% demand for yarn by export oriented fabric producing mills are being met by the private sector spinning mills. Besides, part of the yarn is supplied to Home-Textile producers, terry-towel, shop towel and denim producers.

The complementarity between PTS and RMG has spawned a new set of linkage industries and facilitated expansion of many service sectors activities. The complementarity of PTS and RMG not only propelled the growth of Spinning, Weaving, Dyeing and Finishing industries, production of accessories and spare-parts, but also generated large externalities by contributing to other economic activities in areas such as banking, insurance, real-estate, packaging, hotels and tourism, recycling of consumer goods, utility services and transportation. A study undertaken by CPD showed that RMG sector has high backward linkage with the textile sector providing fabric and yarn. The sectoral input output ratio of yarn and RMG has been 0.59 % and 0.004 %, respectively.

Though the country had some base in cotton textile industry even before the emergence of export oriented RMG sector, its linkage with global market was insignificant. Realizing the importance of the backward linkage industry in terms of supplying export quality yarn and fabric to satisfy the need of the growing RMG sector, Government took an early initiative to declare the PTS as a **Thrust Sector**. Since the textile policy was put in place in 1995, the PTS registered a remarkable growth. In response to the incentives provided and a ready market brought to distance by the continuous demand by the RMG sector, private sector dynamic and risk-bearing entrepreneurs came forward to invest in backward linkage industries. Backward linkage marked remarkable progress in the last decade, particularly since mid-1990s. Tables 1 and 2 show the growth pattern in the Spinning sector and the production of yarn since 1995 :

**Table 1 : Growth Pattern of Spindle Capacity**

Year	Number of Mills	Spindles	Growth % (+)(-)
1995	84	1701823	-
2000	116	2289280	34.51 %
2001	145	2352310	02.75 %
2002	163	3390026	44.11 %
2003	174	3419504	0.87 %
2004	197	3931624	4.90 %
2005	230	4937353	25.58 %
2006	260	5500000	11.39 %
2007	283	6000000	9.09 %

Source: BTMA

**Table 2 : Yarn Production (in Mln. Kgs.)**

Year	Private Sector Production	Growth Rate % (+)(-)
1995-96	157.01	-
2000-01	186.76	18.94 %
2001-02	204.81	9.66 %
2002-03	330.65	61.44 %
2003-04	370.30	11.99 %
2004-05	440.52	18.96 %
2005-06	530.00	20.31 %
2006-07	600.00	13.30 %

Source: BTMA

The Spinning Sector has been playing a pivotal role in the expansion of the knit sector. The capacity of private sector spinning mills to meet as much as 85% to 90% of the demand for yarn by the knit sector has produced a number of advantages. Availability of yarn domestically has helped in the reduction of lead time, higher retention of foreign exchange from the same volume of exports, creation of more employment opportunity, support to poverty alleviation programme of the Government, saving of shipping costs because of lower imports, etc.

**Table 3 : Comparative pattern of Export of Woven & Knitwear in Volume**

Year	Export Volume woven items (in 000 Doz)	Export Volume Knit items (in 000 Doz)	Growth in volume export over preceding year in woven	Growth in volume export over preceding year in knit
1999-00	66636	45270	-	-
2000-01	71218	52536	6.87%	16.05%
2001-02	77055	63390	8.19%	20.66%
2002-03	82835	69178	7.50%	9.13%
2003-04	90488	91600	9.23%	32.41%
2004-05	92262	120131	1.96%	31.15%
2005-06	108815	165023	17.94%	37.37%
2006-07	133075	199544	22.29%	20.92%

Source: BGMEA; BKMEA.

Analysis of the growth pattern also shows that, with appropriate support from PTS, exports of apparels and retention of foreign exchange earning have gone up significantly (Tables 3 and 4). This indicates a positive relation between PTS and Export Oriented RMG sector.

**Table 4 : Foreign Exchange Retention in Export of 2006-07**

Item	Value of F. E. inflow in Mn US\$	% of Retention	Value of Retention in Mn. US\$	% of National Retention
Knit-RMG Local Fabrics	3415	75	2561	36.82
Woven RMG Local Fabrics	1164	75	873	12.56%
Knit RMG Imported Fabrics	1138	25	284	4.08%
Woven RMG Imported Fabrics	3493	25	873	12.56%
Jute & Jute Goods	320	90	280	4.03%
Frozen Foods	515	90	463	6.66%
Leather & Shoes	402	80	322	4.63%
Others	1731	75	1298	18.66%
	12178		6954	100.00%

Source: Own calculation based on EPB, BGMEA and BKMEA data.

- Contribution to F. E. retention by PTS (Local Fabric) is US\$ 3434.00 Mn.
- Contribution to FE retention from imported fabric is US\$ 1157.00 Mn.
- In Knit export, FE is much higher because of local inputs. Besides, retention in woven exports using local fabric is equal to that of exports using imported fabric.
- This has been possible due to growth and expansion in PTS.

It is globally accepted that apparel trade is based on speed. Shelf-life of apparel is very short. In a world of high competition sustainability depends upon easy access to raw-materials. Gain in competitiveness depends on how quick a demand order is acted upon. In such a backdrop, beside dependence on domestic PTS, there is no other no other option. Therefore, sustainability and expansion of market shares in Textiles & Clothing depend on easy access to raw materials of PTS.

If we look into the growth pattern of developed and developing countries, we can see that in the initial stage of their development process, their basic industrial sector was PTS. With development and support from PTS along with cheap labour, their forward linkage got the necessary acceleration. With this support,

their basic industry, i.e. textiles, achieved a certain level of growth, and their forward linkage moved out to other areas of production. In the present day world, high competition is on to have a bigger pie of the Textiles & Clothing (T&C) cake. In such a fight, weaker countries without support from basic backward linkage will wane out as has been experienced by Sri-Lanka and Mauritius.

Several other arguments can be put forth for developing forward and backward linkages. First, for sustained international competitiveness, a cluster of up and down stream industries is essential. Such clusters facilitate product and process innovations. Second, industrial linkages especially involving cooperation among firms and suppliers of inputs help exploit dynamic external economies. Further, industrial linkage can facilitate learning by doing, endogenous product differentiation, and incremental secondary innovations. It may also contribute to promoting international trade in specialized inputs with greater learning effects.

China, the fastest growing exporting country, is the prime beneficiary of quota removal after 2004 and has taken the lion's share of the pie as far as the EU clothing import is concerned. The removal of quota was perceived by EU as a threat that would cause market disruption in EU and impede an orderly development of trade. In order to mitigate the disruptive impact of quota removal, EU limited the import of 10 product categories from China till 31<sup>st</sup> December, 2007. This EU safeguard measure against China provided some breathing space of additional export opportunity for many countries and at the same time its removal is being considered as a headache for these countries. Removal of EU safeguard measure against China will be a worse news for Bangladesh. In the face of increased competition, Bangladeshi suppliers will not be able to hold the market share, and in order to redeem the lead-time it will need to rely on the backward linkage sector for domestic raw materials. An increase in the supply side capacity will ensure a level playing field to compete with China in terms of quality, price and lead-time.

Although the Spinning Sector as the backbone of the PTS achieved a substantial growth, the sector is not free from some inherent short comings. Obsolete machinery, acute shortage of power, increase in the prices of raw cotton in international markets, fluctuation in foreign exchange rates, higher rate of wastage, lack of proper maintenance of machinery and equipment, higher cost of production, lack of skilled manpower and technicians, higher cost of capital, limited access to capital market, high taxes on some textile raw materials and chemicals have thwarted the desired growth in the Spinning sector. Without appropriate policy support, accelerated investment may not take place to meet the challenges in the coming years.

### **3. Weaving**

Weaving is the 2<sup>nd</sup> stage of the backward linkage sector. In this phase yarn is converted into grey fabric. In Bangladesh, compared to Spinning sector, investment in weaving sector is much lower. Various factors contributed to the slowing down in investment. High cost of capital (since Weaving is also a very high capital intensive sector), and lack of expertise in terms of labour, expert technicians etc. in addition to what have already been identified in the case of Spinning deter the growth of the Weaving sector. There are around 400 SMEs producing grey fabrics. Besides, there are around 1000 Specialized Textile & Power Loom units producing grey fabrics. According to a projection of the Ministry of Textiles & Jute, during 2006-07 the total demand for fabric was 8.48 billion metres, out of which domestic demand was 2.46 billion and export oriented units' demand was 6.02 billion metres. However, the local industrial units could provide only around 3.58 billion metres to export oriented units. Out of this huge demand, domestic production was 4.91 bn. meters, and 1.13 bn. metres were imported. It is envisaged that by 2012 the total demand for fabric inclusive of local export units' demand will stand at 12.03 bn meters i.e. 71% of the total demand. This in terms of 2006-07 would mean a short-fall of 3.60 bn. meters. Out of this projected target 1.46 bn. meters can hopefully be produced in high-tech weaving mills. Recently Bangladesh has achieved significant progress in Denim and Jeans production. Present production capacity of Denim and Jeans has been around 184 million meters. Very shortly the sub-sector of Denim and Jeans would be able to meet the demand of RMG units. However, support from Government in terms of infrastructure, R&D, and access to capital on soft terms, including fund for BMRE, would encourage private investment in the Weaving Sector.

The sub-sector of weaving suffers from some inherent problems such as limited number of high tech mills, serious dearth of skilled technicians, huge capital outlay, limited access to sources of capital, fluctuations in prices of yarn both at local and international markets, poor productivity due to lack of or limited back-processing facility, poor quality of grey fabrics and poor utilization of installed capacity.

### **4. Knitting & Knit-Dyeing**

The knitting and hosiery industry has been producing Knit & Hosiery items such as T-shirt, Polo shirt, Under-garments etc. since long. In the mid-eighties Bangladesh started to export knitwear items to international market. During the last two decades the export of knit-wears has gained a significant position. In

1995-96 the export of knitwear items was Tk. 2.44 billion which by 2006-07 stood at Tk. 31.45 billion. To meet the demand for yarn and fabrics, a good number of Textile Spinning & Knit fabrics manufacturing mills have been set-up. At present the domestic Spinning and Knit fabrics producing mills could meet 85% to 90% demand of the knitwear industries. Present demand of yarn in the export oriented knit units has been 598 million Kgs. against which local mills supplied 490 million Kgs. By 2012 export oriented knitwear industry's demand would be around 964 million Kgs. To meet that demand new mills need to be set up as well as the existing mills will have to go for an expansion programme.

However, this booming sector also suffers from some inherent problems such as lack of high technology in some cases. Besides, as these mills are scatteredly set-up, they suffer from lack of economies of concentration in pollution abatement and compliance issues, insufficient cash assistance, unfavourable debt equity ratio, complexity at land ports, illegal imports of yarn etc.

## **5. Dyeing-Printing-Finishing**

Attractive and high quality colour, design and finishing play an important role in the marketing of textile products. At present the locally produced fabrics serve the domestic market demand, export market demands and demand of the export oriented RMG units. There are around 300 automatic and semi-automatic dyeing-printing-finishing units in operation, whose annual production capacity is around 1600 million metres. Out of these 300 mills, a good number have been set up with high quality machines, which are capable of processing international standard fabrics. This sector has been suffering from some basic problems such as lack of high quality machinery and equipment, very high capital outlay, limited access to capital market, very high rate of interest, high debt equity ratio, lack of skilled technicians, too much dependence on foreign experts, higher processing cost due to high tariff, very high cost of setting up of ETP, lack/absence of CEPT.

## **6. Relationship between PTS and Promotion of Textile & Clothing Exports**

We have now the background set to have an analytical assessment as to how PTS and RMG exports are interdependent. It is well known that export of RMG depends on a number of factors, of which the undernoted factors are internationally recognized.



**They are**

- (a) Quality
- (b) Price
- (c) Lead-time
- (d) Reliability.

If we examine each one separately in relation to export of RMG, we will be able to establish the linkage. In Bangladesh most of the mills set up after 1990 have the latest machinery and equipment. Outputs of these mills are of top quality yarn and fabrics. They are produced in Bangladeshi Spinning and Weaving mills having internationally accepted quality. As such, apparels made out of high quality inputs shall always be high quality products. Therefore, quality can not be questioned. The quality always satisfies the buyers' standards.

When inputs are available locally, there is a big saving of cost. Banking charges, transportation cost, storage charges, demurrage and post charge, and other ancillary charges can be avoided if the inputs of apparels are produced locally. This helps the apparels produced to be more cost effective.

Availability of inputs locally reduces the lead time to a great extent. Apparels being fashion related, the shelf-life of the apparels should be as short as possible. In such a situation, domestically produced inputs play a significant role in reducing lead time.

If we examine the pattern of our export trade in clothing, and relate the trend with expansion and growth in spindle capacity, we will see that whenever PTS achieved a substantial growth, apparel exports tended to be high. This proves that the availability of local inputs not only reduced the lead time but also increased the competitiveness of our RMG units.

**Table 5 : Comparative Growth Pattern**

Year	Compared to Preceding Year	Compared to Preceding Year
	Growth in Spindle.	Growth in Exports.
2000-01	(+) 34.51 %	(+) 11. 68%
2001-02	(+) 2.75 %	(-) 5.69 %
2002-03	(+) 44.11%	(+) 7. 16%
2003-04	(+) 0.87%	(+) 15. 76 %
2004-05	(+) 4.90%	(+) 12.87 %
2005-06	(+) 25.58%	(+) 23.11 %
2006-07	(+) 11.39%	(+) 16.58 %

The relationship between local inputs and the increase in RMG exports always proved to be positive. This trend has also been supplemented by the Preferential Trading Scheme (GSP of EU and others), wherein the use of domestically produced inputs in apparel qualify for duty free market access. This acted as a boost to the use of local inputs encouraging new mills to be set-up to meet the demand of export oriented RMG units. This was proved when the three stage transformation process was in use. During that time a good number of spinning mills were set up to meet the demand of the RMG units to enjoy GSP facilities. There has been a complementarity of export promotion of apparels and PTS. One is complementary to the other and not substitute. PTS and RMG are the parts of the same industry. The downstream and upstream are two different positions only. Without one, the existence of the other will be in serious crisis.

Liberalization of trade following the Uruguay Round agreement presented opportunities as well as challenges for a country like Bangladesh. In the post-Uruguay Round period, traditional instruments of trade policy such as tariff, quotas, subsidies have become less relevant. In a liberalized trade regime, competition among textile & clothing exporting countries has become intense. For a developing country like Bangladesh, low relative labour cost may not be sufficient for improving its competitive position. The patterns of competitive advantage and the structure of exports and imports depend on the stage of economic development. A country's competitive advantage changes as a result of changes in factor endowment, accumulation of huge capital, industrialization, and technical innovations. Countries move along the ladder of competitive advantage as development proceeds. Bangladesh, being a labour abundant country, started the process of industrialization by concentrating on labour intensive textiles industries.

The industry circle and trade experts expressed concerns that with the phasing out of MFA Bangladesh will face intense competition from China and India. In such a situation, Bangladesh RMG would face a serious challenge to survive. However, these fears proved wrong. Bangladesh RMG not only survived but achieved the growth of an enviable height. This has been possible only because of the support from the PTS.

## **7. Conclusion**

From the analysis of the present state of the country's Primary Textile Sector, it is evident that forward linkage and backward linkage in textile and clothing trade are complementary to each other. Without support from one the other cannot sustain. The stronger the support of the downstream industries, the more vibrant would be

the upstream units. PTS can ensure quality and shorter lead time with reliability and efficiency. Cost effective raw materials also ensure competitiveness. It is therefore only with appropriate support from PTS that cost effectiveness, competitiveness and reduction in lead time, which are vital factors for promotion of apparel exports, could be achieved. Moreover, with the growth of PTS that will enable a bigger use of local inputs, the country will also be able to avail of the preferential tariff advantage under GSP. Taking into consideration the close complementarity between PTS and T&C sectors, the paper calls for appropriate policy support for accelerating investment in the primary textile sector and addressing the many constraints facing its various sub-sectors as highlighted earlier in the paper.