4.1 Evolution of the India Textile and Garments Industry

The term 'Textile' is a Latin word originating from the word 'texere' which means 'to weave'. Textile refers to a flexible material comprising of a network of natural or artificial fibers, known as yarn. Textiles are formed by weaving, knitting, crocheting, knotting and pressing fibers together. The history of textile is almost as old as that of human civilization and as time moves on the history of textile has further enriched itself. In the 6th and 7th century BC, the oldest recorded indication of using fiber comes with the invention of flax and wool fabric at the excavation of Swiss lake inhabitants. In India the culture of silk was introduced in 400AD, while spinning of cotton traces back to 3000BC. In China, the discovery and consequent development of sericulture and spin silk methods got initiated at 2640 BC while in Egypt the art of spinning linen and weaving developed in 3400 BC. The discovery of machines and their widespread application in processing natural fibers was a direct outcome of the industrial revolution of the 18th and 19th centuries. The discoveries of various synthetic fibers like nylon created a wider market for textile products and gradually led to the invention of new and improved sources of natural fiber. The development of transportation and communication facilities facilitated the path of transaction of localized skills and textile art among various countries. (Location of Indian crafts, Udyog Vihar, Gurgaon.)
Ancient human first learnt the twisting of grass strands to make ropes, imitating the twisting of creepers around the stems of trees. From that beginning, they learnt to twist, or spin the fibers derived from inside the stalks of flax and fibre coats of sheep and goats. From early times through the middle Ages spinning was accomplished by the use of a device, the distaff and the drop spindle. This device is similar to 'Takli', as we know it today in India. The distaff is a stick on which the mass of fibers is held. Spinning wheel first invented in India was introduced to Europe in the middle Ages. This spinning wheel was later modified in Europe at the beginning of the 16th century, which is known as 'Saxony wheel' and is similar to 'Charkha' of Gandhi era. This development mechanised the spinning process. Later in 1770 James Hargreaves patented a spinning jenny with which twenty-four spindles could be operated. A hand-operated machine for carding cotton was also added. (Textile Industry, Economy Watch, 2006).

Weaving and its traditions have a history as ancient as mankind. Human first learnt the art of basket weaving. Woven fabrics probably originated from this technique of basket weaving. The earliest evidence of weaving, closely relate to basket weaving which dates from Neolithic cultures of about 5000 BC. The earliest looms date from the 5th millennium BC and consisted of a frame to hold a number of parallel alternative threads in two sets, later known as warp. By rising one set of these threads a space was made between them to run a thread cross, later
known as weft. The block of wood that used to carry the weft strand through the warp was later called the shuttle. Interestingly, the fundamental operation of the loom remained unchanged till date. But long successions of improvements were introduced through ancient and medieval times that gave birth to present day handlooms in its various forms.

The art of sewing is at least 20,000 years old. Ancient peoples joined pieces of material using bone and horn needles and animal sinew for thread. However, sewing was mostly confined to side seams and, in later years, to armholes. Around the 14th century iron needles were invented, and by the 15th century there were eyed needles. Basic hand-sewing stitches included the running, hemming, and blind, stitches. Interestingly many earlier stitches are still common and more easily executed ones. Later sewing needles were made of steel, as they still are today. In 1851 Isaac M. Singer, an immigrant from Germany settled in New York, invented the first sewing machine making it possible to sew on any part of the garment. Soon after he started mass production of these machines in 1856 James Gibbs invented the chain stitch machine. This invention changed the earlier tradition of home stitching to shop tailoring in Western Europe. Today there are machines for sewing almost every conceivable article, including clothing, upholstery, canvas, and leather goods. In 1873, Levi Strauss, an immigrant merchant from Germany patented a men's work pants with riveted pocket corners made from denim fabric,
now known as Jeans, and started a manufacturing factory for the same in San Francisco. With the emergence of ready-made garment concept tailoring has now taken to garment industry in most part of the world. Lately garment manufacturing processes has also undergone radical changes. The first hand-powered sewing machines in the 19th century sewed 20 stitches per minute. At the turn of the century some electrically powered machines sewed 200 stitches. By mid-20th century machine speeds reached 4,500. By 1970 most machines could sew 7,000, and some could sew 8,000 stitches per minute. Art of needlework, such as in knitting, crochet or Embroidery is also quite old.

However the earliest known examples of stitch work date back to 3000 BC. The term or word 'Embroidery' comes from the Anglo-Saxon word for "edge", but the technique itself was being done long before that. The golden age of Western embroidery coincides with the golden age of music: the 17th and 18th centuries are considered golden age for western embroidery. After mid eighteen the invention of embroidery machines devastated the hand embroidery industry, causing major economic crises in many parts of the world.

The Indian Textiles Industry has an overwhelming presence in the economic life of the country. Apart from providing one of the basic necessities of life, the textiles industry also plays a pivotal role through its contribution to industrial output, employment generation, and the export earnings of the country. It
contributes about 14 per cent to industrial production, 4 per cent to the GDP, and 16.63 per cent to the country's export earnings. It would provide direct employment to over 35 million people by 2010 (Texmin 2005), which includes a substantial number of people from less privileged sections of society. The textiles sector is the second largest provider of employment after agriculture. Thus, the growth and all round development of this industry has a direct bearing on the improvement of the economy of the nation.

The Indian textiles and apparel industry has an unbalanced structure, 95 % of the industry is the unorganized and only 5 % is the organized. Sector consolidation process in certain segments, to take advantage of economies of scale is necessary. This will generate more employment, as smaller operations affect cost and competitiveness. The overview of Textile sector includes following key elements. Textile is a key contributor to GDP to the order of 4%. It accounts to 14% of National Industrial production and it is a significant forex earner to the tune of 16% through exports. Textile export is 17.8 $ billion and Textile imports was 2.2 $ billion. It is an important employment generator sector next to only agriculture sector and it provides direct and indirect employment to about 35 million people (Annual Review, Ministry of Textiles).

Domestic market also experienced a healthy growth, with the Indian apparel market reaching US$ 30 billion in 2010. The share of the branded sector increased
to 29% as compared to 21% in 2008. India is one of the few countries that encompass the entire supply chain in close proximity, from diverse fibres to a large market. It is capable of delivering packaged products to customers comprising a variety of fibres, diverse count sizes, cloth of different weight and weave, and panoply of finishes. This permits the supply chain to mix and match variety in different segments to deliver new products and applications. This advantage is further enhanced by cost based advantages and diverse traditions in textiles.

The Indian textiles industry is extremely varied, with the hand-spun and hand-woven sector at one end of the spectrum, and the capital intensive, sophisticated mill sector at the other. The decentralized hand looms / hosiery and knitting sectors form the largest section of the textiles sector. The close linkage of the Industry to agriculture and the ancient culture and traditions of the country make the Indian textiles sector unique when compared to the textiles industry of other countries.

4.2 Structure of the Indian Textile Industry

The Indian Textile industry is highly fragmented sector. It is fully vertically integrated across the whole value chain and interconnected with various operations. Textile Industry comprises small-scale, medium-scale, large-scale,
non-integrated, spinning, weaving, finishing, and apparel-making firms and enterprises. This is an unorganized sector and includes Handlooms, Power-loom, Hosiery, Knitting, Readymade Garments, Khadi, Carpet and Handicrafts manufacturing units.

Indian textile industry is the confluence of 5 different sectors these are,

1. Mills

2. Power loom

3. Handloom

4. Readymade garments (Apparel) and

5. Hosiery

All these sectors are complementary to one another in relation to raw materials or finished products. The mill sector consists of spinning and composite mills. The spinning mills hold the apex position in the Indian textile industry as it is the sole source for producing yarn from raw cotton. The composite mills carry out both spinning and weaving and they are the major source of supplying cloth for domestic and overseas market. The power loom and handloom sectors go hand in hand because the later depends on the former to a great extent. Installation of power loom has significantly lightened the work load of waving units and hence increased their productivity.
The structural pattern of Indian textile industry takes a deviation with the emergence of readymade garments sector. The readymade garments sector produces tailored clothing or apparel by incorporating fashion/style of high value. An important feature of readymade garments sector is that the lion’s share of readymade garments units is floated as small scale industries units. The hosiery sector produces knitted textiles both and industrial purposes like occupational garments, medical textiles, pan-belt runners, packaging materials and upholstery items. This sector also represents textile handicrafts, consisting of carpets, mats, furnishing items and inputs for interior decorations. (http://www.india-crafts.com)

The organized Mill Sector comprises of spinning Mills, and Composite Mills where spinning, weaving, and processing activities are done. The Fibre and Yarn Sector of the textile industry includes Textile Fibers, Natural Fibers such as Cotton, Jute, Silk and Wool; Synthetic / Man-Made fibers such as Polyester, Viscose, Nylon, Acrylic and Polypropylene. The Man-Made Textile Sector includes Fibre and Filament Yarn manufacturing units of Cellulosic and Non-Cellulosic origin. The Cellulosic Fibre/yarn Industry is controlled by the Ministry of Textiles, and the Non-Cellulosic Industry is controlled by the Ministry of Chemicals and Fertilizers. India is the largest producer of Jute, the 2nd largest producer of Silk, Cotton and Cellulosic Fibre/Yarn and 4th largest producer of Synthetic Fibers/Yarn. (Theme Paper, CII, TEXCON- ’05).
Fig: 4.1. The supply chain of Indian Textile Industry

Source: D&B Research
Fig: 4.2 The Textile and Apparel Supply chain
Position of Textile industry from 2002 to 2009

Table 4.1 Segment wise exports of Textiles from 2002 to 2009 (US $ billion)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton Textiles</td>
<td>3.62</td>
<td>3.68</td>
<td>3.54</td>
<td>4.49</td>
<td>5.56</td>
<td>6.85</td>
<td>4.75</td>
</tr>
<tr>
<td>Manmade Textiles</td>
<td>1.53</td>
<td>1.86</td>
<td>2.05</td>
<td>2.60</td>
<td>2.39</td>
<td>3.17</td>
<td>3.28</td>
</tr>
<tr>
<td>Silk</td>
<td>0.49</td>
<td>0.56</td>
<td>0.59</td>
<td>0.69</td>
<td>0.70</td>
<td>0.65</td>
<td>0.67</td>
</tr>
<tr>
<td>Wool</td>
<td>0.29</td>
<td>0.35</td>
<td>0.42</td>
<td>0.47</td>
<td>0.42</td>
<td>0.44</td>
<td>0.47</td>
</tr>
<tr>
<td>Ready Made Garments</td>
<td>5.75</td>
<td>5.92</td>
<td>6.02</td>
<td>7.75</td>
<td>8.28</td>
<td>9.06</td>
<td>10.25</td>
</tr>
<tr>
<td>Handicrafts</td>
<td>1.42</td>
<td>1.11</td>
<td>1.01</td>
<td>1.24</td>
<td>1.36</td>
<td>1.45</td>
<td>1.07</td>
</tr>
<tr>
<td>Jute</td>
<td>0.20</td>
<td>0.25</td>
<td>0.28</td>
<td>0.29</td>
<td>0.26</td>
<td>0.32</td>
<td>0.29</td>
</tr>
<tr>
<td>Coir &amp; Coir Manufacturers</td>
<td>0.20</td>
<td>0.25</td>
<td>0.28</td>
<td>0.29</td>
<td>0.14</td>
<td>0.16</td>
<td>0.14</td>
</tr>
<tr>
<td>Total</td>
<td>13.50</td>
<td>13.98</td>
<td>14.19</td>
<td>17.82</td>
<td>19.11</td>
<td>22.10</td>
<td>20.92</td>
</tr>
</tbody>
</table>

The Indian textiles industry contributes substantially to India's exports earnings. The export basket consists of wide range of items containing cotton yarn and fabrics, man-made yarn and fabrics, wool and silk fabrics, made-ups and variety of garments. India’s textile products, including handlooms and handicrafts, are exported to more than a hundred countries.
However, the USA and the EU, account for about two-third of India’s textiles exports. The other major export destinations are Canada, U.A.E., Japan, Saudi Arabia, Republic of Korea, Bangladesh, Turkey, etc.

In the post-quota period, India has emerged as a major sourcing destination for new buyers. As a measure of growing interest in the Indian textile and clothing sector a number of buyers have opened their sourcing/ liaison office in India. Commercially, the buoyant retailers across the world are looking for options of increasing their sourcing from the Indian markets. In 2008-09, various export promotion councils and trade bodies have been representing to the Government that the textiles exports have adversely been affected by recent global economic slowdown, leading to considerable loss of employment in the textiles sector.

Textiles & clothing exports during 2007-08 amounted to US$ 22.10 billion as against US$ 19.11 billion in the corresponding period in the preceding financial year. But when we see the exports in 2008-09 there is a decline in the total exports in 2007-08 it was US$ 22.10 billion but in 2008-09 it declined to US$ 20.92 billion. A sector-wise analysis of textiles exports is given below:-

(i) **Readymade Garments**: Readymade Garments account for approximately 41% of the country’s total textiles exports. During 2007-08 the Readymade Garments exports have amounted to US$ 9.065 billion, recording an increase of 9.46 % over the exports during 2006-2007. During the period of April-December’ 2008, the
Readymade Garments exports have amounted to US$ 6.8 billion, recording an increase of 5.97% over the exports during the corresponding period of 2007.

(ii) **Cotton Textiles including Handlooms**: Cotton Textiles i.e. yarn; fabrics and made-ups (Mill made / Powerloom/ Handloom) constitute more than 2/3rd of our exports of all fibres/yarns/made-ups. During 2007-08 the Cotton Textiles exports have amounted to US$ 6.85 billion, recording a healthy increase of 23.14% over the exports during previous year. During the period of April –December’ 2008, the Cotton Textiles including Handlooms exports have amounted to US$ 3.765 billion, recording a decline of 11.39% over the exports during the corresponding period of 2007.

(iii) **Man-made Textiles**: During 2007-08 the Man-made Textiles exports have amounted to US$ 3.176 billion, recording an increase of 32.38% over 2006-07. During the period of April –December’ 2008 the Man-made Textiles exports have amounted to US$ 2.58 billion, recording a growth of about 12.07% over the exports during the corresponding period of 2007.

(iv) **Silk Textiles**: During 2007-08 the silk exports have amounted to US$ 0.657 billion, recording a decline of 6.88% over the exports during the previous year. During the period of April –December’ 2008 the Silk Textiles exports have amounted to US$ 0.523 billion, recording a growth of 14.16% over the exports during the corresponding period of 2007.
(v) Woolen Textiles: During 2007-08 the woolen textiles exports have amounted to US$ 0.44 billion, recording a growth of 4.5% over 2006-07. During the period of April –December’ 2008 the woolen textiles exports have amounted to US$ 0.379 billion, recording an increase of 22.66% over the exports during the corresponding period of 2007.

(vi) Handicrafts including carpets: During 2007-08 the handicrafts exports have amounted to US$ 1.45 billion, recording a growth of 6.31% over the exports during 2006-07. During the period of April –December’ 2008 the handicrafts including carpets exports have amounted to US$ 0.858 billion, recording a sharp decline of 24.67% over the exports during the corresponding period of 2007.

(vii) Coir: During 2007-08 the coir exports have amounted to US$ 0.16 billion recording an increase of 9.86% over the exports during 2006-07. During the period of April –December’ 2008 the coir exports have amounted to US$ 0.109 billion, recording a decline of 6.19% over the exports during the corresponding period of 2007.

(viii) Jute: During 2007-08 the Jute exports have amounted to US$ 0.326 billion, recording a growth of 25.32% over the exports during 2006-07. During the period of April –December’ 2008 the Jute exports have amounted to US$ 0.242 billion, recording a decline of 2.35% over the exports during the corresponding period of 2007. (Ministry of Textiles, GOI).
4.3 Indian Textile Industry- Some Facts

- With a market size of Rs. 1,27,000 crore it is the 2nd largest industry in India.

- Contribute about
  - 14% to the total industrial output
  - 4% to GDP
  - 16.63% to the country’s export earnings

- Provides employment to about 35 million persons i.e. 18% of the country’s workforce.

- Exports estimated to account for 34% of production.

- Rated as 2nd largest producers of cotton yarn, silk and cellulose fibre/yarn.

- Largest producer of jute.

- 3rd largest producer of raw cotton.

- 4th largest producer of synthetic fibre/yarn.

- Second largest employment generator after agriculture.

- Second largest spindle age in the world.

*Source: Theme Paper, CII, TEXCON- '05*
4.4 Indian Readymade Garments Industry

This is one of the most important segments of the Indian textile sector. Indian Readymade garments industries have been the single largest net foreign exchange earner among all the products in the countries export basket. The performance of Indian garments export shows that how an efficiently managed labour intensive sector can be transferred into a prolific foreign exchange earner. Exports of readymade garments have taken place with very little import content. Garments production is carried out largely with less modern technology and automation because it is reserved for small scale sector. The garments manufacturing and export activities in India are mainly located in Mumbai, Chennai, Tirupur, Bangalore, Ahmedabad, Jaipur, Ludhiana and NCR region (Delhi, Gurgaon, Noida). The bulk of Indian garments export goes to USA and EU (around 90%) and rest to Australia, Canada, Norway, middle east etc (CRISIL Research, Annual Review, 2009). The garments sector has centered on an extensive subcontracting system which made use of power looms fabrics and second hand machinery. (Sunder A. Shetty, 2001)

India’s garment/apparel sector is highly fragmented, comprising more than 8,000 units and employing some 5 million people (AEPC 2009). Most apparel sector units are family-run businesses having 50-60 sewing machines, often on contract to apparel wholesalers, usually using old production equipment and methods. The
EOUs tend to operate on a much larger scale in more modern facilities and offer brand-name quality goods, especially menswear. Exporters of ready-made garments are classified as either manufacturer-exporters or merchant-exporters. (Anju Sneh, 1999)

Some 2,000 manufacturer-exporters export apparel, while the roughly 26,000 merchant-exporters serve as export brokers on behalf of apparel manufacturers. For tax purposes, export-oriented apparel firms generally own several units registered as either manufacturer-exporters or merchant-exporters. (Tallam Venkatesh, 1999). India has about 6,000 knitting units registered as producers or exporters; the majority of the units are registered as SSI units. The knitting segment has grown by 76 percent since 1993, with current annual output of knitwear (sweaters, polo shirts, T-shirts, and underwear) at 6.4 billion square meters, valued at nearly Rs80 billion. (Ahluwalia, 2000)

Garment industry is textile based industry. India’s garment exports have been growing at a CAGR of 10% in the last decade. Garment manufacturing is the most labour intensive of all other segments of textile value chain, thus has the maximum potential to leverage India’s comparative advantage in labour cost; labour being cheap in India. Moreover, low capital requirements and high value additions make this an ideal sector for India to focus on. However, competing countries have left far behind India. In the last decade, China’s share of world apparel exports jumped
from 4% in 1980 to 21% in 2005, India could only manage to increase it from 1% to 3%.

One of the key issues in the Indian garment industry has been the lack of scale of operation primarily caused by archaic labour laws and obligation to export 50% of the output for an export-oriented unit. Above all, the productivity levels in the Indian garment industry are substantially lower compared with best Asian competitors. Moreover, Indian garment industry did not pursued latest manufacturing technology in almost all stages of manufacturing, starting from pre-cutting machines to processing machines. There have been near absence of special purpose machines in the production line. Majority of manufacturers outsource cutting & sewing operations, which results in complexity in supply chain management, low scale of production beside quality problems such as lot-to-lot variation, and higher lead times. In addition, poor infrastructure & bureaucratic delays add to the in-efficiency of the industry.

It is expected that Indian textile industry would grow annually at 4-5% based on expected population growth at 1.7-1.9%, increase in proportion of India’s middle class (high consuming classes) from 28.8% in 2001 to 32% in 2011. Apparel consumption in India, even in the urban, high-income classes, as compared to China is low, and so is the consumption in the home textiles. There is further scope to tap these latent demands. Growth in India’s textile and clothing market
could be accelerated by capturing latent demand and through new applications of textiles. Though the branded garments segment has been growing at 15-20% in the last few years, it still represents an extremely small part of India’s overall apparel consumption. It is possible for the domestic industry to grow at 6-7% p.a. (volume terms) if identified constraints are effectively tackled. (Textile Industry, Economy watch, 2006).

4.4.1 Structure of the Garments Industry

The garments industry is the least capital intensive part of the textiles value chain and is therefore characterized by low entry barriers. This has led to a high level of fragmentation in the industry. While there are no reliable estimates in terms of the total number of apparel manufacturers in the country, the data that is available for the exports market is in itself a reflection of the level of fragmentation. There are around 8,000 exporters registered with the Apparel Export Promotion Council (AEPC, Gurgaon). Of these, the turnover of more than 4,000 exporters is less than Rs 5 million.
Table 4.2: Degree of fragmentation in the apparel industry

<table>
<thead>
<tr>
<th>Turn Over (Rs Million)</th>
<th>No. of Exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 1000</td>
<td>15</td>
</tr>
<tr>
<td>500-1000</td>
<td>30</td>
</tr>
<tr>
<td>200-500</td>
<td>180</td>
</tr>
<tr>
<td>100-200</td>
<td>330</td>
</tr>
<tr>
<td>50-100</td>
<td>502</td>
</tr>
<tr>
<td>30-50</td>
<td>485</td>
</tr>
<tr>
<td>20-30</td>
<td>435</td>
</tr>
<tr>
<td>10-20</td>
<td>825</td>
</tr>
<tr>
<td>05-10</td>
<td>834</td>
</tr>
<tr>
<td>&lt; 5</td>
<td>4800</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8436</strong></td>
</tr>
</tbody>
</table>

Note: The above mentioned figures are for 2008.

Source: Annual Review, Ministry of Textiles, GOI

Fig.4.3 Degree of fragmentation in the apparel industry
There are several reasons due to which manufacturing garments has evolved as a fragmented activity. These include:

1. **Reservation for SSI**

   Until 2003-04, manufacturing garments was reserved for the small-scale sector and this restricted growth in this industry for a long time. Units could not bring in modern machinery on account of the Rs 30 million investment ceiling on plant and machinery, resulting in fragmentation and hence, poor economies of scale. Further, the knitwear segment continued to remain under the reserved list for a slightly longer period and was de reserved only in 2004-05.

2. **Quota restrictions**

   Exports to the USA and EU markets were governed by quota restrictions till the beginning of 2005. In simple words, quota restrictions meant that, as a country, there was a cap on the quantity that it could export and within this overall restriction, there was a specific cap that was applied to each company. Since no company could increase its exports significantly due to the cap on quotas, there was no incentive for expansion. But from 1st Jan 2005 these restrictions has been washed out.
3. Stringent labour laws

The Indian labour laws are beneficial for the employees but inflexible for the employer. The labour laws protect the interests of the employees, but there is no obligation to continue working with a particular employer. This exposes the garment manufacturers to a big risk, as garment manufacturing is a labour-intensive process. Any abrupt relinquishment of jobs by the employees can delay the manufacturing process, which can lead to cancellation of orders, resulting not only in financial losses but also loss of probable future orders. Again, labour laws sometimes leave no viable option for the organisation to lay off the employee in the event of lack of adequate orders. Accordingly, this is the highest level of job security as compared to other countries. This led to many employees being lethargic in their work, thus impacting labour productivity. Further, the maximum working hours stipulated for the industry are only 8 as against 12 in case of India's closest competitor - China. Also, the employer was not allowed to allocate female employees for night shifts although the apparel industry mainly employs female workers. However, lately, the government has come up with a welcome move of allowing female workers in the textile sector to work in night shifts.
Labor cost in garments industries of various countries

Table 4.3: Comparative labour cost in garments industries of various countries

<table>
<thead>
<tr>
<th>S. No</th>
<th>Country</th>
<th>Average Hourly wage (US $ ML)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USA</td>
<td>11.2</td>
</tr>
<tr>
<td>2</td>
<td>GERMANY</td>
<td>10.0</td>
</tr>
<tr>
<td>3</td>
<td>KOREA</td>
<td>5.1</td>
</tr>
<tr>
<td>4</td>
<td>MEXICO</td>
<td>1.8</td>
</tr>
<tr>
<td>5</td>
<td>S.AFRICA</td>
<td>1.6</td>
</tr>
<tr>
<td>6</td>
<td>MALAYSIA</td>
<td>1.4</td>
</tr>
<tr>
<td>7</td>
<td>CHINA</td>
<td>0.9</td>
</tr>
<tr>
<td>8</td>
<td>INDIA</td>
<td>0.7</td>
</tr>
<tr>
<td>9</td>
<td>SRILANKA</td>
<td>0.6</td>
</tr>
<tr>
<td>10</td>
<td>PAKISTAN</td>
<td>0.2</td>
</tr>
<tr>
<td>11</td>
<td>BANGLADESH</td>
<td>0.2</td>
</tr>
</tbody>
</table>

From the above table it is depicted that Indian Garments industry has a positive position in labour cost in comparison to the major producers that is Korea, Mexico, Malaysia and China which have a higher rate than India. But in comparison to India Sri Lanka, Pakistan and Bangladesh has a positive attitude.
over India. That’s why Pakistan and Bangladesh have now become a great threat to the Indian Garments sector in respect of lower labour cost leading overall decline in cost of garments manufacturing.

### 4.5 Indian Readymade garments Industry- A SWOT Analysis

SWOT Analysis is a strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture. This analysis helps in pointing out the objective and flow of business under internal and external factors. Favorability of the strategy based on the factors can be analyzed. The technique first used by Stanford University in 1960 by Albert Humphrey. (Strategies of Pantaloon India Ltd, 2009) The SWOT analysis of Indian readymade garments industries can be elaborated as follows.

#### 4.5.1 Strengths

- A vertical country in cotton from growing to garmenting
- Strong entrepreneurial class
- Flexibility in production of small order lots in garments
- Ability to handle embellishments
• Plentiful supply of labour at relatively low wages
• Good “cultural” comfort with US and Europe
• Strong material base
• Low manpower cost
• Established in International markets
• Large domestic markets
• High entrepreneurial spirit

### 4.5.2 Weaknesses

• Poor work methods resulting in higher than normal labour content in many staple garments
• Absence of formally educated factory management
• Too much emphases on cotton fabrics – manmade fibres largely ignored
• Unit Production capacities very low by international standards
• Fabric quality low by international standards
• Difficult government policy on labour
• Inadequate infrastructure
• Obsolete technology
• weak value chain

• weak marketing network

• Lack of economies of scale & size- fragmentation.

4.5.3 Opportunities

• Quantitative restrictions may be re imposed in China until 2010

• Good political equation with the US and EU

• Buyers preference for India after China

• Understanding buyers need

• Improvements in infrastructure and regulation

• Research and product development

4.5.4 Threats

• Trade Blocks and Partnerships

• Location disadvantage – long transit times

• Special advantage for Bangladesh, Sri Lanka and Pakistan

• Rupee appreciation

• Trade blocs and partnership at the exclusion of India

• Enhanced competition from other countries similarly constrained by quota.
4.6 Products and Markets

4.6.1 Readymade Garments Products

Various items of clothing, also known as apparel, garments, dress or attire are worn not only in order to protect the body against extreme weather conditions but also for functional as well as cultural, social reasons. Clothing also have an attached emotional value for the wearer. It actually reflects social classes, sexes, occupation, marital status and ethnic or religious affiliation. Apparel, Clothing & Garments can be categorized based on innumerable criteria- Clothing by Fashion, Clothing by Fabrics, Men's Clothing, Women's Clothing, Kids Clothing, Industrial Clothing, Infant Wear, Animal Clothing etc.

4.6.2 Garments manufacturing Process

'Garmenting' (the process of manufacturing readymade garments) is the final link in the entire textile value chain, in which processed fabrics are converted into ready-to-wear apparels. The textile value chain begins with 'spinning', which converts fibre into yarn. The yarn is then converted into fabrics through 'weaving'. The fabric undergoes various processes (commonly classified under the term 'processing') like scouring, bleaching, mercerising, dyeing/printing, washing, finishing, etc, to produce processed fabrics that are suitable for manufacturing apparels or home textiles. The chemical process for manufacturing fabrics with
properties like anti-crease, oil repellence, water repellence, etc, are undertaken in the processing stage. So typically, a wrinkle-free pant is made out of fabrics that have been subject to various chemical treatments at the processing stage. The final stage of 'garmenting' involves a series of sub-stages such as laying, measuring, cutting, stitching, etc, before the processed fabric is converted into a ready-to-wear garment. The garments are finally marketed through a range of distribution channels in the domestic market or are exported. (CRISIL; Industry overview)
Fig 4.4: The Manufacturing Process Tree

STAGE I

NATURAL FIBRES
- COTTON
- WOOL
- SILK

SYNTHETIC FIBRE
- VSF
- PSF
- ACRYLIC FIBRES

SPINNING

SPUN YARN

STAGE II

WEAVING/KNITTING

GREY FABRIC

PROCESSING
(Designing, Scouring, Bleaching, Dying, Printing, Etc)

STAGE III

PROCESSED FABRIC

GARMENT MANUFACTURING
(Laying, Measuring, Cutting, Stitching, ironing, packaging Etc)

STAGE IV

STAGE V

DISTRIBUTION

OWN STORES

RETAILERS

DISCOUNT STORES

DISTRIBUTORS

EXPORTS

MULTI-BRAND OUTLETS
4.6.3 Weaving/knitting and processing

The process of converting a yarn into fabric involves one of the two main processes— weavmg or knitting. Weaving is the most common used method of manufacturing cloth from yarn. It involves interlacing of two sets of yarns made of fibres at right angles. Weaving is done on a loom to make a fabric. The length-wise yarns are called warp and width-wise yarns are called weft. Knitting is another process of turning yarn into fabric. In this process, there is only one set of yarn, by which the fabric is produced. However, unlike woven fabric, the knitted fabrics are made by interlacing loops of yarn.

In weft knitting, successive loops of a single yarn form a row running across the width of the fabric, whereas in warp knitting, successive loops of yarn run along the length of the fabric. Weft knitting produces a more extensible fabric and tends to be used for producing items such as stockings, tights and socks. The fabric, which is produced, can be made out of simple yarn, that is, carded spun yarn or combed spun yarn. Yarn, which is used for knitting process possess less twist, and that, is the requirement of fabric. Other different types of yarn which can be used are mélange yarn, dyed yarn, singed yarn, mercerized yarn, etc, or different combination of these yarns can also be used.

The output of weaving and knitting is a grey fabric (grey cloth). The grey cloth is then processed and finished so that it can be used for manufacturing home textiles.
or garments. Processing of the fabric involves steps like de-sizing, scouring, bleaching, mercerising, washing, dyeing, printing, washing, etc, before it is ready to be used as an input for manufacturing RMG. The fabric can also undergo many other optional processes that impart various properties to the fabric for manufacturing value-added products. Thus, there could be water repellence, oil repellence, wrinkle-free, mosquito repellent jackets, anti bacterial vests, flame retardant coats, etc. The process mainly involves usage of specialty chemicals for treating the fabrics.

### 4.6.4 Readymade garment manufacturing

The processed fabric is the key input for the stitching division. Some products like cotton trousers, denim jeans and jackets undergo washing after being stitched into garment. Designing involves visualisation and preparation of designs and selection of desired and suitable fabrics for the garment. The designers need to be creative and imaginative, should have aesthetic and colour sense. They should be aware of the latest trends in the fashion industry, both in the domestic market as well as the international market, along with customer's liking and demand. The designing for readymade garments vary according to age, gender, usage, etc. For example, different designs are required for kids, males and females, different designs for formal wear and party wear, sportswear, etc.
After designing, the fabrics are measured and cut according to the design selected and are sent for stitching. Stitching is done by sewing machines which then join the various parts using threads. Highly specialised machines are available for buttonholing and button sewing, seam finishing and embroidery. Computer controlled modern machines are used to achieve very complex patterns. Large embroideries can be machine-produced based on designs developed on screen using AutoCAD or other design software’s. The software allows the designer to shrink, enlarge, rotate, mirror designs, and select colours and types of stitches that can then be embroidered on materials ranging from satin to leather.

Defects in Garments

For the garments industry, product quality is calculated in terms of quality and standard of fibers, yarns, fabric construction, colour fastness, designs and the final finished garments. Quality control in terms of garment manufacturing, pre-sales and posts sales service, delivery, pricing, etc are essential for any garment manufacturer, trader or exporter. Certain quality related problems, often seen in garment manufacturing like sewing, colour, sizing, or garment defects should never be over looked.
**Sewing defects**

Open seams, wrong stitching techniques, non-matching threads, and missing stitches, improper creasing of the garment, erroneous thread tension and raw edges are some of the sewing defects which can affect the garment quality adversely.

**Colour defects**

Variation of colour between the sample and the final garment, wrong colour combinations and mismatching dyes should always be avoided.

**Sizing defects**

Wrong gradation of sizes, difference in measurement of various parts of a garment like sleeves of XL size for body of L size garment can deteriorate the garments beyond repair.

**Garment defects**

Broken or defective buttons, snaps, stitches, different shades within the same garment, dropped stitches, exposed notches and raw edges, fabric defects, holes, faulty zippers, loose or hanging sewing threads, misaligned buttons and holes, missing buttons, needle cuts or chews, pulled or loose yarn, stains, unfinished buttonhole, short zippers, inappropriate trimmings etc. all can lead to the end of a brand name even before its establishment.
4.7 Major Garments players in the Indian readymade garments Industry

These are some of the major Indian Garments industries which have a major share in the manufacturing, retailing in domestic as well as exports market especially to USA, EU and other countries. Among various the Top 20 are as follows.

1. Madura Garments (Indian rayon)
2. Arvind Mills
3. Raymond Limited
4. Alok Industries ltd
5. Welspun India
6. Bombay Dying
7. Abhishek industries
8. Sangam Indian ltd
9. Provogue India ltd
10. Wills Life Style (ITC)
11. Gokaldas Exports
12. Indo Rama Synthetics ltd
14. Bombay Rayon Fashion ltd
15. S.Kumar’s Nationwide ltd
16. GHCL ltd
17. Kouton Retail India ltd
18. Pantaloons India ltd
4.8 Market Segments for Garments Industry

The Product line of Indian readymade garments industries can be divided into 2 parts. One is concerned to the domestic demand and another to the exports. The domestic market is a significant segment for the Indian apparel industry. Of the total apparels manufactured in India, nearly 80 per cent are sold domestically and only 20 per cent of the domestic production is exported (in value terms). However, in value terms, exports account for nearly 27 per cent of the revenues of the Indian RMG manufacturers. Indian apparels are mainly exported to the US and EU-27 countries. These two regions account for nearly 90 per cent of the total apparel exports from India. Other importing countries are Canada, Japan and markets in the Middle East. The market segment of readymade garments sector can be divided into the following segments.

Men's Clothing

Men have, of late, become very fashion conscious. As a result, along with the formal and casual wears for men, the market is open for variety of formal as well as designer cloths including jackets, jeans, pants, shirts, shorts, trousers, T-shirts, under wears, sports wears, beach wears etc.
Women's Clothing

Fashion keeps on changing and more so for women's clothing. From formal, casual, and corporate wears to designer and exclusive wear, women's clothing doesn't know any boundaries. Ladies Frocks, tops, capris, skirts, T-Shirts, tunics, jeans, nighties, shirts, shorts, trousers, swimsuits, outerwear, waistcoats, wraparound, blouses- all have their own ever increasing markets.

Kids Clothing

The market of children's wear is expanding at a very fast rate competing with the women's apparel sales. Kids Caps, dresses, jeans, jumpers, school uniforms, shirts, shorts, T-Shirts are all manufactured on large scales to fulfill the demands of the market. Infant wears like bibs, diapers etc. are also in great demand.

Industrial Clothing

With the increasing industry establishments and the growing concern of the manufacturers towards the safety of their workers, the market for industrial clothing is growing due to the demand of work apparels and protective garments. Boiler suits, industrial gloves, industrial leather jackets, industrial safety trousers, industrial tool bags, leather leg guard, leather safety sleeves- the list is increasing continuously.
Animal Clothing

People these days have become more adventurous and love such sports where there is thrill. Along with other water and adventurous sports, the sports using various animals are also liked by them. Apart from this, animals are also widely used in farms etc. As such, the market for such items as animal blankets, harness sets, horse boots, bridle, halters, harness and saddle are growing very fast.

Table 4.4: Domestic market break-up in 2008

<table>
<thead>
<tr>
<th>RMG Segments</th>
<th>Value (Rs Billion)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Textile Market</td>
<td>1,466</td>
<td></td>
</tr>
<tr>
<td>Readymade Garments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tailor made</td>
<td>350</td>
<td>23.9</td>
</tr>
<tr>
<td></td>
<td>1,116</td>
<td>76.1</td>
</tr>
<tr>
<td>Domestic RMG Market</td>
<td>1,116</td>
<td></td>
</tr>
<tr>
<td>Men’s wear</td>
<td>522</td>
<td>46.8</td>
</tr>
<tr>
<td>Women’s wear</td>
<td>463</td>
<td>41.5</td>
</tr>
<tr>
<td>Kids wear</td>
<td>131</td>
<td>11.7</td>
</tr>
</tbody>
</table>

Source: CRISIL Research, Readymade garments (Annual review)-Feb 2007

4.8.2 Domestic Demand

The Domestic market can be segmented into Men’s wear (RMG of males aged above 15 years), Women’s wear (RMG for females aged above 15 years) and kids'
wear (RMG for children aged up to 15 years). The size of each of these segments is estimated to be around Rs 522 billion, Rs 463 billion and Rs 131 billion, respectively in the year 2008-09. The major part is covered by men’s wear that is 46.8% and then by women’s wear having share of 41.5% and a least is covered only by kid’s wear that is 11.7%. (CRISIL Research, pp1-2)

It is estimated that the size of the domestic RMG market had gone upto Rs 1,116 billion in 2008. The domestic market size (value) had grown at a CAGR of 7.3 per cent from 2004 to 2008.

The key determinants of demand for garments in the domestic market are:

Size of the population

i. Age

ii. Gender

iii. Rising income levels and income distribution patterns

iv. Allocation of private final consumption expenditure on clothing at different income levels

v. Consumers' preference for RMG versus tailored garments

Instant availability

Brand consciousness
Credit facility (use of credit card while shopping)

Fashion cycle (time factor)

The domestic RMG market is largely dominated by unorganised players. However, in today's scenario, the changing mindsets of consumers towards shopping and spending, increasing brand consciousness and disposable income of the Indian consumer are favouring the growth of the market for branded apparel segment. Some of the important brands playing in the Indian market are as follows.

1. Men’s wear segment

The market size of the men's wear segment was estimated at Rs 522 billion in 2008, translating into per capita expenditure of Rs 1,034 per annum. Men's clothing is the largest segment within the domestic apparels market, accounting for nearly 46.8 per cent of the total market size. This segment has grown at a CAGR of 7-8 percent from 2004-08. Men’s wear segment can be categorized as follows.(CRISIL Research, pp5-6)

A). Shirts

The size of the men's shirt market is estimated at around 370 million pieces or Rs 176 billion in 2008, accounting for nearly 35.6 per cent of the total men's wear segment. The market size (value) of shirts has grown at a CAGR of 12.3 per cent from 2004 to 2008. The shirt market can be further classified into office wear
(formal and semi-formal) and non-office wear (leisure wear and occasion/party wear). The men's shirt market is characterised by the highest retail and brand penetration and therefore, has intense competition. So, shirt manufacturers have tried to differentiate by positioning themselves, at a broad level, at specific price points such as premium segment, economy segment and at niche levels by the type of wear such as formal, casual or party wear. Most manufacturers are increasingly focusing on the smart casual or the semi-formal segment, which is gaining acceptance across most employed urban youth.

**B). Trousers**

The size of the market for men's trousers is around 170 million pieces or Rs 98 billion, thereby accounting for nearly 19.2 per cent of the total men's wear segment. The size of the market (value) for readymade trousers has grown at a CAGR of 8.4 per cent from 2004 to 2008. The proportion of tailored trousers is high relative to the shirts market. The share of ready-mades is, however, fast increasing with a wider size and price range being offered by manufacturers. The categorisation of a pair of trousers as formal or casual wear is not as well-evolved in the trousers segment as in the shirts market. For instance, although khakis are casual wear, they are increasingly accepted as formal wear in most offices. Trousers made out of a polyester-viscose blended fabric will typically be strict formal wear.
C) T-shirts and Jeans

T-shirts and jeans are categorised as casual clothing in the men's segment. It is worn across age groups but is more popular among the youth. The demand for T-shirts and jeans is driven by fashion trends that change frequently. Thus, this category is highly susceptible to changing consumer tastes and preferences. Earlier, consumers would buy low priced T-shirts, as they have shorter life but, now, with changing trends there is increasing acceptance for premium branded T-shirts. The estimated size of the men's T-shirt market is around 85 million pieces or Rs 49 billion in 2008, contributing 9.6 per cent of the total men's wear segment. The demand for T-shirts has grown at a CAGR of 6.3 per cent in value terms from 2004 to 2008.

2. Women's wear segment

The market size of the women's wear segment was estimated at Rs 463 billion in 2008, thus accounting for 42 per cent of the total domestic RMG market. This translates to per capita expenditure of Rs 1,210 per annum. Demand in the women's wear segment has grown at a CAGR of 7-8 per cent (value terms) from 2004 to 2008. Consumption has increased mainly due to the growing number of working women and the changing psychology of the Indian society.( CRISIL Research, pp6-7)
A) Sarees

Sarees are a part of the cultural and traditional attire worn by Indian women and is generally preferred by married women. With changing tastes and social trends, Indian women prefer more easy-to-wear apparel such as salwar-kameez, etc. So, the demand for sarees has seen a lower growth (in volume terms) as compared to the other categories within the women's wear segment. At an aggregate level, the sarees market has grown at a CAGR of 12 per cent in value terms between 2004 and 2008. The estimated size of this category is Rs 183 billion in 2008, accounting for around 40 per cent of the Indian women's wear market.

B) Ethnic dresses

This is the next prominent category in the Indian women's wear segment. This traditional Indian attire consists of churidar/salwar and kurta/kameez with dupatta. These are referred to as Punjabi dresses in layman terms. This category is also characterised by the availability of products at wide price points ranging from low prices to expensive embroidered dresses or designer dresses used as occasional wear. The estimated size of this category in 2008 was Rs 108 billion, accounting for nearly 23 per cent of the Indian women's wear market. The market size of dresses has grown at a CAGR of 9-10 per cent from 2004 to 2008 in value terms.
C) Bottom-wear

Trousers and skirts account for a small portion of the women's wear market. This is because they are largely considered western wear and in India, their usage is restricted to working women residing in large metropolitan cities. The estimated size of this category is Rs 39 billion in 2008. On a small base, this category has seen the highest growth in the women's wear segment - a CAGR of 13-14 per cent (value terms) from 2004 to 2008. Growth in this category can mainly be attributed to the changing mindset of the Indian women and society as a whole, and their willingness to experiment with western attire.

D) T-shirts and Tops

T-shirts and tops are casual forms of attire. Worn with trousers, denim jeans or skirts, this category is also an adoption of western attire by Indian women. The estimated market size for this category is Rs 41 billion in 2008 and has grown at a CAGR of 10-12 per cent from 2004 to 2008.

E) Kids' segments

This segment includes ready-to-wear apparels for girls and boys between 0-15 years. The estimated market size of the kids' wear segment was Rs 131 billion (non-uniform + uniform) in 2008, accounting for 10 per cent of the total domestic
garments market. This segment has grown at a CAGR of 5-6 per cent from 2004 to 2008. The average per capita expenditure in this segment amounts to Rs 590.

4.8.2 Export of Readymade Garments

The export market of garments industries is around 35 percent of the total RMG production. Among the total exports 90 percent of the exports go to US and EU and only 10 percent to rest of the world. For the clear vision the data from 2005 to 2008 has been taken into consideration. For 2008, RMG exports to the US and EU stood at Rs 133 billion ($3.07 billion) and Rs 247 billion (3.89 billion euro), respectively. 90 per cent of the US clothing demand for 2008 was met through imports, while for the EU, RMG imports accounted for around 54 per cent of its total clothing requirement in value terms. India's exports share to the US was 3.9 per cent (in volume terms) and 4.3 percent (in value terms). Similarly, in the EU Extra market, its share stood at 5.4 per cent (in volume terms) and 6.5 per cent (in value terms). Although Indian exports have gained momentum post-abolition of quotas, they have continued to face stiff competition from Chinese exporters.

Review of exports to the US

We have studied two of our important markets for apparel exports as shown below. For 2005-08, the total US apparel imports increased at a CAGR of 1.3 per cent in value terms and 1.0 per cent in volume terms. For the same period, India's apparel
exports to the US increased at a CAGR of 1.1 per cent in value ($) and 3.8 per cent in volume terms, thus accounting for 31 per cent of India's RMG exports.

Table 4.5: India's exports of Readymade Garments to US

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume Meters (Billion sq Mtr)</th>
<th>Value in $ (Billion)</th>
<th>Value in Rs (Billion)</th>
<th>Exchange Rate. Rs/$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0.8</td>
<td>3.0</td>
<td>3.8</td>
<td>44.1</td>
</tr>
<tr>
<td>2006</td>
<td>0.8</td>
<td>3.2</td>
<td>3.8</td>
<td>45.3</td>
</tr>
<tr>
<td>2007</td>
<td>0.9</td>
<td>3.2</td>
<td>3.7</td>
<td>41.4</td>
</tr>
<tr>
<td>2008</td>
<td>0.9</td>
<td>3.1</td>
<td>3.5</td>
<td>43.5</td>
</tr>
<tr>
<td>CAGR</td>
<td>3.8%</td>
<td>1.1%</td>
<td>-2.6%</td>
<td></td>
</tr>
</tbody>
</table>

Graph 4.5: India's exports of Readymade Garments to US
a. **Cotton apparels**

Cotton apparel constituted nearly 86.5 per cent of the total apparels exported by India to the US in 2008. India's exports of cotton-based apparels to the US have grown at a CAGR of 4.5 per cent from 2005 to 2008. In 2008, India's market share in the US cotton-based apparel imports improved from 5.6 per cent in 2005 to 6.0 per cent in 2008. Some of the key cotton apparel products that account for a significant portion in India's export basket to the US are analyzed below.

**Table 4.6 India’s export of different Garments categories to US.**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>No 1 Total Apparels</td>
<td>2976</td>
<td>790</td>
<td>3073</td>
<td>883</td>
<td>1.1</td>
<td>3.8</td>
</tr>
<tr>
<td>31 Cotton Apparel</td>
<td>2307</td>
<td>614</td>
<td>2630</td>
<td>766</td>
<td>4.5</td>
<td>7.6</td>
</tr>
<tr>
<td>338 MB Knit Shirts</td>
<td>412</td>
<td>50</td>
<td>498</td>
<td>69</td>
<td>6.5</td>
<td>11.1</td>
</tr>
<tr>
<td>339 WG Knit Shirts</td>
<td>202</td>
<td>30</td>
<td>341</td>
<td>55</td>
<td>19.1</td>
<td>21.9</td>
</tr>
<tr>
<td>340 MB Woven Shirts</td>
<td>288</td>
<td>81</td>
<td>213</td>
<td>52</td>
<td>-9.6</td>
<td>-13.5</td>
</tr>
<tr>
<td>341 WG Woven Shirts</td>
<td>361</td>
<td>82</td>
<td>295</td>
<td>55</td>
<td>-6.5</td>
<td>-12.6</td>
</tr>
<tr>
<td>347 MB Trousers</td>
<td>139</td>
<td>25</td>
<td>222</td>
<td>39</td>
<td>16.8</td>
<td>16.5</td>
</tr>
<tr>
<td>348 WG Trousers</td>
<td>148</td>
<td>30</td>
<td>283</td>
<td>67</td>
<td>24.2</td>
<td>31.2</td>
</tr>
</tbody>
</table>
Graph 4.6: India’s export of different garments categories to US in 2005 & 2008

Review of key product categories

Men's and boy's cotton knit shirts (338)

Exports for men's and boys’ cotton knit shirts in 2008 constituted 16.2 per cent (in value) of India's apparel exports to the US. India's exports for this category of apparel to the US grew to $498 million in 2008 from $412 million in 2005. India has managed to show a marginal increase in the market share (in value terms).
China had doubled its market share from 4.2 per cent in 2005 to 10 per cent in 2008.

Women’s and Girls’ Cotton Knit shirts or blouses

Exports of women and girls' cotton knit shirts and blouses accounted for 11.1 per cent (in value terms) of India's total apparel exports to the US in 2008 as against 6.8 per cent in 2005. India's exports to the US in this category were $202 million in 2005, which grew to $341 million in 2008. India managed to grab only 4.1 per cent of the market share (in value terms) in 2008 in this category. This was an improvement over 2005, when India's market share was merely 3.0 per cent of the total US imports of women and girls' cotton knit shirts and blouses.

Men's and boy's cotton woven shirts (340)

Exports for men's and boys' cotton woven shirts were 6.9 per cent of India's apparel exports to the US in 2008. India's exports for this category of apparels to the US declined to $213 million in 2008 from $288 million in 2005. India's market share for this category has declined continuously whereas Bangladesh and China have been significant gainers.

Women and Girls Cotton bottom wear (341)

This category accounted for 12.1 percent of India’s total apparel exports to the US in 2005 but declined to 9.6 percent in 2008. India’s market share in 2008 dropped
to 18.4 per cent (in value terms) from 23.8 per cent in 2005 for US cotton imports of woven shirts and blouses.

Men's and boy's cotton bottom wear (347)

Men's and boys' cotton bottom wear apparel comprised 7.2 per cent of India's total apparel exports to the US in 2008. India's exports for this category of apparel to the US increased from $139 million in 2005 to $222 million in 2008. India managed to capture 4.1 per cent market share (in value terms) in 2008 which was an improvement over 2.6 per cent in 2005 in the US men's and boy's cotton bottom wear apparels.

Women's and girl's cotton bottom wear (348)

Exports of women and girl's cotton bottom-wear accounted for 9.2 per cent of India's total apparel exports to the US in 2008 as against 4.9 per cent in 2005. India's exports to the US in this category were $148 million in 2005, which improved to $283 million in 2008. India's market share (in value terms) in US imports for women and girls' cotton bottom-wear has grown from 2.1 per cent in 2005 to 4.2 per cent in 2008.

**Review of exports to EU**

For 2005-08, total EU apparel imports increased at a CAGR of 6.4 per cent in value terms and 5.4 per cent in volume terms.
Table 4.7: India’s Garments export to EU

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume(Kg) (Euro bln)</th>
<th>Value (Rs bln)</th>
<th>Value (Euro bln)</th>
<th>Exchange Rate Rs/ Euro</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>212.6</td>
<td>178</td>
<td>3.2</td>
<td>54.9</td>
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<tr>
<td>2006</td>
<td>226.7</td>
<td>217</td>
<td>3.8</td>
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<tr>
<td>2007</td>
<td>239.8</td>
<td>217</td>
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<td>56.6</td>
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<tr>
<td>2008</td>
<td>248.0</td>
<td>250</td>
<td>3.9</td>
<td>64.1</td>
</tr>
<tr>
<td>CAGR</td>
<td>5.3%</td>
<td>12.0%</td>
<td>6.3%</td>
<td></td>
</tr>
</tbody>
</table>

Fig 4.7: India’s Garments export to EU from 2005 to 2008
Table 4.8: India’s different Garments categories exports to EU.

<table>
<thead>
<tr>
<th>Category name</th>
<th>2005</th>
<th>2008</th>
<th>CAGR(2005-08)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value (Bln)</td>
<td>Volume (Billion Kg)</td>
<td>Value (Bln)</td>
</tr>
<tr>
<td>Total garments export</td>
<td>3239</td>
<td>213</td>
<td>3895</td>
</tr>
<tr>
<td>MB Trousers</td>
<td>140</td>
<td>12</td>
<td>242</td>
</tr>
<tr>
<td>WG Bottom wear</td>
<td>734</td>
<td>35</td>
<td>806</td>
</tr>
<tr>
<td>MB Shirts</td>
<td>300</td>
<td>18</td>
<td>424</td>
</tr>
<tr>
<td>WG Shirts</td>
<td>466</td>
<td>17</td>
<td>621</td>
</tr>
<tr>
<td>T-Shirts</td>
<td>567</td>
<td>41</td>
<td>703</td>
</tr>
<tr>
<td>Jersey</td>
<td>196</td>
<td>15</td>
<td>205</td>
</tr>
<tr>
<td>Others</td>
<td>837</td>
<td>76</td>
<td>895</td>
</tr>
</tbody>
</table>

Men's and boy's bottom wear

Exports for men's and boy's bottom-wear is 6.2 per cent of India's total apparel exports to the EU in 2008. India's exports to the EU for this category were 140 million Euros in 2005 which increased to 242 million Euros in 2008. However, India's market share (in value terms) in total EU imports for this category is 3.4 per cent in 2008 and 3.2 per cent in volume terms.
Women's and girl's bottom wear

Exports of women's and girls' woven bottom wear apparel formed 20 per cent of India's total apparel exports to the EU in 2008. India's exports of women's bottom wear apparel to the EU increased from 34 million Euros in 2005 to 806 million Euros in 2008, thereby witnessing a 4.2 per cent CAGR from 2005-2008. During this period, India's market share (in value terms) in total EU imports for this category has remained stable.

Women's and girl's blouses/shirts

Exports of women's and girls' woven blouses and shirts formed 16 per cent of India's total apparel exports to the EU in 2008. India's exports to the EU for this category of women's apparel increased from 466 million Euros in 2005 to 621 million Euros in 2008, thereby witnessing a 10.1 per cent year-on-year growth. India's market share (in value terms) in the total EU market for this category was 21.5 per cent in 2005, which decreased to 18.7 per cent in 2008.

Men's and boy's shirts

Exports of men's and boys' shirts stood at 11 per cent of India's total apparel exports to the EU in 2008. India's exports to the EU for this category of women's apparel increased from 300 million Euros in 2005 to 424 million Euros in 2008, thereby witnessing a 12 per cent year-on-year growth. India's market share (in
value terms) in total EU market for this category has increased from 10.2 per cent in 2005 to 12.2 per cent in 2008.

Jerseys / pullovers

Exports of jerseys/pullovers were 5.2 per cent of India's total apparel exports to the EU in 2008. India's exports for this category of apparel to the EU increased from 196 million Euros in 2005 to 205 million Euros in 2008, witnessing a y-o-y growth of 1.6 per cent. India's market share (in value terms) in total EU markets for this category decreased from 2.9 per cent in 2005 to 2.5 per cent in 2008.

T-shirts and vests

Exports of T-shirts and vests formed 18 per cent of India's total apparel exports to the EU in 2008. India's T-shirt exports to the EU increased sharply from 567 million euros in 2005 to 703 million euros in 2008, thus witnessing a y-o-y growth of .4 per cent. India's market share (in value terms) in the total EU market for T-shirts increased from 9.2 per cent in 2005 to 10.2 per cent in 2008.

4.9 Multi Fibre Arrangements (MFA)

The quantitative restrictions on textile imports from developing countries were first introduced in 1930s, mainly directed against the increasingly competitive Japanese cotton textile industry. It was Japan's textile exports to the industrial
countries, which spearheaded its export-led industrialization after the Second World War. The industrial countries came under pressure for protecting their textiles and apparel sectors not only because of international competition but also mainly due to shrinking domestic industry as a result of sluggish domestic demand (Keesing and Wolf, 1980).

International trade in agricultural products and in textiles and clothing was gradually taken out of reach of GATT-1947 disciplines starting in 1950s. The textiles and clothing sectors in the developed countries were increasingly coming under pressure from relatively cheap imports of these products from the developing countries. The developing countries had gradually been acquiring comparative advantage in these sectors, which were high on labour intensity but relatively low on the required levels of skill, scale, technology and capital. 2 The developed countries aimed at protecting employment of skilled and semi-skilled workers in textiles and clothing sectors, which, as of 1960s, accounted for a major share of employment in the manufacturing sectors of many OECD countries (Hoekman and Kostecki, 1995). Instead of permitting reallocation of resources in line with shifting comparative advantage, the developed countries chose to limit imports of textile and clothing products. Despite such protection, total employment in these sectors along with the real income of the low-skilled workers declined steadily. Low-income groups were especially hit hard due to rise in prices
of lower-quality garments as the result of controlled imports thereof. Estimates for
Canada revealed that the relative burden of protection is four times higher for low-
income consumers than for higher income groups (UNCTAD, 1994). Despite
Japan's "voluntary" export restraints, world trade in cotton textiles got restricted
through the Short-Term Arrangement (STA) on Cotton Textiles under the auspices
of the GATT Dillon Round (1961) followed by a Long-Term (LTA) Arrangement
in 1962. However, textile exports of developing countries to industrial countries
continued to expand during the 1960s due to strengthened competitiveness of the
developing countries arising from technological upgradation as well as emergence
of synthetic fibres (Yang et al, 1997). Restrictions on Japanese cotton textile
exports had also led to rapid growth of exports from developing Asian countries,
namely, Hong Kong, Korea and Taiwan (Keesing and Wolf, 1980).

The renewed threat of competition from developing countries was followed by
four successive agreements on Multi-Fibre Arrangements commencing with MFA-
I in 1974. MFA-IV was signed in 1986 with extension up to 1991 when it was
extended further till 1994. MFA-IV had forty-five signatories including eight
importers (developed countries) and thirty-seven exporters (developing countries).
The scope of MFA was progressively broadened to include all types of fibres.
4.9.1 Economics of MFA

The Multi-Fibre Arrangement provided a framework under which developed countries imposed quotas on export of yarn, textiles and apparel from developing countries. The MFA runs counter to the spirit of the multilateral trading system, which promotes ban on quantitative restrictions, and prohibition of discrimination between suppliers (Martin, 1996).

The MFA framework provides for imposition of import quotas by developed countries on the exports of textile and apparel products from developing countries. The quotas are usually negotiated bilaterally under the threat of unilateral restraints by the importer. These quotas are specific to particular product categories and are defined by fibre and function. This arises discrimination not only against specific fibres and products but also among exporting countries (Martin, 1996). The governments of the exporting countries adopt voluntary export restraints (VERs) and allocate export quotas to individual exporting firms on the basis of certain criteria like past performance and/or current exports of unrestricted products. The binding quotas lead to rents being associated with quota rights, which command varying prices in different countries depending upon the severity of restrictions. Many countries allow quota rights to be traded among exporters. An exporting firm either has to buy a quota or forego the sale of quota
right that it might hold. The quota rent thus adds to the cost of export, which is analogous to the cost imposed by an export tax.

The MFA imposes heavy costs of protection on textiles and apparel importing developed countries as the quotas induce increase in costs of the suppliers and hence in prices at which they are willing to supply textiles and clothing. The importing countries also forgo conventional benefits of import protection, which potentially arise through import duty revenues or quota rents, unless there is some rent sharing with the exporting firms (Martin, 1996). Though exporting countries benefit from higher prices in the restricted markets, they lose from lower prices in the unrestricted markets. Both importing and exporting countries suffer a loss of efficiency as the former do not benefit from the flexibility of efficient sourcing of imports across supplying countries while the exporting countries have to scale back production in sectors for which they have comparative advantage (Elbehri et al, 1998).

One of the most important accomplishments of the Uruguay Round was the Agreement on Textiles and Clothing (ATC), which would bring MFA-restricted goods under GATT disciplines. Under this liberalization process, the MFA quota-regime gradually phased out during a 10-year transition period commencing from 1995. The import tariffs are also being reduced on both textiles and clothing and on a wide range of other goods. However, the rates of tariff reduction on
textiles are considerable lower compared to most other goods. The MFA abolition offers great opportunities for exporting countries, particularly to expand textile and clothing exports and stimulate demand for fibres (Elbehri et al., 1998). The expansion of these labour-intensive sectors is likely to have a positive impact on employment in exporting countries. Tightly restricted exporters like India, Pakistan and Sri Lanka are more likely to be net beneficiaries under the ATC. The less restricted exporters (Bangladesh) or mature markets like South Korea, Taiwan and Hong Kong, which have large quotas relative to their export levels (Yang et al., 1997; and Martin 1996). India may also gain more than some other textile and apparel exporters from MFA elimination since it has been shown that these quotas tend to discriminate more strongly against relatively labour-intensive component of MFA controlled goods, viz. cotton based fibres, which dominate India in India's exports (Martin, 1996). Since India has a natural comparative advantage in cotton and cotton-based fibres, abolition of the MFA has an implicit potential to benefit India's cotton industry as well as cotton based textiles and clothing sectors (Elbehri et al., 1998).

4.9.2 Agreement on Textile and Clothing (ATC)

One of the most important accomplishments of the Uruguay Round was the Agreement on Textiles and Clothing (ATC), which brought MFA-restricted goods under GATT disciplines. Under this liberalization process, the MFA quota-regime
was gradually phased out during a 10-year transition period commencing from 1995 till 1st Jan 2005. The import tariffs were also being reduced on both textiles and clothing and on a wide range of other goods.

However, the rates of tariff reduction on textiles are considerably lower compared to most other goods. The MFA abolition offers great opportunities for exporting countries, particularly in South and Southeast Asia, to expand textile and clothing exports and stimulate demand for fibres (Elbehri et al., 1998). The expansion of these labour-intensive sectors is likely to have a positive impact on employment in exporting countries. Tightly restricted exporters like India, Pakistan and Sri Lanka are more likely to be net beneficiaries under the ATC. India have also gained more than some other textile and apparel exporters from MFA elimination since it has been shown that these quotas tend to discriminate more strongly against relatively labour-intensive component of MFA controlled goods, viz. cotton based fibres, which dominate India's exports (Martin, 1996). Since India has a natural comparative advantage in cotton and cotton-based fibres, abolition of the MFA has an implicit potential to benefit India's cotton industry as well as cotton based textiles and clothing sectors (Elbehri et al., 1998).

ATC is a transitory regime between the MFA and the integration of trading in textiles and clothing in the multilateral trading system. The ATC provided for a stage-wise integration process to be completed within a period of ten years (1995-
2004), divided into four stages starting with the implementation of the agreement in 1995. The product groups from which products were to be integrated at each stage of the integration included (i) tops and yarns; (ii) fabrics; (iii) made-up textile products; and (iv) clothing.

The ATC mandated that importing countries must integrate a specified minimum portion of their textile and garment exports based on total volume of trade in 1990, at the start of each phase of integration. In the first stage, each country was required to integrate 16 percent of the total volume of imports of 1990, followed by a further 17 percent at the end of first three year and another 18 percent at the end of third stage. The fourth stage would see the final integration of the remaining 49 percent of trade.

4.9.3 Impact of MFA on the Export of Indian Readymade garments

Table 4.9: Exports of Knit and Woven Garments to the US

<table>
<thead>
<tr>
<th>Origin</th>
<th>Amount Million (US $)</th>
<th>Rate of Change (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
<td>2005</td>
</tr>
<tr>
<td>World</td>
<td>66875</td>
<td>70811</td>
</tr>
<tr>
<td>China</td>
<td>10723</td>
<td>16810</td>
</tr>
<tr>
<td>Mexico</td>
<td>6845</td>
<td>6230</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2402</td>
<td>2882</td>
</tr>
<tr>
<td>India</td>
<td>2277</td>
<td>3059</td>
</tr>
</tbody>
</table>
Table 4.9 exhibits detailed structural changes in the composition of source countries supplying the US market. The annual growth rate of garment exports from China to the United States was 56.77 percent in 2005, which was extremely high in comparison with the growth rate of total garment imports to the United States, which was 5.89 percent. India was the second fastest among the top 4 exporters, with a growth rate of 34.31 percent. Among South Asian countries Indonesia substantially extended garment exports to the United States with a percentage of 19.99. Mexico suffered a lot with negative growth of -8.99 percent.

The whole picture visibly changed due to the MFA phase out after 2005 (Table 4.9). The growth in garment exports from India was attenuated, and the growth rate declined to 6.00 percent in 2006 which was a little higher than the decline in the total garment imports in the United States of 3.65 percent. On the other hand, other Asian exporters kept or recovered their growth momentum. Mexico suffered to a big extent with a negative growth of 12.55%.

### Table 4.10: Exports of Knit and Woven Garments to the EU

<table>
<thead>
<tr>
<th>Origin</th>
<th>Amount Million (US $)</th>
<th>Rate of Change (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
<td>2005</td>
</tr>
<tr>
<td>World</td>
<td>66,552</td>
<td>69,864</td>
</tr>
<tr>
<td>China</td>
<td>13714</td>
<td>20361</td>
</tr>
<tr>
<td>Turkey</td>
<td>9348</td>
<td>9776</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>4578</td>
<td>4356</td>
</tr>
<tr>
<td>India</td>
<td>3020</td>
<td>3992</td>
</tr>
</tbody>
</table>
As the export of Garments to the EU is concerned China and India expanded garment exports to the EU in 2005. The growth rates for the two countries up to the third quarter of the year were 54.41 percent and 33.74 percent, respectively (Table 2). China’s growth rate for January-October was lowered and even smaller than the world average of 10.74 percent in 2006. India’s growth rate was also attenuated to 17.65 percent with a decline rate of just half in the in 2004.

**Table 4.11: Exports of Knit and Woven Garments to Japan**

<table>
<thead>
<tr>
<th>Origin</th>
<th>Amount Million (US $)</th>
<th>Rate of Change( in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
<td>2005</td>
</tr>
<tr>
<td>World</td>
<td>20460</td>
<td>21188</td>
</tr>
<tr>
<td>China</td>
<td>16862</td>
<td>17448</td>
</tr>
<tr>
<td>India</td>
<td>107</td>
<td>141</td>
</tr>
<tr>
<td>Indonesia</td>
<td>117</td>
<td>115</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>22</td>
<td>22</td>
</tr>
</tbody>
</table>

China has been dominant in terms of its share of Japan’s garment imports with a share of 5.62 percent in post MFA phase out with a rising share of more than 50 percent. But as the case of India is concerned its share has declined in 2006 in comparison to pre MFA phase out period that was 31.63 percent in 2004 and 20.64 percent in 2006.
4.10 Government Policies and Regulations in Readymade garments

Industries

Government policies have a major impact on the textile industry. The textile industry is governed by the National Textile Policy (NTP), which is announced once every decade by the Ministry of Textiles. The policy aims to ensure that the industry is internationally competitive in terms of manufacturing practices and exports. Apart from this, there are various statutes, including fiscal policies (governing customs, excise, sales tax, etc), rules, initiatives, incentives, etc, that have an impact on the textile industry.

4.10.1 Recent government measures

The government policies have by and large been favourable for the sector. In the Union Budget 2009-10, the 2 per cent interest subvention on pre-shipment and post-shipment export credit has further been extended for 6 months till March 31, 2010. (Earlier it was applicable till March 31, 2009, as per the first fiscal stimulus package which was further extended till September 30, 2009, in the interim budget presented on February 16, 2009.) This recent extension of the interest subvention will lower interest costs on working capital loans by approximately 1 per cent, thereby benefiting exporters. On February 28, 2009, the government announced a
2 per cent duty credit scrip for garment exporters on their value of exports. (Duty credit scrip is a substitute for currency and is often a form of credit. It can be traded in the secondary market.) This scheme is applicable only to exports to the US and EU and is valid for a period of 6 months with effect from April 1, 2009. The move will benefit garment exporters marginally.

National Textile Policy

The last NTP was announced in 2000, with the following objectives:

1. To facilitate the textile industry to attain and sustain a pre-eminent global standing in the manufacture and export of clothing.

2. To equip the industry to withstand pressures of import penetration and maintain a dominant presence in the domestic market.

3. To liberalize controls and regulations so that different segments of the textile industry are enabled to perform in a greater competitive environment.

4. To enable the industry to build world-class, state-of-the-art manufacturing capabilities in conformity with environmental standards, and to encourage foreign direct investment (FDI) for this purpose as well as research and development in the sector.

5. To develop a strong multi-fibre base with thrust of product upgradation and diversification.
6. To sustain and strengthen the traditional knowledge, skills and capabilities of our weavers and craftsmen.

In order to achieve the above objectives, not only were various changes brought about in other existing fiscal and non-fiscal policies affecting the textile industry, but new incentives and initiatives were also rolled out for the sector. Earlier, the garment industry was reserved for the SSI sector and that had restricted growth in this industry for a very long time. Units could not bring in modern machinery on account of the Rs 30-million investment ceiling imposed on plant and machinery, resulting in poor economies of scale. However, the industry was de-reserved a few years ago — the woven sector in Union Budget 2001-02 and the knitwear sector in Union Budget 2005-06. This was an important step taken towards achieving the objectives of NTP, 2000. We will now study various measures and policies that impact the textile sector in general and RMG industry in particular.

**Customs duty**

The customs duty on readymade garments, home textiles, fabrics and spun yarn is currently prevailing at a high duty rate of 10 per cent (Union Budget 2008-09) to protect the indigenous industry from imports.

There are hardly any imports of readymade garment products into India. India is cost-competitive in manufacturing garments. Moreover, the customs duty on
garment imports is high and these have prevented imports of garments into India. However, of late, garment imports from countries like Nepal and China have been increasing and they account for 1-2 per cent of the domestic apparel sales.

**Excise duty**

The entire cotton textile chain (yarn, fabric and garments) falls under the optional duty regime and thus is practically duty-free. However, there is mandatory excise duty on the polyester chain (yarn, fabric and garments). The manufacturers of cotton-based readymade garments have the option either to pay 4 per cent excise duty and avail Cenvat credit on duty paid.

**Sales tax**

Textile products were covered under the Additional Duties of Excise (Goods of Special Importance) Act, 1957, under which, additional excise duty was levied on these products in lieu of exempting them from the levy of local sales tax. The state government was not allowed to impose any sales tax on textile articles. The objective of this regime was to ensure that the excise duty (in lieu of sales tax) on textile specially garment products is not very high and is standardised across the nation, as textile products form basic necessities of people and hence are very important to the economy. The Centre compensated the states for loss of revenues arising out of non-imposition of sales tax.
**Duty drawback**

The duty drawback scheme was also introduced to promote exports from India. Under this scheme, the exporters are allowed refund of the excise and import duties paid on raw materials so as to make the products more competitive in the international market. The duty drawback rates are prescribed for each product after considering the rate of excise and import duty on its raw materials. The garments sector is also covered under this scheme.

**Export Promotion Capital Goods (EPCG) Scheme**

The EPCG Scheme facilitates import of capital goods with duty at a concession of 5 per cent and appropriate export obligations. The garments producing machinery is also covered under this scheme, thereby promoting garment exports.

**Advance Licensing Scheme (ALS)**

The ALS allows duty-free import of raw materials to be used in goods that are exported to encourage exports. This scheme is extended to nearly 300 textile and clothing products including readymade garments.

**Liberalization of FDI policy**

From August 1991 to March 2009, India has attracted a total FDI of US$ 106 Bn, of which approximately US$ 90 billion was invested during Apr’ 2000 to Mar’ 2009. Extending its liberalization policies to other industries, India also raised the
level of foreign equity ownership permitted in civil aviation, refineries, some mineral mining, construction, industrial parks and commodity exchanges in January 2008. In the textile and apparel sector, 100% FDI is allowed under the automatic route. FDI in sectors to the extent permitted under automatic route does not require any prior approval either by the Government of India or Reserve Bank of India (RBI). FDI inflows for this sector account for about 1% of the total FDI inflows to the country.

Though the textile and apparel sector is considered as the sunshine sector of India, till date only 1% of total FDI inflow has come in this sector. However, given the advantages that India offers as an FDI destination, specific to textile and apparel sector, it is a matter of time that major Textile and Apparel Transnational Corporations (TNCs) recognize the real potential of India in this sector and significant investment follows. After China, India is the second most attractive destination for FDI in textile and apparel sector, other than South Asian countries of Bangladesh and Vietnam. These are the countries where the FDI and textile and apparel exports have seen a major growth. The primary reason for major investment in other countries has been duty free access to major markets, a parameter on which India ranks way behind. In order to achieve the projected growth of textile and apparel sector, it becomes still more important to make
efforts to educate the international investing community about the merits of investment in India.(Economy Watch, 2009).

4.10.2 Setting up modern laboratories

The Ministry of Textiles has assisted the Textile Committee in setting up modern textile laboratories to ensure that the garments exported from the country meet all the international environmental standards. The main objective of these institutions is to carry out research and render consultancy services (quality Management Service - ISO-9001) to industry on various aspects of textile technology with a view to reducing the cost and improving the quality and durability, reducing pollution, conserving energy and utilizing waste, adopting new technology and improving the technologies in the decentralized sectors. A large number of research projects of considerable importance are already going on in several fields of textiles. These associations are headed by Directors. These are as follows

Ahmadabad Textile Industry Research Association (ATIRA)

Bombay Textile Research Association (BTRA)

South India Textile Research Association (SITRA)

Northern India Textile Research Association (NITRA)

The Synthetic & Art Silk Mills Research Association (SASMIRA)

Man-made Textile Research Association (MANTRA)
Indian Jute Industry's Research Association (IJIRA)

Wool Research Association (WRA)

4.10.3 Technology Up gradation Fund Scheme (TUFS)

The Ministry of Textiles launched the Technology Up gradation Fund Scheme (TUFS) in 1999 with an objective to facilitate technology up gradation of textile units. The interest rates in India were very high during the 1990s. Accordingly, the Union Government set up a fund of Rs 250 billion under TUFS for providing aid to the textile projects commencing from April 1, 1999, through a 5 per cent interest subsidy on loans borrowed from specified institutions. The interest rates in India were very high in the 1990s. Also, the textile business is very capital intensive. The 5 per cent interest subsidy lent a much-needed helping hand to the industry for expansion and modernization. The scheme has been extended till the Eleventh Plan period. The government has indirectly favoured this sector through the TUFS, which provides for an interest subsidy of 5 per cent and enables players to expand/modernize at lower costs. However, to correct the skew in investments towards spinning, the government has decreased the interest rate subsidy on spinning machinery from 5 per cent to 4 per cent.
Scheme for integrated textile parks (SITP)

This is a scheme rolled out by the government to provide the garments industry with world-class infrastructural facilities including power, water, roads and drainage system, and assist the garment units to meet environmental norms. With this facility, huge investments in modern garments facilities are expected to come up, leading to huge integrated set-ups. This is a positive step towards making India a hub for garments products. In Union Budget 2009-10, the government has allocated Rs 3.77 billion to promote integrated textile parks. The amount is up from the Rs 2.8 billion allocated during the year 2008-09.

4.11 Organizations concerned to garments sector

Apparel Export Promotion Council (AEPC)

The Apparel Export Promotion Council (AEPC) was incorporated on February 22, 1978. It is the official body of apparel exporters in India that provides invaluable assistance to Indian exporters as well as importers/international buyers who choose India as their preferred sourcing destination for garments. The Council was administering the exports entitlements quota in respect of readymade garment items, which were subject to restraint in USA, European Union and Canada. AEPC is committed to satisfy the apparel exporters with the service efficiency in
achieving the growth of exports garments by exploring, sustaining & expanding
global markets, becoming one stop information centre providing export assistance
to garment exporters and bridge the gap between the exporters and overseas
buyers through dedicated efforts of employees and continual improvement of the
quality management system. Besides its headquarter at Gurgaon, the Council has
Regional Offices at New Delhi, Jaipur (Rajasthan), Ludhiana (Punjab), Mumbai
(Maharashtra), Chennai and Tirupur (Tamilnadu), Bangalore (Karnataka) and
Kolkata (West Bengal). (AEPC)

The Cotton Textiles Export Promotion Council (Texprocil)
The Cotton Textiles Export Promotion Council (TEXPROCIL), Mumbai was
incorporated under the Indian Companies Act, VII of 1913 in October, 1954 with
the pressing objectives of export promotion of cotton textiles. In the year under
review, the Cotton Textiles Export Promotion Council (TEXPROCIL), Mumbai
made a number of suggestions for strengthening
the export efforts and also to provide data for monitoring exports. The Council
continued to disseminate information on demand patterns, consumer preferences,
competing products/countries etc. with a view to assist Indian exporters to
compete effectively in the overseas markets. The Council also undertakes export
promotion measures to project the considerable product range of Indian cotton
textiles in India and abroad.
The Synthetic & Rayon Textiles Export Promotion Council (SRTEPC)

The Synthetic & Rayon Textiles Export Promotion Council (SRTEPC), Mumbai was incorporated in 1954 under the Indian Companies Act, 1913 with the basic objectives to establish, promote and operate maintain and increase the export of synthetic and/or cellulosic yarn, etc. In the period under review, the Council provided comprehensive inputs to the Government for modification in export import policy/procedures as well as disseminated information on demand patterns, fashion trends and prices of competing products in the overseas markets to enable Indian exporters to implement modernized cost-effective manufacturing techniques, product adaptation and diversification. The Council undertook several export promotion measures to generate greater awareness of Indian man-made textiles among overseas buyers.

Apparel International Mart (AIM)

The Apparel International Mart (AIM) has been constructed at Gurgaon in Haryana with a covered area of 3.5 lakh sq. ft., where International buyers can have the converge at one single source to access their requirements and conduct on-the spot business. A total of 223 showrooms have been booked against the available 229 showrooms. The events like Market Week and Markets Carnivals were organized during the year by the Council, where the showroom holders displayed their collections. The Apparel House has become an important landmark
in Gurgaon, and houses facilities like Auditorium, Exhibition Hall, Art Gallery, Cafeteria, and Plaza Area & Amphitheatre.

**Apparel Training & Designing Centres (ATDCs)**

The Apparel Training & Designing Centre was registered as a Society under Societies Registration Act on February 15, 1991 at New Delhi with the mission to upgrade the technical skills of the human resource employed in Garment Industry. There are 52 ATDC centre functioning across the country to provide trained manpower in the field of Pattern Making/ Cutting Techniques and Production Supervision and Quality Control Techniques to the Readymade Garment Industry so that quality garments are manufactured for the global market.

**Sardar Vallabhbhai Patel Institute of Textile Management (SVPITM)**

Sardar Vallabhbhai Patel Institute of Textile Management (SVPITM), Coimbatore is a National Level Autonomous Institution providing comprehensive education, training, consultancy and research in textiles management. The Institute has been set up by the Government of India, Ministry of Textiles and the Textiles Industry, registered under the Tamil Nadu Societies Registration Act, 1975 to cater to the long-felt need for management courses specializing in textiles.
Apparel Park for Exports Scheme (APEC)

With the objective of imparting a focused thrust to set up apparel units of international standards and to give a fillip to exports, the Government had launched the Apparel Park for Exports Scheme (APES), a centrally sponsored scheme. Twelve Project Proposals have been sanctioned for setting up Apparel Parks at Tronica City & Kanpur (U.P.), Surat (Gujarat), Thiruvananthapuram (Kerala), Visakhapatnam (Andhra Pradesh), Ludhiana (Punjab), Bangalore (Karnataka), Tirupur & Kanchipuram (Tamil Nadu), SEZ, Indore (Madhya Pradesh), Mahal (Jaipur, Rajasthan) and Butibori-Nagpur (Maharashtra). Developments of basic infrastructure facilities have been completed in eight projects, where textiles units have started commercial production. Assistance of Rs.128.69 Crore has been provided under the scheme for these projects.

National Institute of Fashion Technology (NIFT)

The National Institute of Fashion Technology was set up in 1986 is an autonomous Society in collaboration with the Fashion Technology (FIT), New York, to train professionals to meet the requirements of the textiles industry. The Institute has pioneered the evolution of fashion business education across the country through its network of seven centres at New Delhi, Bangalore, Chennai, Gandhinagar, Hyderabad, Kolkata and Mumbai. A Centre at Rae Bareli has been added from academic year 2007-08 and four Centres at Patna, Bhopal, Shillong
and Kannur have been added from academic year 2008-09. New NIFT Centre at Kangra has been inaugurated on 21/1/ 2009. NIFT, besides conducting regular professional undergraduate and postgraduate programmes in Design, Management and Technology, also offers short duration part-time courses under its Continuing Education (CE) Programme. The National Institute of Fashion Technology Act, 2006 came into force on July 14, 2006 and comes into effect from 1st April, 2007. The Act provides statutory status to the Institute and formally recognizes its leadership in fashion technology sector, and empowers NIFT to award degrees to its students. NIFT is the first institute in the world to award degrees in fashion education. (Ministry of Textiles, 2009).
REFERENCES

Ahluwalia, secretary, North India Textile Mills Association, interview by USITC staff, Feb. 11, 2000, New Delhi.


Chatterjee, Chandrima. 2005. Presentation on Indian Textiles, Post-MFA, Jawaharlal Nehru University, New Delhi, February 2005.


Ministry of Textiles, GOI. “Note on Indian Textie and Clothing Export” International Trade Section Updated on 11-05-09.


Tallam Venkatesh, president, Federation of Karnataka Chamber of Commerce & Industry, interview by USITC staff, Dec. 20, 1999, Bangalore, India.


V.K. Bhartia, vice president - marketing, Raymond (India) Ltd., interview by USITC staff, Jan. 31, 2000, Mumbai.
