





Indian Textile and Clothing Sector

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Source: Textile Review

Maximizing Growth and Value Addition with Special Allusion to Cotton Industry

India is a traditional textile -producing country with textiles in general, and cotton in particular, being major industries for the country. India is among the world's top producers of yarns and fabrics, and the export quality of its products is ever increasing. Textile Industry in India is a self-reliant and independent industry and has great diversification and versatility.

The Indian Textile Industry has an overwhelming presence in the economic life of the country. Apart from providing one of the basic necessities of life i.e. cloth, the textile industry contributes about 14% to the country's industrial output and about 17% to export earnings. This industry provides employment to maximum number of people in India, employing 35 million people. Besides, another 50 million people are engaged in allied activities.

On the eve of the Eleventh Five Year Plan, this sector is conceived in a much stronger position than it was at any point in the last six decades. The abolition of quota regime, a buoyant economy and a conducive policy environment provided by the Government have put the industry on the path of rapid growth. Simultaneously, based on achievements of targets made in the Tenth Plan in different sectors, the path forward in Eleventh Plan is worked out.

The Government of India has initiated a number of schemes. They are aimed at overall balanced growth of all the sectors, increasing job opportunities, increased per capita availability of cloth to clothe and better living standard to the growing middle class having surplus disposable income and growing population every year itself provides immense opportunities in domestic market and thus preparing road map of this vital industry growth on domestic as well as for capturing higher share of 7% from present 3 - 4% in international trade.

This paper is focused on the growth of Indian Textile and Clothing sector along with some strategies which can be implemented in order to enhance value addition to the Indian cotton sector which will be profitable to farmers and to the economy as a whole.

In view of the fact that time immemorial India has been the producer of cotton and the finest and most beautiful cotton fabrics. India enjoys the distinction of being the earliest country in the world to domesticate cotton and utilize its fiber for manufacture of fabrics. This affinity has endured through the centuries and today India ranks first in cotton cultivated area and second in production among all cotton producing countries in the world next to China.

Cotton is one of the principal crops of the country. It plays a vital role in the country's economy providing substantial employment and making significant contributions to export earnings. The ratio of the use of cotton to man-made fiber and man-made continuous filament yarn is 60: 40 for Indian textile industry (based on the financial year



2005-06). It engages around 6 million farmers while another about 40 to 50 million people depends on activities relating to cotton cultivation, cotton trade and it is processing for their livelihood. It is the principal raw material for the domestic textile industry.

India has brought about a quantitative and qualitative transformation in the production of cotton since her independence. Production and productivity of cotton in India have improved significantly during the past six decades. It increased from 2.79 millions of 170kgs each in 1947 to an estimated 310 millions of 170 kgs each in 2008-09.

Major Phases of development in India

The development of cotton cultivation falls into five distinct phases characterized by expansion of area under cultivation, by intensive cultivation with introduction of high yielding varieties, by steady increase in both area and productivity, by stagnation in area under cultivation, decline in productivity, and production and irrigation coverage at 1996-97 levels and finally by resurgence of the cotton sector from 2003 04 onwards. At the time of independence, mostly short and medium staple cotton were produced in the country and there were no long and extra long staple cotton during 1947-48; the same now constitute more than 40% of the production. Today India produces the widest range of cotton capable of spinning for 6s to 120s counts of yarn. The import of cotton, particularly of Egyptian and Sudanese 10ng and extra long staple cotton, which was a regular phenomenon till 1978-79, now taken place for extra long staple varieties (ELS) and for orders in which yarn importers specify the growth to be use. India has emerged as a net exporter of cotton in the mid-1990s and now again from 2005-06.

Quality of Indian Cotton

Apart from the giant strides in production and productivity, Indian cotton has also undergone qualitative transformation since independence. Development of improved varieties and hybrids in the different staple length groups, introduction of improved production and plant protection technologies, their dissemination by extension functionaries and adoption of farmers are responsible for bringing about the distinct change in cotton scenario to its present stage. Government policies such as giving greater thrust to research and development in cotton, encouraging use of quality seeds and pesticides and price support measures have also contributed in no small measure to changing the cotton scenario. These are highlighted below:

- Dedicated efforts in the field of research and technology generation, transfer of technology and development, improvement of Marketing Infrastructure in Market Yards and Modernization /Up- gradation of Ginning and Pressing Factories undertaken by all the four Mini Missions of the Technology Mission on Cotton (TMC) launched in February, 2000 have helped in the aim of addressing issues relating to the increase in overall quantity and quality of cotton.
- Sustained awareness programmes by NGOs like Cotton Association of India's COTAAP Research foundation, CITI - CDRA etc. to adopt Best Management Practices in modern agronomic methods and crop management techniques.
- Phenomenal spread of Hybrid and Bt cottons
- Adoption of scientific and agronomic practices by farmers.
- Distribution of quality inputs, village adoption programmes, support to R & D efforts
- Commercial cultivation of Bt. Cotton from 2002 resulting in higher yields and higher economic benefits to farmers



- Grater application of IPM technology and effective check on pest and disease infestation
- Increase in area under irrigation seed

India still has a long way to go to catch up with the world average yield. In terms of area under cotton cultivation, India accounts for 25% of the global area of around 33.4 million hectares. However, in terms of production, India accounts for 20% of world production. This is primarily because of lower productivity of around 560 kgs per hectare as against global average of 788 kgs per hectare in 2007. This underscores the need for accelerating our efforts for rapid improvement in productivity.

Strengths of the Textile Industry

The following are few strengths of the Indian Textile Industry:

- An Independent and self-reliant industry
- Large and potential domestic and international market
- Abundant Raw Material availability that helps industry to control costs and reduces the lead-time across the operation
- Availability of low cost and skilled manpower provides competitive advantage to industry
- Availability of large varieties of cotton fiber and has a fast growing synthetic fiber industry
- Promising export potential

Weaknesses of the Textile Industry

- The Industry is a highly fragmented Industry
- It is highly dependent on Cotton
- There is lower productivity in various segments
- There is a declining Mill Segment
- Lack of Technological Development that affect the productivity and other activities in whole value chain
- Infrastructural Bottlenecks and Efficiency such as, Transaction Time at Ports and transportation Time
- Unfavorable labor Laws
- Lack of Trade Membership, which restrict to tap other potential market

Indian textile industry - Capacity, growth, and technology level:

The cotton/man-made fiber textile mills industry in the country is the oldest industry and had seen various phases during its existence over last two centuries or so. The industry which was composite in nature got fragmented into spinning, weaving and processing except a few remaining in composite shape in organized sector. This was due to various Government policies, labor related issues, techno-economic reasons and trade environment in domestic / international market.

The size of the textile industry has been stagnant / declining for several years before a recovery, which started during the end of Tenth Five Year Plan period. In the absence of clear direction and Government policies, the textile industry declined. The recovery of the industry was also driven by the various Government initiatives, policies such as economic liberalization and deregulation, fiscal reforms and initiatives like Technology Mission of



Cotton, Technology upgradation Fund (TUF) and off late attempts in reducing duty structure between synthetics and cotton, which has resulted in balanced growth of both synthetics and natural fibre. The emerging opportunities due to opening of international trade as a result of MFA phase-out during 1995 - 2002 also acted as a catalyst to growth in this sector.

These measures and opportunities have helped in attracting investment resulting into some growth and up-gradation of the technology across value chain albeit with different speeds and levels across different sectors. During Tenth Five Year Plan period, the increase in total number of mills and installed capacity was moderate; It was modernization which helped in increasing the production in different sectors during the terminal years of the Plan.

Sector-wise review

Indian textile industry can be broadly subdivided into organized and decentralized sector. The composite mills and spinning sector is largely into organized sector while bulk of fabric manufacturing/knitting and processing of cloth is into decentralized sector. Besides, hand loom sector which contributes another 16% of cloth manufacturing in total output of woven cloth is highly labor intensive and is in unorganized sector. The clothing and apparel sector is highly labor intensive catering to clothing and apparel needs of domestic/export market.

Spinning of Yarn

The primary product of the textile industry is spun yarn, of which almost 90% is concentrated in the organized sector. Spun yarn besides man-made filament yarn is the key raw material for the composite units, decentralized power loom, unorganized hand loom and hosiery sector.

The spinning sector produces cotton yarn, blended yarn and 100% non-cotton yarn (made out of either polyester or viscose or acrylic staple fibre). The yarn production statistics reveals the fluctuating yarn production from a level of 3,160 million kg in 2001 to 4,003 million kg in 2007 - 08. During 2007 - 08, the share of cotton, blended and 100% non-cotton yarn was 74%, 17% and 9% respectively. The total rise in yarn production during these seven years is approximately 4% on annual basis.

The total number of cotton/man-made fibre textile mills during 2001 to 2008 rose marginally from 1565 to 1597. In fact, the addition of new mills was more than 128, but simultaneously a number of units -- over 165 -- were permanently liquidated/closed during the period.

A look at the growth in capacity of cotton / man made textile mills in non-55 I sector, however, shows a decline in spindle capacity from 35.53 million in 2001 to 35.01 million in 2008 and growth in rotors from 3.94 lakh to 4.61 lakh. The growth in yarn can primarily be explained due to replacement of spindles suitable for high speed spinning and growth in open end rotors whose productivity is 4-5 times higher than ring spindles. Open end spinning is primarily used in producing coarse count range where it is highly economical over ring spinning.

In addition, a large number of spinning mills numbering over 1250 and four million spindles in 551 sector had come up largely in Tamil Nadu since late eighties whose



capacity accounts for 10% of the spun yarn production. Though the yarn production figure mentioned during the period has a combined yarn production of 551 and composite units, the growth in spindle capacity shown above is only for organized composite sector.

The spinning sector of India has been able to keep pace with latest technology trend to a fair degree and is bench marked to be competitive internationally in terms of conversion cost/kg of yarn. However, a comparison with India's neighboring countries reveals that in terms of productivity India is far behind. The spindle point productivity/kg/year in Pakistan, Indonesia, China and India is 230, 200, 185 and 130 kg respectively, showing that India's is almost 43% lower than Pakistan and 30% lower than China. These figures are revealed by a leading international textile machinery manufacturer survey in "Saurer -- The Fibre Yearbook 2005 06, a World Survey on Textile and Nonwoven Industry."

Weaving

The manufacturing of cloth is carried out on looms in weaving sector. The weaving activity in Indian textile industry is at composite units, the decentralized power loom and unorganized hand loom sector. Total woven cloth production during 2007 - 08 was 43,464 million sq meters consisting of 4%, 80% and 16% coming out respectively from composite, power loom and hand loom sectors. In addition, decentralized hosiery sector produced 11,804 million sq meters of knitted cloth and 768 million sq meters was produced by khadi, wool and silk sectors.

In the organized composite sector, weaving capacity declined from 1.231akh looms in 2001 to 0.561akh looms in 2008. Excluding the permanently closed/liquidated looms during 2002 - 06, the incremental loom age installation during similar period reported is of 6,523 looms consisting of 5,140 shuttle less and 1,383 shuttle looms. The organized composite sector remained stagnant during Tenth Plan and increased marginally in the initial years of Eleventh Plan.

The decentralized power loom sector having largest share of woven cloth production is reported to have 4.3lakh power loom units with 19.441akh looms as on March 31, 2006. The technology level of this sector varies from obsolete vintage looms to state-of-the-art shuttle less looms. The degree of technology level can be accessed from the technology level of these looms. Out of 19.44 lakh looms, 14.72 lakh looms (75%) are plain looms and 11.04 lakh (75%) of these looms are obsolete/outdated with a vintage of 15 years and above. They have virtually no process or quality control devices/attachments. Remaining 4.72lakh looms (25%) consist of 4.0 lakh drop box, semiautomatic looms, 0.40lakh automatic and 0.321akh shuttle less looms.

The widely dispersed unorganized hand loom sector has 391akh looms, and 85% of world's 461akh looms are located in India. The tradition of weaving by hand constitutes one of the richest, most vibrant aspects of the Indian cultural heritage and has historic significance with country's independence movement. This sector is low capital intensive, not requiring electric power to operate, has no import content in either asset or raw material, presents incredible spectrum of traditional design and texture, produces eco-friendly fabric in environment-friendly way, having contributed over USD 544 million in export earnings during 2002-03 and is still growing.

A census conducted by the Government in 1995-96 confirmed that a large population of weavers has break-up of 10.76% scheduled caste, 25.5% scheduled tribe and 42.65%



belonging to other backward classes. All of them belong to under privileged strata of society and a large number of 60.6% of them are women.

With the phasing out of quota and opening up of markets, hand loom products are facing tough competition from the domestic power loom, mill made fabric as well as cheap imports. Despite all this, the Government of India, since independence has been following a policy, rightly, of promoting and encouraging the sector through a number of schemes and programmes aimed at enhancing the efficiency, productivity, income and socio economic status of weavers by upgrading their skills.

Weaving sector is one of the structural weaknesses of Indian textile sector. In comparison to percentage of shuttle less to shuttle looms, world average is 16%, China, Indonesia, Pakistan at 15%, 10% and 9% respectively against a low of India's 2%.

Processing & Finishing

This sector is unquestionably the most significant process in the value chain of cloth production contributing to essential user requirement and aesthetic values. The value addition at this stage is maximum, often manifold.

Processing and finishing of fabric can be carried out by hand or by power. During Tenth Plan, the share of power processed fabric has increased from 30% to 68%. The balance 32%, share of hand processed is 22% while 10% is sold in grey form. Most of the process houses are in decentralized sector.

The census in 2005 conducted by the Textiles Committee put the record of 2,510 power processing units compared to 2324 units in 1999-2000. The overall increase during this period was 8%. Amongst 2510 power processing units, the composite sector has 59, semicomposite units are 167 and balance 2284 units are independent processors. The major clusters of processing units are at Mumbai, Surat, Ahmedabad, Delhi, Ludhiana, Amritsar, Tirupur and Bhilwara. There are 189 units having facility of continuous processing of fabric of 50000 metres and above per day. The production of these units was 7.62 billion square metres in 2004 - 05.

In spite of significant improvements in processing during the Tenth Plan, there is still dearth of facilities for wide width fabric processing and state-of-the-art processing facility in this sector. Domestic as well as international markets, for reason of economies of scale require flawless fabric in cutting and garment made-up and therefore large quantities of wide width finished fabric is the need of the hour.

Clothing & Apparel

The clothing sector is the final stage of the textile value chain and the point of maximum value addition. This sector is an export intensive sector and the world growth in international trade in clothing sector is more than textiles as explained earlier. The sector is eco-friendly as it is least polluting, generates large-scale employment and provides employment to a large number of women.

This industry in India is concentrated primarily at Bangalore, Delhi/Noida/Gurgaon, Mumbai, Jaipur and Indore for garment made from woven cloth while industry concentrating on garment made from knitted cloth is clustered at Tirupur, Ludhiana and Kolkata.



Excluding tailoring units engaged in making personal garment for individual fit, there were 12,963 units comprising 12,289 units (95%) in 551 and 674 non-SSI units in 2005 - 06. The total production of clothing sector during said period was 7.85 billion pieces with a value of $\stackrel{?}{\stackrel{\checkmark}}$ 93,328 crore comprising of 5.61 billion pieces (71%) with a value of $\stackrel{?}{\stackrel{\checkmark}}$ 56,120 crore for domestic market and 2.24 billion pieces (29%) with value of $\stackrel{?}{\stackrel{\checkmark}}$ 37,208 crore for exports.

Since clothes are made of cotton, blends with man-made fibre, wool and other vegetable fibres, a comparison of fibre usage is given; the clothing sector in India has been dominated by cotton-based garment. A look at the following Table shows the fibre composition in export destined for USA, one of the largest exporters in 2007.

Supplier	Cotton	MMF	Wool	Vegetable fibres (Others)
Mexico	29%	69.8%	0.7%	0.5%
China	33.2%	62.6%	0.8%	3.4%
Indonesia	40.5%	58.1%	0.6%	0.8%
Vietnam	49.8%	48.5%	1.1%	0.6%
Bangladesh	68.7%	29.7%	0.2%	1.3%
India	71.3%	26.6%	1.1%	3.4%
Pakistan	92.6%	07.3%	0.1%	0.6%

Source: ITCB compilation from office of OTEXA, US statistics department of commerce data

India exports more than 100 categories of garment products, mainly falling in cotton, semi fashion casual wear such as T-shirts, men shirts, ladies blouses, ladies dresses and skirts in middle price segment. The unit value realization in clothing exports averages at USD 3.81 mainly in cotton and low value garment. The unit value realization in woven garment sector is approx USD 5.05 per piece and USD 2.7 per piece in knitwear sector.

Primary capital investment is the crux to increased automation and productivity, which in turn improves the quality and consistency of the product crucial for the end-product clothing. The companies and the countries that are capable of continued investment in both plant and innovative product will have a share in international market. Technological upgradation is the essence in all the three sectors as no amount of supervision and labor can monitor thread characteristics, flawless production of fabric in high speed production equipment nor it can substantially increase output capacity unless the closed loop control, process automation, sensitive photo electric sensors and digital display of the performance is not in place.

The sewing technique of garment making has basically remained the same to those which were used a century ago. The innovations in this sector are primarily related to preassembly phase of production where they are precise, technologically advanced and most capital intensive. The introduction of cutting machines in 1969 made it possible to cut thick layer of fabric accurately and put more reliance on flawless quality of fabric. In international trade, the least developed countries have generally entered the trade at garment making stage due to factors cited above.



In the clothing, the most labor intensive process in complete value chain, countries such as Bangladesh, Indonesia and Vietnam have used their comparative advantage -- ample supplies of low cost labor to build up a sizable export business as sub contractor to clothing manufacturers and retailers in industrialized countries. There are more than 150 countries supplying garment to industrialized world, although the 25 largest suppliers account for nearly 90% of the trade. It was just in 2005 when the MFA was completely phased out and predictions were made' that countries such as Bangladesh and many others will face large declining trade and unemployment as a result of free trade. However it is worth noting that it is not even five years of quota-free regime post MFA, and the countries such as Bangladesh have left us behind and the Vietnam is notching higher growth rate in clothing trade than India.

Efforts in Indian Scene

Indian textile industry, on the eve of the Eleventh Five Year Plan conceives this sector in a much stronger position than it was at any point in the last six decades. The abolition of quota regime, a buoyant economy and a conducive policy environment provided by the Government have put the industry on the path of rapid growth. Simultaneously, based on achievements of targets made in the Tenth Plan in different sectors, the path forward in Eleventh Plan is worked out.

The vision statement for textile industry envisages the growth of the Indian textile industry at 16% per annum in value terms to reach a level of US\$ 115 billion comprising of US\$ 55 billion in exports and US\$ 60 billion of domestic market. Besides providing large scale employment, Indian textile industry has its presence in all the sectors like cotton, man-made fibre and filaments, wool, silk and other vegetable fibres such as jute.

Knowing the potential of this sector, the Government of India has initiated a number of schemes. The various schemes are aimed at overall balanced growth of all the sectors, increasing job opportunities, increased per capita availability of cloth to clothe and better living standard to the growing middle class having surplus disposable income and growing population every year itself provides immense opportunities in domestic market and thus preparing road map of this vital industry growth on domestic as well as for capturing higher share of 7% from present 3 - 4% in international trade. To name a few of these schemes, such as Technology Mission on Cotton to make increased availability of quality raw cotton to industry, correction on custom and fiscal duties on man made fibre and filaments for balanced growth of cotton and synthetics, derivation of number of items from SSI sector and Technological Up gradation Fund (TUF) for expansion and modernization of various textile sectors vital to maintain its competitive strength and schemes of integrated textile parks. TUF provides subsidy on capital and interest since 1999 and is received well and appreciated by industry. It has proved to be highly successful in increasing investment in the textile sector. As on July 31, 2006 projects worth ₹ 44,686 crore were sanctioned under TUF. It has registered the growth of 123% and 127% respectively in the last two years.

Strategy which can be implemented to enhance value addition and growth

- Scaling up contract farming concept and increase outreach to farmers
- Support trainings in agronomic practice to increase productivity and the quality of cotton
- Support the formation and management capacity of producer groups



 Facilitate partner's access to required business services and support by other providers; namely for financial services to allow the planned investments

Conclusion

Thus industry is eagerly looking at some relief in the prices of cotton. Contrary to expectations, the recent moves have only further aggravated the ongoing crisis. The aim of the government to provide relief to the Cotton producer would not be achieved as the Cotton season is already over and most of the farmers have already sold their produce. The benefit of 5% incentive on exports of Cotton and that too given effect retrospectively from 1st April 2008 would not reach the intended beneficiaries, he warned. "We understand that the Cotton exports need to be encouraged, but not at the cost of hampering the growth of value added textiles and clothing sector" he said.

Due to high prices of Cotton and slow down in major markets, Indian textile industry was holding on to the purchase of Cotton. The exports of cotton would worsen the stock to use ratio, which is already low (around 26%) when compared to global average of 54.79% during 200809. Lower availability of Cotton in the domestic market would severely hamper the growth prospects of value added T and C sector, which not only is a significant foreign exchange earner but also is the largest employment providing sector after agriculture. The decision of allowing government bodies to provide discounts on the bulk purchase of Cotton will benefit only the speculators and commodity hedge funds and not the manufacturers, who are not in a position to lift bulk quantities. Strangely, the discount increases in tandem with the quantity purchased, thus benefiting the speculators and large buyers, most of whom are multinational companies who have access to cheaper funds at international interest rates (4%-5%) and thus are in a position to hoard the stocks against the small traders and manufacturers who are facing high cost of funds (to the tune of 11 %-13%). Considering these facts, the discounts should be provided on regular sales without discriminating the buyer of smaller quantities against bulk buyers and should be uniform, irrespective of quantities bought.

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Originally Published in Textile Review, August-2011

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